Graduate Council Meeting Agenda

310 Jack K. Williams Administration Building
November 5th, 2015

1. Discussion Items:

a. Zero Semester Credit Hour Course Options Information

2. New Course Requests:

a. ANSC 670 Quality Assurance for the Food Industry
b. ANTH 672 Ancient Genetics
c. ATTR 673 Manual Therapy in Athletic Training
d. BIOL 694 Graduate Orientation
e. BIOL 696 Ethics and Responsible Conduct of Research
f. EEBL 630 Big Bend National Park Natural History Survey
g. EPSY 634 Educational Neuroscience
h. ESSM 604 Changing Natural Resource Policy
i. FINC 678 Real Estate Analytics
j. FSTC 670 Quality Assurance for the Food Industry
k. GENE 602 Introduction to Genetic Model Systems
l. GENE 682 Seminar Presentation
m. HIST 626 Reading Seminar in Gender and Sexuality in History
n. HIST 627 Research Seminar in Gender and Sexuality in History
o. HIST 638 Research Seminar in Asian History
p. HLKN 689 Systems Thinking and Complexity in Population Health
q. HPCH 641 Coaching Health Behavioral Change
r. MARA 675 Business Leadership
s. MARS 603 Quantitative Methods for Resource Management
t. MARS 693 Professional Study for Marine Resource Management
u. MEEN 605 Gas Dynamics
v. NUEN 647 Uncertainty Quantification in Nuclear Science and Engineering
w. PERF 606 Performing Gender and Sexuality through Music
x. PERF 607 Performance and Technology
y. PERF 608 Performance and the Art of Government
z. PHEO 639 Hazardous Materials Management and Compliance
aa. PHEO 722 Introduction to One Health
bb. PHEO 723 Ecosystem and Economic Impact on Human and Animal Health
cc. PSAA 624 Water Policy and Management
dd. PSAA 625 Urban Sustainability Policies and Management
e. SPMT 630 Economic Issues in Sport
ff. URSC 601 Foundations of Research in Urban and Regional Science
g. URSC 602 Research Methods in Urban and Regional Science
hh. VPAT 610 Cell Mechanisms of Disease
ii. VSCS 697 Teaching Neuroanatomy Lab

3. Course Change Requests:

a. ARCH 619 Applied Solar Energy
b. ARCH 621 Energy Optimization in Building Design
c. ARCH 633 Applied Architectural Systems
d. ARCH 634  Architectural Lighting

e. ARCH 643  Software Analysis for HVAC Systems in Low Energy Buildings

f. CHEM 636  Mechanistic Inorganic Chemistry

g. CHEM 673  Symmetry and Group Therapy in Chemistry

h. EDTC 602  Educational Technology: Field, Theory, Profession

i. EDTC 621  Graphic Communication and Interface Design

j. EDTC 631  Educational Video

k. EDTC 645  Instructional Applications of Computer Technologies I

l. EDTC 646  Instructional Applications of Computer Technologies II

m. EDTC 651  Tutorials and Simulations

n. FINC 635  Financial Management for Non-Business

o. FINC 685  Directed Studies

p. GENE 608  Critical Analysis of Genetics Literature

q. MARS 675  Environmental Management Strategies for Scientists

r. PERF 605  Topics in Globalization and Performance

s. PERF 611  Contemporary Religions and Performance

t. PERF 615  Spectacle, Performance, and Politics

u. PERF 621  Topics in Popular Music Studies

v. SCMT 610  Quantitative Analysis for Business Decisions

w. VIZA 617  Advanced Animation

x. VIZA 622  Design Communication I

y. VIZA 627  Design Communication III

z. VIZA 629  Digital Media: Inspiration and Process

aa. VIZA 630  Contemporary Art Studio/Seminar I

bb. VIZA 631  Contemporary Art Studio/Seminar II

c. VIZA 643  Time Based Media I

dd. VIZA 658  Experimental Visual Techniques

ee. VIZA 680  Professional Practice in Visualization

ff. VIZA 691  Research

gg. VIZA 693  Professional Study

4. **Course Withdrawal Requests:**

   a. PERF 612  Music Capitalism

5. **Change in Curriculum Requests**

   a. Bush School – Executive Masters of Public Service and Administration (EMPSA)

   b. Bush School – Political Science 3+2 BA-MPSA and BS-MPSA Revisions

   c. College of Education and Human Development- Education and Social Sciences Advanced Research Method Certificate

   d. College Education and Human Development- Department of Health and Kinesiology - Master of Science in Athletic Training

   e. College of Geosciences- Oceanography and Atmospheric Sciences Meteorology 5-Year Joint Degree Program

   f. College of Geosciences- Oceanography and Environmental Geosciences Meteorology 5-Year Joint Degree Program

   g. College of Liberal Arts- Masters of Arts in Performance Studies

   h. Genetics – Master of Science in Genetics

   i. Genetics – Ph.D. in Genetics

   j. Institute for Scientific Computation- Computational Sciences Certificate Program

   k. Texas A&M University- Galveston- Master of Marine Resources Management
1. Texas A&M University- Galveston- Ocean and Coastal Resources & Marine Resources Management

6. **Special Consideration Requests**
   a. Bush School – International Affairs- China Certificate- Teach Out Plan
   b. College of Veterinary Medicine & Biomedical Sciences – Master of Science in Laboratory Animal Medicine – Teach Out Plan
   c. Texas A&M University- Galveston- Masters in Maritime Administration and Logistics – Waive Residency Requirement
   d. School of Public Health- Masters of Public Health – Austin Site
      i. Environmental Health - Teach Out Plan
      ii. Health Policy and Management – Teach Out Plan
Discussion Items
Information on Zero Semester Credit Hour (ZSCH) Course Options

Registration/Enrollment

- A student registered for a ZSCH course only is considered an enrolled student.
- A student will not be billed for fees based on enrollment in a ZSCH course. (Billing is based on semester credit hours.)
- Enrollment in a ZSCH course will keep the academic record active for a term, regardless of enrollment in credit-bearing courses.
- ZSCH courses will be listed in the schedule and students will register for them along with their credit-bearing courses.
- ZSCH courses do not count toward progress toward degree or full-time enrollment.
- ZSCH courses must be graded with either a letter grade or satisfactory/unsatisfactory, but grades received in ZSCH courses will not be included in the grade point average.
- The National Clearinghouse will not show students enrolled if they are only taking ZSCH courses. However, pursuant to Student Rule 1.7, students participating in student teaching, internships, and cooperative education programs, and study abroad programs who are enrolled in less than 12 hours during a fall or spring semester or eight hours in a summer semester may be eligible to be certified as a full-time student with the approval of the Dean of the College or his or her designee. These certifications above based on exemptions might not be used to qualify for Federal Financial Aid as federal regulations determine financial aid eligibility.

Financial Aid and Scholarships

- A student must be enrolled in credit-bearing courses to be eligible for Financial Aid. Therefore, enrollment in ZSCH only does not allow for Financial Aid eligibility.
- ZSCH do not count toward progress toward degree or full-time enrollment for scholarships or financial aid.

Adds/Drops and Withdrawals

- If a student drops all courses except the ZSCH course, the student is still enrolled.
- Dropping all credit-bearing courses and/or ZSCH’s (withdraw) will inactivate the academic record prior to the census date.
- Dropped ZSCH courses stay on the student record and will be treated like other courses, with the appropriate grade assigned (Q, W, etc.).
- Dropping a ZSCH course will not count against University and State limits.
- The schedule for adding/dropping and withdrawing from ZSCH courses is the same schedule in place for courses with credit. Students taking only ZSCH courses are considered enrolled students and, therefore, must follow the dates in order to be included in census data and maintain “active student” status. If the “active student” status was not maintained, the student would have to apply for admission before being eligible to enroll again.
- Students adding ZSCH course to an existing schedule may be able to late add in future semesters. The Office of the Registrar is exploring this concept.

10/2/2015
Information on Zero Semester Credit Hour (ZSCH) Course Options

Administrative Matters

- The course must be offered for variable credit hours that include zero. An existing course can be changed, through a course change process, to include zero as a variable credit option. If the course is available to be taught as zero credit hours, faculty should work with their department to teach and list the course in the same manner as courses taught for credit are offered.
- ZSCH courses will not be included in teaching load.
- Colleges will determine eligibility for instructors of ZSCH courses. The Dean of Faculties will not require credentialing verification for instructors of ZSCH courses. However, colleges will maintain internal records of qualifications.
- ZSCH courses can have the Lab Safety Acknowledgement (LSA) attached to them.
- ZSCH courses can have defining attributes attached to them, by section.
New Courses
Texas A&M University
Departmental Request for a New Course
Undergraduate  Graduate  Professional
Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:
   - [ ] Undergraduate  [x] Graduate  [ ] First Professional (DOS, MD, JD, PharmD, IVM)

2. Request submitted by (Department or Program Name):
   Department of Animal Science
   ANSC 670: Quality Assurance For The Food Industry

3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Principles of food system process control including statistical process control (SPC) and the "tools" required to assure uniform communication and understanding of quality assurance systems.

5. Prerequisite(s):
   Graduate Classification
   Cross-listed with: FSTC 670
   Stacked with: ANSC/FSTC 470
   Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course?
   [ ] Yes  [x] No  If yes, from _______ to _______

7. Is this a repeatable course?
   [ ] Yes  [x] No  If yes, this course may be taken _______ times.
   Will this course be repeated within the same semester?
   [ ] Yes  [ ] No

8. Will this course be submitted to the Core Curriculum Council?
   [ ] Yes  [x] No
   [ ] P/E (CLMD)

9. How will this course be graded?
   [x] Grade  [ ] S/U

10. This course will be:
   a. required for students enrolled in the following degree programs (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

11. Graduate students in Animal Science and in Food Science

12. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

13. Prefix  Course #  Title (excluding punctuation)
    ANSC  670  Quality Assurance Food Ind

   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  ENG Code
   3.00  0.00  0.00  3.00  010901005  0270  16  17  0  3  6  3  2

   Approval recommended by:
   H. Russell Cross  David Reed  Mark Hussey
   Department Head or Program Chair (Type Name & Sign)  Chair, College Review Committee  Dean of College
   Date  9/28/15  Date  9/26/15
   (if cross-listed course)

   Submitted to Coordinating Board by:
   Chair, GC or UCC
   Date

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
ANSC/FSTC 470/670 - QUALITY ASSURANCE FOR THE FOOD INDUSTRY- FALL SEMESTER 2016

INSTRUCTOR: W.N. Osburn
338D Kleberg; Ph: 979-845-3989; E-mail: osburnw@tamu.edu
Office Hours: Fridays 10-12:00 or By Appointment.

LECTURE:
TTH 8:00-9:15; KLCT 300

OBJECTIVES:
1. To provide an understanding of the principles of quality and primary strategies for implementation of Quality Systems in the food industry.
2. To provide a fundamental basis for the principles of food system process control including statistical process control (SPC) and the "tools" required to assure uniform communication and understanding of quality assurance systems.
3. Use quality teams to provide knowledge and application of philosophical and analytical tools required for successful implementation of quality assurance programs in the food industry.

STUDENT LEARNING OUTCOMES:
By the end of this course, students will be able to
1. Apply critical thinking skills to define a problem, identify potential causes and possible solutions, and make thoughtful recommendations.
2. Work as a member of a team to solve a problem and report findings via oral and written communication.
3. Develop product standards and specifications.
4. Use statistical process control techniques to construct control charts.
5. Explain the interrelationship between food safety and quality systems.

SUPPLEMENTAL READING (No required texts)
 Covey, S. 1989. The Seven Habits of Highly Effective People, Simon & Schuster. NY.
Specific readings will be established for classroom discussion.

Grading and Class Assignments/Projects:
All students must take three class exams and one class final.

<table>
<thead>
<tr>
<th>Exam dates</th>
<th>Class Exams (All Students)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 20XX</td>
<td>Exam 1</td>
<td>100</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Exam 2</td>
<td>100</td>
</tr>
<tr>
<td>Dec 20XX</td>
<td>Exam 3</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Exam 4 (Final)</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Specific Undergraduate Student Assignments</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 20XX</td>
<td>Quality Guru Paper (UG)</td>
<td>100</td>
</tr>
<tr>
<td>Variable dates</td>
<td>SPC Quality Problem Solving Homework</td>
<td>100</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Team Quality Problem Solving Project Report</td>
<td>50</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Team Quality Problem Solving Project Presentation</td>
<td>50</td>
</tr>
<tr>
<td>Dec 20XX</td>
<td>Personal Mission Statement</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Participation and Class Attendance</td>
<td>50</td>
</tr>
<tr>
<td>Date Due</td>
<td>Specific Graduate Student Assignments</td>
<td>Points</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Variable Dates</td>
<td>SPC Quality Problem Solving Homework</td>
<td>100</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Team Quality Problem Solving Project Report</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Team Quality Problem Solving Project Presentations</td>
<td>50</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Food System Research Paper</td>
<td>100</td>
</tr>
<tr>
<td>Dec 20XX</td>
<td>Personal Mission Statement</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Participation and Class Attendance</td>
<td>50</td>
</tr>
<tr>
<td>Total Points</td>
<td></td>
<td>800 (UG)/800 (G)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of Total Points</th>
<th>800 Points Max (Undergraduate)</th>
<th>800 Points Max (Graduate)</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>720-800</td>
<td>720-800</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>640-719</td>
<td>640-719</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>560-639</td>
<td>560-639</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>480-559</td>
<td>480-559</td>
<td>D</td>
</tr>
<tr>
<td>&lt;60%</td>
<td>479 or less</td>
<td>479 or less</td>
<td>F</td>
</tr>
</tbody>
</table>

**DESCRIPTION OF UNDERGRADUATE STUDENT ASSIGNMENTS:** The following assignments are requirements for undergraduate students in this course.

a) **Assignment I:** "Quality Guru" paper
Students will select one "founder" or "guru" of "Quality Systems" and write a one to two page paper on how their philosophy of quality impacted current quality management systems.

b) **Assignment II:** Statistical Process Control
Take home assignments on statistical process control (SPC) include calculations of Z values and process capability construction of X-bar and R charts, Np charts, etc. Dates vary during the semester.

c) **Assignment III:** Team Project Report and Presentation Assignment
1. You will be formed into Quality Improvement Teams (3-4 persons per team)
2. Each team will be given a scenario with a dataset involving quality issues or problems of a specific food product (Dairy, cereals and grains, fruits and vegetables, muscle foods, etc.).
3. Utilizing the scenario information, plus skills learned in lecture and lab (Team problem solving, Tools of quality, SPC) your team is to use the six step problem solving process to:
   a. utilize data provided to construct statistical process control charts;
   b. from the control charts and information given - identify and define the problem,
   c. determine the cause(s) of the problem based on your statistical analysis,
   d. generate potential solutions to solve the cause(s) of the problem,
   e. analyze each potential solution for its advantages and disadvantages,
   f. recommend the "best" solution (feasible, suitable, cost effective, etc.), and
   g. develop an action plan and timeline for implementing the proposed solution and how the solution will be evaluated to determine its effectiveness.
4. Each team will prepare a written report and PowerPoint slide presentation to the fictional Chief Operating Officer and/or President of the respective company that you are working for.
5. A separate handout detailing what is expected of each team will be provided.

d) **Assignment IV:** Mission Statement Preparation (Covey).
Each student will be responsible to develop and critique a personal mission statement using the principles and procedures outlined by Covey. This statement will be required and will be based on software program materials to be made available for student use found at the address:
DESCRIPTION OF GRADUATE STUDENT ASSIGNMENTS: The following assignments are requirements for graduate students in this course.

a) Assignment I: Quality Food Systems Research Paper
Students will write a research proposal framework/outline for an eight to ten page research paper explaining how quality management systems can be used to solve a specific food production system (dairy, fruits and vegetables, cereal grains, muscle foods, beef, pork or poultry production systems, etc.) problem area and explain how the application of quality systems principles could positively impact the quality and/or efficiency of that food system.

b) Assignment II: Statistical Process Control
Several take home assignment on statistical process control (SPC). Assignments will include calculations of Z values and process capability and construction of X-bar and R charts, Np charts, etc. Dates vary throughout the semester.

c) Assignment III: Team Project Report and Presentation Assignment
1. You will be formed into Quality Improvement Teams (3-4 persons per team)
2. Each graduate student team must collect their own dataset to be used to develop SPC charts and identifying areas for quality improvements. This dataset can be from research projects or collected from various Animal Science/Food Science facilities (Meat Science Center, Extrusion Lab, etc.) or other food/campus entity.
3. Utilizing the scenario information, plus skills learned in lecture and lab (Team problem solving, Tools of quality, SPC) your team is to use the six step problem solving process to:
   a. utilize data provided to construct statistical process control charts;
   b. from the control charts and information given - identify and define the problem,
   c. determine the cause(s) of the problem based on your statistical analysis,
   d. generate potential solutions to solve the cause(s) of the problem,
   e. analyze each potential solution for its advantages and disadvantages,
   f. recommend the “best” solution (feasible, suitable, cost effective, etc.), and
   g. develop an action plan and timeline for implementing the proposed solution and how the solution will be evaluated to determine its effectiveness.
4. Each team will prepare a written report and PowerPoint slide presentation to the fictional Chief Operating Officer and/or President of the respective company that you are working for.
5. A separate handout detailing what is expected of each team will be provided.

d) Assignment IV: Mission Statement Preparation (Covey).
Each student will be responsible to develop and critique a personal mission statement using the principles and procedures outlined by Covey. This statement will be required and will be based on software program materials to be made available for student use found at the address:
TOPICS FOR CLASS LECTURE & DISCUSSION:

I. Principles for Total Quality Management
   a. Defining Quality
   b. Philosophies - Deming, Crosby, Juran, Shewhart

II. Quality Leadership
    a. Project team development
    b. Quality Improvement Cycle
    c. Teambuilding, Communication and Interpersonal Skills

III. Quality Problem Solving
     a. Quality Problem Solving and Management
     b. Problem Solving Process
        i. Problem Identification, Definition, Diagnosis
        ii. Alternative Generation and Evaluation
     c. Types of Quality Problem
        i. Conformance and Efficiency Problems
        ii. Product Design and Process Problems
     d. Team Problem Solving
        i. Blueprint for successful teams
        ii. Conflict Resolution

IV. Quality Management Systems
    a. Total Quality Management
    b. ISO 9000, FSC 22000, SQF, BRC
    c. Six Sigma and Lean Manufacturing

V. The Quality Improvement Process
    a. The Ten-Step Quality Improvement Process

VI. Statistical Process Control
    a. Variation and distributions
    b. Central tendency
    c. Probability and hypothesis testing
    d. Control charts
       i. X bar and R charts
       ii. P, np and c charts
    e. Process capability

VII. The Quality Tool Box - Selected Tools for Continuous Quality Improvement
     a. Project Planning and Implementation Tools
     b. Data Collection and Analysis Tools
     c. Evaluation and Decision-Making Tools

VIII. Applications of Quality Improvement
      a. Team Project Report and Presentations

IX. Interrelationship Between Quality Assurance/Control and Food Safety Programs
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Quality Systems Philosophy (TQM)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>History of Quality</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Quality Leadership - Team Building - Undergraduate Quality Gurus Paper Due</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Quality Problem Solving</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Quality Management Systems</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Quality Improvement Process</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Tools of Total Quality</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Tools of Total Quality</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Tools of Total Quality</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Exam 1</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Statistical Process Control</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Statistical Process Control</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Statistical Process Control</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Statistical Process Control - Interrelationship Between Quality Assurance/Control and Food Safety Programs</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Team Project Assignments and Scenarios</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>Interrelationship Between Quality Assurance/Control and Food Safety Programs</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Interrelationship Between Quality Assurance/Control and Food Safety Programs</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>Team Project Data Development</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Team Project Data Development</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>Exam II</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>Team Project Presentations</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>Team Project Presentations and Final Reports Due</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>7 Habits Of Highly Effective People</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>7 Habits Of Highly Effective People</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>7 Habits Of Highly Effective People - Graduate Student Quality Food System Research Paper Due</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>Thanksgiving</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td>Prep for BRC/SQF training - Mission Statement Due</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td>Exam III</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>Prep for BRC/SQF training - Class Evaluations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Exam</td>
</tr>
</tbody>
</table>

**COURSE REQUIREMENTS**

**Attendance:** Since student participation during discussion sessions is an important aspect of this course, students are expected to attend all sessions. Attendance will be documented using an attendance sheet that must be signed by students in class. Absences will be excused only upon approval of instructors in advance of the class session in question. Five points per unexcused absence will be deducted from your final grade. For more information see TAMU Student Rule 7 – Attendance: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07)
Make-up Work/Auditing Policy

Regular attendance and participation in the course is expected of all students. Anticipated absences should be cleared with the instructor prior to the absence, if possible. Emergency absences (serious illness, injury, death, etc.) should be reported as soon as possible. An excuse may be necessary for more than three absences. Those students auditing the course are expected to participate in all class sessions. Make-up work will be allowed under extenuating circumstances for which written excuses are provided.

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 979-845-1637. For additional information visit http://disability.tamu.edu.

Academic Integrity and Honesty

It is the personal responsibility of each student to maintain the highest level of scholastic integrity at the university by refusing to participate in or tolerate any form of scholastic dishonesty. Additional information may be obtained from the Student Handbook or at the Handbook website http://student-rules.tamu.edu/index.htm, http://student-rules.tamu.edu/rules20.htm.

Copyright

The handouts used in this course are copyrighted. By "handout", I mean all materials generated for this class, which include but are not limited to syllabi, in-class materials, and handouts. You do not have the right to copy the handouts, unless I expressly grant permission.

Plagiarism

Plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. You are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues.

Aggie Code of Honor

For many years, Aggies have followed a Code of Honor in an effort to unify the aims of all Aggies toward a high code of ethics and dignity. It functions as a symbol to all Aggies, promoting understanding and loyalty in truth and confidence in each other. "Aggies do not lie, cheat or steal; or tolerate those who do." If you have any questions regarding plagiarism or cheating, please consult the Texas A&M University Student Rules, under the section Scholastic Dishonesty. http://aggiehonor.tamu.edu.
Texas A&M University

Departmental Request for a New Course
Undergraduate • Graduate • Professional

• Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional (DO, MD, JD, PharmD, DVMD)

2. Request submitted by (Department or Program Name):
   Department of Anthropology

3. Course prefix, number and complete title of course:
   ANTH 672 - Ancient Genetics

4. Catalog course description (not to exceed 50 words):
   Ancient DNA and its role in answering anthropological and archaeological questions.

5. Prerequisite(s):
   Graduate Standing or approval of instructor

   Cross-listed with: ____________________________ Stacked with: ____________________________

   Crosslisted courses require the signature of both department heads.

   Is this a variable credit course? □ Yes  ☑ No
   If yes, from ________ to ________

   Is this a repeatable course?  □ Yes  ☑ No
   If yes, this course may be taken ________ times.

   Will this course be repeated within the same semester? □ Yes  ☑ No

   Will this course be submitted to the Core Curriculum Council? □ Yes  ☑ No

   How will this course be graded?
   - □ Grade
   - □ S/U
   - □ P/F (CLMO)

10. This course will be:
   a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      M.A., M.S., Ph.D. in anthropology

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. ANTH 672
   Title (excluding punctuation): Ancient Genetics

   Lect. Lab Other SCH CIP and Fund Code Admin. Unit Acct. Year HCE Code
   3.00 0.00 0.00 3.00 4503010001 0280 16 - 17 0 0 3 6 3 2

   Approval recommended by:
   Ted Goode
   Department Head or Program Chair (Type Name & Sign) Date 10/14/15

   Chair, College Review Committee Date

   Dean of College Date

   Submitted to Coordinating Board by:
   Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8291 or sandra.williams@tamu.edu.
Anthropology 672-600
Ancient Genetics
Friday, 9:00-12:00 ANTH 236
Spring 2016

Course Description:
In bioarchaeology ancient DNA has become one of the most rapidly growing areas. This is largely due to the introduction of Next Generation Sequencing. We have moved from looking at a single DNA sequence to looking at whole genomes. Some have hailed ancient DNA as the answer to everything. To understand the advantages as well as the pitfalls of ancient DNA, we will explore all the nuances of this exciting and expanding field.

In this course, the lectures will cover the basics of ancient DNA and how it can be used to answer either big or small Anthropological and/or Archaeological questions. We will look at different themes, such as domestication and human evolution and see what ancient DNA can contribute to the understanding of these events. We will look at issues such as ancient DNA contamination and survival, and familiarize ourselves with the methods used to extract and analyze the data. Students will get hands-on experience in the laboratory, extracting DNA and analyzing the results as well as writing a lab report. Furthermore, the students will practice their oral presentations skills, as they present their own researched topics.

Course Objectives:
- Demonstrate a general knowledge of the use of ancient DNA in bioarchaeology
- Demonstrate the ability to design and carry out a study using ancient DNA whilst critically discussing and assessing the advantages as well as the pitfalls of the methods
- Develop communication skills necessary to give conference-like presentations in a logical and structured way, supported by biomolecular and archaeological evidence

Instructor: Anna Linderholm
Class: Friday, 9-12 ANTH 236
Office: Anthropology, Rm 311
Telephone: alinderholm@tamu.edu
Web: http://anthropology.tamu.edu/faculty/Linderholm
Office Hours: Mon & Wed 9-10, Tues 2-4.
Prerequisites: Graduate Standing or approval of instructor

Required Course Material:
The required reading material will be a set of articles, all available online via Google scholar. They will also be uploaded to eCampus. All the required articles are listed below.

Grades:
Grades will be based on three presentations worth 150 points each (450 points total), a lab report worth 200 points and a final paper worth 350 points. The three presentations will be 30-minute, conference style presentations on assigned topics, during weeks chosen by the student
in consultation with the instructor. The written lab report will relate to lab work done with the
instructor, and it will have an introduction, methods section, results section, and discussion. The
final paper will be a 10 to 15-page paper presented in the style of *Journal of Archaeological
Science*.

**Grading Scale**
A  900-1000
B  800-899
C  700-799
D  600-699
F  <600

**eCampus**
Using the eCampus application ([http://ecampus.tamu.edu](http://ecampus.tamu.edu)), students can find the readings,
review lecture power-point presentations, find their grades, view announcements, and view the
syllabus.

**Attendance**
This is a graduate course and students are expected to participate in all classes; however,
attendance will not be recorded nor taken into account in the calculation of the final grade.

**Make Up policy:**
If you are not present in class to give your presentations, without a legitimate excuse or prior re-
arrangement, you will be assigned a zero. Legitimate excuses for absences are defined in the
Texas A&M University Regulations ([http://student-rules.tamu.edu/rules7.htm](http://student-rules.tamu.edu/rules7.htm)).

If an absence is excused, the instructor will either provide the student with an opportunity to
make up any presentation, exam or other lab work that contributes to the final grade or provide
a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor
has a regularly scheduled make up exam, students are expected to attend unless they have a
university-approved excuse. The make-up work must be completed in a timeframe not to
exceed 30 calendar days from the last day of the initial absence.

**The Americans with Disabilities Act (ADA)**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides
comprehensive civil rights protection for persons with disabilities. Among other things, this
legislation requires that all students with disabilities are guaranteed a learning environment that
provides for reasonable accommodation of their disabilities. If you believe you have a disability
requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or
call 979-845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu).

**Academic Integrity**
Cheating will not be tolerated. To view the guidelines of academic honesty laid out by the
university, please visit this site: [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).

"An Aggie does not lie, cheat or steal, or tolerate those who do."
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignments &amp; Events</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction, Ancient DNA</td>
<td>Lecture</td>
<td>(Hofreiter et al., 2001, Pääbo et al., 2004, Gilbert et al., 2005)</td>
</tr>
<tr>
<td>Week 3</td>
<td>Extinct Animals</td>
<td>Lecture plus Student presentations</td>
<td>(Haile et al., 2009, Rohland et al., 2010, Allentoft et al., 2015)</td>
</tr>
<tr>
<td>Week 4</td>
<td>Neanderthals and Modern humans</td>
<td>Lecture plus Student presentations</td>
<td>(Green et al., 2006, Prüfer et al., 2014, Fu et al., 2015)</td>
</tr>
<tr>
<td>Week 5</td>
<td>Kinship</td>
<td>Lecture plus Student presentations</td>
<td>(Haak et al., 2008, Der Sarkissian et al., 2013, Rasmussen et al., 2015)</td>
</tr>
<tr>
<td>Week 6</td>
<td>Disease</td>
<td>Lecture plus Student presentations</td>
<td>(Malmström et al., 2010, Bos et al., 2011, Weyrich et al., 2015)</td>
</tr>
<tr>
<td>Week 7</td>
<td>Sediments, Ice and Shipwrecks</td>
<td>Lecture plus Student presentations</td>
<td>(Halle et al., 2007, Willerslev et al., 2007, Foley et al., 2009)</td>
</tr>
<tr>
<td>Week 8</td>
<td>Pitfalls, Contamination and Ethics</td>
<td>Lecture plus debate</td>
<td>(Jehaes et al., 2001, Kaufmann and Rühli, 2010, Skoglund et al., 2014)</td>
</tr>
<tr>
<td>Week 9</td>
<td>Primer workshop, lab prep</td>
<td>Workshop</td>
<td>(Torrioni et al., 2006, Achilli et al., 2008, Ye et al., 2012)</td>
</tr>
<tr>
<td>Week 10</td>
<td>DNA lab, extracting DNA</td>
<td>Lab work, in modern lab</td>
<td>(Jaenicke-Despres et al., 2003, Larson et al., 2007, Linderholm and Larson, 2013)</td>
</tr>
<tr>
<td>Week 11</td>
<td>Domestication</td>
<td>Lecture plus Student presentations</td>
<td>(Reich et al., 2011, Miller et al., 2012, Lazaridis et al., 2014)</td>
</tr>
<tr>
<td>Week 14</td>
<td>DNA lab results and analysis</td>
<td>Analyzing results and discussion</td>
<td></td>
</tr>
<tr>
<td>Week 15</td>
<td></td>
<td>Final paper and lab report due</td>
<td></td>
</tr>
</tbody>
</table>
List of required reading material


Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
* Submit original form and attach a course syllabus.*

Form Instructions
1. Course request type:  
   - [ ] Undergraduate  
   - [x] Graduate  
   - [ ] First Professional (DDS, MD, J.D., Pharm.D., DVM)
2. Request submitted by (Department or Program Name):  Health and Kinesiology
3. Course prefix, number and complete title of course:  ATTR 673 Manual Therapy in Athletic Training
4. Catalog course description (not to exceed 50 words):  Manual therapy theory and techniques used as a therapeutic intervention for orthopedic injuries and conditions; indications and contradictions for the use of manual therapy; skill development in soft tissue assessment; application of manual and tool assisted techniques.

5. Prerequisite(s):  
   - Enrollment in MS athletic training program
   - Stacked with:  

   Cross-listed with:  
   - Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course?  
   - [ ] Yes  
   - [x] No  
   - If yes, from ________ to ________
7. Is this a repeatable course?  
   - [ ] Yes  
   - [x] No  
   - If yes, this course may be taken ________ times.
   - Will this course be repeated within the same semester?  
     - [ ] Yes  
     - [ ] No
8. Will this course be submitted to the Core Curriculum Council?  
   - [ ] Yes  
   - [x] No
9. How will this course be graded?  
   - [x] Grade  
   - [ ] S/U  
   - [ ] P/F (CLMD)
10. This course will be:  
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)  
    MS in athletic training  
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. [x] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
13. Prefix  
    - Course #  
    - Title (excluding punctuation)  

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>E/C Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
<td>5109130002</td>
<td>1402</td>
<td>16</td>
<td>17</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:
- Richard Kreider
  - Department Head or Program Chair (Type Name & Sign)  
  - Date
- George Cunningham
  - Chair, College Review Committee  
  - Date
- George Cunningham
  - Dean of College  
  - Date
- Tim Scott
  - Chair, GC or UCC  
  - Date

Submitted to Coordinating Board by:
- Associate Director, Curricular Services  
  - Date  
  - Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
ATTR 673: Manual Therapy in Athletic Training  
Texas A&M University  
Department of Health and Kinesiology

Term: Fall 2016  
Instructor: Saul Luna, MEd, ATC, LAT, LMT, CSCS  
Office: Olympic Athletic Training Room  
Phone: 979-458-2871  
E-mail: sluna@athletics.tamu.edu (preferred contact method with response within 24 hours M-F; 48 hrs. on weekend)  
Office Hrs: TBD  
Classroom: Heldenfels 217  
Day/Time: TBD  
Technology: TBD

Course Description:

Manual therapy theory and techniques used as a therapeutic intervention for orthopedic injuries and conditions; indications and contradictions for the use of manual therapy; skill development in soft tissue assessment; application of manual and tool assisted techniques. Prerequisite: Enrollment in MS athletic training program.

Required Text and Reading:


Supplemental Reading: Will be made available on eCampus.

Digital Support Resources:
Anatomy TV at  
http://online.statref.com/EULA/EULA.aspx?SessionId=1CE4FADSPSHETYVB&Path=http%3a%2f%2fonoiline.statref.com%2fanatomy.aspx

Nerve Whiz - free  

Course Objectives:
Upon completion of this course the student will be able to:
1. Integrate evidence-based practice into clinical assessment, decision-making and manual therapy application (EBP-10).
2. Understand the definition and categories of manual therapy.
3. Apply decision making models to the use of manual therapy.
4. Incorporate manual therapies appropriately into a therapeutic intervention plan of care for common orthopedic injuries to the lower extremity, upper extremity, and spine.
5. Explain the theory and principles of various manual therapy techniques (i.e., muscle energy, myofascial release, strain-counterstrain, joint mobilization, massage, neurodynamics) (TI-8).
6. Fabricate and apply musculoskeletal performance taping to facilitate function (TI-16).
7. Identify absolute and relative contraindications for various manual therapy techniques and procedures in the management of orthopedic and athletic injuries (TI-11a).
8. Demonstrate proper positioning and preparation of the patient for various manual therapies (TI-11b) and describe the expected results and reactions (TI-11c).
9. Demonstrate a specific plan for appropriate staging, progression, regression, or termination of treatments during the execution of a management plan based on ongoing clinical examination, presentation, signs, symptoms, and pathophysiological status (TI-12).
10. Describe the relationship and integration of therapeutic modalities and the incorporation of manual therapies (TI-13).
11. Integrate joint mobilization, neural mobilization, and soft tissue mobilization into a therapeutic plan for pain reduction and restoration of joint and tissue mobility (TI-14).
13. Identify institutional, state, and/or federal standards that influence the application of manual therapy techniques by athletic trainers (TI-19).

Evaluation Procedures:
Grades awarded in this class will be calculated as a simple percentage of the total number of points possible. The specific point values for each of the various evaluative criteria appear below, as well as the grading scale to be applied to earned percentage values.

- Written examination = 100
- Practical examinations 2 x 100 points = 200
Final written cumulative examination = 100
400 points

* Quizzes and additional assignments as would benefit learning process.

Grading System:
90% and above A; 80-89% B; 70-79% C; 60-69% D; Below 60% F

Course Policies:
Dress Code: All students must dress appropriately for lab sessions and examinations. Failure to dress appropriately for lab sessions will count as an absence from lab. Failure to dress appropriately for lab examinations will result in a zero "0" for that examination. Appropriate dress includes the following: exercise shorts (wearing tights underneath is acceptable), sport bras for women, men will need to remove shirts for torso and upper extremity injury evaluation.

Electronic Submission of Course Assignments:
At times, students may be required to submit a course assignment electronically by emailing it to the course instructor on a specified date and time. Failure to follow electronic submission guidelines may result in the assignment not being accepted. When doing so, students are expected to do the following:
- Send a professional email to the instructor which contains a professional salutation (Dr., or Ms., or Mr.),
- Brief information regarding the purpose of the email should be included;
- The email should be closed with the student's name and affiliation;
- The subject line on the email should include the course, assignment, and student name.
- The name of the attached file should be as follows unless otherwise specified: Course prefix and number (ATTR 665), Name of assignment (Case Study Assignment #1), Jane Doe, 2.14.12

Attendance Policy: Attendance requirements will be as described in the Texas A&M University Student Rules handbook (http://student-rules.tamu.edu/rule07). TAMU views class attendance as an individual student's responsibility. Students are expected to attend class and to complete all assignments. Instructors are expected to give adequate notice of the dates on which major tests will be given and assignments will be due. Absences will be authorized for reasons deemed sufficient by the instructor or by the university. When an absence is authorized, the instructor must either provide the student an opportunity to make up tests, assignments and other work missed or provide a satisfactory alternative to be completed within 30 days of the excused absence. The manner in which make-up work is administered remains the prerogative of the instructor. The instructor is under no obligation to provide an opportunity for the student to make up work missed because of unauthorized absence. The student may appeal the instructor's decision that an absence is unauthorized.
Professional Conduct: Students are expected to conduct themselves professionally at all times and to adhere to the guidelines published in the Texas A&M University Student Rules Handbook. Professional conduct entails but is not limited to attending classes on time, showing respect for the instructor and fellow classmates, being prepared for class, dressing appropriately and turning completed assignments in on time with exact adherence to instructions for completion.

Cell Phones (and other IM Devices) and IPods: Cell phones, IPods, and other IM devices should be turned OFF during class – not in silent/vibrate or other mode. Students must not answer incoming calls or text (or other mode of communication) during class. These are to be turned off and put away before entering the classroom. If you have a situation (family illness, etc.), and you need to be contacted, notify the instructor to acquire permission to keep the device on vibrate and then step out of the room before answering.

Academic Integrity Statement and Policy: The handling of possible incidents of academic dishonesty will be as described in the Texas A&M University Student Rules handbook. Students are encouraged to review Section 20 at http://student-rules.tamu.edu/search/rule20.htm of the Texas A&M University Student Rules as well as http://aggiehonor.tamu.edu. Students who do not understand any part of Section 20 should consult the instructor of this course. All work to be completed for this class is to be individual work unless otherwise noted. “An Aggie does not lie, cheat, or steal, or tolerate those who do.”

Plagiarism: As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, consult the latest issue of the Texas A&M University Student Rules, under the section concerning Scholastic Dishonesty.

Americans with Disabilities Act (ADA) Policy Statement: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Additional Notes: The instructor reserves the right to modify this course syllabus at any time. Students will receive verbal notification of such modifications.
# ATTR 673: Manual Therapy in Athletic Training

## Tentative Course Schedule

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WK 1</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Tues 8/30 | Introduction  
Orthopedic manual therapy art and science  
Manual therapy credentials  
Regulation of manual therapy practice | Biel Chp. 7  
Cook Chp. 1 |
| Thurs 9/1 | Lower Extremity Evaluation:  
Anatomy, Palpation, Mechanics of Foot, Ankle, Knee | Biel Chp. 7  
Cook Chp. 2, 3 |
| **WK 2** | | |
| Tues 9/6 | Anatomy, Palpation, Mechanics of Hip, Torso, Shoulder | Biel Chp. 2, 4, 6 |
| Thurs 9/8 | Anatomy, Palpation, Mechanics of Hip, Torso, Shoulder | Biel Chp. 2, 4, 6 |
| **WK 3** | | |
| Tues 9/13 | Anatomy, Palpation, Mechanics of Elbow, Wrist, Hand | Biel Chp. 2, 3 |
| Thurs 9/15 | Anatomy, Palpation, Mechanics of Elbow, Wrist, Hand | Biel Chp. 2, 3 |
| **WK 4** | | |
| Tues 9/20 | Written Exam #1 | |
| Thurs 9/22 | Soft Tissue Interventions:  
Massage | Starkey Chp. 17 |
| **WK 5** | | |
| Tues 9/27 | Soft Tissue Interventions:  
Myofascial Release, Muscle Energy, Strain/Counter Strain | Supplemental Reading |
| Thurs 9/29 | Soft Tissue Interventions:  
Joint Mobilization | K&C Chp. 5 |
<p>| <strong>WK 6</strong> | | |
| Tues. 10/4 | Neurodynamics | Cook Chp. 15 |
| Thurs. 10/6 | Neurodynamics | Cook Chp. 15 |
| <strong>WK 7</strong> | | |
| Tues 10/11 | Performance Taping | Supplemental Reading |
| Thurs 10/13 | Practical Exam #2 | |</p>
<table>
<thead>
<tr>
<th>Wk 9</th>
<th>Tues 10/25</th>
<th>Integration of Techniques: Assessment/Interventions Ankle/Knee</th>
<th>Cook Chp. 13, 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wk 9</td>
<td>Thurs 10/27</td>
<td>Integration of Techniques: Assessment/Interventions Ankle/Knee</td>
<td>Cook Chp. 13, 14</td>
</tr>
<tr>
<td>Wk 10</td>
<td>Tues 11/1</td>
<td>Integration of Techniques: Assessment/Interventions Hip/Torso</td>
<td>Cook Chp. 10, 11</td>
</tr>
<tr>
<td>Wk 10</td>
<td>Thurs 11/3</td>
<td>Integration of Techniques: Assessment/Interventions Hip/Torso</td>
<td>Cook Chp. 10, 11</td>
</tr>
<tr>
<td>Wk 11</td>
<td>Tues 11/8</td>
<td>Integration of Techniques: Assessment/Interventions Shoulder/Elbow</td>
<td>Cook Chp. 8</td>
</tr>
<tr>
<td>Wk 11</td>
<td>Thurs 11/10</td>
<td>Integration of Techniques: Assessment/Interventions Shoulder/Elbow</td>
<td>Cook Chp. 8</td>
</tr>
<tr>
<td>Wk 12</td>
<td>Tues 11/15</td>
<td>Integration of Techniques: Assessment/Interventions Wrist/Hand</td>
<td>Cook Chp. 9</td>
</tr>
<tr>
<td>Wk 12</td>
<td>Thurs 11/17</td>
<td>Integration of Techniques: Assessment/Interventions Wrist/Hand</td>
<td>Cook Chp. 9</td>
</tr>
<tr>
<td>Wk 13</td>
<td>Tues 11/22</td>
<td>Practical Exam #3</td>
<td></td>
</tr>
<tr>
<td>Wk 13</td>
<td>Thurs 11/24</td>
<td>THANKSGIVING</td>
<td></td>
</tr>
<tr>
<td>Wk 14</td>
<td>Tues 11/29</td>
<td>Global Assessments: Movement screening/Video Analysis/Intervention Plans</td>
<td>Supplemental Videos</td>
</tr>
<tr>
<td>Wk 14</td>
<td>Thurs 12/1</td>
<td>Global Assessments: Movement screening/Video Analysis/Intervention Plans</td>
<td>Supplemental Videos</td>
</tr>
<tr>
<td>Wk 15</td>
<td>Tues 12/6</td>
<td>Exam Review Course Evaluations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Written Exam: TBA</td>
<td></td>
</tr>
</tbody>
</table>

*Class times and days may occasionally be altered to accommodate guest speakers and other learning opportunities

*Lab examinations may be scheduled outside of laboratory hours to accommodate the number of students in the course.
Texas A&M University
Departmental Request for a New Course
Undergraduate □ Graduate □ Professional
Submit original form and attach a course syllabus.

Form Instructions:
1. Course request type:
   □ Undergraduate  □ Graduate  □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):
   Department of Biology
   BIOL 694 GRADUATE ORIENTATION
3. Course prefix, number and complete title of course:
   Cross-listed courses require the signature of both department heads.

4. Catalog course description (not to exceed 50 words):
   This course provides an orientation to graduate studies and the pathway through a PhD and beyond.

5. Prerequisite(s):
   Graduate classification

6. Is this a variable credit course?  □ Yes  □ No  If yes, from _______ to _______
7. Is this a repeatable course?  □ Yes  □ No  If yes, this course may be taken _______ times.
   Will this course be repeated within the same semester?  □ Yes  □ No
   Will this course be submitted to the Core Curriculum Council?  □ Yes  □ No
   How will this course be graded:  □ Grade  □ S/U  □ P/F (CLMD)
8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   BIOL and MICR
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
10. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-contrls/export-contrls-basics-for-distance-education).
11. Prefix  Course #  Title (excluding punctuation)
    BIOL  694  GRADUATE ORIENTATION

   Approval recommended by:
   [Signature]
   [Date]

   Department Head or Program Chair (Type Name & Sign)  Date
   Chair, College Review Committee  Date
   Dean of College  Date

   Submitted to Coordinating Board by:
   [Signature]
   [Date]
   Chair, GC or UCC

   [Effective Date]

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
BIOL 694. Graduate Orientation Syllabus.  
Fall 2016. Thursdays 5:30-7:00 pm, Butler Hall 103.

Instructor: Dr. Arne Lekven. Office: BSBE 118B. 
email: alekven@bio.tamu.edu 
phone 979-458-3461

Course description: This course provides an orientation to graduate studies and the pathway through a PhD and beyond.

Grading: Attendance is required for a grade of satisfactory.

Tentative schedule of class topics:
Sept. 03 Arne Lekven Welcome to grad school. How to talk to profs, lab members. Navigating the system.
Sept. 10 Rene and Wayne How to excel as a graduate student.
Sept. 17 Arne Being faculty at a Tier 1 research university.
Sept. 24 University Writing Center Overview of their services
Oct. 01 BGSA officers Surviving grad school; BGSA organization/activities.
Oct. 08 Veronica Acosta Being faculty at a primarily undergrad institution
Oct. 15 Bruce Neville TAMU library and online servies.
Oct. 22 Steve Lockless Scientific publishing and reviewing.
Oct. 29 Katie Stober Career Center Services
Nov. 05 Jim Smith Working, connecting with biotech/ pharmaceuticals.
Nov. 12 Ginger Carney Plagiarism/balancing work and life.
Nov. 19 TBD.
Nov. 26 Free for Thanksgiving.
Dec. 03 TBD.
Academic Integrity

"An Aggie does not lie, cheat, or steal, or tolerate those who do." The Aggie Honor Code.
Academic misconduct, a violation of the Texas A&M Honor System, involves any of the
following offenses: cheating, fabrication, falsification, multiple submissions, plagiarism, and
complicity in any of these offenses. For explanations and examples of what constitutes academic
dishonesty visit the Office of the Aggie Honor System at http://www.tamu.edu/aggiehonor/

The Americans With Disabilities Act

The Americans with Disabilities Act provides comprehensive civil rights for persons with
disabilities. It requires that all students with disabilities be guaranteed a learning environment
that provides for reasonable accommodation of their disabilities. If you believe you have a
disability requiring an accommodation, please contact the Department of Student Life, Services
for Students with Disabilities, in Room 126 of the Koldus Building or call 845-1637.
Texas A&M University

Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:  [ ] Undergraduate  [ ] Graduate  [ ] First Professional (LDS, MD, JD, Pharm, DVM)
2. Request submitted by (Department or Program Name):  Department of Biology
3. Course prefix, number and complete title of course:  BIOL 696 Ethics and Responsible Conduct of Research
4. Catalog course description (not to exceed 50 words):
Course will provide instruction on what constitutes fraud in science, how to recognize it, and how to avoid committing fraud; subjects in this area include basis of ethics and plagiarism, negotiation techniques and conflict management, and the regulations and ethics covering animal and human experiments, record-keeping, data management, and peer review.

5. Prerequisite(s):
Graduate classification or approval of instructor

Cross-listed with:  
Stacked with: 
Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course?  [ ] Yes  [ ] No  If yes, from [ ] to [ ]
7. Is this a repeatable course?  [ ] Yes  [ ] No  If yes, this course may be taken [ ] times.
   Will this course be repeated within the same semester?  [ ] Yes  [ ] No
   Will this course be submitted to the Core Curriculum Council?  [ ] Yes  [ ] No
8. How will this course be graded?  [ ] Grade  [ ] S/U  [ ] P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      BIOL and MCR
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      PhD and MS for any biological science discipline

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

<table>
<thead>
<tr>
<th>PREFIX</th>
<th>COURSE #</th>
<th>TITLE (INCLUDING PUNCTUATION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 696</td>
<td>ETHICS AND RESP RESEARCH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CH and Fund Code</th>
<th>Admin Unit</th>
<th>Acad. Year</th>
<th>HIC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0.00</td>
<td>1.00</td>
<td>26.0101</td>
<td>0440</td>
<td>15 -</td>
<td>16</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:

Department Head or Program Chair (Type Name & Sign) Date

Department Head or Program Chair (Type Name & Sign) Date

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 07/14
BIOL 696-600: Ethics and Responsible Conduct of Research

Term: Spring 2017
Meeting Times: Wednesdays 1:00 PM – 2:30 PM
Location: ILSB room 3143
Number of Credits: 1

Course Description
This class provides instruction on what constitutes fraud in science, how to recognize it, and how to avoid committing fraud. Subjects in this area will also include the basis of ethics and plagiarism, negotiation techniques and conflict management, and the regulations and ethics covering animal and human experiments, record-keeping, data management, and peer review.

Course Pre-requisites
Graduate student standing or approval of the instructor

Learning outcomes/ course objectives/ learning objectives
Students successfully passing the course will get legal certification that they have received ethical training following the NIH and NSF guidelines (see for instance http://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html for NIH and http://www/nsf.gov/bfa/dias/policy/rcr.jsp for NSF); will have learned how to not inadvertently violate federal laws regulating record-keeping, human studies, and animal studies, and will have learned skills in negotiation techniques and conflict management.

Instructor Name: Dr. Richard Gomer
Telephone Number: 979 458 5745
email address: rgomer@tamu.edu
Affiliation: TAMU Biology
Office hours: By appointment
Office location: ILSB room 2121 301 Old Main Drive MS 3474 College Station, TX 77843-3474 USA

Textbook

Grading policy
To receive your one hour pass-fail credit, you need to:
1) Complete the NIH-approved tutorials and hand in the printed certification pages with your name on them by April 16.

a. human subjects: http://rcb.tamu.edu/humansubjects/training

2) Attend classes. There will be 10 of these on Wednesdays at 1 PM. Since this course is designed to meet specific legal guidelines for your certification, attendance at ALL classes is required to pass the course. You may make up as many as two classes (no more than two) by interviewing two people who attended the class and writing a 500-word summary of what went on. Make sure you sign in at each class to get credit. Showing up more than 10 minutes late constitutes missing a class, and if you do show up late for any class, you will be required to write a 100 word essay as above
describing the material that you missed. All classes will include discussion. To get credit for the class you must be prepared, which means you must have read the assigned reading from the ORI text and be ready to show you have applied some thought to the posted questions.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 4</td>
<td>Introduction</td>
</tr>
<tr>
<td>Feb 11</td>
<td>The basis of Ethics (1,2)</td>
</tr>
<tr>
<td>Feb 18</td>
<td>Human subjects (3,5,8)</td>
</tr>
<tr>
<td>Feb 25</td>
<td>Animal care and use (4)</td>
</tr>
<tr>
<td>Mar 4</td>
<td>Plagiarism, paraphrasing, and citations</td>
</tr>
<tr>
<td>Mar 11</td>
<td>No Class</td>
</tr>
<tr>
<td>Mar 18</td>
<td>No Class -Spring Break</td>
</tr>
<tr>
<td>Mar 25</td>
<td>Patents</td>
</tr>
<tr>
<td>Apr 1</td>
<td>Record-keeping (6)</td>
</tr>
<tr>
<td>Apr 8</td>
<td>Career Paths (7)</td>
</tr>
<tr>
<td>Apr 15</td>
<td>Negotiations and conflict management</td>
</tr>
<tr>
<td>Apr 22</td>
<td>Data Management and Peer Review (9,10)</td>
</tr>
</tbody>
</table>

**Americans with Disabilities Act (ADA) Policy Statement**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services in Cain Hall B118, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu)

**Academic Integrity Statements**
AGGIE HONOR CODE: "An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: [http://aggiehonor.tamu.edu/](http://aggiehonor.tamu.edu/)

**Copyright Policy**
All materials used in this class are copyrighted. Therefore, you do not have the right to copy class materials unless permission is expressly granted.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:
   - [ ] Undergraduate
   - [ ] Graduate
   - [ ] First Professional (DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   EEBL

3. Course prefix, number and complete title of course:
   EEBL 630 Big Bend National Park Natural History Survey

4. Catalog course description (not to exceed 50 words):
   An advanced field course taught in Big Bend National Park emphasizing biological, ecological, and natural history features of the Trans-Pecos ecoregion. Detailed notes of the biology and geology of Big Bend based upon daily field trips will be recorded by students.

5. Prerequisite(s):
   None

6. Cross-listed with:
   Stacked with:
   Geology 330

7. Is this a variable credit course?
   - [ ] Yes
   - [ ] No
   If yes, from __________ to __________

8. Is this a repeatable course?
   - [ ] Yes
   - [ ] No
   If yes, this course may be taken __________ times.

9. Will this course be repeated within the same semester?
   - [ ] Yes
   - [ ] No

10. Will this course be submitted to the Core Curriculum Council?
    - [ ] Yes
    - [ ] No

11. How will this course be graded?
    - [ ] Grade
    - [ ] S/U
    - [ ] P/F (CLMD)

12. This course will be:
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
       NA
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
       Ecology and Evolutionary Biology (EEBL)

13. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

14. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control/basics-for-distance-education).

15. Privy Course 
    - [ ] Title (excluding punctuation)

   EEBL Big Bend National Park Natural

<table>
<thead>
<tr>
<th>Text</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CPI and Fund Code</th>
<th>Admin Unit</th>
<th>Acid Year</th>
<th>HFL Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

   Level

   Approval recommended by:
   [Signature]
   10-4-15

   Department Chair or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee Date
   Dean of College Date
   Chair, GC or UCC Date
   Effective Date

   Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
   Curricular Services – 07/14
EEBL XXX (Section XXX)
Big Bend National Park Natural History Survey

Instructors:
David E. Baumgardner, PhD
Senior Lecturer
Department of Biology
Texas A&M University
College Station, TX 77843-3258
e-mail: dbaumgardner@tamu.edu
979-845-4191 (phone), 979-845-2891 (fax)
Office Location: Biological Sciences Building East (BSBE), Room 325

Teaching Assistant:
TBD

Course Description, Summary and Prerequisites

Course Description:
Big Bend National Park is part of the Trans-Pecos ecoregion, and is considered a semi-arid desert. August is part of the rainy season, which triggers many species of plants and animals to become active, and can result in a time of great biological activity. In addition, Big Bend is an exceptionally diverse region geologically, featuring an extinct volcanic caldera, tectonic features that reflect the assembly of the North American continent, and fossil deposits ranging from ancient marine reefs to river deposits containing dinosaur remains.

Students will experience the unique geology, landscape, flora, and fauna of the Chihuahuan Desert, while gaining a greater understanding of the inter-related ecosystems of the Chihuahuan Desert. Students will be expected to keep a daily journal of the various learning events experienced and submit a final document at the end of the course.

Course Summary: An advanced field course taught in Big Bend National Park emphasizing biological, ecological, and natural history features of the Trans-Pecos ecoregion. Detailed notes of the biology and geology of Big Bend based upon daily field trips throughout the park will be recorded by students.

Prerequisites: Approval of instructors.

Course Objectives and Learning Outcomes

Course Objectives.
• Learn about the culture, history, geography, flora, fauna, and ecology of Big Bend.
• Develop observational, natural history skills needed to record and document observations in a detailed field journal. These observations can include unique adaptations and diversity of the plants and animals of the tropics, and changes in structure and function between different ecosystems.

• Learn to interact effectively with fellow students and conduct field studies in a difficult and challenging environment.

**Learning Outcomes. At the completion of the course, the student will:**

• Have an increased understanding of the history, culture, and ecology of Big Bend National Park and its associated ecology.

• Be able to successfully document the diverse flora and fauna and adaptations of these organisms that allow them to exist in a semi-arid environment.

• Enhance scientific writing and observational skills through “hands on”, high impact teaching.

**Required Textbooks**

No textbook is required for course. However, the following are recommended reading if you wish to learn more about Big Bend National Park:

- **Big Bend National Park Trails Illustrated.** 2009. National Geographic Maps.


**Grading Policies**

The student’s final grade will be based upon the following two criteria: (1) behavior, attitude, and participation in scheduled events; (2) daily field notes, reports, and discussions.

(1) **Behavior, Attitude, and Participation in Scheduled Events (10% / 10 Points).** All students are expected to participate in all scheduled events, including lectures, and discussion of daily findings. Students are expected to follow all instructions and directives of the course faculty and staff and to treat all members of the course and any other individuals with whom the students may interact with respect and professionalism. Violation of these standards may result in verbal or written counseling statements and/or loss of points towards final course grade.

(2) **Daily Field Notes, Reports, and Discussions (50% / 50 Points).** Students will be required to maintain an observational journal of the flora, fauna, community structure, biological adaptations, and any other ecological concepts which they find of interest or are discussed by the course instructors. A notebook and permanent ink pen will be provided. Sketches and reference to pictures may also be included. Students will be expected to record at least four observational recordings per day based upon either formal, scheduled events or observations while in smaller,
informal groups. Journals will be randomly reviewed by either the course director or teaching assistant and, if needed, feedback provided to improve the journal.

(3) Research data or research proposal (40% / 40 Points). Graduate students will be expected to accomplish this additional criteria by one of two ways. First, for graduate students who will benefit from gathering data that directly supports their research. Second, for new graduate students (generally those in their first year of graduate school), a 4-page (approximately 1,000 words), double-spaced research proposal after they return. The proposal should have a clear rationale and a sound hypothesis. Students can use any background knowledge or interest they bring to the table.

Final Grades: Final grades are determined as follows: A ≥ 90 points; B, 89 to 80 points; C, 79 to 70 points; D 69 to 60 points; F ≤ 59.

IMPORTANT NOTE: Administratively, this is considered a Fall course. Since the course will take place before the beginning of the fall semester, grades will not be formally assigned until the end of the fall semester.

Other Pertinent Course Information

Policy on Possession and/or Consumption of Alcoholic Beverages:
Possession or consumption of alcoholic beverages is strictly forbidden during the course for several reasons. First, many of the students in the course will not be of legal drinking age. Second, alcohol is a diuretic, which results in water loss to the body. Working in Big Bend in August is extremely stressful to the body due to the heat and lack of humidity, and results in extensive water loss to the body. Consumption of alcohol will only make the situation worse. Third, alcohol consumption can result in numerous social problems among students and create uncomfortable (and sometimes dangerous) situations.

Health Insurance:
All students are required to be covered under a health insurance policy and provide proof of this coverage when they complete the Health and Safety awareness form.

Safety:
Big Bend National Park is one of America’s most stunning parks, but also one of its most dangerous. Any student who is part of the course must realize and understand the risks, and how they are mitigated. Excessive heat and dehydration are the conditions that kill or injure many visitors to Big Bend each year, in particular during the months of July and August. Each morning, the instructors will brief the student’s on the activities for the day, safety concerns, and ensure everybody has proper clothing, water, and any other necessary items. Students MUST inform the instructors or teaching assistants at any time if they are feeling ill or have any health concerns or issues.

Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this
legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity
For additional information please visit: http://www.tamu.edu/aggiehonor

THE HIGHEST ETHICAL STANDARDS ARE EXPECTED AT ALL TIMES FROM ALL STUDENTS. "An Aggie does not lie, cheat or steal, or tolerate those who do." For additional information, please visit: http://www.tamu.edu/aggiehonor
This was the course schedule for 2015. The schedule for 2016 will be very similar both in terms of the number of days and activities. At this point, it is not possible to develop a detailed itinerary for 2016 because it takes a few months to coordinate all the activities with Big Bend National Park.

**TENTATIVE COURSE SCHEDULE 2015**
*(SUBJECT TO CHANGE DUE TO WEATHER CONDITIONS OR PARK RESTRICTIONS)*

<table>
<thead>
<tr>
<th>DAY</th>
<th>DATE</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Monday)</td>
<td>17-Aug-15</td>
<td>Travel from College Station to Big Bend</td>
</tr>
<tr>
<td>2 (Tuesday)</td>
<td>18-Aug-15</td>
<td>Rattlesnake Mountain (Fossil Hunt); Santa Elena Canyon; Cattail Falls</td>
</tr>
<tr>
<td>3 (Wednesday)</td>
<td>19-Aug-15</td>
<td>Boquillas Canyon; Hot Springs Hike; Mariscal Mine</td>
</tr>
<tr>
<td>4 (Thursday)</td>
<td>20-Aug-15</td>
<td>Fossil Bone Exhibit; Alpine; Night Hike</td>
</tr>
<tr>
<td>5 (Friday)</td>
<td>21-Aug-15</td>
<td>The Window; Lost Mine Trail (Caldera); Night Hike</td>
</tr>
<tr>
<td>6 (Saturday)</td>
<td>22-Aug-15</td>
<td>Emory Peak</td>
</tr>
<tr>
<td>7 (Sunday)</td>
<td>23-Aug-15</td>
<td>Rest and Recovery</td>
</tr>
<tr>
<td>8 (Monday)</td>
<td>24-Aug-15</td>
<td>Glenn Spring Road/Outer Mountain Loop Hike</td>
</tr>
<tr>
<td>9 (Tuesday)</td>
<td>25-Aug-15</td>
<td>Pine Canyon Trail Hike</td>
</tr>
<tr>
<td>10 (Wednesday)</td>
<td>26-Aug-15</td>
<td>Returns TAMU</td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: George Cunningham, Ph.D.
Associate Dean, College of Education and Human Development

FROM: Victor Willson, Ph.D.
Professor and Head

SUBJECT: New Course – EPSY 634: Educational Neuroscience

Attached, please find the appropriate paperwork for creating the new course EPSY 634: Educational Neuroscience.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: This course is a new course that will be optional for all Ph.D. students in the Learning Sciences program for Educational Psychology major as well as PhD students in the SPSY program - Neuroscience track. The course is meant to give more background and rationale as to how the brain functions in a variety of capacities and provide students with more research understanding in this area.

2. Vote by the Executive Committee: The changes have the unanimous support of our executive committee. This course was discussed at that executive committee meeting on 10/12/15.

We appreciate your consideration of this course. Please contact us should you require any additional information.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:
   - Undergraduate
   - Graduated
   - First Professional (e.g., DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   Select or Type Department/Program Name
   EPSY 634: Educational Neuroscience

3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Human learning from a biological perspective; fundamentals of genetics and neuroscience and the principles used to better understand the conditions brains develop and function optimally; a look at the biological substrates of emotions and motivation as well as executive functions (e.g., working memory, attentional control), and skills related to language and mathematics; neuroscience and application to atypical learners; emotional, learning, and other disorders that make learning and succeeding in educational contexts more challenging.

5. Prerequisite(s):
   Graduate classification; approval of department head

6. Is this a variable credit course?
   - Yes
   - No
   If yes, from ________ to ________

7. Is this a repeatable course?
   - Yes
   - No
   If yes, this course may be taken ________ times.

8. Will this course be repeated within the same semester?
   - Yes
   - No

9. Will this course be submitted to the Core Curriculum Council?
   - Yes
   - No

10. How will this course be graded?
   - Grade
   - S/U
   - P/F (CLmd)

11. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   Students in the Master's and PHD on Learning Sciences as well as the PHD in School Psychology - Neuroscience track.

12. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

13. Prefix
   - Course 
   - Title (excluding punctuation)

| Code | 634 |
|------|
| EDUCATIONAL NEUROSCIENCE |

<table>
<thead>
<tr>
<th>Lec.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HCC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>1308010004</td>
<td>0920</td>
<td>16</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:

Victor Wilson, Ph.D.
Department Head / Program Chair (Type Name & Sign)
Date 10/2/16

George Cunningham, Ph.D.
Chair, College Review Committee
Date 10/16/15

Mark Zoran, Ph.D.
Dean of College
Date 10/16/15

Submitted to Coordinating Board by:

Associate Director, Curricular Services
Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8301 or sandra-williams@tamu.edu.
Curricular Services – 07/14
EPSY 634: EDUCATIONAL NEUROSCIENCE
Syllabus
Fall 2016, Face-to-face
Department of Educational Psychology

Instructor: Steven Woltering, Ph. D.
Contact: swolte@tamu.edu.
Office hours: By appointment, 718B Harrington Tower
Teaching Assistant: TBD

Main Textbook: None, articles only.

ABOUT THIS COURSE

Welcome to EPSY620, Educational Neuroscience! Neuroscience has been, and still is, taking the field of psychology by storm and education is next. This course is meant for educational professionals, clinicians, and anyone interested in the psychology of learning who wishes to be prepared for an age where neuroscience and other biometrics will become an increasingly important factor in explaining our thoughts, motivations, and behavior. This course may also be useful for neuroscientists who wish to learn about theoretical models which can bridge the translational gap between biological mechanism and behavior.

In the course, we will mostly look at human learning from a biological perspective. We will cover the fundamentals of genetics and neuroscience before we discuss how we can use these principles to better understand under what conditions our brains develop and function most optimally. Next to basic factors such as sleep, nutrition, and exercise, we will also look at the biological substrates of emotions and motivation as well as executive functions (e.g., working memory, attentional control), and skills related to language and mathematics. We will also discuss what we can learn from neuroscience that can be applied to atypical learners, such as those struggling with emotional, learning, and other disorders that make learning and succeeding in educational contexts more challenging (e.g., dyslexia, ADHD, disruptive behavior disorders).

Pre-requisites: Graduate classification; approval of department head.
ROLE EXPECTATION

As your instructor (you can call me Dr. Steven), I am proud to offer you ‘Educational Neuroscience’ at Texas A&M University. We will be among the first (and few) to offer such a course in the world hosted by an education department. You can expect me to provide you with a deeper exploration and contextualization of the learning material as provided in the core readings. I will facilitate the learning process by offering you opportunities to interact with the learning material, myself, or your classmates through discussions, presentations, writing, or other activities. Last, I hope my background as an elementary school teacher, behavioral geneticist, and neuroscientists will also be able to provide you with unique perspectives.

I see you, the graduate student, as a self-directed future colleague in a common quest to generate new knowledge or applications that will transform lives for the better. Building on our diverse backgrounds, personal goals, and skills, I look forward to learning from each other’s insights and perspectives.

My main expectation is that you.
- have read this entire syllabus and agreed to all its content before the course begins.
- are here because you want to improve your skills, and advance your knowledge, about the science of learning.
- will alert me as soon as you are under-challenged or unable to fulfill the basic course requirements.

The teacher assistant (TA) will allow me to focus more on the quality of teaching and feedback. When you have a general or specific question about the course, available resources, or a complaint about the marking, please always contact a TA first. If the TA won’t be able to resolve your question, she or you can contact me directly at swolte@ tamu. edu. When appropriate, I will involve the TA in my answer so she will be able to help other students who have similar queries. We strive to get back to you within 24hrs. In addition to being a helpful resource, TA’s may direct class activities, moderate debates, or assist with marking.

CLASS FORMAT

A typical class will start with a lecture. Lectures won’t just summarize the readings but build onto the prepared materials to deepen and personalize your level of knowledge and surpass that of a standard textbook. Discussion during lectures is encouraged to promote critical thinking.

After a short break there will be a class activity or demonstration followed by student presentations. Class activities are aimed at promoting student involvement with each other and the learning material. Each class will end with a take-home message, a reflection on whether the class-goals were met, and what to expect when preparing for the next class.
EVALUATION

Your course grade is based on your performance in two reaction papers (40 points max), two wiki reviews (30 points max), one class presentation (20 points max), and general class participation (10 points max).

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
<td>69-60</td>
<td>D</td>
</tr>
<tr>
<td>89-80</td>
<td>B</td>
<td>Below 60</td>
<td>F</td>
</tr>
<tr>
<td>79-70</td>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reaction papers (40 pts):** You are required to submit *a minimum of two* double-spaced 2-page reaction papers. You can hand in as many reaction papers as you like, however, *the best two papers will count towards your final mark* (20 points each, max). Reaction papers are short reactions to the material you studied in preparation of a class. Reaction papers can be emailed to me at *any time in the course but before the first class activity starts* of the class you did your reaction paper topic on. This way, we can all benefit from your insights and ideas during the class. *Please note that everyone should have submitted at least one paper by the 7th class.*

Reaction papers can be in the form of a critique, novel synthesis of readings, proposal for a potential application or research, or an integration of the material with your own work or interests. The intended audience of your writing are professional reviewers (of grants, scholarships, scientific journals/outlets) in your field of interest. Reaction papers should not exceed a two pages and be in 12pt Times New Roman font, double spaced with 1” margins. An extra page can be used to denote references (APA-style, latest edition) and to add up to 2 footnotes to explain specialist terms or concepts. To save space, you are allowed to use numbers in the text to refer to your references instead of writing out the author names. Papers should be titled, dated, and contain your name and course code (EPSY 673).

You will receive feedback on your work the week after you have handed in your paper. Papers will be judged on formatting and academic style, clarity of written expression, understanding of material, and novelty. However, after your first paper, a very important criterion will be *your own progress*. All your reaction papers must be on different topics. More information on these assignments, including helpful resources to improve your writing, can be found on the course website.

*Please note that the feedback is intended to challenging. An average student can be expected to hand in more than three papers for a satisfactory mark.*

I believe this approach will give you more high-quality teacher-student feedback, allow for more opportunity to write on topics when you feel inspired, and enable you to spread your effort across the semester instead of a final assignment during a stressful period. Moreover, learning how to write succinctly is an important skill in obtaining grants & scholarships as well as manuscripts.
for publication in professional outlets.

**Wiki reviews (30 pts):** You are required to submit 2 literature reviews (15 points each, max) on a topic of your choice as indicated in the lab wiki page on the Educational Neuroscience textbook project. This project aims to create the first (and best!) textbook on Educational Neuroscience. You will gain access to the wiki which contains an outline/draft including tags where specific literature reviews are needed.

Reviews should, 1) contain a clear description of your search criteria and databases used, 2) contain full references to the source of the material, and 3) report findings in a scientifically sound, objective, unbiased and balanced fashion (this may also be in the form of an excel sheet). There are no page limits, however, we expect a typical review to consist of no more than 4 pages (including references/tables, etc...). More information on this assignment, including examples, can be found on the course website and wiki pages.

*You can hand in reviews once at any point during the course, however, you have to have handed in your first review by the 7th class.*

**Class presentation (20 pts):** Students are required to do one solo presentation of about 30 minutes on a topic of their choice. You are encouraged to do your presentation on the topic you choose for your wiki review and contain presentations of scientific peer-reviewed papers, case-studies, or other reliable sources on a topic closely related to the theme of the class. Typically, solo presentations happen near the end of a class. The idea is for your presentation to supplement the required class material and further engage your classmates.

I aim to have a schedule finalized by the end of the second class. *Topics for the presentation should be approved by Dr. Woltering at least a week ahead of time.* This will prevent your content from overlapping with class material.

Presentations are judged on your communication skills and understanding of the material. A presentation shouldn’t last longer than 30 minutes in total, should have an interactive component or at least allow for questions to be asked. You are encouraged to use presentation software such as PowerPoint or Prezi.

**Class participation (10 pts) & penalty points:** Your class participation mark will be determined by your class-attendance, consistent preparation, and active engagement during the class with your instructor, classmates, and learning material. In preparation for a class, you are required to do the readings as listed under ‘prepare’ in the class schedule. The enrichment material is optional, however, you are strongly recommended to check them out.

As an instructor, I reserve the right to hold (un)announced mini-quizzes as well as other means of assessment. Such mini-quizzes consist of easy questions from the required readings. The class activities, in general, are a means to engage with the learning material, and test/expand your knowledge, through discussion, games, videos, and/or other exercises.
As for class attendance, you are expected to be present and active at every class, except in instances of university excused absences. For each missed class there will be a 10-point reduction on your grade. To avoid the 10-point penalty, you can hand in a make-up assignment that will constitute out of a 4-page summary and reflection of the learning material to be handed in within 2 weeks of the missed class (pass or fail). If more than three classes are missed, your grade will be an auto-fail (independent of make-up assignments). For information on class attendance and excused absences, please see student rule 7: student-rules.tamu.edu/rule07

Students are expected to arrive before the class starts. Points can be deducted if a student is consistently late or misses a large portion of the class.

Please contact me if you think there should be an exception to these rules based on extenuating circumstances.

**BONUS points (up to 10 pts):** Bonus points are added to your total mark at the end of the course. You are in no way obligated to partake in activities that can earn you these points. They can be gained through peer review activities, bonus questions on mini-quizzes, or high-quality feedback comments on the wiki project.

For **peer review**, you can earn 1 bonus point for each reaction paper you reviewed from one of your classmates (to a maximum of 5 points). Your feedback will be judged (pass-fail) on elements of style, grammar, and formatting but mostly on how you stimulate the author to deepen their thinking, provide clearer argumentation or synthesis, and/or conduct more accurate literature research. Next to comments on how to improve the paper, it's also important to give detailed feedback on what you thought was good. **Under no circumstance are you allowed to (re)write sections of the paper for them or suggest completely novel ideas!**

Rules: the same rules apply for the handing in and receiving of feedback as with reaction papers with respect to the timing. You need to email me an electronic copy with your comments in track changes. You must have permission from the original author to share the review. A paper may only be reviewed for bonus points by one reviewer.

For **bonus questions** on mini-quizzes, you just simply answer those questions correctly.

For **feedback comments** on the wiki project (to a maximum of 5 points), Dr. Woltering will determine whether your feedback or suggestion is something he had not considered yet or whether your feedback will have an impact, beyond what was already planned, on the textbook.

**SCHEDULE**

The class units will be called chapters. In each chapter, we will discuss developmental perspectives, treatment/intervention perspectives, as well as psychopathologies.

Chapter 1: Introduction to the course & Basic neuroscience I.

Chapter 2: Basic developmental neuroscience (*Class presentation dates decided*)
Chapter 3: Theoretical principles of neuroscience
Chapter 4: How to read a neuroscience paper
Chapter 5: Exercise and movement
Chapter 6: Sleep, napping, and other mental states
Chapter 7: Nutrition (First reaction paper and review due, if not submitted one before)
Chapter 8: Language development
Chapter 9: Memory
Chapter 10: Math and higher-order reasoning
Chapter 11: Executive functions
Chapter 12: Socio-emotional development
Chapter 13: Self-regulation
Chapter 14: The future of Educational Neuroscience: use and misuse (Second reaction paper and review due, if not submitted before).

QUESTIONS?
Before you ask a question, after having read the syllabus (of course), please check the general discussion forum’s ‘frequently asked questions’ (FAQ) on the lab’s website. If your question is not answered there, please email the TA if your question is very specific to your situation. If your question is of general interest, we urge you to start a thread in the general discussion forum.
TAMU INTEGRITY ACADEMIC STATEMENT AND POLICY

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Students with Special Needs

Any student who could require assistance in the event of a necessary evacuation of the building in which this class is taught are asked to notify the instructor so that individuals can be identified to assist him/her during an evacuation.

Academic Honesty

As commonly defined, plagiarism consists of passing off as one’s own words, writings, etc., which belong to another. Therefore, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. In addition, all materials generated for this class are copyrighted. As such, you do not have the right to copy the handouts, unless I specifically grant permission. If you have any questions concerning plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section entitled “Scholastic Dishonesty.”

Aggie honor code

“An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.

For additional information please visit: aggiehonor.tamu.edu
TAMU Integrity Academic Statement and Policy

You must properly acknowledge the sources of the words, ideas, and information you present in all course assignments, assessments, and other activities. Failure to do so constitutes plagiarism.

(Aggie Honor System:

http://aggiehonor.tamu.edu/Descriptions/Plagiarism.aspx)

In all of your work in this course, you should use your own words to express your understanding whenever possible, being certain that you always give proper credit to the source. When you quote, paraphrase, or summarize another source, you must clearly indicate that you have done so following the rules and formats specified by APA (2010, pp. 169-174). In addition, you must avoid "paraphragarism," (i.e., plagiarism via paraphrase, Gall, Gall, & Borg, 2007, p. 75), in which text from another source is used with only minor revisions.

For information about how to avoid plagiarism see:

Aggie Honor System Rules:

http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#HonorSystemRules.html

Plagiarism, TAMU Library Guides:

http://guides.library.tamu.edu/content.php?pid=393112&sid=3221010

Avoiding Plagiarism, TAMU University Writing Center:

http://writingcenter.tamu.edu/for-faculty/teaching-writing/classroom-workshops/undergrad/plagiarism/

Avoiding Plagiarism, Self-Plagiarism, and Other Questionable Writing Practices; U.S. Department of Health and Human Services Office of Research Integrity:

http://ori.dhhs.gov/education/products/plagiarism/6.shtml

Avoiding Plagiarism Tutorial, McGraw Hill:

http://highered.mcgraw-hill.com/sites/0072873469/student_view0/avoiding_plagiarism_tutorial/

How to recognize plagiarism, paraphrasing, Indiana University Bloomington School of Education:

https://www.indiana.edu/~istd/example1paraphrasing.html

All incidents of suspected plagiarism or other academic misconduct in this class will be reported to the Aggie Honor System Office as required by TAMU rules and procedures.
(http://aggiehonor.tamu.edu/). If a finding of plagiarism or other academic misconduct is reached, the student’s Chair or Temporary Advisor will be notified. The range of possible penalties for such offenses ranges from mandatory ethics training with no penalty to expulsion from the program or university.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:  □ Undergraduate  □ Graduate  □ First Professional Program

2. Request submitted by (Department or Program Name): Department of Finance

3. Course prefix, number and complete title of course: FINC 678 Real Estate Analytics

4. Catalog course description (not to exceed 50 words): Specialized training for the real estate finance industry including Excel, Argus, and GIS software. Classification 6 students may not enroll in this course.

5. Prerequisite(s): Enrollment restricted to Master of Real Estate students only.

Cross-listed with:  
Stacked with:

Cross-listed courses require the signatures of both department heads.

6. Is this a variable credit course?  □ Yes  □ No

If yes, from ________ to ________

7. Is this a repeatable course?  □ Yes  □ No

If yes, this course may be taken ________ times.

8. Will this course be repeated within the same semester?  □ Yes  □ No

9. Will this course be submitted to the Core Curriculum Council?  □ Yes  □ No

10. How will this course be graded:  □ Grade  □ S/U  □ P/F (CLMD)

11. This course will be:

a.  required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   Master of Real Estate

b.  an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

12. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

13. Prefix  Course #  Title (excluding punctuation)

FINC  678  REAL ESTATE ANALYTICS

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CH &amp; Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>5215010016</td>
<td>1110</td>
<td>16</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:

R. T. Dye  2/18/15
Department Head or Program Chair (Type Name & Sign)  Date

Chair, College Review Committee  9/21/2015
Date

Dean of College  9/21/2015
Date

Submit to Coordinating Board by:

Chair, GC or UCC  Date

Associate Director, Curricular Services  Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
Real Estate Analytics

Class Meeting time    MTWRF 8:00am – 5:00pm

NOTE: Course meets the week prior to the first week of spring semester

Credit Hours:    One
Classroom:    Wehner 184 or other Computer Labs
Instructor:    John Russell Peterson

Office and Hours:    Wehner 351G
                    TBD
E-mail:    jpeterson@mays.tamu.edu

Office Phone:    979.862.1406
Cell Phone:    917.204.0748

Course Description and Objectives:
FINC 678 is a series of specialized trainings critical for success in the Real Estate Finance Industry. The analytic software utilized include Excel, ARGUS and GIS.

The purpose of the course is to introduce students to information and technology systems utilized in the real estate finance industry. Specific course objectives are to assist students in:

- Developing an appreciation for the importance of information systems available
- Developing computer skills through hands-on experience using technology tools
- Gaining an understanding of the importance of the use of information systems to provide a competitive advantage
- Becoming familiar with the capabilities and limitations of each system and when to utilize in analyzing a problem
- Explain key analytic terms used in the financial analysis of real estate
- Expose students to the resulting analysis performed and how to interpret the information
- Improve upon skill sets that are highly desired by industry

Learning outcomes:

Graduates will begin to master certain computer software programs commonly used in the real estate industry. While students will learn at their own pace, equally important will be the knowledge gained as to the usefulness of each of the information system’s capabilities. For example, some students may master GIS technology and use it frequently, but all will gain an understanding of the capabilities of the system, the analytic information generated and interpretation of the output.
Prerequisites

Finance 678 is strictly limited to students enrolled in the Master of Real Estate Program.

Required Material

Specific course materials including the Excel modeling and ARGUS training manuals will be provided to the students.

Attendance, Assignments and Grading:

Each student is required to attend all training days. The attendance grade will be prorated based on the hours you are in class. For example, if you attend 4 of the 5 days (32 hours out of the total 40) or 80% of the total hours, your attendance score will be 80 and your max points 64 as detailed in the table below. If you miss a graded activity without a valid, documented university excuse, you will receive a grade of zero on that activity.

Grading is based on attendance and completion of activities.

<table>
<thead>
<tr>
<th>Item</th>
<th>Max Score</th>
<th>Weight</th>
<th>Max Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>100</td>
<td>80%</td>
<td>80</td>
</tr>
<tr>
<td>Activity Score</td>
<td>100</td>
<td>20%</td>
<td>20</td>
</tr>
</tbody>
</table>

Course grades will follow the standard 90/80/70/60 scale:

<table>
<thead>
<tr>
<th>Points Collected (PC)</th>
<th>Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC ≥ 90</td>
<td>A</td>
</tr>
<tr>
<td>90 &gt; PC ≥ 80</td>
<td>B</td>
</tr>
<tr>
<td>80 &gt; PC ≥ 70</td>
<td>C</td>
</tr>
<tr>
<td>70 &gt; PC ≥ 60</td>
<td>D</td>
</tr>
<tr>
<td>60 &gt; PC</td>
<td>F</td>
</tr>
</tbody>
</table>

Your Activity Score is determined by participation in the exercises assigned during the training. Some of the activities will be individual work and others will be team based and the value of the activity will vary. As the objective is to have each student progress at his or her own pace, successful completion of the activity is not necessarily defined by determining a definitive answer but rather active engagement and demonstrated progress on the task assigned. Failure to actively participate in the exercise will result in a deduction of the activity score.

Your attendance and participation are not only recommended, but are essential to a successful learning experience and a passing grade. For more on attendance according to university policy, please visit the Texas A&M University Web site at:

http://student-rules.tamu.edu/rule07.
KNOW THE CODE

The Honor Council Rules and Procedures may be found on the Web at http://aggiehonor.tamu.edu. It is the responsibility of both students and instructors to maintain scholastic integrity by refusing to participate in or tolerate scholastic dishonesty. Incidents of scholastic dishonesty will not be tolerated and will be prosecuted to the fullest extent possible, consistent with university policy.

Classroom Care
To maintain the high quality conditions of our Wehner Building classrooms, students must adhere to the established policies. No beverages (except water), food, tobacco products or animals (unless approved) are allowed in the WCBA classrooms. Please do not leave trash including newspapers in the classroom.

Americans with Disabilities Act (ADA) Policy Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute providing comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118 or call 845-1637. For additional information, visit http://disability.tamu.edu.

Master of Real Estate "Winter-mester" Schedule and Topics

January 11 Excel functions tools and techniques commonly used in the real estate industry. Development modeling for all income producing properties.

January 12 Private equity fund structure basics including the general legal structure of U.S. based funds. Modeling joint venture properties for individual property transactions. Private equity fund modeling at the fund, general partner, limited partner levels. Key analytics such as IRR and equity multiples.

January 13 Introduction to ARGUS Enterprise and ARGUS Developer. Data input. Generating excel cash flow and analytic reports.

January 14 Case examples in ARGUS

January 15 Introduction to GIS Systems. Explanation of data available for populating reports or maps. Analysis of information generated by the system. Sample case to analyze in teams
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:
   - ☐ Undergraduate
   - ☑ Graduate
   - ☐ First Professional (DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   Department of Ecosystem Science and Management
   ESSM 604: Changing Natural Resource Policy

3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Study of the process through which environmental policies are changed; theories of social and political change; using these theories along with original research on environmental policy problems to create and implement plans for changing environmental policies in communities.

5. Prerequisite(s):
   Graduate classification:
   Cross-listed with:

   Stacked with: ESSM 404

   Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course?
   - ☐ Yes
   - ☑ No
   If yes, from _____ to _____

7. Is this a repeatable course?
   - ☐ Yes
   - ☑ No
   If yes, this course may be taken _____ times.

8. Will this course be repeated within the same semester?
   - ☐ Yes
   - ☑ No

9. Will this course be submitted to the Core Curriculum Council?
   - ☐ Yes
   - ☑ No

10. How will this course be graded:
    - ☑ Grade
    - ☐ S/U
    - ☐ P/F (CLMD)

11. This course will be:
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

12. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

13. Prefix | Course No. | Title (excluding punctuation)
    ------------------- | ------------------- | -------------------
    ESSM | 604 | Changing Nat Resc Policy

   Lect. | Lab | Other | SCH | CIP and Fund Code | Admin. Unit | Acad. Year | ELC Code
   ---- | ---- | ---- | ---- | --------------- | ---------- | ---------- | ----
   3.00 | 0.00 | 0.00 | 3.00 | 0111060005 | 0841 | 16 | - | 17 | 0 | 0 | 3 | 6 | 3 | 2

   Approval recommended by:
   Dr. Tom Boulton 8/8/2015
   Department Head or Program Chair (Type Name & Sign) Date
   Dr. David Reed 10/12/15
   Chair, College Review Committee Date
   Dr. David Reed 10/12/15
   Dean of College Date
   Dr. Mark Zoran 8/8/2015
   Chair, GC or UCC Date
   Submitted to Coordinating Board by:
   Associate Director, Curricular Services Date
   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 07/14
TO: Dr. David Reed, Associate Dean for Graduate Programs  
College of Agriculture and Life Sciences

THROUGH: Dr. Thomas Boutton, Associate Department Head for Graduate Programs  
Department of Ecosystem Science and Management

FROM: Dr. Forrest Fleischman, Assistant Professor  
Department of Ecosystem Science and Management

DATE: September 23, 2015

SUBJECT: Proposed new course: ESSM 604: Changing Natural Resource Policy

Dear Dr. Reed,

I am writing to propose a new graduate course, ESSM 604, Changing Natural Resource Policy. This course will be stacked with ESSM 404, an advanced undergraduate class with the same title. I taught this class in the fall semester of 2014 as ESSM 489/689, and it enrolled 3 graduate students and 15 undergraduates.

Changing Natural Resource Policy is a seminar-based class. Students are responsible for writing weekly reading responses, and we have extensive in-class discussions on the theory and practice of changing natural resource policies, drawing on historical examples from the US and other countries. In addition, students work in teams to implement a strategy to change a local environment. In 2014 one team worked with Keep Brazos Beautiful to develop a curriculum for educating local school children about water conservation, while another team worked with the campus office of emergency management to develop better knowledge about mitigating the risks of fracking and gas leaks on campus. Graduate students in the course were responsible for writing an extensive background research paper on their team’s topic. Guest speakers, including a neighborhood activist from Houston and a forest industry lobbyist from Austin, provided on-the-ground views on the topics we covered in the readings, discussions and projects. I am looking forward to enhancing the integration of guest speakers who work to change environmental policies here in Texas as my own knowledge of environmental policy issues in the state grows.

In addition to attracting students from ESSM and other natural resource oriented departments, I anticipate drawing some students from the Bush School; one enrolled in the fall 2014 course.

Thank you for considering this request. Please contact me if additional information is required.

Forrest Fleischman  
Assistant Professor, Department of Ecosystem Science & Management

213 Kleberg Center  
2138 TAMU  
College Station, Texas 77843  
tel. 979.845.5579 | fax. 979.845.6430 | http://essm.tamu.edu
To: Dr. Forrest Fleischman

From: Dr. Ann Bowman and Dr. Kent Portney

Subject: Proposed Course ESSM 604

Date: September 23, 2015

We have reviewed the syllabus for the proposed graduate course, ESSM 604-Changing Natural Resource Policy, and we do not find any areas of significant overlap with courses taught in the Bush School, such as PSAA 606-Environmental Policy and Management.

We support the creation of ESSM 604 as proposed. We believe it will be an important addition to TAMU’s offerings in environmental and natural resource policy.
Changing Natural Resource Policy

Course title and number: ESSM 404/604, Changing Natural Resource Policy (3-0). Credit 3
Term: Fall 2016
Meeting times and Location: Lecture T&R 11:10 a.m.-12:25pm ANIN317

Course Description and Prerequisites

Students will study the process through which environmental policies are changed; study theories of social and political change; teams use those theories along with their original research on environmental policy problems to create and implement plans for changing environmental policies in their own communities.

Prerequisites for ESSM 404: Junior or senior classification, or approval of instructor.
Prerequisites for ESSM 604: Graduate classification or approval of instructor.

Learning Outcomes or Course Objectives

PLO 7: Design management strategies for restoring and sustaining ecosystem goods and services and adaptive management concepts.
PLO 8: Interpret socio-economic and business environments relevant to ecosystem management.
PLO 9: Assess past, present, and future policy options relevant to ecosystems.
PLO 10: Illustrate critical thinking and demonstrate problem solving skills.
PLO 11: Demonstrate an ability to acquire, interpret, and present conclusions orally and in writing.
PLO 12: Demonstrate the ability to work collaboratively in teams and exercise leadership skills on projects.
PLO 13: Demonstrate environmental stewardship and professional and ethical behavior.
PLO 14: Recognize the need for lifelong learning and exhibit the skills necessary to acquire, organize, and reorganize new knowledge.
PLO 15: Demonstrate civic responsibility and global citizenship.

Instructor Information

Name: Dr. Forrest Fleischman
Telephone number: 979-862-1071 Office (please note that email is preferred)
Email address: forrestf@tamu.edu
Office hours: Wednesday & Thursday, 1:30-3:30 pm or by Appointment
Office location: 310 HFSB
Assessment, Grading & Course Structure

During the first week of the class, students will participate in a facilitated brainstorming exercise, in which they will self-select into teams of 4-6 students who will work together for the remainder of the semester to develop and implement a plan to change an environmental policy of their choosing. Students will be guided towards focusing on problems which are tractable within the limits of a semester: Solving global warming is probably not tractable in a semester, but changing the way energy is used on campus may be.

Assessment will be divided up into individually-based assessment and team-based assessment. Individual assessment will focus on weekly reading responses and/or reflections on the learning process, due 3 hours before the week's first class (12 in total, plus one final reflection for 13). Team assessments will assess the quality of team-produced outputs including (a) a problem statement (b) an action plan, and (c) a report on the action taken. All three of these will require both written & oral presentation. Students will have an opportunity to grade their peers, and this will be used to adjust individual grades (i.e. a portion of the grade for each team assignment will be assigned by peers).

Additional requirements for graduate students:
Graduate students will also be required to write a background research paper that will serve as a basis for their team's action, but bring scholarly literature to bear on the question. An initial draft, due early in the semester, will provide the basis for more polished revisions.

Grading Policies

Undergraduate students
The points in the course will be assigned as follows for undergraduate students:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number of Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly reading responses/reflections (12 worth 25 points each)</td>
<td>300</td>
</tr>
<tr>
<td>Written Problem statement</td>
<td>125</td>
</tr>
<tr>
<td>Problem statement presentation</td>
<td>50</td>
</tr>
<tr>
<td>Written Action Plan</td>
<td>175</td>
</tr>
<tr>
<td>Action plan presentation</td>
<td>50</td>
</tr>
<tr>
<td>Written report on action taken</td>
<td>225</td>
</tr>
<tr>
<td>Action taken presentation</td>
<td>50</td>
</tr>
<tr>
<td>Final Reflection</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>1025</td>
</tr>
</tbody>
</table>

Grading Scale
- 900-1025 = A
- 800-899 = B
- 700-799 = C
- 600-699 = D
- Below 599 = F

Note that there are 25 "extra points" in this grading scale, effectively allowing students to drop one reading response, should they feel confident in gaining the other points in the class. In the unusual case that a student has a grade between the 99 and 00 (e.g., 899.4), conventional rounding rules will be followed (i.e., 899.4 is rounded down to 899, a B, 899.5 will be rounded up to 900, an A).
Graduate students
The points in the course will be assigned as follows for graduate students:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number of Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly reading responses/reflections (12 worth 25 points each)</td>
<td>300</td>
</tr>
<tr>
<td>Written Problem statement</td>
<td>125</td>
</tr>
<tr>
<td>Problem statement presentation</td>
<td>50</td>
</tr>
<tr>
<td>Written Action Plan</td>
<td>175</td>
</tr>
<tr>
<td>Action plan presentation</td>
<td>50</td>
</tr>
<tr>
<td>Written report on action taken</td>
<td>225</td>
</tr>
<tr>
<td>Action taken presentation</td>
<td>50</td>
</tr>
<tr>
<td>Final Reflection</td>
<td>50</td>
</tr>
<tr>
<td>1st draft of graduate paper</td>
<td>100</td>
</tr>
<tr>
<td>Final draft of graduate paper</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td>1425</td>
</tr>
</tbody>
</table>

Grading Scale
- 1260-1425 = A
- 1120-1259 = B
- 980-1119 = C
- 840-979 = D
- Below 840 = F

Note that there are 25 “extra points” in this grading scale, effectively allowing students to drop one reading response, should they feel confident in gaining the other points in the class. In the unusual case that a student has a grade between the 9 and the 0, (e.g., 1259.4), conventional rounding rules will be followed (i.e., 1259.4 is rounded down to 1259, a B, 1259.5 is rounded up to 1260, an A).

Attendance and Late Work Policy

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/rule07. Regular attendance in this class is necessary for success, and students who have excused absences should contact the instructor as soon as possible to arrange for make up work.

Students who hand in assignments after the time it is due will receive 50% credit for the assignment if completed and handed in within 24 hours of the due date, after which it will receive a zero. Please note that the grading rubric contains 25 “extra points”, effectively allowing students to drop one reading response for the term without penalty. Late work will be accepted in the case of a University Excused Absence with no penalty. There will be no makeup for missed exams, except in the case of a University Excused Absence. Extensions will only be granted in extenuating circumstances.
Textbook and/or Resource/Reading Material

All readings apart from the course textbooks will be posted on eCampus. One textbook is required for all students: Graham, B. H. C. (2010). *America, the owner's manual: making government work for you*. Washington, D.C.: CQ Press. Please note that you may be able to find very inexpensive used copies of this book online. Graduate Students are recommended to obtain *Theories of the Policy Process*, 3rd edition, edited by Paul Sabatier & Chris Weible.

Other Pertinent Course Information

You are allowed to use electronic devices during class time for appropriate purposes (i.e. writing, working with students). Inappropriate use of electronic devices (i.e. for purposes not related to the class) is disrespectful and disruptive. If inappropriate use is frequent, this privilege will be suspended.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu).

Academic Integrity

*You are expected to follow the Aggie Honor code. For additional information please visit: [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).* “An Aggie does not lie, cheat, or steal, or tolerate those who do.”
Course Outline

Week 1 (August 29 - Sept. 2): Course Introduction, topic brainstorm

Week 2 (Sept. 5 - 9): Overview of approaches to policy change (part 1)

Week 3 (Sept. 12 - 16): Action Research.

Week 4 (Sept. 19 - 23): Overview of approaches (part 2)
Problem statement presentations in class.

Problem statements due before class September 27.

Week 6 (Oct. 3 - 7): Political Strategies.
1st draft of graduate student background papers due October 4.

Week 7 (Oct. 10 - 14): Communication & its limits.
Strategy presentations in class

**Strategies due Oct 18.**

- Selections from Houck, Oliver A. (2010). *Taking back Eden eight environmental cases that changed the world.* Washington, DC: Island Press. (Storm King & Trillium)


Week 10 (Oct. 31–Nov. 4): Grassroots social organizing


Week 11 (Nov. 7–11): Nonviolent direct action (1)

- Thoreau, H.D. *Civil Disobedience*

Week 12 (Nov. 14–18): Nonviolent Direct Action (2)


Week 13: (Nov. 21–25): Thanksgiving break: No class

Week 14: (Nov. 28–Dec. 2): **Presentations of action**

Week 15: LAST DAY OF CLASS: DEC. 6

**Action write-ups due. Final reflections due. Final papers due for graduate students on last day of classes at midnight.**
# Texas A&M University
## Departmental Request for a New Course
### Undergraduate • Graduate • Professional
- Submit original form and attach a course syllabus.

## Form Instructions

1. **Course request type:**  
   - [ ] Undergraduate  
   - [x] Graduate  
   - [ ] First Professional (DDS, MD, JD, PharmD, DVM)

2. **Request submitted by (Department or Program Name):**  
   - Select or Type Department/Program Name
   - FSTC 670: Quality Assurance For The Food Industry

3. **Course prefix, number and complete title of course:**
   - FSTC 670: Quality Assurance For The Food Industry

4. **Catalog course description (not to exceed 50 words):**  
   - Principles of food system process control including statistical process control (SPC) and the "tools" required to assure uniform communication and understanding of quality assurance systems.

5. **Prerequisite(s):**
   - **Graduate Classification**
     - Cross-listed with: ANSC 670
     - Stacked with: FSTC/ANSC 470
     - Cross-listed courses require the signatures of both department heads.

6. **Is this a variable credit course?**  
   - [ ] Yes  
   - [x] No  
   - If yes, from ________ to ________

7. **Is this a repeatable course?**  
   - [ ] Yes  
   - [x] No  
   - If yes, this course may be taken ________ times.

8. **Will this course be repeated within the same semester?**  
   - [ ] Yes  
   - [x] No

9. **Will this course be submitted to the Core Curriculum Council?**  
   - [ ] Yes  
   - [x] No

10. **How will this course be graded:**  
    - [x] Grade  
    - [ ] S/U  
    - [ ] P/F (CLMD)

11. **This course will be:**
    - [ ] required for students enrolled in the following degree program(s) (e.g., B.A. in history)
    - [ ] an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

12. **Graduate Students in Food Science and Animal Science**

13. **Prereq.**  
    - **Course #**  
    - Title (excluding punctuation)
    - FSTC 670: Quality Assurance Food Ind

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HCL Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>010901005</td>
<td>0270</td>
<td>16 - 17</td>
<td>0 3 6 3 2</td>
</tr>
</tbody>
</table>

**Approval recommended by:**
- Boon Chew  
  - Department Head or Program Chair (Type Name & Sign)  
  - Date: 9/28/15

- David Reed  
  - Chair, College Review Committee  
  - Date: 9/13/15

- Mark Hussey  
  - Dean of College  
  - Date: 9/26/15

**Submitted to Coordinating Board by:**  
- [ ] Date

- [ ] Chair, GC or UCC
- [ ] Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
ANSC/FSTC 470/670 - QUALITY ASSURANCE FOR THE FOOD INDUSTRY - FALL SEMESTER 2016

INSTRUCTOR: W.N. Osburn
338D Kleberg; Ph: 979-845-3989; E-mail: osburnw@tamu.edu
Office Hours: Fridays 10-12:00 or By Appointment.

LECTURE:
TTH 8:00-9:15; KLCT 300

OBJECTIVES:
1. To provide an understanding of the principles of quality and primary strategies for implementation of Quality Systems in the food industry.
2. To provide a fundamental basis for the principles of food system process control including statistical process control (SPC) and the "tools" required to assure uniform communication and understanding of quality assurance systems.
3. Use quality teams to provide knowledge and application of philosophical and analytical tools required for successful implementation of quality assurance programs in the food industry.

STUDENT LEARNING OUTCOMES:
By the end of this course, students will be able to
1. Apply critical thinking skills to define a problem, identify potential causes and possible solutions, and make thoughtful recommendations.
2. Work as a member of a team to solve a problem and report findings via oral and written communication.
3. Develop product standards and specifications.
4. Use statistical process control techniques to construct control charts.
5. Explain the interrelationship between food safety and quality systems.

SUPPLEMENTAL READING (No required texts)
Covey, S. 1989. The Seven Habits of Highly Effective People. Simon & Schuster. NY.
Specific readings will be established for classroom discussion.

Grading and Class Assignments/Projects:
All students must take three class exams and one class final.

<table>
<thead>
<tr>
<th>Exam dates</th>
<th>Class Exams (All Students)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 20XX</td>
<td>Exam 1</td>
<td>100</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Exam 2</td>
<td>100</td>
</tr>
<tr>
<td>Dec 20XX</td>
<td>Exam 3</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Exam 4 (Final)</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Due</th>
<th>Specific Undergraduate Student Assignments</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 20XX</td>
<td>Quality Guru Paper (UG)</td>
<td>100</td>
</tr>
<tr>
<td>Variable dates</td>
<td>SPC Quality Problem Solving Homework</td>
<td>100</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Team Quality Problem Solving Project Report</td>
<td>50</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Team Quality Problem Solving Project Presentation</td>
<td>50</td>
</tr>
<tr>
<td>Dec 20XX</td>
<td>Personal Mission Statement</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Participation and Class Attendance</td>
<td>50</td>
</tr>
<tr>
<td>Date Due</td>
<td>Specific Graduate Student Assignments</td>
<td>Points</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Variable Dates</td>
<td>SPC Quality Problem Solving Homework</td>
<td>100</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Team Quality Problem Solving Project Report</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Team Quality Problem Solving Project Presentations</td>
<td>50</td>
</tr>
<tr>
<td>Nov 20XX</td>
<td>Food System Research Paper</td>
<td>100</td>
</tr>
<tr>
<td>Dec 20XX</td>
<td>Personal Mission Statement</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Participation and Class Attendance</td>
<td>50</td>
</tr>
<tr>
<td>Total Points</td>
<td></td>
<td>800 (UG)/800 (G)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of Total Points</th>
<th>800 Points Max (Undergraduate)</th>
<th>800 Points Max (Graduate)</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>720-800</td>
<td>720-800</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>640-719</td>
<td>640-719</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>560-639</td>
<td>560-639</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>480-559</td>
<td>480-559</td>
<td>D</td>
</tr>
<tr>
<td>&lt;60%</td>
<td>479 or less</td>
<td>479 or less</td>
<td>F</td>
</tr>
</tbody>
</table>

DESCRIPTION OF UNDERGRADUATE STUDENT ASSIGNMENTS: The following assignments are requirements for undergraduate students in this course.

a) Assignment I: "Quality Guru" paper
Students will select one "founder" or "guru" of "Quality Systems" and write a one to two page paper on how their philosophy of quality impacted current quality management systems.

b) Assignment II: Statistical Process Control
Take home assignments on statistical process control (SPC) include calculations of Z values and process capability construction of X-bar and R charts, Np charts, etc. Dates vary during the semester.

c) Assignment III: Team Project Report and Presentation Assignment
1. You will be formed into Quality Improvement Teams (3-4 persons per team)
2. Each team will be given a scenario with a dataset involving quality issues or problems of a specific food product (Dairy, cereals and grains, fruits and vegetables, muscle foods, etc.).
3. Utilizing the scenario information, plus skills learned in lecture and lab (Team problem solving, Tools of quality, SPC) your team is to use the six step problem solving process to:
   a. utilize data provided to construct statistical process control charts;
   b. from the control charts and information given - identify and define the problem,
   c. determine the cause(s) of the problem based on your statistical analysis,
   d. generate potential solutions to solve the cause(s) of the problem,
   e. analyze each potential solution for its advantages and disadvantages,
   f. recommend the "best" solution (feasible, suitable, cost effective, etc.), and
   g. develop an action plan and timeline for implementing the proposed solution and how the solution will be evaluated to determine its effectiveness.
4. Each team will prepare a written report and PowerPoint slide presentation to the fictional Chief Operating Officer and/or President of the respective company that you are working for.
5. A separate handout detailing what is expected of each team will be provided.

d) Assignment IV: Mission Statement Preparation (Covey).
Each student will be responsible to develop and critique a personal mission statement using the principles and procedures outlined by Covey. This statement will be required and will be based on software program materials to be made available for student use found at the address:
DESCRIPTION OF GRADUATE STUDENT ASSIGNMENTS: The following assignments are requirements for graduate students in this course.

a) Assignment I: Quality Food Systems Research Paper
Students will write a research proposal framework/outline for an eight to ten page research paper explaining how quality management systems can be used to solve a specific food production system (dairy, fruits and vegetables, cereal grains, muscle foods, beef, pork or poultry production systems, etc.) problem area and explain how the application of quality systems principles could positively impact the quality and/or efficiency of that food system.

b) Assignment II: Statistical Process Control
Several take home assignment on statistical process control (SPC). Assignments will include calculations of Z values and process capability and construction of X-bar and R charts, Np charts, etc. Dates vary throughout the semester.

c) Assignment III: Team Project Report and Presentation Assignment
1. You will be formed into Quality Improvement Teams (3-4 persons per team)
2. Each graduate student team must collect their own dataset to be used to develop SPC charts and identifying areas for quality improvements. This dataset can be from research projects or collected from various Animal Science/Food Science facilities (Meat Science Center, Extrusion Lab, etc.) or other food/campus entity.
3. Utilizing the scenario information, plus skills learned in lecture and lab (Team problem solving, Tools of quality, SPC) your team is to use the six step problem solving process to:
   a. utilize data provided to construct statistical process control charts;
   b. from the control charts and information given - identify and define the problem,
   c. determine the cause(s) of the problem based on your statistical analysis,
   d. generate potential solutions to solve the cause(s) of the problem,
   e. analyze each potential solution for its advantages and disadvantages,
   f. recommend the "best" solution (feasible, suitable, cost effective, etc.), and
   g. develop an action plan and timeline for implementing the proposed solution and how the solution will be evaluated to determine its effectiveness.
4. Each team will prepare a written report and PowerPoint slide presentation to the fictional Chief Operating Officer and/or President of the respective company that you are working for.
5. A separate handout detailing what is expected of each team will be provided.

d) Assignment IV: Mission Statement Preparation (Covey).
Each student will be responsible to develop and critique a personal mission statement using the principles and procedures outlined by Covey. This statement will be required and will be based on software program materials to be made available for student use found at the address:
TOPICS FOR CLASS LECTURE & DISCUSSION:

I. Principles for Total Quality Management
   a. Defining Quality
   b. Philosophies - Deming, Crosby, Juran, Shewhart

II. Quality Leadership
    a. Project team development
    b. Quality Improvement Cycle
    c. Teambuilding, Communication and Interpersonal Skills

III. Quality Problem Solving
    a. Quality Problem Solving and Management
    b. Problem Solving Process
       i. Problem Identification, Definition, Diagnosis
       ii. Alternative Generation and Evaluation
    c. Types of Quality Problem
       i. Conformance and Efficiency Problems
       ii. Product Design and Process Problems
    d. Team Problem Solving
       i. Blueprint for successful teams
       ii. Conflict Resolution

IV. Quality Management Systems
    a. Total Quality Management
    b. ISO 9000, FSC 22000, SQF, BRC
    c. Six Sigma and Lean Manufacturing

V. The Quality Improvement Process
    a. The Ten-Step Quality Improvement Process

VI. Statistical Process Control
    a. Variation and distributions
    b. Central tendency
    c. Probability and hypothesis testing
    d. Control charts
       i. X bar and R charts ii.
       P, np and c charts
    e. Process capability

VII. The Quality Tool Box - Selected Tools for Continuous Quality Improvement
    a. Project Planning and Implementation Tools
    b. Data Collection and Analysis Tools
    c. Evaluation and Decision-Making Tools

VIII. Applications of Quality Improvement
     a. Team Project Report and Presentations

IX. Interrelationship Between Quality Assurance/Control and Food Safety Programs
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Quality Systems Philosophy (TQM)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>History of Quality</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Quality Leadership - Team Building - Undergraduate Quality Gurus Paper Due</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Quality Problem Solving</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Quality Management Systems</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Quality Improvement Process</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Tools of Total Quality</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Tools of Total Quality</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>Tools of Total Quality</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Exam 1</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Statistical Process Control</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Statistical Process Control</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>Statistical Process Control</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Statistical Process Control - Interrelationship Between Quality Assurance/Control and Food Safety Programs</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>Team Project Assignments and Scenarios</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>Interrelationship Between Quality Assurance/Control and Food Safety Programs</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>Interrelationship Between Quality Assurance/Control and Food Safety Programs</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>Team Project Data Development</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Team Project Data Development</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>Exam II</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>Team Project Presentations</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>Team Project Presentations and Final Reports Due</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>7 Habits Of Highly Effective People</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>7 Habits Of Highly Effective People</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>7 Habits Of Highly Effective People - Graduate Student Quality Food System Research Paper Due</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>Thanksgiving</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td>Prep for BRC/SQF training - Mission Statement Due</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td>Exam III</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>Prep for BRC/SQF training - Class Evaluations</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

Attendance: Since student participation during discussion sessions is an important aspect of this course, students are expected to attend all sessions. Attendance will be documented using an attendance sheet that must be signed by students in class. Absences will be excused only upon approval of instructors in advance of the class session in question. Five points per unexcused absence will be deducted from your final grade. For more information see TAMU Student Rule 7 – Attendance: http://student-rules.tamu.edu/rule07
Make-up Work/Auditing Policy

Regular attendance and participation in the course is expected of all students. Anticipated absences should be cleared with the instructor prior to the absence, if possible. Emergency absences (serious illness, injury, death, etc.) should be reported as soon as possible. An excuse may be necessary for more than three absences. Those students auditing the course are expected to participate in all class sessions. Make-up work will be allowed under extenuating circumstances for which written excuses are provided.

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 979-845-1637. For additional information visit http://disability.tamu.edu.

Academic Integrity and Honesty

It is the personal responsibility of each student to maintain the highest level of scholastic integrity at the university by refusing to participate in or tolerate any form of scholastic dishonesty. Additional information may be obtained from the Student Handbook or at the Handbook website http://student-rules.tamu.edu/index.htm, http://student-rules.tamu.edu/rules20.htm.

Copyright

The handouts used in this course are copyrighted. By "handout", I mean all materials generated for this class, which include but are not limited to syllabi, in-class materials, and handouts. You do not have the right to copy the handouts, unless I expressly grant permission.

Plagiarism

Plagiarism consists of passing off as one’s own the ideas, words, writings, etc., which belong to another. You are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues.

Aggie Code of Honor

For many years, Aggies have followed a Code of Honor in an effort to unify the aims of all Aggies toward a high code of ethics and dignity. It functions as a symbol to all Aggies, promoting understanding and loyalty in truth and confidence in each other. “Aggies do not lie, cheat or steal; or tolerate those who do.” If you have any questions regarding plagiarism or cheating, please consult the Texas A&M University Student Rules, under the section Scholastic Dishonesty. http://aggiehonor.tamu.edu.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:  
   - Undergraduate  
   - Graduate  
   - First Professional (If applicable)

2. Request submitted by (Department or Program Name): Genetics

3. Course prefix, number and complete title of course: GENE 602 Introduction to Genetic Model Systems

4. Catalog course description (not to exceed 50 words):

5. Prerequisite(s): None

6. Is this a variable credit course?  
   - Yes  
   - No
   If yes, from ________ to ________

7. Is this a repeatable course?  
   - Yes  
   - No
   If yes, this course may be taken ________ times.

   Will this course be repeated within the same semester?  
   - Yes  
   - No

8. Will this course be submitted to the Core Curriculum Council?  
   - Yes  
   - No

9. How will this course be graded?  
   - Grade  
   - S/U  
   - P/F (CLMD)

10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Ph.D. in Genetics, M.S. in Genetics
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export- 
controls/export-controls-basics-for-distance-education).

13. Prefix  | Course #:  | Title (excluding punctuation)  
   GENE  | 602  | GENETIC MODEL SYSTEMS

   Lect.  | Lab  | Other  | SCH  | CIP and Fund Code  | Admin Unit  | Grad. Year  | HEC Code  
   2.00  | 2.00  | 26.0801.00  | GENE  | 16  | -  | 17  | 0  | 0  | 3  | 6  | 3  | 2  

   Approval recommended by:
   Craig J. Coates  
   Department Head or Program Chair (Type Name & Sign)  
   Date

   Chair, College Review Committee
   Date

   Department Head or Program Chair (Type Name & Sign)  
   Date
   (if cross-listed course)

   Dean of College
   Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC
   Date

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 07/14
GENE 602
Critical Analysis of Genetic Literature
Introduction to Major Genetic Model Systems (MSs)

Course coordinator: Hubert Amrein (amrein@tamhsc.edu), (979) 845-6742; 242 Reynolds Medical Bldg; Office Hours by appointment.

Instructors: Michael Polymenis, Dorothy Shippen, Rene Garcia, Hubert Amrein, Bruce Riley, David Threadgill

Time & Location: Mondays 5:15 – 6:45pm ILSB 3119

Course Description: Gene 608 is designed to introduce first and second year graduate students to the main eukaryotic genetic model systems (MS): yeast, C. elegans, Arabidopsis, Drosophila, zebrafish, mouse. The course is organized in six sections, each dealing with one of the classical MSs, which are all used in numerous laboratories of Genetics faculty.

Learning Outcomes:
1. Students will be exposed to the MSs and will be able to describe the following
   - Basics of development and biology of MSs
   - Major discoveries that propelled each MSs into the mainstream
   - Major genetic tools of each MS, especially those unique to it

2: Students will improve their critical thinking skills, which they will demonstrate by being able to:
   - Succinctly state the goals of the study
   - Identify the rationale behind experiments
   - Analyze the strengths and weaknesses of the paper

Grading:
Grades will be based on the following scale:
A – 90-100 Points
B – 80-89 Points
C – 70-79 Points
D – 60-69 Points
F - <= 59 Points

Participation: Students are required to attend 13 of 14 classes to gain full credit for participation (40 points). Each additional absence from class reduces their score by 5 points per absence. Excused Absences will be allowed without a point penalty as dictated by student rule 7 http://student-rules.tamu.edu/rule07

Written Essay/Paper Presentation: Each Instructor will assign up to 10 Points for a total of up to 60 points.
Resources: There are several “How to Read a Scientific Article” resources online. Students are encouraged to consult the following websites.

http://www.ownet.rice.edu/~cainproj/courses/HowToReadSciArticle.pdf
http://web.stanford.edu/~siegelr/readingsci.htm

### Class schedule:

<table>
<thead>
<tr>
<th>Lecture/model</th>
<th>Week</th>
<th>Lecturer</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview, Intro of lecturers</td>
<td>1</td>
<td>PM SD GR KJ* RB TD</td>
<td>Introduction of lecturers and model systems</td>
</tr>
<tr>
<td>1 Yeast</td>
<td>2</td>
<td>PM</td>
<td>Human-yeast gene replacements</td>
</tr>
<tr>
<td>2 Yeast</td>
<td>3</td>
<td>PM</td>
<td>Genetic screens with conditional alleles, classic and modern</td>
</tr>
<tr>
<td>3 Arabidopsis</td>
<td>4</td>
<td>SD</td>
<td>Introduction to Arabidopsis</td>
</tr>
<tr>
<td>4 Arabidopsis</td>
<td>5</td>
<td>SD</td>
<td>Paper discussion: Harnessing the power of Arabidopsis genetics</td>
</tr>
<tr>
<td>5 Caenorhabditis</td>
<td>6</td>
<td>GR</td>
<td>See below</td>
</tr>
<tr>
<td>6 Caenorhabditis</td>
<td>7</td>
<td>GR</td>
<td>See below</td>
</tr>
<tr>
<td>7 Caenorhabditis</td>
<td>8</td>
<td>GR</td>
<td>See below</td>
</tr>
<tr>
<td>8 Drosophila</td>
<td>9</td>
<td>AH</td>
<td>Classical Genetics</td>
</tr>
<tr>
<td>9 Drosophila</td>
<td>10</td>
<td>AH</td>
<td>Modern Molec Genetics</td>
</tr>
<tr>
<td>10 Drosophila</td>
<td>11</td>
<td>AH</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>11 Zebrafish</td>
<td>12</td>
<td>RB</td>
<td>Introduction to zebrafish</td>
</tr>
<tr>
<td>12 Zebrafish</td>
<td>13</td>
<td>RB</td>
<td>Combining zebrafish tools to resolve core issues in early vertebrate development.</td>
</tr>
<tr>
<td>13 Mouse</td>
<td>14</td>
<td>TD</td>
<td>Introduction to Mouse</td>
</tr>
<tr>
<td>14 Mouse</td>
<td>15</td>
<td>TD</td>
<td>Paper discussion</td>
</tr>
</tbody>
</table>

### Lecturers
PM: Polymenis, Michael, PhD  
SD: Shippen Dorothy, PhD  
GR: Garcia, Rene, PhD  
AH: Amrein, Hubert, PhD  
RB: Riley, Bruce, PhD  
TD: Threadgill, David, PhD  
KJ* Karpac, Jason, PhD (will introduce Drosophila; AH out of town)

### American with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B1188, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu).
Academic Integrity
For additional information please visit: http://www.tamu.edu/aggiehonor
"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Information about specific lectures

Yeast (Michael Polymenis)

Lecture 1:
- Overview of the life cycle of S. cerevisiae.
- Highlight advantageous experimental properties, such as:
  1. High efficiency of homologous recombination
  2. Isolation of all gametes from an individual meiosis
  3. Conservation of basic cellular processes
  4. Unique morphological features, allowing non-invasive monitoring of cell cycle progression.

Lecture 2:

- Case studies for the above:
  1. A genome wide replacement of yeast genes with human orthologs, (see http://www.sciencemag.org/content/348/6237/921.long). This paper uses many of the tools available for gene replacement, and demonstrates the conservation of fundamental eukaryotic cellular machines.
  2. Genetic dissection of the cell cycle. The Hartwell cdc screen (http://www.sciencemag.org/content/183/4120/46.long). This is the Nobel Prize winning screen. An excellent example of using conditional mutants to probe processes essential for life, and a demonstration of the unique cell cycle morphology of yeast. The accompanying paper (http://www.ncbi.nlm.nih.gov/pubmed/16943325), is an illustration of how one goes about the same problem with the tools of the post-genomic era.
Arabidopsis thaliana (Dorothy Shippen)

Lecture 1: Introduction to Arabidopsis
Class Format: Lecture
1. Arabidopsis life cycle with emphasis on flower development
2. Genetic and molecular tools in Arabidopsis
3. The impact of Arabidopsis on human medicine

Assigned reading:

Lecture 2: The awesome power of Arabidopsis genetics
Class format: Collaborative Presentation.
Each student will be assigned a specific section/aspect of the primary research paper and must give a presentation to the class on that topic. Additionally, they must turn in a written essay re-explaining the assigned topic.

Assigned reading:
Primary research paper:

Commentary/Review articles:

Caenorhabditis elegans (Rene Garcia)

Lecture 1:
Overview of how different idiosyncratic facets of C. elegans Biology are used to address general biological questions.
1. Invariant developmental program in embryology.
3. Nutritional sensing and diapause developmental programs
4. Hermaphroditic and copulatory sexual mechanisms
5. Post reproductive biology and aging

Lecture 2:
Genetic and molecular tools used in C. elegans research
1. Microscopy inspection of cellular events.
2. Laser ablation analysis
3. Forward genetic analysis using chemical mutagenesis.
   a. Design and analysis
4. Reverse genetic tools.
   a. RNAi and CRISPR knock-outs and knock-ins.
5. Agonist and antagonist pharmacology
6. in vivo Calcium Imaging, optogenetics, and behavioral assays.

Lecture 3:
Epistasis Genetic Analysis of C. elegans post-embryonic diapause Development:
Collaborative Presentation. Each student will be given a specific section of the paper and must give a 5-8 minute chalk talk presentation on explaining the experiment design of their section. Additionally, they must turn in a written essay re-explaining the methodology, results and interpretation of the section.
Drosophila melanogaster (Hubert Amrein)

Lecture 1: Classic Drosophila genetics
- Overview over basic Drosophila biology: embryonic development, larval growth stage, metamorphosis (imaginal discs, reorganization of body plan)
- Genetic tools (classic genetics): mutations, saturation mutagenesis, balancers, polytene chromosomes, gene/deficiency mapping, P-elements (Morgan, TH, Nobel Prize in Medicine 1915)
- Classic Genetic screen to identify genes controlling early development (Wieschaus EF/Nuesslein-Volhard C, Nobel-Prize in Medicine 1995) and the use of the compound eye as a model system for Genetic screens (Rubin lab et al)

Lecture 2: Modern Molecular Genetics
- Molecular genetic tools: transgenesis, reverse genetic screens, gene traps, repressor/enhancer screens, targeted deletions (piggyback); GAL4 system, Q system
- Homologous recombination, gene-knock outs/knock-ins, CRISPR
- MARCM technique (Molecular Analysis with Repressible Cell Marker): dissecting neural circuitry
- Life imaging techniques: cell migration in embryo (gfp); Ca2+ imaging in vivo in various neurons both in the brain and periphery

Lecture 3: Paper discussion
- Paper discussion (1 or 2 papers selected; depending on number of students).
- Each student gets a specific assignment to discuss specific aspects of the paper in a 1 page brief, to be submitted prior to lecture 3)
- Each student is prepared to discuss any of the figures of the assigned paper, as well as respond to more general questions handed out to the entire class after lecture 2.
Danio rerio (Bruce Riley)

Lecture 1
- Overview of the zebrafish model system
  Biological attributes
  Current status
- Evolutionary considerations
  Whole genome duplications in the vertebrate lineage
  Common fates of duplicated genes
  Broad conservation of structure/function
- Forward screens
  Advantages and historical significance
- Reverse genetics – Morpholinos, TALENs, CRISPRs, Cre-Lox
  Current status, ongoing debates
- Transgenesis – Reporter lines, gene misexpression
  Heat shock, Gal4-UAS
- “Chemical genetics” - small molecule screens
  Regenerative medicine, cancer biology

Lecture 2
Paper discussion (tba)
Mus musculus (David Threadgill)

Lecture 1: Introduction to Mouse
Class Format: Lecture
1. Historical importance of mouse as a model
2. Unique position as a translational model
3. Important genetic concepts for the model including syntenic conservation, genetics, physiology, engineering and mutant screens.

Lecture 2: Paper discussion
Class format: Collaborative Presentation
Each student will be assigned a specific section/aspect of the research papers or background techniques, and must give a presentation to the class on that topic. Additionally, they must turn in a written essay re-explaining the assigned topic.

Assigned readings:
1. Classic George Snell paper where he first described the genetics of histocompatibility using tumor transplants. Snell was awarded the Nobel Prize in Physiology or Medicine in 1980 for this work. This a landmark paper that will bring in the concepts of natural genetic variation, congenics, different types of genetic crosses, and introduction to quantitative genetics.

2. Classic Shinya Yamanaka paper describing derivation of induced pluripotent stem cells that have characteristics of embryonic stem cells. Yamanaka won the Nobel Prize in Physiology and Medicine in 2012 for this work. This paper will cover cell-based genetic screens, embryonic stem cells, and the unique aspects of making germ line alterations in mice.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type: □ Undergraduate  ✔ Graduate  □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Genetics
3. Course prefix, number and complete title of course: GENE 682 Seminar Presentation

4. Catalog course description (not to exceed 50 words):
   Graduate students will present their research progress and results; perform peer assessment.

5. Prerequisite(s): None
   Cross-listed with: ____________________________
   Stacked with: ____________________________
   Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course? □ Yes  ✔ No
   If yes, from _________ to _________

7. Is this a repeatable course? □ Yes  ✔ No
   If yes, this course may be taken ________ times.
   Will this course be repeated within the same semester? □ Yes  ✔ No

8. Will this course be submitted to the Core Curriculum Council?
   □ Yes  ✔ No

9. How will this course be graded: □ Grade  ✔ S/U  □ P/F (CLMD)

10. This course will be:
    a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)
       Ph.D. in Genetics
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ✔ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix  Course #  Title (excluding punctuation)
    GENE  682  SEMINAR PRESENTATION

    Levt.   Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  HCE Code
    1.00     1.00  1.00  26.08.0801  GENE  16    -   17    0  0  3  6  3  2

    Approval recommended by:
    Craig Coates  10-16-15

    Chair, College Review Committee
    Date

    Department Head or Program Chair (Type Name & Sign)
    Date

    Dean of College
    Date

    Submitted to Coordinating Board by:

    Date

    Associate Director, Curricular Services

    Date

    Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
Course title and number: GENE 682 Seminar Presentation
Term (e.g., Fall 200X): Fall 2016
Meeting times and location: Monday, 4pm-5:15pm

Course Description and Prerequisites

Students will present their research progress and results; as well as perform peer assessment of other student's presentations. There are no prerequisites for this course.

Learning Outcomes

1. Students will perform an oral presentation of their research progress and results.
2. Students will critique student presentations through a peer evaluation process.

Instructor Information

Name: Jerome Menet
Telephone number: 458-5696
Email address: menet@tamu.edu
Office hours: By appointment
Office location: 3141A ILSB

Textbook and/or Resource Material

None Required

Grading Policies

Grades will be assigned based on the following point scale.
A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = <=59

Participation: Students are required to attend all of the seminar presentations to gain full credit for participation (40 points). One unexcused absence is allowed and then each additional absence from class reduces their score by 5 points per absence. Excused Absences will be allowed without a point penalty as dictated by student rule 7 http://student-rules.tamu.edu/rule07

Peer Assessment: Students will be provided with a rubric for critiquing other student presentations. Students will be assigned points for the quality of their peer review assessments, up to a total of 60 points.
Course Topics, Calendar of Activities, Major Assignment Dates

Seminar Presentations will be scheduled in conjunction with the Genomics and Genetics weekly seminar series. Each student will only present once during the semester.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity

For additional information please visit: http://aggiehonor.tamu.edu

"An Aggie does not lie, cheat, or steal, or tolerate those who do."
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:  □ Undergraduate  □ Graduate  □ First Professional (DOS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):  Department of History
3. Course prefix, number and complete title of course:  Hist 626 Reading Seminar in Gender and Sexuality in History
4. Catalog course description (not to exceed 50 words):
Examines how gender and sexuality operate both as categories of identity and as analytical tools; how scholars have employed them to understand historical processes; how languages shape power relationships; how other vectors of identity (class, race, and nation) intertwine with gender and sexuality.

5. Prerequisite(s):  graduate classification
Cross-listed with:  
Stacked with:  Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course?  □ Yes  □ No  If yes, from _______ to _______
7. Is this a repeatable course?  □ Yes  □ No  If yes, this course may be taken ______ times.
   Will this course be repeated within the same semester?  □ Yes  □ No
8. Will this course be submitted to the Core Curriculum Council?  □ Yes  □ No
9. How will this course be graded:  □ Grade  □ S/U  □ P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   M.A. and Ph.D in History
11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix  Course #  Title (excluding punctuation)
   HIST  626  READING SEM GENDER/SEXUALITY

<table>
<thead>
<tr>
<th>Unit</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CRN and Enroll Code</th>
<th>Admin Unit</th>
<th>Acad. Year</th>
<th>SEC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td></td>
<td>3.00</td>
<td>5401010001</td>
<td>1450</td>
<td>16</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:  Dr. David Vaughn  10-6-15
Department Head or Program Chair (Type Name & Sign)  Date

Department Head or Program Chair (Type Name & Sign)  Date
(if cross-listed course)

Submitted to Coordinating Board by:  Chair, GC or UCC  Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 07/14
February 2, 2015

Adam Seipp
Director of Graduate Studies
Department of History

Dear Dr. Seipp,

I write as Interim Director of the Women’s and Gender Studies Program (WGST) to offer unequivocal support for two proposed History courses: HIST 626, Readings in Gender and Sexuality in History, and HIST 627, Research Seminar in Gender and Sexuality in History. WGST has a thriving Graduate Certificate Program that currently enrolls over fifty students from three colleges (Liberal Arts, Education, and Health Sciences). The Program requires 12 credits in gender studies and emphasizes interdisciplinary learning, which means our students regularly take courses outside their home department and across the humanities and social sciences. A steadily increasing number of these students, moreover, are engaged in research and/or dissertation work on topics having to do with gender and sexuality. I am virtually certain, in other words, that both History courses would attract strong WGST enrollment, and I fully support their adoption.

Sincerely yours,

Joan B. Wolf
Interim Director
Women’s and Gender Studies Program

cc: Cynthia Bouton
HIST. 626: READING SEMINAR IN GENDER AND SEXUALITY IN HISTORY

Fall 2015
Wednesday, 2:00-4:50 PM
Glasscock 205

Dr. Cynthia Bouton
207 Glasscock Bldg
Office Hours: M, 1:00-2:00 PM
c-bouton@tamu.edu

Course Description
This readings course is a graduate level introduction to current research about how gender and sexuality operate both as categories of identity and as analytical tools, and how they can help us ask broader questions about historical processes. We will consider how scholars have employed gender as a category of analysis to explore how different societies have historically defined and preserved (economically, politically, culturally, intellectually, and socially) the categories of 'man' and 'woman', how language shapes power relationships—in both personal and institutional contexts—and how other vectors of identity (like race, class, and nation) are historically intertwined with questions of gender and sexuality. We will also examine how scholars have investigated how sex (as a biological category) and sexuality (as a set of human practices) are historically constructed, often drawing on the interdisciplinary theories/methods of queer and sexuality studies.

Format
This course is a seminar. Its success depends on coming to class prepared to discuss the assigned readings.

Prerequisite:
Graduate classification

Course Objectives:
• Students will be able to identify and analyze a wide variety of historical methods relating to the study of Gender and Sexuality in History.
• Students will be able to present their analyses in written and oral formats.
• Students will be able to apply course lessons to their comprehensive exam and dissertation preparation.

Learning Outcomes:
At the end of the course, students should be able to:
• Articulate the major themes and theories in Gender and Sexuality in History
• Understand the different methodological approaches that they might use when writing historically (e.g. sociological, anthropological, cultural studies)
• Identify the historiographical trends in Gender and Sexuality in History and how major theoretical insights, new evidence, and methodological trends have shaped this field since the 1960s.
Required Books:

Assignments:
Two essays: 6-8 pages (1500-2,000 words).
Each essay will indicate the state of the field for that week's topic: what questions have driving scholars' exportation of this topic, and why? When did scholars begin
studying this topic, and how has their scholarship changed over time (in response to what developments within and outside academia)? This essay is not a book review of the week's readings, although you may wish to refer to its contributions to the topic under consideration. You are considering the relevant field(s).

Circulate this essay to the class the Friday before our seminar. This essay forms part of the week's reading for the entire class.

For each week you have a paper assignment, you will also lead class discussion about how the class readings contribute to the field. You should prepare discussion questions in advance.

Attendance: Attendance is required except in the case of university-excused absences. Please see http://student-rules.tamu.edu/rule 7.htm for current policy on university excused absences.

Grading Assessment:
First Essay: 30%
Second Essay: 30%
Discussion: 40%

Grading Scale:
A 90-100
B 80-89
C 70-79
D 60-69
F 59 and below

COURSE SCHEDULE & READING ASSIGNMENTS

WEEK 1  INTRODUCTION
Editors' notes from the first issues of the following journals: *Journal of the History of Sexuality* (1990); *Gender and History* (1989); *GLQ* (1993); *Journal of Women's History* (1989); *Signs* (1975); *Studies in Gender and Sexuality* (2000)


GENDER AND SEXUALITY IN HISTORY, Readings Course  (draft, 3/26/14)

**WEEK VI**


**WEEK VII**


**WEEK VIII**


**WEEK IX**

**WEEK X**


**WEEK XI**


**WEEK XII**


OTHER IMPORTANT INFORMATION

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning experience that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life Services for Students with Disabilities, in Room B-118 Cain Hall. This phone number is 845-1637. It is the student's responsibility to contact the Department of Student Life and the professor.

Academic Dishonesty/Plagiarism/Professionalism in the Classroom: Texas A&M operates on an Honor System that presumes the integrity of its students. Students violate the honors policy and betray the Aggie tradition by plagiarizing or participating in other forms of academic dishonesty. Plagiarism includes failing to credit sources used in your work and/or attempting to receive credit for work performed in part or in whole by another person. The Texas A&M University Student Handbook outlines the meaning of "Academic Dishonesty and Plagiarism."
In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist is stealing and destroys trust among colleagues. Without that trust, and the safety that goes along with it, authors cannot communicate their research.
This information is available online at http://student-rules.tamu.edu/. Plagiarism is a serious offense and will result in receiving an a "F" on the assignment and failing this course.
Academic Integrity: "An Aggie does not lie, cheat, or steal, or tolerate those who do." You are expected to be aware of the Aggie Honor Code and the Honor Council Rules and Procedures, stated at http://www.tamu.edu/aggiehonor.
If you have any questions about what qualified as plagiarism, please make an appointment to see me during office hours.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):
   Department of History
3. Course prefix, number and complete title of course:
   Hist 627 Research Seminar in Gender and Sexuality in History
4. Catalog course description (not to exceed 50 words):
   Research and writing seminar focused on topics relevant to gender and sexuality in history.

5. Prerequisite(s):
   graduate classification
   Cross-listed with:
   Stacked with:
   Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course?
   - Yes
   - No
   If yes, from ________ to ________
7. Is this a repeatable course?
   - Yes
   - No
   If yes, this course may be taken ________ times.
   Will this course be repeated within the same semester?
   - Yes
   - No
8. Will this course be submitted to the Core Curriculum Council?
   - Yes
   - No
9. How will this course be graded:
   - Grade
   - S/U
   - P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree programs(s) (e.g., B.A. in History)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in Geography)
M.A. and Ph.D. in History

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Dept/ Course # Title (excluding punctuation)
   HIST 627 RESEARCH SEM GENDER/SEXUALITY

   Last. Lab Other S/U ULP and Fund Code Admin Unit Academic Year HUL Code
   3.00 0.00 3.00 5401010001 1450 16 - 17 0 0 3 6 3 2

   Approval recommended by: [Signature]
   [Name]
   Department Head or Program Chair (Type Name & Sign) Date

   Department Head or Program Chair (Type Name & Sign) Date
   (if cross-listed course)

   Submitted to Coordinating Board by:
   [Signature]
   [Name]
   Date

   Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
   Curricular Services – 07/14
February 2, 2015

Adam Seipp
Director of Graduate Studies
Department of History

Dear Dr. Seipp,

I write as Interim Director of the Women’s and Gender Studies Program (WGST) to offer unequivocal support for two proposed History courses: HIST 626, Readings in Gender and Sexuality in History, and HIST 627, Research Seminar in Gender and Sexuality in History. WGST has a thriving Graduate Certificate Program that currently enrolls over fifty students from three colleges (Liberal Arts, Education, and Health Sciences). The Program requires 12 credits in gender studies and emphasizes interdisciplinary learning, which means our students regularly take courses outside their home department and across the humanities and social sciences. A steadily increasing number of these students, moreover, are engaged in research and/or dissertation work on topics having to do with gender and sexuality. I am virtually certain, in other words, that both History courses would attract strong WGST enrollment, and I fully support their adoption.

Sincerely yours,

Joan B. Wolf
Interim Director
Women’s and Gender Studies Program

cc: Cynthia Bouton
**HIST. 627: RESEARCH SEMINAR IN GENDER AND SEXUALITY IN HISTORY**

Fall 2015  
Tuesday, 2:00-4:50 PM  
Glasscock 205  
Dr. Cynthia Bouton  
207 Glasscock Bldg  
Office Hours: M, 1:00-2:00 PM  
c-bouton@tamu.edu

**Course Description**

First, this is a research seminar and we will seek first to facilitate writing an article- or chapter-length research project, suitable for publication (and/or inclusion in a dissertation). By “suitable for publication” we mean a manuscript that formulates a research problem, draws on primary sources to generate a significant thesis/argument, and engages secondary literature. We will consider on a case-by-case basis other proposals for projects (such as a digital project, perhaps) that meet the standards of the genre and profession.

Second, we invite work in all epochs, spaces, and topics. We will begin the seminar by considering what sorts of questions scholars in the field of gender and sexuality in history are studying. To do this we will analyze recent articles and journals that publish in these fields: to see what scholars are doing, to understand how to find a journal appropriate for your questions, and to learn how to prepare a submission for a specific journal. Then, I will ask students to propose specific readings (articles in journals or other contributions of similar length) and primary sources particularly appropriate for their own research.

Finally, we will work to advance each student’s individual project—from proposal, to sources, to draft, to final revision—through a combination of peer reviews and individual meetings.

**Prerequisites:** Graduate Classification

**Learning Outcomes:**

The general learning goals for this course are important for your graduate education. By the end of this course you will be able to:

- Demonstrate that you have an in-depth understanding of the major methodological and theoretical approaches important to your work in Gender and Sexuality in history.
- Conduct original research.
- Communicate your research findings effectively in written and spoken presentations.
- Provide constructive feedback to your colleagues.

**Required Readings:**

Assignments:
- Students are expected to come to class with assigned readings completed, other assignments fulfilled, and prepared to participate in class discussions. It will be your job not only to work on your own project, but also to help other class members by providing them with thoughtful advice concerning their projects. I expect you to come to every class. The seminar depends on your collaboration.
- Writing assignments fall into two categories: 1) writing aimed at advancing your own project, and 2) writing directed toward assisting fellow classmates.
  - Your research project: to advance your project, I expect you to write: a one paragraph abstract of your research topic; prepare a prospectus and bibliography of your project; write a complete first draft of your project, including complete citations; and submit a final, revised version of your paper.
  - Other writing assignments include a peer review of other students’ prospectuses and a peer review of their draft projects.
- Oral presentations include: a report on the historical text you chose and why; a review of a particular journal that publishes material on Gender and Sexuality in history; a presentation of an article and primary source central to conceptualizing your project; and a final presentation of your project.

Grading your work:
<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation (including presentations)</td>
<td>10%</td>
</tr>
<tr>
<td>Peer reviews</td>
<td>10%</td>
</tr>
<tr>
<td>Prospectus and bibliography</td>
<td>10%</td>
</tr>
<tr>
<td>First draft research paper</td>
<td>30%</td>
</tr>
<tr>
<td>Final research paper</td>
<td>40%</td>
</tr>
</tbody>
</table>

Only work missed for university “excused absences” can be made up. There will be a 10 point penalty for every 24 hour period the work is late. Refer to student Rule 7 for information about excused absences. http://student-rules.tamu.edu/rule7.htm It is your responsibility to find out what you missed (in-class work, announcements, etc.) if you are absent.

Grading Scale:
90-100% = A; 80-89 = B; 70-79 = C; 60-69 = D; 59 and below = F
SCHEDULE OF ASSIGNMENTS

WEEK I
Introductions
Readings:
  • Gender & History 25th Anniversary Virtual Issue
    (2013)

WEEK II
Read and Discuss: Belcher, Writing your Journal Article in 12
  Weeks
Be prepared to discuss the historical text you admire the most
  (preferably an article, but a book will work) and explain
  why you think it is well-written.
Research Topics, Methodological Approaches, and Theory
  • Come to class with a one paragraph abstract of a research
    topic you would like to pursue in this course. We will
    discuss this.
  • Evaluating journals appropriate for your article.

WEEK III
Discuss the function and organization of Introductions in scholarly
  writing.
Each student will review a journal that publishes material on
  Gender and Sexuality in History (such as Gender &
  History; GLQ; Sexualities; Masculinities; Journal of
  Women's History; Feminist Studies; Journal of the History
  of Sexuality, Signs; Studies in Gender and Sexuality etc.)
  and present this to the class.
Discuss how to identify an appropriate journal for your article.

WEEK IV
Work on your research. Meetings with Instructor.

WEEK V
Group 1 will send (no later than Sunday, Feb. 9 at 5pm) one article
  and one primary source that you think central to
  conceptualizing your project. The class will read these
  and the researcher will present them and lead the discussion
  of them.

WEEK VI
Group 2 will send (no later than Sunday, Feb. 9 at 5pm) one article
  and one primary source that you think central to
  conceptualizing your project. The class will read these
  and the researcher will present them and lead the discussion
  of them.
Discuss how to write a prospectus. Review samples on E-Campus.

WEEK VII
Work on writing prospectus and building bibliography (description
on a separate handout). Circulate prospectus to class (send to Instructor) no later than 5pm on Saturday.

WEEK VIII  Peer Reviews of Prospectus

WEEK IX  SPRING BREAK

WEEK X  Write! Meetings with Instructor.

WEEK XI  Write! Meetings with Instructor.
Circulate Research paper Draft no later than 5pm on Saturday (send to Instructor)

WEEK XII  Peer Reviews of Drafts: prepare a written critique (template on separate sheet)

WEEK XIII  Discussion of Revision process
Preparing a grant proposal: Read:

WEEK XIV  Work on Revisions: meet with Instructor

WEEK XV  Paper presentations and feedback
Discussion of manuscript submissions.

FINAL PAPER DUE no later than last day of final exams by 5pm.
OTHER IMPORTANT INFORMATION

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning experience that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life Services for Students with Disabilities, in Room B-118 Cain Hall. This phone number is 845-1637. It is the student's responsibility to contact the Department of Student Life and the professor.

Academic Dishonesty/Plagiarism/Professionalism in the Classroom: Texas A&M operates on an Honor System that presumes the integrity of its students. Students violate the honors policy and betray the Aggie tradition by plagiarizing or participating in other forms of academic dishonesty. Plagiarism includes failing to credit sources used in your work and/or attempting to receive credit for work performed in part or in whole by another person. The Texas A&M University Student Handbook outlines the meaning of "Academic Dishonesty and Plagiarism." In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist is stealing and destroys trust among colleagues. Without that trust, and the safety that goes along with it, authors cannot communicate their research. This information is available online at http://student-rules.tamu.edu/. Plagiarism is a serious offense and will result in receiving an "F" on the assignment and failing this course.

Academic Integrity: "An Aggie does not lie, cheat, or steal, or tolerate those who do." You are expected to be aware of the Aggie Honor Code and the Honor Council Rules and Procedures, stated at http://www.tamu.edu/aggiehonor. If you have any questions about what qualified as plagiarism, please make an appointment to see me during office hours.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
- Submit original form and attach a course syllabus.

Form Instructions
1. Course request type: □ Undergraduate □ Graduate □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of History
3. Course prefix, number and complete title of course: Hist 638 Research Seminar in Asian History
4. Catalog course description (not to exceed 50 words):
Research seminar in Asian History: Social and cultural transformation of modern Asia; politics and government; wars and military affairs; imperialism and foreign relations; economic development, society, culture, religion.

5. Prerequisite(s):

Cross-listed with: __________________________
Stacked with: __________________________

Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course? □ Yes □ No
If yes, from _____ to _____
7. Is this a repeatable course? □ Yes □ No
If yes, this course may be taken ____ times.
Will this course be repeated within the same semester? □ Yes □ No
8. Will this course be submitted to the Core Curriculum Council? □ Yes □ No
9. How will this course be graded: □ Grade □ S/U □ P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

M.A. and Ph.D in History

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://ypr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix: Course #: Title (excluding punctuation)

<table>
<thead>
<tr>
<th>HIST</th>
<th>638</th>
<th>RESEARCH SEMINAR IN ASIAN HIST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Level Lab Other SCH CRP and Land Code</td>
</tr>
</tbody>
</table>

Approval recommended by:

Dr. David Vaugh 10-6-15
Department Head or Program Chair (Type Name & Sign) Date

Chair, College Review Committee 10-12-15
Dean of College 10-12-15

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
History 638 Research Seminar in Asian History (Fall 2016)

Dr. Olga Dror

Class Meetings: M 7:00-9:50, Glasscock 205

Office: 103D Glasscock Building

Office Hours: MW 2:30-3:30 and by appointment

Email: olgadror@tamu.edu

Prerequisite:

Graduate classification

Course Description:

This semester, HIST 638 will focus on the multiple conflicts in Southeast Asia during the second half of the 20th century. The word "Vietnam," hardly known to most Americans before the 1960s, since then has become a symbol of national pain. How the US got involved in Vietnam, how it left Vietnam, and what happened in between – these questions will be among many others discussed in class. We will consider different views on the war in Vietnam – of both its proponents and opponents. We will remember that after all it was the "Vietnam" war and, thus, a
considerable portion of the course will focus on the country where the war took place, its history, its people, and its tragedy. Primary documents, accounts of the leading political and military figures as well as of ordinary participants, literary works, will serve as a basis for seeing the war in Vietnam from different perspectives.

**Course Objectives:**

1. Students will gain an appreciation of history as both a field of knowledge and a creative process.

2. The war in Vietnam has generally been taught from the American perspective. This course expands students’ knowledge by emphasizing the Vietnamese sides of the war.

3. In studying different, often conflicting, views of the war, students will get a comparative perspective on the history of the war.

4. Students will come to understand that “Vietnam” is the name of a country of people, and not just a war.

5. Students will acquire an understanding of the intellectual demands required of historians through their own critical analysis—thinking, reading, listening, speaking, and writing.

6. Seminar participants will produce an original research paper based on primary and secondary sources and will learn the research techniques that lead to publication. The seminar will introduce students to the types of intriguing research questions that scholars of war and society are currently exploring and will help students consider new methods of interpreting and analyzing primary sources. Through instructor feedback and the peer review process, participants will develop an article with an original argument that contributes to the scholarship of the field.

**Student Learning Outcomes:** During the semester, students will:

1. Enhance their ability to ask questions of, accurately evaluate, and effectively synthesize primary and secondary historical writings.

2. Develop the ability to effectively express their own ideas in written and oral form.

3. Expand their knowledge of the historical and social contexts that created diversity in past and present human cultures.

4. Apply knowledge about the human condition—in the past and present—to their personal lives and studies.

**Required Readings:**


**Course Requirements:**

This course has three graded components: seminar participation, a research prospectus; and a 25-35 page research paper. Your final grade will be determined by the following formula:

- Participation: 5%
- Prospectus: 30%
- Final Paper: 65%

**Participation:** By joining this seminar, you have accepted my invitation to join a community of scholars who will work together to practice the research methods of historians. This course will be conducted as a seminar, where discussion, analysis, and constructive peer review will be expected from every member of the seminar. Periodically you will be asked to bring to seminar examples of primary sources, to make short oral reports on your research, or to turn in short statements of your research progress.

**Prospectus:** Early in the semester, you will develop a research prospectus that will provide a statement of your topic, your initial research questions, and a bibliography of primary and secondary sources.

**Paper:** Practicing historians produce original research aimed toward publication. Your final paper should be an article-length (25-35 pages) paper of a quality that you can aim toward eventual publication. The paper should have a clear argument, use primary source evidence to prove the argument, and demonstrate how the paper makes an original contribution to the scholarly literature.

- Students may select a topic from their individual sub-field of research and study as long as the paper contributes to scholarship in the area of war and society. Students working toward a doctorate are encouraged to use this seminar as an opportunity to produce a publishable chapter of the dissertation or to re-work portions of the master’s thesis for publication. Students in the M.A. program are encouraged to use this seminar as an opportunity to work toward a publishable chapter of the thesis or to expand significantly on an area of research in which you have already worked. If you choose to expand or make significant research revisions to work you have done previously, please provide me with a copy of your previous work.
- During the research and writing stage of this course, you will be given significant independence to work on your project without oversight and guidance from me. This autonomy can be a blessing or a curse. To succeed you will need to be self-motivated and self-disciplined: procrastination in a research seminar inevitably leads to sub-standard work. While you will generally be working on your own, please do not hesitate to contact me at any point with concerns or challenges you are facing. If you become overwhelmed, come and see me. We can work toward a solution.
- On the weeks that class does not officially meet, if you would like to meet with me one-on-one during the class meeting period, please let me know via email and I will be glad to
meet with you in my office. I will not be in my office during class time on those weeks unless I have made an appointment with a student.

**Grading Scale:**

90-100%    A  
80-89%      B  
70-79%      C  
60-69%      D  
59%         F

**E-Campus:**

Some course communication will occur through E-Campus (http://ecampus.tamu.edu/) and you will use the course page on E-Campus to submit your paper during the peer review process, to share your final paper electronically with other seminar members, and to access your grades. The course page will serve as a venue for seminar members to post questions, ask other members for help and suggestions, and discuss research problems that arise during the semester. You can download a mobile app for E-Campus that will notify you when new information is posted.

**Due Dates and Late Policy:**

Hard copies of the research prospectus and the paper are due at the start of class on the date given in the syllabus. Since you have no other major work in this course, late papers will not be accepted unless you have made prior arrangements with me or have an emergency the day of that class meeting, in which case you have two days to communicate with me and document your emergency as per university policy (http://student-rules.tamu.edu/rule07).

**Academic Integrity**


Please note that I will flunk you for the course if you plagiarize any portion of your prospectus or paper.

**ADA: Students with Disabilities**
The Americans with Disabilities Act is a federal anti-discrimination statute that provides civil rights protection for persons with disabilities. Among other things, this legislation requires that students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If a student believes that they have a disability requiring accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall (campus phone 845-1637). For additional information visit http://disability.tamu.edu.

Course Schedule

Sept 1  Questions and Sources  Readings: Herring, 1-169;
                        McMahon,

During this session we will discuss historical developments in the world that led to American involvement in Vietnam and the internal situation in Vietnam until 1965. We will start developing research questions that will serve as the basis for research papers and help to understand the field of war and society.

Sept 8  Questions and Sources  Readings: Herring, 170-368;
                        McMahon,

During this session we will discuss the period of direct American intervention in the war in Vietnam as well as the internal conflicts in Vietnam representing the civil war aspect of the conflict. We continue developing research questions that will serve as the basis for research papers and help to understand the field of war and society.

Sept 15  Research and Historiographical Approaches  Reading: Hess

During this session we will evaluate different historiographical approaches pertaining to the fundamental questions of the war in Vietnam.

Sept 22  Research and Writing  Reading: Nha Ca

During this session we work on search for original sources and on the construction of an academic article. We will practice good writing at the micro-level.

Sept 29  Community of Scholars  Due: Research Prospectus

The goal for this session is to facilitate research through the feedback and shared knowledge of a community of scholars. Seminar members will make short oral presentations.

Oct 5  Community of Scholars

The goal for this session is to facilitate research through the feedback and shared knowledge of a community of scholars. Seminar members will make short oral presentations.
Oct 12-Nov 10  Independent Research (No class meetings)

Nov 17  Problem Solving

The goal for this session is to collaborate on questions, sources, methods, and problems that have arisen during the research process.

Nov 24  Peer Review  Due: First Draft

There will be no formal class meeting on this date. Seminar members will submit their first drafts electronically to their peer review groups.

Dec 1  Community of Scholars  Due: Peer Reviews

The goal of this session is to receive feedback on first drafts, collectively work on problems encountered, and to build the members’ shared knowledge of research in war and society.

Dec 8  Independent Writing (No class meeting)

Dec 12  PAPER IS DUE BY NOON
Form Instructions

1. Course request type: ☐ Undergraduate  ☑ Graduate  ☐ First Professional  (Part A or B)  ☐ Other  
2. Request submitted by (Department or Program Name): Department of Health and Kinesiology  
3. Course prefix, number and complete title of course: HLTH 688 Systems Thinking and Complexity in Population Health
4. Catalog course description (not to exceed 50 words):
   This course examines population health as a complex adaptive system. It delves into the theoretical underpinnings of complexity science with an emphasis in modeling and simulation. Key topics include emergence, phase transitions, tipping points, resilience, early warning signals, edge of chaos, cellular automata, fractals, system dynamics, and agent-based models.

5. Prerequisite(s):
   HLTH 605: Research Methods or similar graduate research methods course

6. Is this a variable credit course? ☐ Yes  ☑ No  
   If yes, from _______ to _______.

7. Is this a repeatable course? ☐ Yes  ☑ No  
   If yes, this course may be taken _______ times.

8. Will this course be repeated within the same semester? ☐ Yes  ☑ No

9. Will this course be submitted to the Core Curriculum Council? ☐ Yes  ☑ No

10. How will this course be graded: ☑ Grade  ☐ S/U  ☐ P/F (CLMD)

11. This course will be:
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
       M.S. & PhD in Health Education
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix  Course #  Title (excluding punctuation)
    HLTH  688  Systems Thinking & Complexity

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td></td>
<td>16</td>
<td>-</td>
<td>003632</td>
</tr>
</tbody>
</table>

Approval recommended by:

Richard Kreider  
Department Head or Program Chair (Type Name & Sign) Date

George Cunningham  
Chair, College Review Committee Date

Joyce Alexander  
Dean of College Date

Mark Zoran  
Chair, GC or UCC Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu  
Curricular Services – 07/14
SYSTEMS THINKING AND COMPLEXITY IN POPULATION HEALTH
Course Syllabus

HLTH 689
Fall 2015
W 2:00-5:00 pm
313 Blocker

Professor: Yorghos Apostolopoulos
Email: yaposto@tamu.edu
Skype: yorghos.apostolopoulos
Office Hours: by appointment

Without changing our patterns of thought, we will not be able to solve the problems we created with our current patterns of thought. ~ Albert Einstein

The twenty-first century will be the century of complexity. ~ Stephen Hawking

Public health is fueled by revolutions in life sciences, information/communication technologies, human rights, and systems thinking, allowing us to comprehend and transform complexity. ~ Julio Frenk, Dean, Harvard School of Public Health

Course Description:
This course is an introduction to systems thinking and complexity in population health. It is the first in a sequence of three courses that delve into complex systems and computational simulation modeling in health: (a) Systems Thinking and Complexity in Population Health; (b) System Dynamics Modeling in Population Health; and (c) Agent-Based Modeling in Population Health. The second and third course are currently under development.

Although most disease causation is dynamic and nonlinear, population health interventions are rarely grounded in complex real-world settings. Traditional epistemology has contributed immensely to the strides made by population health sciences; however, it is not designed to capture nonlinearity or complexity. At the same time, theoretical and conceptual frameworks, research designs, methods, and analytical tools that employ systems/complexity paradigms remain underutilized and are not organically included in population health curricula and training, despite ample evidence of their potential contribution to epidemiological, intervention, and evaluation research. Addressing complexity requires the kind of thinking that acknowledges the nonlinear and dynamic nature of population health, and that questions the process of problem formulation, knowledge generation, analysis, integration, and dissemination. Many advocate that the development of systems thinking is imperative for overcoming global population health challenges because our current mental models generally ignore dynamic complexity in which such problems are entrenched.

As a foundational systems thinking and complexity course, this course will introduce you to issues central to the study of population health as a complex system. It will provide you with an overview of seminal pieces of systems/complexity literature, in order to establish an introductory but comprehensive understanding of the work that falls under the rubric of complex systems and its applications to population health. Discussion topics will include emergence, self-organized criticality, phase transitions, tipping points, resilience, edge of chaos, path dependence, cellular automata, small-world and scale-free networks, scaling, fat-tailed distributions, fractals, complex adaptive systems, modeling and simulation, system dynamics, and agent-based models.

The course is intended as an overview of systems thinking and complexity, with an introduction to modeling and simulation methodologies and analytical techniques applicable to population health. While we are all familiar with mental, conceptual, epistemological, mathematical, and statistical models, this course will shed light on the third pillar of the scientific method—computational modeling and simulation. More specifically, we will discuss why we need and use models in health research and will use computer simulation of model using software such as R, Python, LetLogo, and Vensim. Among a variety of computational
simulation techniques applicable to health problems, we will delve into system dynamics modeling and agent-based modeling. We will use these computational simulation modeling tools to answer questions such as: How can we better understand the distribution and determinants of health and disease outcomes in human populations, and inform high-leverage, sustainable interventions and policy?

You do not have to be or intend to become a systems/complexity methodologist or expert to take this course. Doctoral and advanced Master’s students as well as post-doctoral fellows from diverse disciplines and departments are welcome.

Course Objectives:
Upon completion of this course, you will be able to:

1. Articulate the limitations of the dominant paradigm underlying traditional population health research and its ramifications for sustainable interventions and policy;
2. Effectively grapple with fundamental concepts of systems thinking and complex systems as applied to compelling questions of population health;
3. Discuss landmark contributions to the field of complex systems and nonlinearity science;
4. Articulate the concept of complexity and what it entails as well as the specific challenges it poses for traditional population health research and interventions;
5. Discuss fundamental approaches, strengths, and limitations of complex systems thinking, methodologies, and analytical techniques;
6. Explore the contribution of systems thinking and complexity science in theory-building in population health;
7. Use system dynamics modeling and explore agent-based modeling to understand disease burden, impactful interventions, and health policy (including examples and case studies);
8. Build and simulate your own simple models for fundamental population health research questions;
9. Critically review the systems thinking and complex systems literature in population health sciences; and
10. Join a community of graduate students, faculty, and researchers interested in the relevance and utility of transdisciplinary complex systems epistemology, scholarship, and cutting-edge computation.

Course Materials:
The course involves weekly readings and discussion of a wide range of research papers, selections from books, and online reports.

1. Throughout the course, we will draw from the following books:

2. Assigned (required and optional) journal articles, book chapters (in addition to the above list), research reports, and online readings will be uploaded every Thursday to Google Drive (HLTH 689) (further explanations will be given in class).

3. For those with an interest in more advanced computational simulation modeling, the following books are suggested. They are among the best in systems dynamics modeling and agent-based modeling:

(4) Finally, the following books are highly recommended as supplemental readings:

**MOST OF THE ABOVE BOOKS ARE AVAILABLE FOR EXAMINATION IN MY OFFICE.**
**FEEL FREE TO STOP BY AND TAKE A LOOK BEFORE PURCHASING THEM.**

**Course Expectations:**
• You should anticipate an average of 8-10 hours of weekly effort throughout the semester.
• This course is a student-driven, discussion-grounded class, and therefore I will not lecture. I will lead select discussions (introductory class, model building and simulation), and discussion leaders will lead the rest of our class sessions (the last two sessions will be devoted to project presentations). You are all expected to complete the readings and drive the discussions. Please refer to detailed class schedule below.
• As this is the first comprehensive systems/complexity in health course for all of you, I expect that you will be asking/answering a variety of intriguing questions. In addition, as we expect to have participants with different levels of substantive/disciplinary backgrounds (such as
HLKN faculty and faculty from other departments), we can all anticipate very engaging and constructive dialogues and exchanges.

- I expect you to share your own personal, diverse knowledge and experiences in the area of systems, complexity, and health (as well as other thematic areas) during our discussions as the opportunity and need arise.
- There is ample and useful systems- and complexity-related information on the Internet. A quick search will easily lead you to short introductions to most themes and topics we cover as well as deeper and more technical topics.

Course Format:

- **Readings**: Everyone needs to read and think about the required readings assigned for each session prior to class. Students are highly encouraged to read at least one or two of the optional readings and come to class prepared to discuss them. In this way there will be a few people who have read each optional reading and collectively the class will cover them all. Supplemental readings are meant only for those who want to delve even further into systems and complexity themes, concepts, methodologies, analytical tools, and their capabilities.

- **Discussion leaders**: In each session 2-3 students will serve as discussion leaders who will decide how to run the session (discussion leaders should not lecture). For example, you might summarize what you thought were some of the key points or ideas from the readings, you might provide a critique of key points, or, when applicable, you might want to find examples of particular systems (i.e., climate system tipping points) and present them to classmates. It is suggested that discussion leaders read and organize the emailed questions and comments (described below), collect last minute questions at the start of class, and then lead the group through them, with all participants adding comments, answering questions, etc. The priority for discussion leaders should be to facilitate an informative and stimulating discussion.

- **Discussion questions**: Students are required to prepare at least 2-3 questions and/or comments about each reading. The questions can be simple (e.g., a request for clarification or simple explanations) or more complex, while comments can be to express dis/agreement with some or all of the readings, or to share with the class other readings in your area of interest, or in general, that are of relevance to the class. To give discussion leaders time to organize them and to give your classmates time to read/think about your questions/comments, they must be emailed to the whole class (copying me) each Tuesday by 8:00 am. These questions, comments, and/or discussion items are intended as seeds for ongoing discussions, before, during, and after the day of readings and class time. You may also bring to class additional discussion items, open-ended questions, notes about upcoming lectures of interest, pointers to papers and web pages, or add these to emails to facilitate even deeper or more stimulating discussion.

- **Lab sessions**: While this course will be heavily based on in-depth discussions, the inclusion of lab sessions is deemed necessary to meaningfully introduce computational modeling and simulation. While I intend to include more extensive, hands-on model building and simulation in the second class iteration (Fall 2016), only the basics of model building and simulation using system dynamics modeling methodologies, based on Vensim (free online, see p. 5) will be introduced this semester. In addition, a guest speaker will introduce the basics of agent-based modeling and simulation using NetLogo (free online, see p. 12).
Based on pedagogical and learning experiences and outcomes from this semester, a *Complexity in Health Discussion Forum* will be created in Spring 2016 so that HLKN and other TAMU students, faculty members, and researchers can post questions, comments, and discussion items to start a transdisciplinary dialogue on issues of systems, complexity, and computational population health. Along these lines, starting Fall 2016, HLTH 689 will have its own comprehensive website and discussion forum.

**Course Evaluation:**

There are 5 evaluation criteria, out of which 4 provide points toward your course grade. The fifth criterion is your contribution to building a Wikipedia-type internal storehouse of systems and complexity terms/concepts, which can potentially boost your overall grade in marginal cases.

1. **Discussion leadership and participation [30 points]:** All class participants (including those who sit in/audit the course) are expected to come to class having read all required readings, completed the in-class assignments, and ready to be active participants in class discussions and exercises. To facilitate meaningful discussions, each of you will take on the role of discussion leader $n$ times, which will result in a total grade for this evaluation category. Discussion leaders will be responsible for leading the discussion and may use visual aids or handouts as they see fit. Because there will be multiple discussion leaders per class period, you need to coordinate the process. All students must **participate substantively in the discussions** to do well.

2. **Group paper [20 points]:** Using class-initiated readings, materials, and discussions as well as external sources, we will produce (with my active involvement) a groundbreaking, critical-review group paper tentatively titled "Mind the gap? Why systems thinking and complexity science are absent from public health curricula and training." Our goal will be to submit this co-authored manuscript to the *American Journal of Public Health*, under the rubric of *Framing Health Matters* papers during spring 2016. The goal is to initiate a dialogue on the importance of immersion into and intersection of social, natural, and biological sciences in higher public health education. This paper (max 4,000 words) will be the first of its type in the U.S. literature, and will examine the reasons that systems thinking and complex systems epistemologies have not thus far been an integral part of current population health university programs, the subsequent substantive, methodological, and practical ramifications, as well as the potential benefits upon its incorporation as a organic part of curricula and training. [This assignment is only for those enrolled for credit.]

   **Due dates:**
   - October 7: One-page individual paper outline as email attachment
   - December 9: Group paper presentation in class
   - December 14: Complete group final paper (both electronic and hard copy)

3. **Model building and simulation [25 points]:** All class participants are expected to select a dynamically complex Research Question (requiring my approval) and then build and simulate a SIMPLE model, grounded in system dynamics theory and methodologies. Steps 1-10 below will be completed using Vensim (http://vensim.com/free-download):
   - Step 1: Define a complex health problem (within the broad area of chronic disease prevention for which you have or can find data to parameterize the model)
   - Step 2: Define the model/system/problem boundary
   - Step 3: Define time horizon and geographic area of the system/problem/model
   - Step 4: Formalize a list of key (causal) variables (endogenous, exogenous, excluded)
   - Step 5: Draw behavior-over-time graphs (or reference mode) of key (causal) variables
   - Step 6: Identify stakeholders and/or community leaders
   - Step 7: Develop causal loop diagram (with distinct reinforcing and balancing loops)
• Step 8: Formulate the dynamic hypothesis of the model
• Step 9: Transform the causal loop diagram into a stock-and-flow diagram
• Step 10: Calibrate and simulate model.

Due dates:
• October 14: Selection of Research Question
• December 2: Complete modeling and simulation exercise and class presentation

(4) Research proposal and peer review [25 points]: This assignment is only for those enrolled for credit. You are expected to write a research proposal using and comparing and/or contrasting reductionist and systems/complexity paradigms (as guiding frameworks of your proposal). The systems/complexity conceptualization and methodology used will be either system dynamics modeling or agent-based modeling (you could also use the research question you used in the modeling/simulation exercise above). Extensive instructions and guidance will be provided throughout the semester. The proposal (10 pages max.) should include the following sections (no need for Human Subjects section):
A. Introduction: very brief proposal rationale, overall aim, specific aims, and hypotheses;
B. Literature Review;
C. Methods: theory/ies, conceptual framework (diagram), design, and analytical plans;
D. Results: substantiated anticipated results for proposed study;
E. Conclusions: interpretation of results
F. Key References: not included in the 10 pages

Due dates:
• October 12: One-page proposal outline (including underlined key hypotheses) as email attachment
• December 9: Final research proposals are due prior to class (both electronic and hard copy). The complete proposal will be presented during class (using Power Points). Each presentation will be peer-reviewed in class for constructive feedback.

(5) Systems/Complexity Wikipedia [0 points]: To further support your ongoing learning on systems thinking and complexity science, we will collectively build a depository of key relevant terms and concepts as a reference guide that will be continually updated and improved for you and future students. We will collectively assemble a weekly list of key systems/complexity terms and concepts with their very brief definitions, thus developing our own small-scale Systems/Complexity Wikipedia. As the course unfolds, each of you can go back and edit that week’s terms and even add new terms not already there. For this reason, I have already prepared a Google Docs folder titled Complexity Wikipedia (further explanations will be given in class). I will periodically review the list, and we will discuss it in class on December 9.

Course Policies:
• Attendance is mandatory. Students are expected to take an active part in class discussions and all in-class exercises and assignments. If there is an emergency that requires you to miss class, you need to notify me ASAP by email prior to class. A 2-page summary/critique of each of the readings for the day class is missed is due to me at the start of next class. Failure to email me your summaries/critiques will lead to a 5% deduction from your final grade for each class period that you miss. This is required regardless of your reasons for missing class.
• Assignment format: Submission guidelines for American Journal of Public Health need to be used for all written assignments (double space, 12 Times Roman or 11 Arial, 1” margins, including a separate cover page with name and class information). Assignments that do not meet all of these criteria will not be graded.
- **Google Drive** will be used for uploading the course syllabus, weekly readings, assignments, and other materials. It is your responsibility to regularly check the course site for updates.
- **Grading scale:** Passing grades in the course are as follows: A = 90-100, B = 80-89, and C = 70-79.

**Course Schedule:**
Topics, readings, and activities below are only indicative and tentative and are subject to changes or modifications based on class progress.

<table>
<thead>
<tr>
<th>WEEK/DATE</th>
<th>TOPICS, READINGS, AND ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART I: SYMBIOSIS OF ORDER, CHAOS, AND COMPLEXITY IN POPULATION HEALTH (2 classes)</strong></td>
<td></td>
</tr>
<tr>
<td>Week 1&lt;br&gt;Sept 2</td>
<td><strong>Course Introduction and Overview</strong></td>
</tr>
<tr>
<td></td>
<td>- Organizational meeting</td>
</tr>
<tr>
<td></td>
<td>- Review of course syllabus, objectives, expectations, and policies</td>
</tr>
<tr>
<td></td>
<td>- Discussion on class participants’ expectations from the course</td>
</tr>
<tr>
<td></td>
<td>- Discussion on class participants’ understanding of systems thinking, complexity, nonlinearity, complex systems, complex systems methodologies and tools and their potential contribution to the epistemology of population health sciences</td>
</tr>
<tr>
<td></td>
<td>- Discussion on the overall state of social and population health sciences</td>
</tr>
<tr>
<td><strong>REQUIRED READINGS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Christakis, N., Let’s shake up the social sciences, 2013 <a href="http://www.nytimes.com/2013/07/21/opinion/sunday/lets-shake-up-the-social-sciences.html?_r=0">http://www.nytimes.com/2013/07/21/opinion/sunday/lets-shake-up-the-social-sciences.html?_r=0</a></td>
</tr>
<tr>
<td></td>
<td>- Jörg, T., New thinking in complexity for the social sciences/humanities (Mission statement), 2011</td>
</tr>
<tr>
<td><strong>OPTIONAL (BUT RECOMMENDED) READINGS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Raia, F., Students' understanding of complex dynamic systems, 2005</td>
</tr>
<tr>
<td><strong>ACTIVITIES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Guiding questions for class discussion:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- What is the state of population health sciences and population health research?</td>
</tr>
<tr>
<td></td>
<td>- Is there a need to supplement the traditional paradigm with a different, more comprehensive (complex systems) paradigm?</td>
</tr>
<tr>
<td></td>
<td>- Are systems thinking and complexity science relevant for population health research, interventions, and evaluation?</td>
</tr>
<tr>
<td></td>
<td>- How do you understand the potential strengths and weaknesses of complexity sciences in the context of population health?</td>
</tr>
<tr>
<td></td>
<td>- Do we need to re-think/-conceptualize/-vise/-structure curricula and training in population health sciences and university public health education?</td>
</tr>
<tr>
<td></td>
<td>- Do curricular rigidities and disciplinary and professional silos impede understanding of complex interrelationships in population health research, interventions, and evaluation?</td>
</tr>
<tr>
<td></td>
<td>- Assigning discussion leaders for 9/9 class</td>
</tr>
<tr>
<td>Week 2&lt;br&gt;Sept 9</td>
<td><strong>Is There an Epistemological Shift in Population Health Sciences?</strong></td>
</tr>
<tr>
<td><strong>REQUIRED READINGS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Fang, P.C. &amp; A. Casadevall, Reductionistic and holistic science, 2011</td>
</tr>
<tr>
<td></td>
<td>- Abbott, A., Transcending general linear reality, 1988</td>
</tr>
<tr>
<td></td>
<td>- Higgins, J.P., Nonlinear systems in medicine, 2002</td>
</tr>
</tbody>
</table>
- Pearce, N. & F. Merletti, Complexity, simplicity, and epidemiology, 2006
- Galea, S., et al., Causal thinking and complex system approaches in epidemiology, 2010
- Diez Roux, A.V., Complex systems thinking and current impasses in health disparities research, 2011

OPTIONAL (BUT RECOMMENDED) READINGS

- Louth, J., From Newton and Newtonianism: Reductionism and the development of the social sciences, 2011
- West, G., Big data needs a big theory to go with it, 2013 [link](http://www.scientificamerican.com/article/big-data-needs-big-theory/)
- Gershenson C., The implications of interactions for science and philosophy, 2011

SUPPLEMENTAL READINGS

- Kuhn, T.S., The structure of scientific revolutions, 1962
- Goodson, P., Theory in Health Promotion Research and Practice (select chapters), 2009
- Mainzer, K., Thinking in Complexity (chapter 1), 2007
- Horgan, J., Can engineers and scientists ever master ‘complexity’? 2012 [link](http://blogs.scientificamerican.com/cross-check/2012/12/10/can-engineers-and-scientists-ever-master-complexity/)

ACTIVITIES

- Watch video [link](http://videocast.nih.gov/summary.asp?Live=5846 (8':56"""","49":00'": Kaplan, G., Why we need complex systems approaches to population health, 2007
- Diez Roux, A.V. (video on complexity, 2013), [link](https://www.youtube.com/watch?v=F3Djam9wtv8
- Assigning discussion leaders for 9/16 class

---

**Part II: Systems Thinking and Complexity: Theoretical Underpinnings (4 classes)**

**Week 3**

**Sept 16**

**Complex Systems: History, Themes, Theories**

**REQUIRED READINGS**

- Weaver, W., Science and complexity, 1948
- Seising, R., Warren Weaver's *Science and complexity* revisited, 2011
- Von Bertalanffy, L., *General Systems Theory* (chapters 1, 2), 1969
- Sterman, J., Making systems thinking more than a slogan, 2013, [link](http://nbs.net/making-systems-thinking-more-than-a-slogan)
- Andersson, C., et al., Societal systems – Complex or worse? 2014
- Vicsek, T., Complexity: The bigger picture, 2002
- Gell-Mann, M., What is complexity? 1995
- McKelvey, B., Complexity science as order-creation science: New theory, new method, 2004
Walby, S., Complexity theory, systems theory, and multiple intersecting social inequalities, 2007
Agar, M., Complexity theory, 1999
Curtis, S. & M Riva, Human geographies I: Complexity theory and human health, 2010
Glass, T.A. & M.J. McAtee, Behavioral science at the crossroads in public health: Extending horizons, envisioning the future, 2006

OPTIONAL (BUT RECOMMENDED) READINGS


SUPPLEMENTAL READINGS

Byrne, D., Complexity Theory and the Social Sciences, 1998
Santa Fe Institute, http://www.santafe.edu/
Waters Foundation, The impact of the Systems Thinking in Schools project, 2012, http://watersfoundation.org/wp-content/uploads/2012/09/STIS_Research.pdf?fbclid=IwAR30ZoLmAg5UokwDOR7eOwSF362o0EOXZEdmBZPgGJl3hS1FmRhG7DkEqCS

ACTIVITIES

Waters Foundation, Systems Thinking
Exercises to stretch and build learning and systems thinking capabilities (Booth Sweeney, L. & D. Meadows, The Systems Thinking Playbook, 1995)
An Introduction to Systems Thinking (G. Midgley), https://www.youtube.com/watch?v=yYyTUs9ipmc
Assigning discussion leaders for 9/23 class

Week 4
Sept 23
Navigating Complex Systems: Foundational Concepts

REQUIRED READINGS

Miller, J.H. & S.E. Page, Complex Adaptive Systems, 2007 (chapters 2, 4)
Mitchell, M., Complexity: A Guided Tour, 2011 (preface, chapters 1, 2, 7, 10, 17, & 19)
Holland, J.H., Complexity: A Very Short Introduction, 2014 (chapters 1, 2, 5, 6, & 8)
Byrne, D. & G. Callaghan, Complexity Theory and the Social Sciences, 2014 (introduction, conclusion, chapters 1, 2, 3, 5, 6, 7, 8, & 11)
Ladyman, J., et al., What is a complex system? 2012

OPTIONAL (BUT RECOMMENDED) READINGS

• Alexander, M., We do complexity tool! Sociology, chaos theory and complexity science, 2009
• MacKay, R.S., Management of complex systems, 2012
  http://www2.warwick.ac.uk/fac/sci/maths/people/et/stranski/mgtcxs/sys/pub/eccs12mgtcxsys.pdf

SUPPLEMENTAL READINGS
• MacKay, R., Complex systems in science and society, 2013
• Hooker, C., Philosophy of Complex Systems, 2011 (chapters: Intro, p 195,

ACTIVITIES
• Page, lectures 1,3 videos (Complexity—What is it? Why does it matter?; The interesting in-between)
• Nova Science NOW, 2008, Emergence, PBS
• Nova Science NOW, 2007, Everyday examples of emergence
• Radio Lab 2007, Emergence, Radio Lab Podcast
• Page, lecture 3 video (Understanding complexity)
• Assigning discussion leaders for 9/30 class

Week 5
Sept 30

Complex Adaptive Systems

REQUIRED READINGS
• Gell-Mann, M., Complex adaptive systems, 1994,
  http://tuvalu.santafe.edu/~mgm/Site/Publications_files/MGM%20113.pdf
• Chan, S., Complex adaptive systems, 2001,
• Holland, J.H., Complexity: A Very Short Introduction, 2014 (chapter 3)
• Kaisler, S.H. & G. Mady, Complex adaptive systems: Emergence and self-organization, 2009,
  http://www3.nd.edu/~gmady/Activities/CAS-Briefing.pdf
• Miller, J.H. & S.E. Page, Complex Adaptive Systems, 2007 (chapters 7, 8)
• Begun, J.W., et al., Healthcare organizations as CAS, 2003,
  http://change-ability.ca/files/Complex_Adaptive.pdf
• Poste, G., Cancer as a complex adaptive system, 2015,
  https://casi.asu.edu/sites/default/files/presentations/X814%20Week%2012%20Bio302%20CCC%207%20April%202015.pdf
• McDaniel, R.R. Jr., et al., Implications of complex adaptive systems theory for the design of
  research on health care organizations, 2013
• Moore, T.W., et al., Public health care as a CAS, 2011
  http://www.sandia.gov/casengineering/docs/CCS_Public%20Health%20Care%20As%20CAS%202011-3188%20C.pdf
• Karwowski, W., A review of human factors challenges of CAS: Discovering and understanding
  chaos in human performance, 2012

OPTIONAL (BUT RECOMMENDED) READINGS
• Shalizi, C.R., Methods and techniques of complex systems science: An overview, 2006
• Sarriot, E. & M. Kouletio, Community health systems as CAS, 2015
• McKenzie, F., Complex adaptive systems: Implications for leaders, organizations, government, and
  140514.pdf

SUPPLEMENTAL READINGS
• CAS, https://casi.asu.edu/sites/default/files/presentations/Poste%20Overview%20CAS%20at%20ASU%20Workshop%201-
  18-13.pdf

ACTIVITIES
• Nicolic, I., Complex adaptive systems (TED Talks), 2010, https://www.youtube.com/watch?v=IS0zJ_dYeBE
• Assigning discussion leaders for 10/7 class
Understanding and Managing Complex Systems: Transitions and Resilience

REQUIRED READINGS
- Scheffer, M., Critical Transitions in Nature and Society (chapters 1, 2, 3, 4, 5, 6, 12, & 17), 2009
- Trefois, C., et al., Critical transitions in chronic disease: Transferring concepts from ecology to systems medicine, 2015
- Boettiger, C. & A. Hastings, From patterns to predictions, 2013
  http://www.carloboettiger.info/assets/files/pubs/10.1038/493157a.pdf
- Scheffer, M., et al., Early warning signals for critical transitions, 2009
- Scheffer, M., Complex systems: Foreseeing tipping points, 2010
- Scheffer, M., et al., Anticipating critical transitions, 2012
- Van de Leemput, I.A., et al., Critical slowing down as early warning for the onset and termination of depression, 2014
- Granovetter, M., Threshold models of collective behavior, 1978
- Lenton, T.M., Early warning of climate tipping points, 2011
- Lamberson, P.J. & S.E. Page, Tipping points, 2012
  http://www.santafe.edu/media/workingpapers/12-02-002.pdf
- O’Riordan, T. & T. Lenton, Tackling tipping points, 2011
- Castano, G. & V. Maheshri, School segregation and the identification of tipping points, 2011
- Grimm, S. & G. Schneider, Predicting Social Tipping Points, 2011
- Defuant, G. & N. Gilbert, Viability and Resilience of Complex Systems, 2011 (chapter 1)
- Holling, C.S., Resilience and stability of ecological systems, 1973

OPTIONAL (BUT RECOMMENDED) READINGS
- Gladwell, M., The Tipping Point, 2000
- Mrotzek, M., Approaching the tipping point: Critical transitions in systems, 2011
- Scheffer, M., et al., Migraine strikes as neuronal excitability reaches a tipping point, 2013
- Jordan, T.E., Recommendations for interdisciplinary study of tipping points in natural and social systems, 2010
- Stockholm Resilience Centre, Social-ecological systems contain various tipping points or thresholds that can trigger large-scale reorganization
- Boettiger, C., et al., Early warning signals: the chartered and uncharted territories

SUPPLEMENTAL READINGS
- Apostolopoulos, Y., et al., A complex systems population health paradigm: Emergence, transitions, and resilience to obesity prevention (in progress, 2015)
- Excellent site on research on Transitions, Tipping Points, and Resilience of Complex Social-Ecological Systems, 2013
  http://www.vasilisidakos.info/research/
- Workshop on critical transitions in complex systems, 2012
  http://wwwf.imperial.ac.uk/~mrasmussen/criticaltransitions/


**PART III: AN INTRODUCTION TO COMPLEX SYSTEMS METHODOLOGIES AND TECHNIQUES**

**Week 7**

**Oct 14**

**Modeling and Simulation**

**REQUIRED READINGS**

- Van der Leeuw, S.E., Why model? 2004
- Page, S.E., Computational models from A to Z, 1999
- Axelrod, R., Advancing the art of simulation in the social sciences, 2003
- Cioffi-Revilla, C., Computational social science, 2010
- http://www.academia.edu/4164897/Computational_social_science
- Lazer, D., et al., Computational social science, 2009
- Giles, J., Computational social science: Making the links, 2012

**OPTIONAL (BUT RECOMMENDED) READINGS**


**SUPPLEMENTAL READINGS**

- Wolkenhauer, O., Why model? 2014
- Johnson, P.E., Simulation modeling in political science, 1999
**Week 8**  
**Oct 21**  

**System Dynamics I: Systems Thinking, Complex Systems, and SD**

**REQUIRED READINGS**
- Forrester, J.W., The beginning of system dynamics, 1989
- Sterman, J.D., Sustaining sustainability: Creating a systems science in a fragmented academy and polarized world, 2012
- Sterman, J.D., All models are wrong: Reflections on becoming a systems scientist, 2002
- Sterman, J.D., Learning from evidence in a complex world, 2006
- Braun, W., *The system archetypes*, 2002
- Richardson, G.P., Reflections on the foundations of system dynamics, 2011
- Forrester, J.W., System dynamics—A personal view of the first fifty years, 2007a
- Forrester, J.W., System dynamics—The next first fifty years, 2007b
- Ford, A., *Modeling the Environment* (chapters 1, 3, & 9), 2010

**OPTIONAL (BUT RECOMMENDED) READINGS**
- Heffron P., Introduction to systems thinking, 2014  
- Milstein, B. & J. Homer, SD simulation in support of obesity prevention decision making, 2009  
  http://www.iom.edu/~media/Files/Activity%20Files/PublicHealth/ObesFramework/IOM Irvine 16 Mar 09 v52 MilsteinHomer aspx

**SUPPLEMENTAL READINGS**
  http://www.thinkingincirclesaboutobesity.com/Thinking%20in%20Circles%20about%20Obesity.pdf
- Heffron, P., Operationalizing systems thinking and system dynamics principles, methods, and tools in government policy and management, 2014  
  http://www.systemdynamics.org/conferences/2014/proceed/papers/P1350.pdf
- Lane, D.C. & J.D. Sterman, Jay Wright Forrester, 2011  
- Sterman, J.D., Stumbling towards sustainability, 2013  
**Week 9  
Oct 28**

**System Dynamics II: SD Methodologies**

**REQUIRED READINGS**

- Sterman, J.D., *Business Dynamics* (chapters 3, 4, 5, 6, & 7), 2000
- Hovmand, P.S., *Community Based System Dynamics* (chapters 1-7), 2014
- Hovmand, P.S., et al., Group model-building "scripts" as a collaborative planning tool, 2012
- Richardson, G.P., Concept models in group model building, 2013
- Stave, K., Participatory systems modeling for policy, 2012
- Coyle, G., Qualitative and quantitative modeling in SD: Some research questions, 2000

**OPTIONAL (BUT RECOMMENDED) READINGS**


**SUPPLEMENTAL READINGS**


**ACTIVITIES**

- Assigning discussion leaders for 10/28 class

**Week 10  
Nov 4**

**System Dynamics III: SD Modeling and Simulation-A**

**REQUIRED READINGS**

- Jones, A.P., et al., Understanding diabetes population dynamics through simulation modeling and experimentation, 2006
• Hirsch, G., et al., Using simulation to compare 4 categories of intervention for reducing CVD risks, 2014
• Homer, J.B. & G.B. Hirsch, SDM for public health: Background and opportunities, 2006
• Lich, K.H., et al., Strategic planning to reduce the burden of stroke among veterans: Using simulation modeling to inform decision making, 2014
• Tozan, Y. & D.C. Ompad, Complexity and dynamism from an urban health perspective: A rationale for a system dynamics approach, 2015
• Loyo, H.K., et al., From model to action: Using a system dynamics model of chronic disease risks to align community action, 2011

OPTIONAL (BUT RECOMMENDED) READINGS

ACTIVITIES
• Building and transforming causal loop diagrams into stock and flow diagrams
• Reviewing simple SD models and case studies
• Building and simulating simple models

Week 11
Nov 11
System Dynamics IV: SD Modeling and Simulation-B

ACTIVITIES
• Building and simulating simple models in class
• Reviewing simple SD models and case studies
• Assigning discussion leaders for 11/18 class

Week 12
Nov 18
Agent-based Modeling

REQUIRED READINGS
• Wilensky, U. & W. Rand, An Introduction to ABM (chapters 0, 1, 2, 4, 5, & 6), 2015
• Macal, C.M. & M.J. North, Tutorial on ABM and simulation, 2010
• Miller, J.H. & S.E. Page, Complex Adaptive Systems (chapter 6), 2007
• Yang, Y., et al., Examining the impact of the walking school bus with an ABM, 2014
• Zhang, D., et al., Impact of different policies on unhealthy dietary behaviors in an urban adult population: An agent-based simulation model, 2014
• Maglio, P.P. & P.L. Mabry, ABM and systems science approaches in public health 2011
• Nianogo, R.A. & O.A. Arah, ABM of noncommunicable diseases: A systematic review, 2015
• Marshall, B.D. & S. Galea, Formalizing the role of ABM in causal inference and epidemiology, 2014
• Bruch, E. & J. Atwell, ABM in empirical social research, 2015

OPTIONAL (BUT RECOMMENDED) READINGS
• Borshchev, A. & Filippov, A., From SD and discrete event to practical ABM: Reasons, techniques, and tools, 2004
• Epstein, J.M., Modeling civil violence: An agent-based computational approach, 2002
• Miller, J. & S.E. Page, The standing ovation problem, 2004
• Wallace, R., et al., Assessing the Use of ABM for Tobacco Regulation, 2015 (free online)

SUPPLEMENTAL READINGS
• Epstein, J.M., Generative Social Science: Studies in Agent-Based Computational Modeling, 2006
• Axelrod, R. & L. Tesfatsion, A guide for newcomers to ABM in the social sciences, 2005
  http://www2.econ.iastate.edu/tesfatsi/abmread.htm
• De Marchi, S. & S.E. Page, Agent-based models, 2014

ACTIVITIES
• Epstein, J.M., Frontiers of computational social science: From neurons to nations, 2015
  https://vimeo.com/124844985
• Agent-based and individual-based modeling: A practical introduction
• Short tutorial on NetLogo, http://ccl.northwestern.edu/netlogo/docs/
• How to build and simulate simple ABM using NetLogo (guest speaker)

Week 13 Nov 25-27 — THANKSGIVING BREAK – NO CLASS

Part IV: Putting It All Together

Week 14  Modeling Presentations
Dec 2  • Reviewing SD-based NIH proposal: Modeling tipping points in and resilience of commercial drivers’ chronic syndemics (Apostolopoulos, Y., et al., 10/2015)
• SD CLD presentations
• SD SFD presentations
• SD simulation modeling presentations

Week 15  Paper Presentations
Dec 9  • Group paper presentation
• Individual proposal presentations
• Systems/complexity Wikipedia
• Course overview and summing up
NOTES

Note 1:
The Americans with Disabilities Act is a federal anti-discrimination statute that provides comprehensive civil rights protections for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Services Main Office, in Cain Hall. The telephone number is 845-1637.

Note 2:
As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty."

Note 3:
"Aggies do not lie, cheat or steal, nor do they tolerate those who do." "The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty, integrity, characteristics that Aggies have always exemplified. The Aggie Code of Honor functions as a symbol to all Aggies, promoting the understanding and loyalty to truth and confidence in each other." All students are expected to abide by the Aggie Honor Code. Students should be aware of all Honor Council Rules and Procedures on the Honor Council website at www.tamu.edu/aggiehonor.
APPENDIX
Detailed Course Content

Systems thinking and complexity science represent a very broad and transdisciplinary field. As such, the course content below provides a very detailed overview of key topics that fall within the realm of systems, complexity, and population health sciences. Due to subject matter breadth and the introductory nature of this course, we will have time only to delve into select foundational concepts, theories, methodologies, and techniques (with an emphasis on SDM).

PART I: SYMBIOSIS OF ORDER, CHAOS, AND COMPLEXITY IN POPULATION HEALTH

1. An Epistemological Shift in Population Health Sciences?
   • Philosophy and epistemology of science
   • Pillars of the scientific method
   • The (linear) paradigm of order
   • Simple systems; Cartesian (rationalist) and Newtonian (physical) laws of science
   • Reductionism, critical realism, and constructivism
   • Positivism and the dominance of linear models
   • The general linear model and regression-based approaches
   • Strengths and weaknesses of the traditional (linear) paradigm (in population health)
   • Challenges of linear approaches in population health research (fragmentation, disciplinary boundaries, rational choice theory, research designs, and plans of analysis); how to transcend these impasses
   • Rejecting linear, reductionist, mechanistic, and atomistic thinking
   • Order, disorder/randomness (chaos), and the space in-between (complexity)
   • Chaos theory, edge of chaos, chaotic phenomena, and examples
   • Physical, social, and biological reality composed by wide range of orderly, complex, and disorderly phenomena
   • The "s" curve of science: in search of unifying frameworks and theories?
   • Population health as a complex dynamical (adaptive) system?
   • Identification of linear, nonlinear, and chaotic patterns within markets, population health, and healthcare

PART II: SYSTEMS THINKING AND COMPLEXITY: THEORETICAL UNDERPINNINGS

2. Complex Systems: History, Themes, Theories
   • Complexity: What is it? Why does it matter? Examples
   • Tracing back the origins and etymology of complexity
   • Systems, complex systems, systems thinking, systems theory
   • Social complexity is the result of (is caused by) the behavior of simple actors as they adapt to their complex environments
   • Systems exist and operate in time and space
   • Wicked and messy problems
   • Complex systems thinking vs. conventional thinking
   • Systems, complexity, and/or nonlinearity science; nonlinear dynamics
   • Complexity theory and complexity science: order-creation science?
   • General systems theory: founders and history
   • Common themes: holism, integration, interconnectedness, organization, perspective taking, nonlinearity, and constructivism
   • System behavior (emerges as result of nonlinear spatiotemporal interactions among many component systems at different levels of organization)
• Laws of thermodynamics and complexity
• Nature of systems (simple/ordered, disorganized complexity/chaotic, organized complexity/complex)
• Complicated vs. complex worlds; General vs. dynamic complexity
• Complexity in biological, physical, natural, technical, and social systems
• Complexity in social worlds: examples, applications, and case studies from marketplace, population health, and healthcare
• Complex systems and health policy
• Major complexity think-tanks: Santa Fe Institute, Los Alamos National Laboratory, Sandia National Laboratories, Brookings Institution, New England Complexity Science Institute

• Complexity: space within, interesting in-between, space between order and chaos
  o Complexity and CAS are not chaos theory
  o Key properties and concepts of complex systems
    • Attributes: interdependence, diversity, connection, and adaptation
    • Complex systems: unpredictable, produce large events, robust, bottom-up emergent phenomena (self-organization), novelty
    • Nonlinearity
    • Emergence and "second-order emergence"
    • Circular/nonlinear causality with positive and negative feedback loops
    • Butterfly effect (sensitive dependence on initial conditions) and chaotic behavior (extreme sensitivity to initial conditions, fractal geometry, and self-organized criticality)
    • Things change over time (dynamics) and time delays
    • History dependence
    • Policy resistance (many obvious solutions fail or worsen the situation)
    • Adaptation and adaptability
    • Multiple (meta) stable states (small change in conditions may precipitate major system change)
    • Non-Gaussian distribution of outputs, often where outcomes that are far away from the average are more likely than you might think (power laws)
    • Autopoiesis (self-production)
    • Six degrees
    • Scaling

• Applications and case studies from marketplace, population health, and healthcare

4. Complex Adaptive Systems
• What are complex adaptive systems (CAS), what do they mean, do they matter, and why do we study them?
  • CAS thinking; examples of CAS
  • History and origins: from cybernetics and systems to CAS
  • CAS and the Santa Fe Institute
  • Theoretical foundations of CAS
• Attributes and properties of CAS
  o CAS components: agents, regularities, feedbacks, patterns
  o Co-evolution, far-from-equilibrium, and self-organization
  o Cellular automata and their properties
  o Strange attractors
  o Distributed control
  o Self-similarity
  o Connectivity
  o Nested systems
  o Simple rules
• Iteration
• Sub optimal
• Requisite variety
• Sensitive dependence on initial conditions
• Edge of chaos
• Emergent order
• Intractability

• CAS, modeling, and computer simulations
• CAS modeling by means of agent-based models and complex networks based models
• Modeling complex adaptive systems (John Holland)
• Why interventions fail in CAS?
• Managing CAS
• CAS in population health and healthcare: examples and case studies

5. Understanding/Managing Complex Systems: Emergence, Transitions and Resilience
• Critical phase transitions and transition theory
• Equilibrium state of a system
• Bifurcation (proceeded by increasing instability), catastrophic bifurcation, catastrophes, and catastrophe theory
• Alternative state states
• Regime shift
• Tipping elements and tipping points (first-order transitions)
• Critical thresholds
• Dynamical and structural stability of a complex system
• Resilience and resilience indicators
• Effects of diversity on resilience; enhancing resilience in vulnerable communities
• Basins of attraction, flickering, perturbations, hysteresis
• "Hot system:" system at risk of reaching a tipping point
• Tipping and game theory
• Precursors of transitions in complex systems
• Tipping point detection, early warning signals: slow recovery from perturbation (critical slowing down), increasing autocorrelation, increasing variance, increasing skewness, and flickering
• Transitions and tipping points in population health: Examples and case studies
• Anticipating critical transitions and managing tipping point dynamics in population health and healthcare
• Embedding the science of tipping points in health interventions, policy, and population health change

PART III: AN INTRODUCTION TO COMPLEX SYSTEMS METHODOLOGIES AND TECHNIQUES

6. Modeling and Simulation
• "All models are wrong, but some are useful" (G.E.P. Box)
• "Make your theory as simple as possible, but no simpler" (A. Einstein)
• Model as simplified representation of system at some point in time or space (intended to promote understanding of real system)
• Importance of model thinking: What is modeling? Benefits of modeling
• Mental vs. explicit models; deterministic vs. probabilistic models
• Linear vs. nonlinear models; static vs. dynamic models
• Mathematical, statistical, and computational models
• Why model? [To predict, explain, understand, guide data collection, suggest dynamical analogies, discover new questions, promote scientific habit of mind, bound outcomes to plausible ranges,
illuminate core uncertainties, offer crisis options in near-real time, demonstrate tradeoffs and suggest efficiencies, challenge robustness of prevailing theory through perturbations, expose prevailing wisdom as incompatible with available data, train practitioners, discipline the policy dialogue, educate general public, reveal apparently simple (complex) to be complex (simple), decide, strategize, re/design

- Modeling: only method that one can use to estimate future behavior of a system to past, present, and future processes that may influence a system
- Modeling and (population health) policy
- Computational models: theoretical foundations
- Designing, building/generating, programming, and evaluating (verifying and validating) computational models
- Simulation as method and tool; Simulation as method of theory development; Theoretical foundations of simulation; Uses/history of simulation; Stages of simulation-based research
- Modeling and simulation techniques based on nonlinear differential equations, networks, stochastic models, cellular automata, and swarm-like systems; Modeling exercises
- Classic models: Schelling’s segregation model, the Garbage Can model, the NK model, Watts-Strogatz model, Barabasi-Albert model, etc.
- Key computational modeling methodologies, tools, and techniques to study complex systems: system dynamics modeling, agent-based modeling, discrete event simulation, microsimulation, Markov modeling, network analysis
- Computational modeling programs: Python, StarLogo, NetLogo, Mathematica, Stella, Vensim, Swarm
- Toward a computational population health science?

7. System Dynamics I: Systems Thinking, Complex Systems, and SD
- History: cybernetics, industrial dynamics, system dynamics
- Founders: Forrester, Meadows, Senge, Sterman, Coyle, Richardson, Homer
- SD designed to address problems marked by dynamic complexity
- Background of SD: based on feedback as encountered in electrical and mechanical control systems
- SD provide tools to: map and model forces of change in dynamically complex systems, learn about why they behave the way they do and how to improve them
- Important questions to address via SD:
  - What aspects of system’s behavior are of concern?
  - Why are those features changing in those ways at those times?
  - Where is the system headed if no new action is taken?
  - How else can the system behave, if different decisions are made?
  - Who has the power to move the system in a more desirable direction?
- Concepts and themes in SD:
  - Mental models
  - Leverage points
  - Systems archetypes
  - Nonlinear causal relationships
  - Policy resistance
  - Unintended consequences
  - Emergent properties
  - Counterintuitive behavior of social systems
  - Dynamic behavior of the system
  - Understanding the causal structure of the system helps to understand the behavior of the system
  - Messy problems
- Properties of system dynamics
  - Stocks (levels, accumulations) and flows (rates, inflow or outflow for a stock)
Bidirectional (reinforcing/positive and balancing/goal-seeking/negative) feedback loops (circular causality)
- Connectors and converters
- Diagrams
- Time delays and time-delayed effects
- Time horizon
- Qualitative and qualitative system dynamics

8. System Dynamics II: SD Methodologies
- SD methodologies:
  - Help us develop a shared understanding of the system
  - Teach us to think differently about how systems behave (i.e., dynamics, circular causal feedbacks, accumulations, etc.)
  - Allow stakeholders to view the larger system they are embedded within
  - Provide framework for integrating what we know and determine importance of what we do not know
  - Support identification of high impact leverage points
  - Offer a virtual world in which to “test-drive” and compare policies
- Iterative steps in system dynamics:
  - Identify and define a persistent problem
  - List key factors (variables)
  - Define time horizon
  - Draw reference modes (historical behavior of key concepts and variables)
  - Formulate a dynamic hypothesis and a system map
  - Convert the map into a simulation model
  - Run simulation experiments
  - Evaluate models
  - Choose among plausible futures, identify leverage points and enact policies
  - Test and improve theory
- Behavior-over-time graphs (BOTGs) or reference mode
  - Exponential growth
  - Goal seeking
  - Exponential decay
  - Limits to growth
  - Oscillation
  - Success to the successful
- System boundaries
- Factors (variables), endogenous, exogenous and excluded variables
- Model boundary charts
- Feedbacks: arrows, signs, and loops (labeling link polarity, determining loop polarity)
- Participatory methods: group model building (GMB) methodologies
- Motivations for GMB methodologies:
  - Greatest insights come from modeling process
  - Participation increase likelihood of implementation
  - Participation is an intervention
  - “Dignity of risk”
  - Modeling is theory building
  - Information source
- The role of stakeholders
- Roles in group model building
  - Teamwork
  - Participants
  - Scripts
  - Developing, posting and clustering BOTGs
- Mapping and modeling (causal maps, concept models)
- Core modeling team
  - Facilitator/substantive expert (1)
  - Modeler/facilitator (1)
  - Gatekeepers/leaders (1-4)
  - Recorders (2-4)
  - Process coach (1)
- Causal loop diagrams and dynamic hypotheses
- Examples of causal loops diagrams in population health
- Stock and flow diagrams
- Examples of stock and flow diagrams in population health
- Diagramming the flows
- Phases in the construction of a model

9/10. System Dynamics III, IV: SD Modeling and Simulation
- Introduction to SD modeling and simulation; use of Vensim
- Benefits of simulation and game-based learning
  - Formal means of evaluating options
  - Experimental control of conditions
  - Compressed time
  - Complete, undistorted results
  - Actions can be stopped or reversed
  - Visceral engagement and learning
  - Tests for extreme conditions
  - Early warning of unintended effects
  - Opportunity to assemble stronger support
- Diagrams and equations (mathematical representation of models)
  - Flow graphs
  - Algebraic equations
  - Differential equations
    - Equations using the population and birth model
    - System dynamics algorithm
- Model calibration
  - Estimation of parameters
  - Quantification challenges
  - Types and sources of data: various quantitative and qualitative data from US Census, vital stats, national surveys, research literature, major studies, etc.)
  - Concepts, proxy variables, and initial values
  - Key constants
  - Scenario variables
  - Calibration of qualitative parts
- Model simulation
  - Model testing
    - Different scenarios (base, optimistic, and pessimistic scenarios; history based; future plausible assumptions; etc.)
  - Role of time horizon
- Model validation and sensitivity analysis
- National population health studies using SDM: ReThink Health, Archimedes, HealthBound

11. Agent-Based Modeling
- Complexity and agent-based models; what is agent-based modeling?
- ABM (or individual based modeling) looks at global consequences of individual or local interactions among agents in a given space
- When and why agent-based models are used?
• Why agent-based objects? (flexibility vs. precision, process oriented, adaptive agents, inherently dynamic, heterogeneous agents and asymmetry, scalability, repeatable and recoverable, constructive)
• Theoretical foundations
• Basic concepts and properties of agent-based modeling
• When ABM is most beneficial?
• Agent attributes and behaviors
• Capabilities of agent-based models
• Agent-based model design process
• Agent interactions with other agents and the environment
• Capturing population health complexity with agent-based modeling and simulation
• Population health studies using agent based modeling
• Differences between ABM and other forms of modeling such as SDM
• Leaders in ABM and the social sciences: Axelrod, Epstein, Hammond, etc.
• Comparative survey of modeling methodologies
• Structure of an agent-based model: Agents, their relationships and methods of interactions, agents' environment
• How to think about agent based modeling and simulation
• Agent-based and mathematical modeling: comparisons
• Range of tools for agent-based modeling
• Specific selected agent-based model development tools
• Basic agent-based model architectures
• Model verification and validation techniques
• Data collection and cleaning for modeling; Model output analysis
• Approaches to presenting results to decision makers
• Agent-based model project management
• Building/creating agent based models
  o Designing your model (choosing research questions, examples)
  o Choosing your agents (choosing agent properties, choosing agent behavior, choosing parameters of the model)
• Components of ABM
  o Agents (properties, behaviors/actions, collections of agents, granularity of an agent, agent cognition, other kinds of agents)
  o Environments (spatial environments, network-based environments, special environments)
  o Interactions
• Analyzing ABM
  o Types of measurement
  o Modeling the spread
  o Verification, validation, and replication
    • Correctness of the model
    • Verification (communication, describing conceptual models, verification testing, beyond verification, sensitivity analysis and robustness, verification benefits and issues)
    • Validation (macrovalidation vs. microvalidation, false validation vs. empirical validation, validation benefits)
    • Replication
• Computational roots of ABM
• Genetic algorithms, John Holland, and CAS
• NetLogo: introduction, commands, procedures
• Simulation skills, agent-based modeling language, software skills (NetLogo), as well as strategies for designing agent-based models and implementing simulation experiments
Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:  
   - □ Undergraduate  
   - ☒ Graduate  
   - □ First Professional (DNS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):  
   Department of Health Promotion and Community Health Sciences, SPH

3. Course prefix, number and complete title of course:  
   HPCH 641 Coaching Health Behavior Change

4. Catalog course description (not to exceed 50 words):  
   Training in coaching lifestyle behavior change to prevent or manage common chronic
diseases; effectiveness of lifestyle coaching; theories and practices in coaching for disease prevention;
motivational and other interviewing techniques; goal setting and legal concerns.

5. Prerequisite(s):  
   None

   Cross-listed with:  

   Stacked with:

   Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course?  
   - □ Yes  
   - ☒ No
   If yes, from ________ to ________

7. Is this a repeatable course?  
   - □ Yes  
   - ☒ No
   If yes, this course may be taken ________ times.

   Will this course be repeated within the same semester?  
   - □ Yes  
   - ☒ No

8. Will this course be submitted to the Core Curriculum Council?  
   - □ Yes  
   - ☒ No

9. How will this course be graded?  
   - ☒ Grade  
   - □ S/U  
   - □ P/F (CLMD)

10. This course will be:

   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S. Ph.D. in geography)

   Any master's or doctoral program

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☒ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vnr.tamu.edu/resources/export-exports-controls/export-controls-basics-for-distance-education).

13. Prefix  
   - HPCH  

   Course #:  
   - 641  

   Title (excluding punctuation):  
   - COACHING HEALTH BEHAVIOR CHANGE

   Lect.  
   - 3.00

   Lab  
   - Other  
   - S/U  
   - 3.00

   CIP Code and Fund Code:  
   Admin Unit  
   - 16  

   Acad. Year  
   - 17  

   Level Code  

   Approval recommended by:  
   Date:  

   Department Head or Program Chair (Type Name & Sign)  
   Date:  

   Chair, Core Review Committee  
   Date:  

   Dean of College  
   Date:  

   Submitted to Coordinating Board by:  
   Date:  

   Chair, GC or UCC  
   Date:  

   Effective Date:  

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu

Curricular Services – 07/14
Instructor Information

Course title and number: HPCH 641 Coaching Health Behavior Change
Term: Fall 2016
Meeting times and location: Course is on-line. Live sessions TBD.
Instructor Name(s): Thomas Tai-Seale Dr.P.H., M.M.S., M.P.H., M.A.
Teaching Assistant(s): NA
Telephone number: 650-815-5612
Email address: ttaiseale@sph.tamhsc.edu
Office hours: Wednesdays at 12:00PM and 9:00PM. Go to: http://sph.adobeconnect.com/ttaiseale/
Office location: NA

Course Description

Coaching Health Behavior Change provides the process skill training necessary to assist those who want assistance in making lifestyle behavior changes to prevent or manage common chronic diseases. The course is focused on how to coach individuals or small groups to make these changes. The course is heavily process oriented, delivering theories, concepts and practice in individual health behavior change, client assessment, motivational strategies, motivational interviewing, cognitive restructuring, problem posing, problem solving and the ethics of professional practice. This process level course is often taken in conjunction with courses that present the content evidence for best behavioral lifestyle practices, especially HPCH 640 Diet and Lifestyle Interventions.

COURSE REQUIREMENTS
1. A reliable computer, laptop, or tablet with high-speed Internet connectivity.
2. Reliable access to high-speed Internet and access to a competent browser (Firefox is greatly preferred).
3. Ability to access and successfully use eCampus and Adobe Connect.
4. Use of university assigned eCampus email for all class correspondence.
5. Full and timely participation in all class assignments and completion of all tests, graded assignments and the final exam.
6. Professional behavior in all interactions with students and the instructor—as further described below.
7. Not copying any course materials—save for personal use. Do not distribute any copy of the course materials in any form.
8. Not copying any item on a test for any reason.

Prerequisites

None
Course Competencies and Objectives

Upon completion of this course, students will be able to:

1. Explain the need for health coaching to prevent and/or manage chronic disease.
2. Distinguish between the roles of a health coach, a personal trainer, and a counselor of therapist.
3. Cite evidence for the effectiveness of health coaching.
4. Explain how key behavioral theories are related to and can be employed in coaching individuals or small groups on behavior change.
5. Describe the skills necessary to be a successful health coach.
6. Describe the process of appreciative inquiry and motivational interviewing.
8. Explain ethical and legal constraints associated with health coaching.

Textbook and/or Resource Material

3. Additional readings as assigned by professor.

Course Topics, Calendar of Activities, Major Assignment Dates

Topics, readings, tests and paper assignment dates are given below.

<table>
<thead>
<tr>
<th>Week starting</th>
<th>Topic</th>
<th>Required Reading/Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>• Video Introduction: The Case for Coaching: Coaching defined, scope, need, evidence and ethics.</td>
<td>Awaiting new text</td>
</tr>
<tr>
<td></td>
<td>• Introduce class assignment book</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Assign reading and practice: Using theories</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>• Discuss reading and practice assignment: Using theories of individual health behavior change in clinical settings: Adult learning theory, Maslow's hierarchy, positive psychology, applied learning theory, cognitive behavioral process.</td>
<td>Awaiting new text</td>
</tr>
<tr>
<td></td>
<td>• Assign reading and practice: Using theories (2)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>• Discuss reading and practice assignment: Using theories of individual health behavior change in clinical settings: transtheoretical framework, social cognitive theory, emotion and behavior, neuroscience of learning.</td>
<td>Awaiting new text</td>
</tr>
<tr>
<td></td>
<td>• Test 1 posted</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Assign reading and practice: Using theories motivation and habit change</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>• Discuss reading and practice assignment: Using theories of</td>
<td>Awaiting new text</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| **6.** | • Discuss reading and practice assignment: Using appreciative inquiry  
• Assign reading and practice: Using motivational interviewing  
• Test 2 Posted | Awaiting new text |
| **6.** | • Discuss reading and practice assignment: Using motivational interviewing theory  
• Assign reading and practice: More using motivational interviewing | Miller and Rollnick |
| **7.** | • Discuss reading and practice assignment: Using motivational interviewing  
• Assign reading and practice: More motivational interviewing | Miller and Rollnick |
| **8.** | • Discuss reading and practice assignment: Using motivational interviewing  
• Post Test 3  
• Assign reading and practice: Using alternative approaches | Miller and Rollnick |
| **9.** | • Discuss reading and practice assignment: Alternative approaches to health coaching.  
• Assign reading and practice: Increasing self-efficacy | Awaiting new text |
| **10.** | • Discuss reading and practice assignment: Increasing self-efficacy.  
• Post Test 4  
• Assign reading and practice: Risks, standards and boundaries | Awaiting new text |
| **11.** | • Discuss reading and practice assignment: Risks, standards and boundaries  
Assign reading and practice: Client assessment... | Awaiting new text |
| **12.** | • Discuss reading and practice assignment: Client assessment, wheel of health, agreement, rapport and visioning  
• Assign reading and practice: Goal-setting | Awaiting new text |
| **13.** | • Discuss reading and practice assignment: The magic of goals, goal-setting and clinical guidelines.  
• Assign reading and practice: Using stress reduction techniques and the challenges of coaching | Awaiting new text |
| **14.** | • Discuss reading and practice assignment Using stress reduction techniques and the challenges of coaching | Awaiting new text |
| **15.** | • Exam | Awaiting new text |
Grading Policies

The course grade is determined by scores on tests, participation in class discussions and practice assignments and a final exam as follows:

<table>
<thead>
<tr>
<th>Avg of 4 tests</th>
<th>40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation weekly reading and practice assignments</td>
<td>40%</td>
</tr>
<tr>
<td>Final exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

Students are expected to come to weekly discussions having read the assigned readings and completed the practice assignments. Participation in weekly readings and practice assignments is graded based on the quality of interaction with the professor reflecting familiarity with the text assignments and thoughtful completion of assigned practice exercises. Students receive one grade ... An A-level score (90-100) is earned when students demonstrate mastery of assigned reading and correct application of skills. A B-level score (80-89) is earned when familiarity with assigned readings is demonstrated and reasonably correct applications are shown in the practice exercises. A C-level score (70-79) represents a marked deficiency of understanding or application. Scores below 70 reflect poor or very poor demonstration of skills and concepts. Unexcused absences from weekly discussions results in a “0” for that session.

Grading Scale
- 90-100 Points: A
- 80-89 Points: B
- 70-79 Points: C
- 60-69 Points: D
- <60 Points: F

Attendance and Make-up Policies

As this is an on-line course, classroom attendance is not applicable. Attendance on-line (through Adobe Connect) for weekly discussion of readings and assignments is, however, required. Every effort will be made to accommodate student’s schedules for these discussions. Once set, however, attendance at discussion sessions is mandatory. Discussions and practice sessions rarely last more than an hour for any group of students. Tests, reading assignments and practice assignments are completed asynchronously. Make-up tests and discussion sessions are generally not allowed—save under exceptional circumstances as determined by the instructor often in consultation with the Department Head.

The University views attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/rule07.

It is the student’s responsibility to provide satisfactory evidence to the instructor to substantiate the reason for absence. Only the reasons specified by the University for being absent will be accepted. They include:

- Participation in an activity appearing on the University-Authorized Activity List;
- Confinement because of injury or illness that is too severe or contagious for the student to attend class;
- Death or major illness in a student’s immediate family;
- Illness of a dependent family member;
- Participation in legal proceedings or administrative procedures that require the student to be present;
- Religious holy day;
- Required participation in military duties;
Mandatory admission interviews for professional or graduate school that cannot be rescheduled.

To be excused from class for one of these reasons, the student must make arrangements with the instructor before the class session that will be missed. For authorized absences, depending on what is missed, the instructor will choose an alternative activity for the student to complete. For unauthorized absences, the instructor will decide on a course of action depending on the circumstances.

**Other Pertinent Course Information**

Students are expected to use eCampus e-mail address for all official correspondence. Students will receive an email to their university assigned eCampus email at the first of every week. This email includes any announcement that needs to be made and usually reminds students of tasks assigned for the week in the class calendar.

**Communicating with the Professor and vice versa**

Three mechanisms exist to communicate with the professor.

1. **Talk with me during weekly discussions**—usually on Adobe Connect.
2. **Visit my live on-line office hour.** Twice a week on Wednesdays I sit in front of a computer and wait for you to contact me through http://sph.adobeconnect.com/ttai.seale/ I've tried many different times over the years, but for on-line classes, Wednesdays at noon and Wednesday night after dinner (9:00 PM) seems to work best.
3. **Send me an email.** Note, however, that I get many dozens of emails every day and sometimes an email may pass by unnoticed or accidentally deleted. (I assume this also happens to you.) Please understand that just like "live" professors, on-line professors are not always on-line, not always on-call, and do not respond instantly to emailed questions. It may take several days to get a response— as it may take several days to get an appointment with a professor. If you don't hear back from me in a few days, email again.

If I need to send a message to the whole class, I use email. Content related questions can be asked during weekly discussions or during Office Hours—see above. If you want to ask more private or sensitive questions, use my personal email: ttai.seale@sph.tamhsc.edu. Questions about process: access, testing, grading, personal difficulties, or concerns about classmates should be sent to my email account. If, after several days, you have not heard back from me, try again.

**eCampus (Blackboard)**

The syllabus, tests, and grades are accessed through eCampus. In addition, some assigned readings may also be posted in eCampus.

In order to access the course material you will need to go to login into Howdy and then click the eCampus button on the top right or look for Quick Links on the bottom of the School's homepage or go to http://ecampus.tamu.edu Please do not contact your instructor with technical problems. If you are having a technical problem with the course, review the Blackboard Learn Tutorials (at the top-right of School's Office of Academic Assessment and Instructional Technology website), or contact John C. Lingsweiler in the School's Office of Academic Assessment and Instructional Technology. John may be reached at (979) 436-9409 or at lingsweiler@sph.tamhsc.edu For login issues (password not working), please contact TAMU Help Desk at helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300. **Your eCampus login is the same as your Howdy login (NetID).**

**Computer Requirements for Online Courses**

For this and all online courses we recommend the minimum technical requirements outlined on our "SPH Computer Requirements for Online Courses" web page, located at
All computing problems or other technical issues not related to eCampus, please contact:

- TAMHSC related account: helpdesk@tamhsc.edu via E-mail, or phone to (979) 862-8029
- TAMU related account: helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300

Important!!! Save your work as you go along. Nothing is more discouraging than to lose an assignment due to a computer hang ups! You may want to also make hard copies of your work to have “proof” and save yourself time and trouble!

Plagiarism Virtual Course

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under “Content.” In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@sphtamhsc.edu for additional information.

Course Evaluation

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School's courses as part of your professional responsibility.

SPH Mission

Our mission is to create and apply knowledge acquired from the disciplines of public health to the education of public health leaders and practitioners through our research, practice, and service in the state of Texas, nationally, and globally.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not
limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html. A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at http://aggiehonor.tamu.edu.

Remember:
"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Copyright Statement

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

FERPA

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy. By enrolling in this course you agree to the following statement: "I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor.”

Equal Opportunity Statement

The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 438-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

DISCLAIMER

This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change. These changes will be communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss reading and practice assignment with the instructor.

Title IX

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

WHERE TO REPORT:
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-436-2907
nachlinger@tamhsc.edu

The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.
Texas A&M University  
Departmental Request for a New Course  
Undergraduate ☑ Graduate ☑ Professional  
* Submit original form and attach a course syllabus.*  

**GRADUATE STUDIES**  
OCT 02 2015  

---  

**Form Instructions**  
1. Course request type:  
   ☑ Undergraduate  
   ☑ Graduate  
   ☐ First Professional (DDS, MD, JD, PharmD, DVM)  

2. Request submitted by *(Department or Program Name)*:  
   Department of Maritime Administration  
   MARA675 Business Leadership  

3. Course prefix, number and complete title of course:  
---  

4. Catalog course description (not to exceed 50 words):  

   Focus on theory and real world practice of leadership; recognize components of leadership, management and labor; the basis of leadership authority, values and styles as applied to organizational vision, mission and life cycle; assess own leadership traits in preparation of entering work force.  

5. Prerequisite(s):  
   Graduate student, and/or permission of instructor  
   Cross-listed with:  
   Steaked with:  
   [Blank]  

6. Is this a variable credit course?  
   ☐ Yes  
   ☑ No  
   If yes, from _____ to _____  

7. Is this a repeatable course?  
   ☐ Yes  
   ☑ No  
   If yes, this course may be taken _____ times.  

   Will this course be repeated within the same semester?  
   ☐ Yes  
   ☑ No  

8. Will this course be submitted to the Core Curriculum Council?  
   ☐ Yes  
   ☑ No  

9. How will this course be graded?  
   ☑ Grade  
   ☐ S/U  
   ☑ P/R (CLMD)  

10. This course will be:  
   a. required for students enrolled in the following degree program(s) *(e.g., B.A. in history)*  
   b. an elective for students enrolled in the following degree program(s) *(e.g., M.S., Ph.D. in geography)*  
   MMAL: MASTER OF MARITIME ADMINISTRATION AND LOGISTICS  

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. *Attach approval letters.*  

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-control-basics-for-distance-education).  

13. Prefix  
   Course/Title (excluding punctuation)  
   MARA  
   675 Business Leadership  

---  

**Faculty Approval**  

**Department Head or Program Chair:**  

**Date:**  

**Chair, College Review Committee:**  

**Date:**  

**Dean of College:**  

**Date:**  

Submitted to Coordinating Board by:  

**Effective Date:**  

---  

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Maritime Administration MARA 675 Leadership in the Maritime Industry
Spring 2016

NOTE: Leadership has a “Ship” in it.

Instructor – Len Waterworth – waterwol@tamug.edu cell 713.899.7917
Meeting Times: 1800 – 2030 hours
        Peter G. Northouse, Leadership and Practice *Sixth edition or better

Course Prerequisite: Graduate Student, Permission of the instructor

COURSE DESCRIPTION:

This course will focus on theory and the real world practice of leadership. Students will become familiar with components of leadership, management and labor, the basis of leadership authority, leadership values and styles as they apply to organizational vision, mission and organizational life cycle. The Student will participate in individual assessment of their leadership traits in preparation of entering the work force.

PARTICIPATIVE LEARNING

The class will meet once weekly throughout the semester. The class will require active participative learning but at this point in your development as a graduate student, much of your learning should be driven by your own intellectual curiosity away from class. However, we still come together collectively to meet as a class because we will learn from each other and gain different perspectives, and reinforce our understanding on the subjects of leadership. We can only do this if everyone is prepared and participates. Our class will become a place where discussion and case studies build a larger common understanding of the topics.

THE PURPOSE OF THIS CLASS

To assist you to be a leader in your: professional, community and personal life, if you choose. In this class you will learn more about leadership, follower-ship and, hopefully, start a lifetime journey of improving leadership skills.

When you graduate I want you to be able to offer not only maritime analysis and advice, but also informed ethical leadership.

LEARNING OBJECTIVES

- Define Leadership and leadership authority
- Examine the roles and responsibilities of leaders, managers and labor and the interactions between each
- Identify and describe major leadership attributes and theories
- Describe the behaviors of effective leaders in a variety of situations
- Use self-assessment tools to evaluate your own level of leadership development and individual skills, personality dimensions and management competencies
- Describe practical skill needed to be an effective leader in different environments
- Describe a leader's ethical options in crisis

TEXTBOOK/READINGS

Required


Textbooks (recommended)


Kellerman, Barbara, The End of Leadership, Boston: Harvard Business School Press,


Headquarter, Department of the Army, FM 6-22, Army Leadership, October 2006

Adizes, Ichak, Adizes Institute Publication, 2004, Managing Corporate Lifecycles:


PRESENTATIONS. LEADERSHIP FRAMEWORK

LEADERSHIP FRAMEWORK

Submit a paper of no more than 10 pages in which you present your current personal leadership framework. (Why would anyone follow me?) A leadership framework is an organized set of your ideas on how you will lead. Explain how you could establish your authority to lead, how you could establish the leadership climate and standards that will accomplish organizational objectives. Explain how you build relationships with your leadership and subordinates. Your work should reflect sensitivity to the ethical dimension of leadership.

The paper is not a research paper. Instead of that it should be a statement of how you think about leadership now. it should reflect your ideas, a statement of what you think about leadership that you can actually live by for the near term as you gain more experience and knowledge. It should be a useful guide to you in future leadership situations, and it should be something you would be proud to give to someone who knows nothing about leadership. It should have the potential to help you benchmark your leadership development over your working career.

The basic framework should include, as a minimum, your answers to the following:

1. Your definitions of leadership and followership, Definitions of values and character.
2. Briefly, in three scenarios, describe your thought process if:

- You determine your immediate supervisor has conducted himself or herself in an unethical manor.
- You determined your immediate subordinate, has conducted himself or herself in an unethical manor.
- And that the action you take has the potential of hurting or terminating your employment.

You may cite the work of others, and you may also adopt or reject the ideas of others as long as you are able to explain why you choose to do so. Useful criteria for accepting for or rejecting the work of others include research, experience and practicality.

I will grade your paper on content, logic and internal consistency. References are required.

GRADING SCHEME:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>25%</td>
</tr>
<tr>
<td>Presentation</td>
<td>25%</td>
</tr>
<tr>
<td>Class attendance</td>
<td>25%</td>
</tr>
<tr>
<td>Leadership Frame Work</td>
<td>25%</td>
</tr>
</tbody>
</table>

Letter grade A: 91-100 B: 81-90 C: 71-80 D: 61-70

Office Hours: In the office most of the time or Contact via email or phone
Phone: 713.899.7917
E-mail: waterwol@tamug.edu

COURSE SCHEDULE

Lesson 1 - Why Study Leadership?
Introduction, POP Quiz-Student Presentations 2 minute each “self introductions to include leadership positions I have held”, Syllabus Negotiations, Assign HOMEWORK#1 before any reading assignment, write your current definition of Leadership, Management and Labor. (1 page max). Assign presentations from Northouse.

Lesson 2 – What is Leadership?
TURN-IN HOMEWORK#1, READ: Syllabus, Gardner: Preface, Introduction
Presentation: Trait Approach (N)

Lesson 3 – Laborer/Followers
Leadership Tasks/Leadership Constituents Chapter 2/3 (G)
Leadership Trait Questionnaire Review (LTQ) pg. 38 (G)
Presentation Skills Approach (N)

Lesson 4 – Context and Attributes Chapter 4/5 (G)
Skills Inventory review pg. 69
Presentation Style Approach (N)
Lesson 5 - Power and Moral Dimension (Ethics) Chapter 6/7 (G)
Style Questionnaire Review pg. 93
Presentation Situational Approach (N)

Lesson 6 - Culture and Ethics Chapter 15/16 (N)
Situational Leadership Review pg. 116 (N)
Presentation Contingency Theory (N)

Lesson 7 - Large Scale Organized Systems Chapter 8 (G)
Contingency Theory Review pg. 134 (N)
Presentation Path-Goal Theory (N)

Lesson 8 - Fragmentation and the Common Good/The Knitting Together Chapter 9/10 (G)
Path-Goal Leadership Questionnaire pg. 155 (N)
Presentation Leader-Member Exchange Theory (N)

Lesson 9 - Community/Renewing Chapter 11/12 (G)
LMX7 Questionnaire Review pg. 180 (N)
Presentation Transformational Leadership (N)

Lesson 10 - Sharing Leadership Tasks Chapter 13 (G)
Multifactor Leadership Questionnaire (MLQ) Review pg. 213 (N)
Presentation Authentic Leadership chapter 11 (N)

Lesson 11 - Motivating/Release of Human Possibilities Chapter 16/17 (G)
Authentic Leadership Self-Assessment Questionnaire review pg. 280 (N)
Presentation Psychodynamic Approach (N)

Lesson 12 - Motivating/Release of Human Possibilities Chapter 16/17
Psychodynamic Approach Survey Review
Class Summary/Wrap up leadership framework presentations

Please note the following important statements relating to University and Department policies

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The Americans with Disabilities Act, (ADA), is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, the legislation requires that all students be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibell Student Center, or call 409.740.4587. For additional information visit http://www.tamug.edu/counsel/disabilities.html

TAUMG Academic Dishonesty Statement

For many years, Aggies have followed a Code of Honor, which is stated in this very simple verse: "Aggies do not lie, cheat or steal, nor do they tolerate others who do." As such, it is the responsibility of students and faculty members to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. The Aggie Code of Honor and the Scholastic Dishonesty sections in the
TEXAS A&M UNIVERSITY AT GALVESTON
Department of Maritime Administration

Maritime Administration MARA 675 Leadership in the Maritime Industry
Spring 2016

NOTE: Leadership has a "Ship" in it.

Instructor – Len Waterworth – waterwol@tamug.edu cell 713.899.7917
Meeting Times: 1800 – 2030 hours
        Peter G. Northouse, Leadership and Practice *Sixth edition or better

Course Prerequisite: Graduate Student, Permission of the instructor

COURSE DESCRIPTION:

This course will focus on theory and the real world practice of leadership. Students will become familiar
with components of leadership, management and labor, the basis of leadership authority, leadership
values and styles as they apply to organizational vision, mission and organizational life cycle. The Student
will participate in individual assessment of their leadership traits in preparation of entering the work
force.

PARTICIPATIVE LEARNING

The class will meet once weekly throughout the semester. The class will require active participative
learning but at this point in your development as a graduate student, much of your learning should be
driven by your own intellectual curiosity away from class. However, we still come together collectively to
meet as a class because we will learn from each other and gain different perspectives, and reinforce our
understanding on the subjects of leadership. We can only do this if everyone is prepared and participates.
Our class will become a place where discussion and case studies build a larger common understanding of
the topics.

THE PURPOSE OF THIS CLASS

To assist you to be a leader in your: professional, community and personal life, if you choose. In this class
you will learn more about leadership, follower-ship and, hopefully, start a lifetime journey of improving
leadership skills.

When you graduate I want you to be able to offer not only maritime analysis and advice, but also
informed ethical leadership.

LEARNING OBJECTIVES

- Define Leadership and leadership authority
- Examine the roles and responsibilities of leaders, managers and labor and the interactions
  between each
- Identify and describe major leadership attributes and theories
• Describe the behaviors of effective leaders in a variety of situations
• Use self-assessment tools to evaluate your own level of leadership development and individual skills, personality dimensions and management competencies
• Describe practical skill needed to be an effective leader in different environments
• Describe a leader’s ethical options in crisis

**TEXTBOOK/READINGS**

**Required**


**Textbooks (recommended)**


Kellerman, Barbara, The End of Leadership, Boston: Harvard Business School Press,


Headquarter, Department of the Army, FM 6-22, Army Leadership, October 2006

Adizes, Ichak, Adizes Institute Publication, 2004, Managing Corporate Lifecycles:


**PRESENTATIONS: LEADERSHIP FRAMEWORK**

**LEADERSHIP FRAMEWORK**

Submit a paper of no more than 10 pages in which you present your current personal leadership framework. (Why would anyone follow me?) A leadership framework is an organized set of your ideas on how you will lead. Explain how you could establish your authority to lead, how you could establish the leadership climate and standards that will accomplish organizational objectives. Explain how you build relationships with your leadership and subordinates. Your work should reflect sensitivity to the ethical dimension of leadership.

The paper is not a research paper. Instead of that it should be a statement of how you think about leadership now. It should reflect your ideas, a statement of what you think about leadership that you can actually live by for the near term as you gain more experience and knowledge. It should be a useful guide to you in future leadership situations, and it should be something you would be proud to give to someone who knows nothing about leadership. It should have the potential to help you benchmark your leadership development over your working career.

The basic framework should include, as a minimum, your answers to the following:

1. Your definitions of leadership and followership, Definitions of values and character.
2. Briefly, in three scenarios, describe your thought process if:

- You determine your immediate supervisor has conducted himself or herself in an unethical manor.
- You determined your immediate subordinate, has conducted himself or herself in an unethical manor.
- And that the action you take has the potential of hurting or terminating your employment.

You may cite the work of others, and you may also adopt or reject the ideas of others as long as you are able to explain why you choose to do so. Useful criteria for accepting for or rejecting the work of others include research, experience and practicality.

I will grade your paper on content, logic and internal consistency. References are required.

GRADING SCHEME:

<table>
<thead>
<tr>
<th>Class Participation</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td>25%</td>
</tr>
<tr>
<td>Class attendance</td>
<td>25%</td>
</tr>
<tr>
<td>Leadership Frame Work</td>
<td>25%</td>
</tr>
</tbody>
</table>

Letter grade A: 91-100 B: 81-90 C: 71-80 D: 61-70

Office Hours: In the office most of the time or Contact via email or phone
Phone: 713.899.7917
E-mail: waterwol@tamug.edu

COURSE SCHEDULE

Lesson 1 - Why Study Leadership?
Introduction, POP Quiz-Student Presentations 2 minute each “self introductions to include leadership positions I have held”, Syllabus Negotiations, Assign HOMEWORK#1 before any reading assignment, write your current definition of Leadership, Management and Labor. (1 page max). Assign presentations from Northouse.

Lesson 2 – What is Leadership?
TURN-IN HOMEWORK#1,
READ: Syllabus, Gardner: Preface, Introduction
Presentation: Trait Approach (N)

Lesson 3 – Laborer/Followers
Leadership Tasks/Leadership Constituents Chapter 2/3 (G)
Leadership Trait Questionnaire Review (LTQ) pg. 38 (G)
Presentation Skills Approach (N)

Lesson 4 – Context and Attributes Chapter 4/5 (G)
Skills Inventory review pg. 69
Presentation Style Approach (N)
Lesson 5 - Power and Moral Dimension (Ethics) Chapter 6/7 (G)
Style Questionnaire Review pg. 93
Presentation Situational Approach (N)

Lesson 6 - Culture and Ethics Chapter 15/16 (N)
Situational Leadership Review pg. 116 (N)
Presentation Contingency Theory (N)

Lesson 7 - Large Scale Organized Systems Chapter 8 (G)
Contingency Theory Review pg. 134 (N)
Presentation Path-Goal Theory (N)

Lesson 8 - Fragmentation and the Common Good/The Knitting Together Chapter 9/10 (G)
Path-Goal Leadership Questionnaire pg. 155 (N)
Presentation Leader-Member Exchange Theory (N)

Lesson 9 - Community/Renewing Chapter 11/12 (G)
LMX7 Questionnaire Review pg. 180 (N)
Presentation Transformational Leadership (N)

Lesson 10 - Sharing Leadership Tasks Chapter 13 (G)
Multifactor Leadership Questionnaire (MLQ) Review pg. 213 (N)
Presentation Authentic Leadership chapter 11 (N)

Lesson 11 - Motivating/Release of Human Possibilities Chapter 16/17 (G)
Authentic Leadership Self-Assessment Questionnaire review pg. 280 (N)
Presentation Psychodynamic Approach (N)

Lesson 12 - Motivating/Release of Human Possibilities Chapter 16/17
Psychodynamic Approach Survey Review
Class Summary/Wrap up leadership framework presentations

Please note the following important statements relating to University and Department policies

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The Americans with Disabilities Act, (ADA), is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, the legislation requires that all students be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call 409.740.4587. For additional information visit http://www.tamug.edu/counsel/disabilities.html

TAUMG Academic Dishonesty Statement

For many years, Aggies have followed a Code of Honor, which is stated in this very simple verse: “Aggies do not lie, cheat or steal, nor do they tolerate others who do.” As such, it is the responsibility of students and faculty members to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. The Aggie Code of Honor and the Scholastic Dishonesty sections in the
TAMUG University Rules handbook will be the standards upon which scholastic integrity is maintained at Teas A&M University at Galveston.” http://www.tamug.edu/HonorSystem

**TAMUG Statement on Absences**

Information concerning absences is contained in the University Student Rules Section 7. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45). More information available at http://www.tamug.edu/stulife/Academic_Rules/7_Attendance.html

**Every student has a University-created E-mail address, which the Department uses when it wishes to contact you. Please check your E-mail daily.**
LEADERSHIP PART I
What it Takes to be a Great Leader (9:19)
https://www.ted.com/talks/roselinde_torres_what_it_takes_to_be_a_great_leader

The Power of Vulnerability (20:19)
https://www.ted.com/talks/brene_brown_on_vulnerability

Tribal Leadership (16:39)
https://www.ted.com/talks/david_logan_on_tribal_leadership

Trial, Error, and the God Complex (18:07)
https://www.ted.com/talks/tim_harford

WORK HAPPINESS PART I
How to Save the World from Bad Meetings (6:34)
https://www.ted.com/talks/david_grady_how_to_save_the_world_or_at_least_yours
self_from_bad_meetings

Why It's Time to Forget the Pecking Order at Work (15:47)
https://www.ted.com/talks/margaret_heffernan_why_it_s_time_to_forget_the_pecking_order_at_work

Six Rules to Simplify (12:01)
https://www.ted.com/talks/yves_moricex_as_work_gets_more_complex_6_rules_to_simplify

Why Work Doesn't Happen at Work (15:21)
https://www.ted.com/talks/jason_fried_why_work_doesn_t_happen_at_work

Got a Meeting? Take a Walk (3:28)
https://www.ted.com/talks/nillofor_merchant_got_a_meeting_take_a_walk

LEARNING
Three Rules to Spark Learning
https://www.ted.com/talks/ramsey_musallam_3_rules_to.spark_learning

How to Learn From Mistakes
https://www.ted.com/talks/diana_laufenberg_3_ways_to.teach

Why We Do What We Do (21:45)
https://www.ted.com/talks/tony_robbins_asks_why_we_do_what_we_do

How Reliable is Your Memory? (17:36)
https://www.ted.com/talks/elizabeth_loftus_the_fiction_of_memory

BRAINS
Brain Magic (19:49)
https://www.ted.com/talks/keith_barry_does_brain_magic

A Neural Portrait of the Human Mind (17:40)
https://www.ted.com/talks/nancy_kanwisher_the_brain_is_a_swiss_army_knife

Got a Wicked Problem? (9:01)
https://www.ted.com/talks/tom_wujec_get_a_wicked_problem_first.tell.me.how.you.make.toast

Optical Illusions Show How We See (16:30)
https://www.ted.com/talks/beau_lotto_optical_illusions.show.how.we.see

LISTENING
Five Ways to Listen Better (7:50)
https://www.ted.com/talks/julian_treasure_5_ways_to_listen_better

Everyone Around You Has a Story the World Needs to Hear (21:38)
https://www.ted.com/talks/dave_isay_everyone_around_you.has.a.story.the.world.needs.to.hear

Want to Help Someone? Shut Up and Listen! (17:09)
https://www.ted.com/talks/ernesto_siroli_want_to_help.someone.shut.up.and.listen
How to Speak So That People Want to Listen (9:58)
https://www.ted.com/talks/julian_treasure_how_to_speak_so_that_people_want_to_listen

All Kinds of People
The World Needs All Kinds of Minds (19:43)
https://www.ted.com/talks/temple_grandin_the_world_needs_all_kinds_of_minds
The Power of Introverts (19:04)
https://www.ted.com/talks/susan_cain_the_power_of_introverts
Your Elusive Creative Genius (19:09)
https://www.ted.com/talks/elizabeth_gilbert_on_genius

Leadership Part II
How Great Leaders Inspire Action (18:04)
https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action
Lead Like Great Conductors (20:51)
https://www.ted.com/talks/itay_talgam_lead_like_the_great_conductors
Listen, Learn...Then Lead (15:38)
https://www.ted.com/talks/stanley mccrystal
Why Good Leaders Make you Feel Safe (11:59)
https://www.ted.com/talks/simon_sinek_why_good_leaders_make_you_feel_safe

Work Happiness Part II
The New Era of Positive Psychology (23:43)
https://www.ted.com/talks/martin_seligman_on_the_state_of_psychology
The Puzzle of Motivation (18:36)
https://www.ted.com/talks/dan_pink_on_motivation
The Power of Time Off (17:40)
https://www.ted.com/talks/stefan_sagmeister_the_power_of_time_off
How to Make Work-Life Balance Work (10:05)
https://www.ted.com/talks/nigel_marsh_how_to_make_work_life_balance_work

Honorable Mentions
What Makes Us Feel Good About Work? (20:26)
https://www.ted.com/talks/dan_ariely_what_makes_us_feel_good_about_our_work
The Origins of Pleasure (16:17)
https://www.ted.com/talks/paul_bloom_the_origins_of_pleasure
How to Truly Listen (32:09)
https://www.ted.com/talks/evelyn_glenne_shows_how_to_listen
Strange Answers to the Psychopath Test (18:01)
https://www.ted.com/talks/jon_ronson_strange_answers_to_the_psychopath_test
Can We Eat to Starve Cancer? (20:02)
https://www.ted.com/talks/william_li
The Surprising Science of Happiness (21:16)
https://www.ted.com/talks/dan_gilbert_asks_why_are_we_happy
Happiness and Its Surprises (19:45)
https://www.ted.com/talks/nancy_etcoff_on_happiness_and_why_we_want_it
The Happy Secret to Better Work (12:20)
https://www.ted.com/talks/shawn_achor_the_happy_secret_to_better_work
Why Do We Sleep (21:46)
https://www.ted.com/talks/russell_foster_why_do_we_sleep
How to Make Hard Choices (14:41)
https://www.ted.com/talks/ruth_chang_how_to_make_hard_choices
How to Make Stress Your Friend (14:28)
https://www.ted.com/talks/kelly_mcgonigal_how_to_make_stress_your_friend
Your Genes are Not Your Fate (3:12)
https://www.ted.com/talks/dean_ornish_says_your_genetics_are_not_your_fate
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
- Submit original form and attach a course syllabus.

Form Instructions:
1. Course request type:  □ Undergraduate  ☑ Graduate  □ First Professional (MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Marine Sciences
   MARS 603 Quantitative Methods for Resource Management
3. Course prefix, number and complete title of course:
4. Catalog course description (not to exceed 50 words):
   Comprehensive introduction to descriptive and inferential statistical techniques, regression models, quantitative data analysis and research designs essential for understanding resource management and policy related issues.
5. Prerequisite(s): STAT 303 or equivalent introductory undergraduate quantitative methods course
   Cross-listed with: 
   Stacked with: 
   Cross-listed courses require the signature of both department heads.
6. Is this a variable credit course?  □ Yes  ☑ No  If yes, from _______ to _______
7. Is this a repeatable course?  □ Yes  ☑ No  If yes, this course may be taken _______ times.
   Will this course be repeated within the same semester?  □ Yes  ☑ No
8. Will this course be submitted to the Core Curriculum Council?  □ Yes  ☑ No
9. How will this course be graded?  ☑ Grade  □ S/U  □ P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Masters of Marine Resources Management
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
13. Prefixed Course #: Title (excluding punctuation)
   MARS 603 Quantitative Methods for MARM
   Lect. Lab Other SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
   3.00 0.00 0.00 3.00 0302050005 1810 16 - 17 0 1 0 2 9 8
   Approval recommended by:
   Department Head or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee Date
   Dean of College Date
   Submitted to Coordinating Board by:
   Associate Director, Curricular Services
   Date
   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 07/14
Course title and number: Quantitative Methods for Resource Management, MARS 603
Meeting term and time: Fall/Spring/Summer 201x, time TBA
Location: TBD

Catalog Description

Comprehensive introduction to descriptive and inferential statistical techniques, regression models, quantitative data analysis and research designs essential for understanding resource management and policy related issues.

Course Description

This course provides an introduction to quantitative methods and reasoning in empirical research. The goal is to understand and confidently apply a variety of statistical methods and research designs that are essential for resource management and policy related questions. There will be an introduction to commonly used descriptive and inferential statistical techniques, regression models (both linear and non-linear) which are routinely used in policy research, and all other social science disciplines. Students will learn how to use statistical software to manage data, conduct statistical analysis, interpret empirical findings and write about the results in a way to communicate them clearly and effectively to general audience.

Prerequisites

Students in this course should have knowledge of the basics in statistics (e.g. STAT 303) or equivalent introductory undergraduate quantitative methods course.

Learning Outcomes

Upon completion of this course, students will be able to:

1) Demonstrate the understanding about various statistical inference techniques and basics of the research design.
2) Explain how quantitative methodology can help guide environmental and resource management policies.
3) Learn how to collect and analyze data, and interpret results.
4) Critically read articles which present data analysis, and discuss the relationship between theory and the real world problems.
5) Use applied quantitative skills, including both linear and non-linear regression analysis.
6) Practice the above knowledge using hands-on case studies, real life examples and data.
7) Identify statistical methods appropriate for different marine resource management and policy research context.
8) Apply the use of STATA and other statistical software.
9) Integrate, synthesize and communicate different ideas and concepts gained from course readings, discussions and lectures.

Instructor Information
Name: Meri Davlasheridze, PhD
Telephone number: 409-741-4338
Email address: davlashm@tamug.edu
Office hours: TBD
Office location: OCSB 362

Textbook
Required:

Software:
STATA – statistical software. Student limited term licensing for STATA package is available at [http://sell.tamu.edu/](http://sell.tamu.edu/).
You can alternatively use the statistical software of your choice (e.g. R).

Recommended:

There will be additional reading assignments that will aim to help students to critically read articles which presents a data analysis as well as get acquainted with various quantitative techniques and methods appropriate for resource management and policy related issues.

Course Structure

A typical week of this course will be split into two parts: in the first one, the instructor will lecture on major concepts related to quantitative methods. Students will discuss assigned readings, if applicable. In the second part, using data and statistical software students will be introduced how to practically implement theoretical notions learnt during the first part of the class. Laptops are required for this class.

Grading Policies

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Sets</td>
<td>40%</td>
</tr>
<tr>
<td>Mid-Term Exam</td>
<td>15%</td>
</tr>
<tr>
<td>Term Paper</td>
<td>30%</td>
</tr>
<tr>
<td>Presentation, participation &amp; attendance</td>
<td>15%</td>
</tr>
</tbody>
</table>
**Homework Sets**

There will be several homework sets and will consist of two parts. The first part will involve application of methods learnt during the class using actual dataset provided by the instructor or collected by a student. The students should estimate the model using the software of their preference. The second portion of the homework assignment entails analyzing the estimated results and writing up a brief summary about the implications of these results in the context of the problems stated. The assignments that do not interpret quantitative results will automatically receive zero grade.

**Mid-term exam**

Mid-term exam is a take-home exam and will cover the major concepts related to data analysis and quantitative methods.

**Term Paper**

The term paper should be an original research (professional) paper that will be based on real dataset and will apply a quantitative method(s) learned throughout the semester. The research question should be related to the coastal and marine resources management and policy topics. The topics must be approved by the instructor (in the form of a one page summary statement due on the date of the midterm exam). Students are encouraged to explore research ideas that will likely develop into a final thesis or a professional paper. In the final paper you should highlight the significance and policy relevance of the research, conduct relevant literature review, propose the most appropriate statistical method to analyze your data, collect data and estimate the model to answer research questions examined.

**Presentations**

Presentations will be held during the last 2 classes of the semester and you should have the draft of your term paper ready by the end of the 14th week. Each student will be given an opportunity to present their research paper and preliminary findings.

**Attendance and Participation**

Attendance and participation are very important for this class and record will be taken at the beginning of every class. You should read all assigned readings and be prepared to participate in class discussions at all times.

**Interpreting Grades:**

<table>
<thead>
<tr>
<th>Grades</th>
<th>Final Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>below 60</td>
</tr>
</tbody>
</table>
# Tentative Course Schedule

The schedule below is subject to modification. The instructor will be updating the schedule and announcing changes, if necessary. Students are expected to keep themselves up to date with the schedule.

<table>
<thead>
<tr>
<th>Week</th>
<th>Class</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19-Jan</td>
<td>Review of Probability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21-Jan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>26-Jan</td>
<td>Review of Statistics</td>
<td></td>
<td>HW #1</td>
</tr>
<tr>
<td></td>
<td>28-Jan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2-Feb</td>
<td>Simple Regression Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4-Feb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>9-Feb</td>
<td>Simple Regression Model</td>
<td></td>
<td>HW #2</td>
</tr>
<tr>
<td></td>
<td>11-Feb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>16-Feb</td>
<td>Multiple Regression Analysis: Estimation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18-Feb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>23-Feb</td>
<td>Multiple Regression Analysis: Inference</td>
<td></td>
<td>HW #3</td>
</tr>
<tr>
<td></td>
<td>25-Feb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Mar, 1</td>
<td>Multiple Regression Analysis with Qualitative Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mar, 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mar, 8</td>
<td>Heteroskedasticity</td>
<td></td>
<td>HW #4</td>
</tr>
<tr>
<td></td>
<td>Mar, 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mar, 15</td>
<td>Spring Break – no classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mar, 17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Mar, 22</td>
<td>Simple Panel Data Methods</td>
<td></td>
<td>HW #5</td>
</tr>
<tr>
<td></td>
<td>Mar, 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mar, 29</td>
<td>Fixed Effects and Random Effects Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mar, 31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Apr, 5</td>
<td>Instrumental Variable Estimation</td>
<td></td>
<td>HW #6</td>
</tr>
<tr>
<td></td>
<td>Apr, 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Apr, 12</td>
<td>Limited Dependent Variable Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apr, 14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Apr, 19</td>
<td>Limited Dependent Variable Model</td>
<td></td>
<td>HW #7</td>
</tr>
<tr>
<td></td>
<td>Apr, 21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Apr, 26</td>
<td>Presentations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apr, 28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>May 3</td>
<td>Final Paper Due</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mar 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Various Institutional Policy Statements

Disabilities Act (ADA) Policy Statement:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Northern Student Center, or call (409)740-4587.

Plagiarism:

Plagiarism is most commonly defined as copying a portion(s) of other students’ paper(s) or some published work without proper citations. (Texas A&M University, University Writing Center, http://writingcenter.tamu.edu). When discovered, serious academic penalties will be imposed.

Aggie Honor System:

Aggie Honor Code: “An Aggie does not lie, cheat, or steal or tolerate those who do.”
Upon accepting admission to Texas A&M University at Galveston, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMUG community from the requirements or the processes of the TAMUG Honor System.
For additional information: http://www.tamug.edu/honorsystem/.

Statement on Absences:

Information concerning absences are contained in the University Student Rules Section 7
http://www.tamug.edu/stulife/Academic%20Rules/Rule%207.pdf. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45).

Statement on the Family Educational Rights and Privacy Act (FERPA):

FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information,
please consult the Admissions & Records Office. Items that can never be identified as public information are a student’s social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:
   □ Undergraduate  □ Graduate  □ First Professional (M.D., D.D.S., Pharm.D., D.V.M.)
2. Request submitted by (Department or Program Name):
   Department of Marine Sciences
   MARS 693 Professional Study for Marine Resource Management
3. Course prefix, number and complete title of course:
4. Catalog course description (not to exceed 50 words):
5. Prerequisite(s):
   Approval of instructor
   Cross-listed with:
   Stacked with:
6. Is this a variable credit course?  □ Yes  □ No  If yes, from ___ to ___
7. Is this a repeatable course?  □ Yes  □ No  If yes, this course may be taken ___ times.
   Will this course be repeated within the same semester?  □ Yes  □ No
8. Will this course be submitted to the Core Curriculum Council?  □ Yes  □ No
9. How will this course be graded:
   □ Grade  □ S/U  □ P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Masters of Marine Resources Management professional (non-thesis) track
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://www.tamu.edu/gyresources/export-control/basics-for-distance-education).
13. Prefix  Course #  Title (excluding punctuation)
   MARS  693  Professional Study for MARM
   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  HICE Code
   3.00  0.00  0.00  3.0C  0302050005  1810  16  17  0 1 0 2 9 8

   Approval recommended by:
   Department Head or Program Chair (Type Name & Sign)  Date
   Chair, College Review Committee  Date
   Dean of College  Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC  Date

   Effective Date

   Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
   Curricular Services – 07/14
Course title and number: Professional Study (MARS 693)
Term: Fall/Spring/Summer 201x
Meeting times and location: TBA

Catalog Description


Course Description and Prerequisites

The professional studies course is intended for non-thesis Marine Resource Management students, under the direction of their advisory committee chair, to focus on and prepare their professional paper. Prerequisite: Approval of instructor. Variable credit: 1-3.

Learning Outcomes

- Abstract writing and revising
- Preparation and writing of research paper.

Instructor Information

Name: TBA
Telephone number
Email address
Office hours
Office location

Textbook and/or Resource Material

None.

Grading Policies

Abstract = 30%
Paper = 70%
GRADING SCALE: 90-100 = A 80-89 = B 70-79 = C 60-69 = D Below 60 = F
A numeric grade of "70" is necessary to pass. Course grading will be Satisfactory/Unsatisfactory.

Attendance and Make-up Policies

Attendance Information concerning absences is contained in the University Student Rules
Section 7, http://www.tamug.edu/stulife/Academic%20Rules/Rule%207.pdf. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments on time. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45). Additional guidelines may be provided by supervising faculty, in line with TAMUG attendance and make up policies.

Course Topics, Calendar of Activities, Major Assignment Dates

Exact schedule to be determined by the supervising faculty. The schedule will include due dates related to the preparation of the professional paper and meetings with the advisor to discuss progress. An example might be the following:

Week Topic
1. The elements of a professional paper
2. Publication guides
3. Scientific communications and abstract writing
4. Preparing an outline of the paper
5. Review of outline
6. Review of outline and first draft
7. Continued work on the paper
8. Continued work on the paper
9. Review of second draft of the paper
10. Continued work on the paper
11. Final revisions of the paper
12. First draft of abstract due
13. Abstracts Due
14. Meeting with student’s committee for review of paper and abstract

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal non-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this law requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409)740-4587. For additional information visit http://www.tamug.edu/counsel/Disabilities.html.

Academic Integrity

For additional information please visit: http://www.tamug.edu/HonorSystem

"An Aggie does not lie, cheat, or steal, or tolerate those who do."
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

1. Course request type:  
   ☐ Undergraduate  ☑ Graduate  ☐ First Professional (DMD, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):  
   Mechanical Engineering Department-Dwight College of Engineering
   MEEN 605- Gas Dynamics

3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Overview of gas flows at Mach numbers wherein the fluid can no longer be assumed incompressible; aerospace and mechanical engineering applications ranging from external aerodynamics to internal flows for applications such as propulsion and airframe designs for jets, rockets, missiles, and other devices; includes supersonic flows, shock waves, expansion waves, shock tubes, supersonic wind tunnels, gas flows with friction and gas flows with heat transfer.

5. Prerequisite(s):
   MEEN 344 or equivalent
   Cross-listed with:  
   MEEN 472

6. Is this a variable credit course?  
   ☑ Yes  ☐ No
   If yes, from _____ to _____

7. Is this a repeatable course?  
   ☑ Yes  ☐ No
   If yes, this course may be taken _____ times.
   Will this course be repeated within the same semester?  
   ☑ Yes  ☐ No

8. Will this course be submitted to the Core Curriculum Council?  
   ☐ Yes  ☑ No

9. How will this course be graded?  
   ☑ Grade  ☐ S/U  ☐ P/F (CLMD)

10. This course will be:
   a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S. Ph.D. in geography)

M.Eng, M.S. and Ph.D. Mechanical Engineering students

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix: MEEN  Course #: 605  Title (excluding punctuation): Gas Dynamics

<table>
<thead>
<tr>
<th>Lect</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td></td>
<td></td>
<td>3.00</td>
<td>1419010006</td>
<td>1920</td>
<td>16</td>
<td>-</td>
</tr>
</tbody>
</table>

Approval recommended by:

Dr. Daniel McAdams

Department Head or Program Chair (Type Name & Sign) Date  Chair, College Review Committee Date

Department Head or Program Chair (Type Name & Sign) Date  Dean of College Date

Submitted to Coordinating Board by:  
Chair, GC or UCC Date  Effective Date

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8281 or sandra-williams@tamu.edu. Curricular Services – 07/14
TEXAS A&M UNIVERSITY
Department of Mechanical Engineering

MEEN 605 - Gas Dynamics
Fall 2015

Instructor: Dr. Eric L. Petersen
Office: ENPO 418
Phone: (979) 845-1257
Email: epetersen@tamu.edu
Office hours: T 09:00-11:00; W 15:00-17:00 or by appointment

Description: Gas dynamics, also referred to as compressible flow and/or high-speed aerodynamics, is a subject dealing with gas flows at high enough Mach number wherein the fluid can no longer be assumed incompressible. Such flows occur in many aerospace and mechanical engineering applications ranging from external aerodynamics to internal flows for applications such as propulsion and airframe designs for jets, rockets, missiles, and many other devices. Topics within high-speed aerodynamics include supersonic flows, shock waves, expansion waves, shock tubes, supersonic wind tunnels, gas flows with friction, and gas flows with heat transfer.

Units: 3

Prerequisites: MEEN 344 – Fluid Mechanics (or its equivalent)

Cross-Listed: MEEN 472

Lecture Times: MWF 12:40-1:30 Room: ENPH 205

Website: E-learning

Required Text: Gas Dynamics
by James E. A. John and Theo G. Keith

Grading:
- Midterm Exams (4) 80% (20% each)
- Project 20%

The course grade is based mainly on four mid-term exams, with a course project (for graduate students only) in addition. The grading will be relative but, in general, the minimum scale will be based on A = 90-100%, B = 80-89%, C = 70-79%, etc. In other words, if you have an 82 average but the class average is 85, you will still get a B.
Homework:
Working homework problems is a necessity for learning and practicing the material. The student is responsible for keeping up with the homework assignments. The homework will not be turned in for a grade. The solutions will be given some time prior to the exam that uses the material on which the problems are based.

Academic Honesty:
Ethical behavior and academic honesty are expected and required of students and even more so of engineers and scientists. Evidence of cheating during an exam or other assignment for credit may result in failure of the entire course for the student(s) in question. Examples of cheating include, but are not limited to: 1) sharing answers or any portion of the problem solutions during an exam, either verbally or on paper; 2) use of cell phones or other electronic communication devices during an exam; 3) talking out loud during an exam, including talking in a language other than English; 4) looking on the paper(s) of the person sitting nearby who is also taking the exam; 5) passing notes or other messages during an exam.

Aggie Honor Code: "An Aggie does not lie, cheat, or steal, or tolerate those who do." Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: http://www.aggiehonor.tamu.edu/

On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge shall be preprinted and signed by the student:

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."

Americans with Disabilities Act (ADA) Policy Statement:
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services (disability.tamu.edu) in Room B118 of Cain Hall or call 845-1637.

Absences:
Work missed due to absences will only be excused for University-approved activities in accordance with TEXAS A&M UNIVERSITY STUDENT RULES (see http://studentrules.tamu.edu/rule7.htm). Specific arrangements for make-up work in such instances will be handled on a case-by-case basis. In accordance with recent changes to Rule 7, please be aware that in this class any "injury or illness that is too severe or contagious for the student to attend class" will require "a medical confirmation note from his or her medical provider" even if the absence is for less than 3 days (see 7.1.6.2 Injury or illness less than three days.).
Course Outline:

Table 1 presents the overall course schedule. The planned exam dates are subject to change upon prior notice of the instructor at least one week in advance of the exam date. The following topics will be covered, roughly in the sequence provided. The suggested homework will be provided on the course website and should be worked as we progress through the course. Solutions will be provided after a suitable amount of time has passed for people keeping pace with the course to practice the homework problems on their own.

- Introduction to compressible flow; ideal gases; conservation of mass; conservation of energy
- momentum equation; 2nd Law of Thermodynamics; wave propagation in elastic media; Mach number; subsonic and supersonic flows
- isentropic flow of a perfect gas; varying area channels; stagnation properties; choked flow
- converging-diverging nozzles and diffusers; applications
- normal shock waves; governing equations for a stationary normal shock wave
- shock waves in a C-D nozzle; supersonic wind tunnels
- moving normal shock waves; reflected normal shock waves
- Shock tubes
- Oblique shock waves; oblique shock reflections
- gradual compressions and expansions; Prandtl-Meyer expansion fans; Prandtl-Meyer flow for a smooth compression
- supersonic oblique-shock diffuser; exit flow for supersonic nozzles; supersonic airfoils
- Fanno flow line; relations of Fanno flow; 1-D flow problems with friction
- Rayleigh flow line; relations of Rayleigh; 1-D flow problems with heat transfer

Table 1 Schedule for MEEN 605, Fall 2015

TBD
Learning Outcomes:

At the end of this course, students should be able to:

1. Understand basic relations of fluid mechanics and thermodynamics (continuity, momentum, energy, 2nd Law of Thermodynamics) from a control volume standpoint;
2. Apply the ideal gas assumption;
3. Use 1-D theory to understand basic wave propagation in gases and elastic media;
4. Evaluate sound speeds of ideal gases and calculate Mach numbers;
5. Categorize the various regimes defined by the Mach number (subsonic, supersonic, hypersonic, etc.);
6. Utilize the concept of stagnation temperature and stagnation pressure for understanding and solving basic gas dynamics problems;
7. Explain basic flow system behavior using T-s diagrams;
8. Evaluate the effect of area changes on 1-D compressible flow;
9. Determine when a flow system is choked and what regions should be subsonic, sonic, or supersonic;
10. Analyze the flow in nozzles, diffusers, and from pressurized vessels;
11. Design (conceptually) basic supersonic wind tunnels;
12. Analyze flow systems containing stationary normal shock waves;
13. Analyze flow systems containing stationary oblique shock waves;
14. Determine the location of a stationary shock wave in a converging-diverging nozzle;
15. Calculate the conditions within ducted systems containing moving shock waves;
16. Understand the fundamentals of shock tubes;
17. Evaluate the pressure and Mach number changes through an expansion fan (Prandtl-Meyer flow);
18. Apply oblique shock waves and expansion fans toward the design of supersonic airfoils;
19. Apply oblique shock waves and expansion fans to supersonic nozzles and their exhaust streams;
20. Perform calculations on a compressible, 1-D internal flow system with friction (optional);
21. Analyze compressible, 1-D internal flows with heat transfer (optional);
22. Sketch Rayleigh and Fanno lines on a T-s diagram (optional);
23. Use look-up tables for solving basic compressible flow problems;
24. Make small computer/EXCEL/MATHCAD programs for solving the basic relations of compressible flow using a computer and/or calculator without having to resort to look-up tables.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

1. Course request type: ☑ Graduate  ☐ Undergraduate  ☐ First Professional (MD, DDS, PharmD, DVM)

2. Request submitted by (Department or Program Name):
Department of Nuclear Engineering
NUEN 647 Uncertainty Quantification in Nuclear Science and Engineering

3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
Predictions of computer codes when the inputs to those codes are uncertain. We will demonstrate how to build confidence in computer models and make a qualified prediction.

5. Prerequisite(s):
Graduate classification or approval of instructor

6. Is this a variable credit course? ☑ No  ☐ Yes If yes, from _______ to _______

7. Is this a repeatable course? ☑ No  ☐ Yes If yes, this course may be taken _______ times.
Will this course be repeated within the same semester? ☐ Yes  ☑ No

8. Will this course be submitted to the Core Curriculum Council? ☑ Yes  ☐ No

9. How will this course be graded? ☑ Grade  ☐ S/U  ☐ P/F (CLMB)

10. This course will be:
a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

NUEN graduate degree programs (MS, ME, PhD)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix  Course #  Title (excluding punctuation)

NUEN  647  UNCERTAINTY QUANT FOR NUEN

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>1423010006</td>
<td>2090</td>
<td>- 17</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:
Yassin Hassan

Chair, College Review Committee

Department Head or Program Chair (Type Name & Sign)  Date
The Dean of College  Date

Submitted to Coordinating Board by:
Associate Director, Curricular Services  Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
Course title and Number: NUEN 647: Uncertainty Quantification in Nuclear Science and Engineering
Term: Fall 2016
Meeting times and location: TR 2:20-3:35pm, ETB 1035

Course Description and Prerequisites
Simulation-based prediction is common in many fields of engineering, and nuclear engineering is no exception. This course asks, and begins to answer, the question of how can we have confidence in the predictions of computer codes when the inputs to those codes are inherently uncertain. We will demonstrate how to build confidence in computer models, find the important uncertain parameters, and make a qualified prediction.

Course Outcomes and Objectives
At the end of this course you will understand what it takes to make simulation-based predictions with quantified uncertainties. Specifically, the student will

1. Compare simulation results with experiments.
2. Calibrate simulation parameters to match experimental results.
3. Discuss the problem of defining a “domain” of validation.
4. Learn what code-to-code comparison can and can’t do.
5. Perform a sensitivity analysis on a numerical code.
6. Propagate uncertainties in the input parameters to the final simulation result via stochastic sampling, polynomial chaos, and reliability methods.
7. Use “intrusive” methods to propagate the uncertainties in a prediction.
8. Evaluate the effect of epistemic uncertainties on a simulation.
9. Use Bayesian inference to reduce input uncertainties.

Instructor Information
Name: Ryan G. McClarren, PhD.
Telephone Number: (979) 862-1779
Email address: rgm@tamu.edu
Office Hours: W 4-5pm or by serendipity
Office Location: ZACH 335W

Textbook and/or Resource Materials
The class notes and various handouts will serve in place of a textbook. Additional supplementary material can be found in the following resources:

P. Knupp and K. Salari, Verification of Computer Codes in Computational Science and Engineering, Chapman and Hall/CRC.
Gilks, Richardson, and Spiegelhalter, Markov Chain Monte Carlo in Practice, Chapman and Hall/CRC.
Calin and Louis, Bayesian Methods for Data Analysis, Chapman and Hall/CRC.
Santrner, Williams, and Notz, Design and Analysis of Computer Experiments. Springer.
Grading Policies

The course grade will be computed based on the following weights:
Homework: 30%
Project: 30%
Starred Problems: 30%
Class Participation: 10%

Course Topics, Calendar of Activities, Major Assignment Dates

Topics
1. Verification/Review of numerical approximations (3 lectures)
2. Validation Data (2 lectures)
3. Uncertainty Quantification
   a. Prob/Stats preliminaries (1 lecture)
   b. Perturbation / first-order sensitivity
   c. Sampling methods (2 lectures)
   d. Reliability methods (1 lecture)
   e. Polynomial Chaos/Collocation methods (2 lectures)
4. Surrogate-based Methods
   a. Linear regression (1.5 lectures)
   b. Bayesian statistics (1.5 lectures)
   c. Markov Chain Monte Carlo sampling (1 lecture)
   d. Gaussian Process Regression (2 lectures)
   e. MARS (2 lectures)
   f. Applications of surrogates (2 lectures)
5. Calibration and Prediction
   a. Calibration methods (2 lectures)
   b. Predictive models (2 lectures)
6. Epistemic Uncertainty (2 lectures)

Calendar of Activities by Week

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture 1</th>
<th>Lecture 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review of numerical approximations</td>
<td>Verification</td>
</tr>
<tr>
<td>2</td>
<td>Verification</td>
<td>Validation Data</td>
</tr>
<tr>
<td>3</td>
<td>Validation</td>
<td>Prob/Stats preliminaries</td>
</tr>
<tr>
<td>4</td>
<td>Perturbation/ 1st order sensitivity</td>
<td>Sampling Methods</td>
</tr>
<tr>
<td>5</td>
<td>Sampling Methods</td>
<td>Reliability Methods</td>
</tr>
<tr>
<td>6</td>
<td>Polynomial Chaos</td>
<td>Polynomial Chaos</td>
</tr>
<tr>
<td>7</td>
<td>Linear Regression</td>
<td>Linear Regression/Bayesian Stats</td>
</tr>
<tr>
<td>8</td>
<td>Bayesian Stats</td>
<td>Markov Chain Monte Carlo</td>
</tr>
<tr>
<td>9</td>
<td>Gaussian Process Regression</td>
<td>Gaussian Process Regression</td>
</tr>
<tr>
<td>10</td>
<td>MARS</td>
<td>MARS</td>
</tr>
<tr>
<td>11</td>
<td>Application of Surrogates</td>
<td>Application of surrogates</td>
</tr>
<tr>
<td>12</td>
<td>Calibration Methods</td>
<td>Calibration Methods</td>
</tr>
<tr>
<td>13</td>
<td>Predictive Models</td>
<td>Predictive Models</td>
</tr>
<tr>
<td>14</td>
<td>Epistemic Uncertainty</td>
<td>Epistemic Uncertainty</td>
</tr>
<tr>
<td>15</td>
<td>Project Presentations</td>
<td>Project Presentations</td>
</tr>
</tbody>
</table>

Final course grade ranges:

<table>
<thead>
<tr>
<th>Final Course Score</th>
<th>Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% and above</td>
<td>A</td>
</tr>
<tr>
<td>80 - 89.9%</td>
<td>B</td>
</tr>
<tr>
<td>70 - 79.9%</td>
<td>C</td>
</tr>
<tr>
<td>60 - 69.9%</td>
<td>D</td>
</tr>
</tbody>
</table>
Other Pertinent Course Information

Computer Usage
Appropriate use of engineering software and compilers will be encouraged. Justified use of relevant nuclear engineering codes will also be supported.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

ATTENDANCE POLICY

The university views class attendance as an individual student responsibility. Students are expected to attend class and to complete all assignments. In all such cases for University Excused absences, a student will be expected to submit a "Texas A&M University Explanatory Statement for Absence from Class" form available at http://student-rules.tamu.edu/rule07.

Religious Holidays

If you are a member of a religious faith that has one or more holidays which require you to be absent from any class listed above, please tell your instructor at least two weeks in advance of your absence and make arrangements to make-up the class.

Copyrights

The handouts used in this course are copyrighted. By "handouts" we mean all materials generated for this class, which include but are not limited to syllabi, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless the author expressly grants permission.

Academic Integrity

All students at Texas A&M University are bound by the Aggie Honor Code:

"An Aggie does not lie, cheat or steal, or tolerate those who do."

For more information, the student is referred to the Honor Council Rules and Procedures on the web at http://aggiehonor.tamu.edu.

As commonly defined, plagiarism consists of passing off as one's own the ideas, work, writings, etc., that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules [http://student-rules.tamu.edu/], under the section "Scholastic Dishonesty."

Professional Behavior

An important attribute of your professional development is that you act and speak in a manner that will not offend others giving particular care to diversity issues.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
- Submit original form and attach a course syllabus. -

Form Instructions
1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional (DMD, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   Department of Performance Studies
   PERF606: Performing Gender and Sexuality through Music

3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Examination of how gendered and sexual identities are explored and contested through musical performance.

---

Graduate Classification

5. Prerequisite(s):
   Cross-listed with:
   Stacked with:
   Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course? □ Yes □ No
   If yes, from ________ to ________

7. Is this a repeatable course? □ Yes □ No
   If yes, this course may be taken ________ times.
   Will this course be repeated within the same semester? □ Yes □ No

8. Will this course be submitted to the Core Curriculum Council?
   □ Yes □ No

9. How will this course be graded?
   □ Grade □ S/U □ P/F (CLAD)

10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      MA in Performance Studies

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix □ Course # □ Title (excluding punctuation)
    PERF □ 606 □ Perform Gender Sexuality Music

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>EFC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>5001010003</td>
<td>2196</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>

Approval recommended by:
Donnamaree Dox

Department Head or Program Chair (Type Name & Sign) Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 07/14
Performing Gender and Sexuality through Music
Fall/Spring Semester 20xx

Instructor: Dr. Kim Kattari
Email: kkattari@tamu.edu
Office: LAAH 272 (Liberal Arts and Humanities)
Office hours: Th 1:00-2:00 PM
Department phone number: 979-845-3355

Course Number: PERF606
Course Time: TBD
Classroom: LAHH 227

PREREQUISITE

Graduate Classification

CLASS DESCRIPTION

The way we perform our ideas about gender and sexuality impact and affect our daily lives. Moreover, scholars have explored the ways in which those ideas are culturally constructed. Using a performance studies lens, we can consider how gendered and sexual identities are constituted, explored, and contested through musical performances, and also how social, economic, and political processes influence and regulate those performances. For instance, how do we “read” the voice as gendered? How are gender norms defined and expressed through music, song, and dance? What songs or performers have contested sexual norms and influenced social change? How do audiences interpret and react to performers that explore the margins of sexual or gender norms? This class will explore music from a variety of cultures, genres, and time periods to examine the relationship between musical performance, gender, and sexuality. Readings and case studies draw from a variety of theoretical and methodological frameworks, including psychoanalysis, feminist scholarship, sexuality studies, performance studies, Marxism, structuralism, post-structuralism/post-colonial studies, and queer studies.

LEARNING OUTCOMES

Become familiar with diverse examples of how music reflects and expresses gender and sexuality in a variety of cultures and time periods.
Situate ethno/musicological research about gender and sexuality within different theoretical frameworks (i.e. queer studies, feminist scholarship, post-structuralism, etc.).

Summarize the ways in which various research and writing methodologies developed in conjunction with the theoretical frameworks listed above, and give appropriate examples.

Integrate the theories, research methodologies, and writing styles discussed in the class into one's own research and performance interests.

Strengthen critical reading skills and further develop one's ability to synthesize and communicate complex ideas through written and oral forms.

Develop skills for critically thinking about one's own performance of gender and sexuality.

**REQUIRED MATERIALS**

All required readings will be available through library databases or Course Reserves. See the schedule and course readings list at the end of this syllabus.

**ASSIGNMENTS**

**Reading Responses, 30 pts:** Write 10 responses to the weekly assigned readings. Do not merely summarize; your response could consider the main points or theoretical interventions of the readings, evaluate strengths or weaknesses therein, make connections to other theories or case studies we’ve discussed, apply relevant ideas to your own research performance interests, and/or suggest questions or topics for class discussion. Since your classmates may be reading different works than you, this will prepare you to give a brief synopsis of the work, its significance, and the issues it raises. Summaries should be 1 to 1 1/2 single-spaced, typed pages, and are due at the beginning of class. Include a works cited section. Late reading summaries will only be accepted in the event of an excused absence, according to Student Rule 7: http://student-rules.tamu.edu/rule07.

**Attendance, Preparation, Participation, 10 pts:** Active engagement in graduate seminars prepares you to effectively participate in the broader academic community. In a small seminar such as this, your regular attendance, diligent preparation of the readings, and thoughtful participation in discussion is vital to how we all benefit from our meetings. Please come to class prepared to actively engage with the assigned readings, consider their theoretical implications, apply relevant concepts to your own interests, and develop your ability to engage with others in respectful but vigorous scholarly debate and conversation. Bring your readings to class. We will foster a respectful space in which to both speak and listen. One unexcused absence will be allowed; more will negatively affect your attendance grade (see Student Rule 7.1).

**Performance Report (and Presentation/Performance), 25 pts:** Attend a musical performance and write a report that addresses how gender and sexuality is performed
through the work, using the theories discussed in class up to Week 8. You will discuss the piece and share your experience of it in class. As an alternative, you could create your own performance piece that addresses gender and/or sexuality through music, and write a short paper connecting your artistic work to the topics addressed in the class.

**Final Paper (and Presentation/Performance), 35 pts:** You will write a final paper of 5500-6500 words that applies the theories or texts from this class to either a) your own research on the performance of gender and/or sexuality in music or b) to your development of a performance that addresses gender and/or sexuality through music. Rough drafts are due Week 14, and you will also present your performance or your original research and analysis in class that week. Final papers are due on the first Monday of final exams. Late papers will be penalized one letter grade per day. Presentations can only be made-up in the event of an excused absence.

### GRADING RUBRIC

**A = 100-90 pts:** Exceptional and illuminating work. Writing is engaging, confident, clear, and free of errors. The argument is easily identifiable and well supported by a variety of evidence. Demonstrates original thought, deep engagement with course themes, and unique applications of major concepts or methods. Shows potential to be developed for publication or public presentation.

**B = 89.5-80 pts:** Demonstrates above average work. Writing is mostly interesting and readable, with few issues of clarity and few surface errors. The argument is mostly clear and well supported. Demonstrates active engagement with course themes and efforts to think in new and compelling directions. Application of course concepts and methods may be pedestrian or require further development.

**C = 79.5-70 pts:** Average work. Writing has issues with clarity, readability, and maintaining the reader’s attention. The argument may be unclear and lack sufficient evidence. Demonstrates familiarity with course themes, but does not extend investigations beyond our readings or classroom conversations. Course concepts may be illustrated, but not applied to new objects or inquiries.

**D = 69.5-60 pts:** Demonstrates unacceptable level of work. Writing may have significant issues with clarity and may contain many errors. Arguments are unoriginal, difficult to follow, and not compelling. Indicates a facile engagement with course themes and a lack of graduate level thinking.

**F = 59.5-0 pts:** Does not satisfy the minimal requirements of the assignment.

### ACADEMIC INTEGRITY

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state
their commitment on examinations and written assignments. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit http://aggiehonor.tamu.edu.

**AMERICANS WITH DISABILITIES ACT (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

For those taking exams at the Disability Services Office, please remind me at least a week before the exam to send the test and listening examples over to their office. For the final exam, you will need to schedule a time to take the listening portion of the exam with me.

**SCHEDULE OF TOPICS AND READINGS**

**Week One: Introduction**


**Week Two: First Wave Feminism**

“The Seneca Falls Convention July 18-20, 1848.”
http://www.npg.si.edu/col/seneca/senfallsl.htm


Choose one of the following:


**Week Three: Second Wave Feminism**


Choose one of the following:


Choose one of the following:


**Week Four: Sexuality and the “New Musicology”**


Choose two of the following:


**Week Five: Third Wave Feminism and Post-Colonial Studies**


Choose one of the following:


**Week Six: Post-Colonialism and Third Wave Feminism: Case Studies**

Choose two of the following:


**Week Seven: Gender and Performativity**


Week Eight: Performances or Performance Report Presentations

Week Nine: Structuralism and Post-Structuralism
Half the class will read one and the other half the other:


Week Ten: Masculine, Feminine, and Queer Performances
Choose two:


AND Choose one:


Week Eleven: Music and Homosexuality
Choose three:


Hubbs, Nadine. 2007. “‘I Will Survive’: Musical Mappings of Queer Social Space in a Disco Anthem.” In *Popular Music* 26(2): 231-244.


**Week Twelve: Ethnicity and Nationality**

Choose two:


**Week Thirteen: Ethical Considerations and Fieldwork**


And choose one of the following to survey:


**Week Fourteen: Presentation of Research Papers or Performances**

Research Paper Drafts Due
Research Papers Due the 1st Monday of Final Exam Week

COURSE READINGS AND OTHER SUGGESTED SOURCES


Hubbs, Nadine. 2007. “‘I Will Survive’: Musical Mappings of Queer Social Space in a Disco Anthem.” In *Popular Music* 26(2): 231-244.


Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type: □ Undergraduate    □ Graduate    □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Performance Studies
3. Course prefix, number and complete title of course: PERF607: Performance and Technology
4. Catalog course description (not to exceed 50 words):
   Explores the intersection of performance and technology with special emphasis on the impact of technology on aesthetics, social and political formations, and the body.

5. Prerequisite(s): Graduate Classification
   Cross-listed with: ____________________________
   Stacked with: ____________________________
   (Cross-listed courses require the signature of both department heads.)

6. Is this a variable credit course? □ Yes    □ No If yes, from _______ to _______.
7. Is this a repeatable course? □ Yes    □ No If yes, this course may be taken ______ times.
   Will this course be repeated within the same semester? □ Yes    □ No
8. Will this course be submitted to the Core Curriculum Council? □ Yes    □ No
9. How will this course be graded? □ Grade    □ S/U    □ P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   MA in Performance Studies

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vnc.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix    Course #    Title (excluding punctuation)
    PERF    607    Performance Technology
    Lect. Lab Other SCH CRP and Fund Code Admin Unit Acad. Year HSC Code
    3 0 0 3 5001010000 2196 15 16 0 0 3 6 3 2
    Approval recommended by:
    Donnalyn Dixon
    Department Head or Program Chair (Type Name & Sign) Date
    Oct 7, 2015

    Department Head or Program Chair (Type Name & Sign) Date
    (if cross-listed course)

    Submitted to Coordinating Board by:
    Chair, GC or UCC Date
    Date       Effective Date
    (Type Name & Sign)

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 07/14
PERF607: Performance and Technology

Dr. James Ball  
jimball@tamu.edu  
Dept. Phone: 979-845-3355  
Course Time: TBD

Fall/Spring 201X  
Office Hours W1:00 – 3:00  
LAAH211  
Classroom: LAAH227

Prerequisite: Graduate Classification

COURSE DESCRIPTION:
How do we think critically within the intersection of performance and technology? Looking primarily at innovations of the 19th, 20th, and 21st centuries, this course will explore the dramatic changes to our social, cultural, and aesthetic lives brought on by the advent of new technologies. How have technologies like photography, sound recording, and cinema affected the arts of theatre and performance? How will new technologies continue to impact the aesthetics and politics of live performance?

This course will also investigate the relationships between technology, the body, and our social lives. How has technology configured or reconfigured our experience of everyday life? How are questions of race, class, gender, and sexuality deployed and impacted by particular technologies and the discourses that surround them? What insights can performance studies provide to an investigation of the ways in which technology intersects our political subjectivity? Themes and sites of analysis will include: robots, cyborgs, cybernetics, and the post-human; video games, social networks, and the virtual; war and security (electronic civil disobedience, surveillance societies, drones); technological genres (science-fiction theatres, intermedial performance); and biopolitics and body art.

A significant component of this course will include student performance research: a midterm solo performance exploring technology and the body, and a final group performance of an excerpt from a science fiction drama.

Learning Outcomes: By the end of this course students will:
- understand the role technology has played in the development of the performing arts in the 20th century;
- be familiar with key theories of the impact of technology on social life;
- understand how technology supports and structures the exercise of power;
- be able to identify and analyze the politics of particular technological phenomena;
- understand the utility of technology in social and political activism;
- understand how technology can advance and support performance research;
- and develop advanced skills for incorporating the analysis of technology into diverse scholarly projects.

MATERIALS:
Full citation information for all required readings has been listed below. All materials have been placed on reserve at the library. Articles can also be found through the usual online databases. I recommend purchasing any book we are reading in its entirety. You are responsible for bringing
required readings to class with you on the day they are assigned, regardless of the format in which you have obtained them.

ASSIGNMENTS

Weekly Blog: Students are expected to post weekly to the class eCampus blog. Weekly posts should respond to the week’s readings, and should point the class towards artists and works relevant to the readings. Posts can include images, video, sound recordings, gifs, etc., but should also include explanatory text making connections to the week’s readings explicit. Purely textual posts, responding in writing to the theories or concepts under discussion in each week’s readings are also welcome. Students are especially encouraged to support the performance research projects of their colleagues by posting links to plays, performances, or other works that could inspire or inform either the Solo Performance or Group Performance Project. In effect, our blog should become a dramaturgical database on performance and technology. Students are required to make 5 posts each week.

Midterm Paper: Students will compose a 3,000 word persuasive essay employing one or more theories encountered during the first 7 weeks of our course in an original research project. Given that the first half of our course focuses on the impact of technology on the development of the visual and plastic arts in the 20\textsuperscript{th} century, archival projects investigating specific technological art objects are strongly encouraged.

Solo Performance: Students will compose an original, 5-10 minute long, solo performance investigating the impact of technology on embodied practices. These performances should interrogate the ways in which technology extends, constricts, and modifies the body in either exceptional or everyday circumstances. These performances should critically engage with some or all of the theories and concepts discussed in weeks 7-11 of our course (race and the internet, cyborgs, body artists, bodies in space, labor). During Week 9 students are required to email Dr. Ball with the proposed topic and scope of their Solo Performance.

Group Performance: Working in groups of 3 students will select one play from the dramas assigned for week 14 of our course. Students will be responsible for presenting a 10-15 minute excerpt from or inspired by their selected work. This performance will include a significant dramaturgical component: students must again use the theories and concepts encountered in our course to critically engage and illuminate the text. More than a scene study exercise, this performance must take advantage of the play text and theatrical event to further advance our classroom investigations of the nexus between art, technology, and society. During Week 12, each group should email Dr. Ball a proposal identifying the play they wish to work with.

Performance Research Report: Each student will be responsible for a 3,000 word performance research report. These reports must take advantage of either/both the Solo or/and Group Performance projects in the context of an original scholarly essay. Use and cite knowledge gained through our performance research projects to develop and support an original thesis on the relationship between performance (everyday or aesthetic) and technology. Students are encouraged (but not required) to incorporate outside research and additional scholarly methodologies to develop their arguments.
GRADING
Weekly Blog – 10 points
Midterm Paper – 25 points
Solo Performance – 20 points
Group Performance – 20 points
Performance Research Report – 25 points

Final Grade Calculation:
A=100-90 points: Student demonstrates an exceptional ability to conceptualize and present ideas; efforts go beyond meeting basic criteria. Student demonstrates significant intellectual curiosity, seeking out new ideas and information, in thorough and original ways, demonstrating initiative and imagination, and the potential to make important contributions to the field of performance studies. The student’s written and oral work contains few to no errors. Throughout the semester the student has shown a trajectory of development and growth. Student exceeds expectations for research, writing, or speaking at the graduate level in a Research I university.
B=89-80 points: Student provides solid work that meets basic requirements with evident language competency and few errors. Student ably engages, but generally does not go beyond, information and ideas readily accessible through class, readings, and discussions. Student’s research, writing, and speaking are commensurate with graduate standing in a Research I university.
C=79-70 points: Student’s work is of marginal quality. Student’s written work and participation in classroom discussions demonstrate limited ability or effort to engage ideas and information. Written and oral assignments have many errors (sentence structure, spelling, grammar, etc.) and/or are underprepared. Student’s research, writing, and speaking are slightly below expectations for students with graduate standing in a Research I university and should be improved with additional effort.
D=69-60 points: Quantity and quality of work falls far below the expectations of graduate students in a Research I university. Student should reflect on their working habits and seek out additional help where it is needed.
F=59-0 points: Student has not completed significant portions of the course in a satisfactory manner.

ATTENDANCE POLICY: Students are expected to attend class. Excused absences require proper documentation. For more details on university excused absences and acceptable forms of documentation, see Rule 7 of TAMU Student Rules, http://student-rules.tamu.edu/rule07. Expected absences should be communicated to Dr. Ball in writing (via email) as soon as you are aware of an engagement that will conflict with our class schedule. Unexpected absences (e.g. illness) should be communicated to Dr. Ball in writing (via email) as soon as you are able. Students are responsible for content from all class sessions, even those they miss; in case of absence, keep up with readings and refer to your colleagues for notes from class discussions.

ACADEMIC INTEGRITY: “An Aggie does not lie, cheat, or steal, or tolerate those who do.” Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations and written assignments. Ignorance of the rules does not exclude any member
of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit http://aggiehonor.tamu.edu.

AMERICANS WITH DISABILITIES ACT (ADA): The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

COPYRIGHT STATEMENT: Class lectures and other materials are copyrighted and they may not be reproduced for anything other than personal use without written permission from the instructor.

SCHEDULE OF CLASSES:
Week 1: Technology and the Avant-Garde: Manifestos

Week 2: Photography

(Online)

Week 3: Cinema and Post-Cinema
(Online)


Week 4: Sound Recording/Radio

Week 5: Virtual Reality

Week 6: Videogames

Week 7: The Internet

**Midterm Paper Due.**

**Week 8: Cyborgs, Cybernetics, Robots**

Haraway, Donna. “The Cyborg Manifesto” (Online)


**Week 9: Body Artists**


**Solo Performance Proposal Due**

**Week 10: Bodies in Space**


**Week 11: Labor**

Marx, Karl. “[Fragment on Machines],” *Economic Manuscripts of 1857 – 1858* (Online)


**Solo Performance Project Due**

**Week 12: Surveillance, Discipline, Control. Drones.**


**Group Performance Proposal Due.**

**Week 13: Protest**


**Week 14: Science Fiction Theatres*  
Anthology:  

Other suggested plays:
Ayckburn, Alan. *Henceforward....*
Harrison, Jordan. *Marjorie Prime.*
Kapek, Carl. *R.U.R. (Rossum's Universal Robots).*
Meriwether, Elizabeth. *Heddatron.*
Padmanabhan, Manjula. *Harvest.*
Washburn, Anne. *Mr. Burns, A Post-Electric Play.*

*Note: This list will be expanded throughout the semester via the combined efforts of our class as groups advance in preliminary preparations for their performance project. Only those plays selected for group performance projects will be required reading for the class as a whole during week 14.  
**Group Performance Project Due  
Performance Research Report Due**

**Syllabus subject to change throughout the semester!**
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions:
1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional (DMD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   Department of Performance Studies
   PERF608: Performance and the Art of Government

3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Examination of performance in political processes and institutions, using the tools of performance studies to analyze and interpret the work of states and governments.

5. Prerequisite(s):
   Graduate Classification
   Cross-listed with:
   Stacked with:
   (Cross-listed courses require the signature of both department heads)

6. Is this a variable credit course?
   - Yes
   - No
   If yes, from _______ to _______

7. Is this a repeatable course?
   - Yes
   - No
   If yes, this course may be taken _______ times.

8. Will this course be repeated within the same semester?
   - Yes
   - No

9. Will this course be submitted to the Core Curriculum Council?
   - Yes
   - No
   - P/F (CLMD)

10. How will this course be graded:
    - Grade
    - S/U

11. This course will be:
    a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)

12. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
    MA in Performance Studies

13. Effective Date
   Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
   Curricular Services – 07/14
PERF608: Performance and the Art of Government

Dr. James Ball
jimball@tamu.edu
Dept. Phone: 979-845-3355
Course Time: TBD

Fall/Spring 201X
Office Hours W1:00 – 3:00
LAAH211
Classroom: LAAH227

Prerequisite: Graduate Classification

COURSE DESCRIPTION:
This seminar will investigate the affinities between performance and politics by examining those places where the work of governance and the theory and practice of performance overlap in their spatial, visual, and bodily effects. From presidential elections to legislative debates to diplomatic missions, the domestic and international activities of states constitute tightly choreographed spectacles for multifaceted audiences. However, the performances of states also provide points of intervention where activists and subversives may contest power. Popular protests, grassroots organizing, and revolutionary practices all emerge from the same spectacular ground on which constituted powers conduct their policies. This course considers the performances that emerge where political and social institutions meet the populations they govern, to study how subjects are made, how the law governs behavior, and how individuals perform to contest or invest in constituted powers.

Several questions will guide the course: How does the state configure our lived experiences? What are the particular dramatic and dramaturgical contours of our political institutions and the policies they write? How do artists engage with the realm of politics to progressive or conservative ends? How can we theorize political performance in order to do both politics and performance better? Staging a performance studies intervention in policy-making and political science, this course will identify and elaborate the avenues by which the study of performance can inform debates over governance, the law, rights, and violence. This course will travel between domestic and international realms, investigating performances in legislative sessions, presidential elections, mass demonstrations, reality television, religious ritual, military simulation, state dinners, and everyday life. A significant component of this course will include original student research on mass events, theatre, television, and film, as well as fieldwork observing and analyzing political spectacle as a live event.

Learning Outcomes: By the end of this course students will:

• understand the key theories and methodologies used by performance studies scholars to analyze public political performance;
• understand how the state enables or forecloses on the performances of persons and populations;
• understand the visual, spatial, and bodily dimensions of the exercise of state power;
• understand how the performing arts have been used to contest power;
• be familiar with the major stages on which geopolitical performance plays;
• be able to present original research in a formal conference format;
• and develop advanced research, analytical, and fieldwork skills.
MATERIALS
Full citation information for all required readings has been listed below. All materials have been placed on reserve at the library. Articles can also be found through the usual online databases. I recommend purchasing any book we are reading in its entirety. You are responsible for bringing required readings to class with you on the day they are assigned, regardless of the format in which you have obtained them.

Democracy+ and Aggie Agora
Our investigations this semester are designed to dovetail with the University’s ongoing Strengthening Democracy (Democracy+) initiative. Students are encouraged to supplement learning in this course by attending events hosted by the Aggie Agora. These include lectures, coffee hours, and workshops on issues ranging from engaged citizenship to speech writing, and visits from professionals working on the frontlines of the theatricality of politics. Participating in Aggie Agora events is NOT required to be successful in this course; however, our studies will enable us to bring a unique and valuable perspective to these events. A complete schedule of events will be distributed on the first day of class, and further information can be found at http://www.aggieagora.org.

ASSIGNMENTS
Participation: Students are expected to post a brief reflection (1 paragraph) on the week’s reading by 5:00 pm each Tuesday before class, on our Blackboard discussion board. These responses should engage with the material assigned for the coming class, highlighting compelling ideas, contesting less compelling ideas, and posing any questions that might arise in the course of your reading. Students are excused from posting during weeks in which they will be giving a presentation. Students are expected to be well prepared for discussion upon arrival in class, and they are expected to participate in discussion each week.

Conference Presentation: Each student will be responsible for one conference-style presentation over the course of the semester, paired to a particular week’s readings. This presentation must apply concepts and theories from that week’s readings to original research on specific performance event(s) or art object(s) selected by the student. Presentations should go beyond the illustration of major concepts from each week’s reading to consider how that week’s theoretical frameworks might be used to open a performance to analytical and scholarly scrutiny. As many of our readings will take us well beyond the usual frames of music, dance, performance art, or theatre, these presentations will serve as an opportunity to flex our academic muscles of application, making use of the readings to analyze particular art works and practices.

Students may present on any aesthetic performance(s) of their choosing. Presentations should run 20 minutes long. As a general rule of thumb, one page of double-spaced text = 1.5-2 minutes of speaking time. Rehearse your presentation as necessary to be sure that you do not exceed the allotted 20 minutes. Visual aids or handouts are encouraged. Students not presenting will be expected to act as an attentive and engaged audience, so that each presentation may be followed by a period of collegial and constructive discussion.

Political Performance Analysis: For this brief written assignment (2,000 words), students will attend a political event and write a thick description and performance analysis of their
experiences. The event might be: a campaign speech, rally, or debate; a session of local, state, or federal legislature; a trial or other legal proceeding; etc. While students are encouraged to seek out live events, in certain circumstances mediated events (e.g. televised presidential debates or UN webcasts) may be appropriate; in such cases the description should account for and discuss the role of mediation in the reception of the event. To support this assignment we will organize two optional class excursions outside of regular class meetings, to attend proceedings at the Brazos County Courthouse and to attend a meeting of the College Station City Council.

Resources:
272nd District Court:
CLASS VISIT: ____________________________

Brazos County Agenda:
http://agenda.co.brazos.tx.us/

City of College Station Schedule of Events:
CLASS VISIT: ____________________________

State Capitol Schedule of Events
http://www.caevent.legis.state.tx.us/caevent.aspx

US Congress Webcasts
https://www.congress.gov/

UN Webcasts
http://webtv.un.org/

Final Paper: Students are expected to write a 4,500-5,000-word research paper exploring any of the topics covered during the semester in greater depth. These papers should draw on the readings for the course and connect our seminar investigations to the student's own particular research interests. Students may choose to develop material from either their presentation or performance analysis in their final paper, or may select a topic unrelated to earlier work.

**GRADING**
Participation – 10 Points
Conference Presentation – 20 Points
Political Performance Analysis – 20 points
Final Paper – 50 Points

Final Grade Calculation:
**A=100-90 points:** Student demonstrates an exceptional ability to conceptualize and present ideas; efforts go beyond meeting basic criteria. Student demonstrates significant intellectual curiosity, seeking out new ideas and information, in thorough and original ways, demonstrating initiative and imagination, and the potential to make important contributions to the field of
performance studies. The student’s written and oral work contains few to no errors. Throughout the semester the student has shown a trajectory of development and growth. Student exceeds expectations for research, writing, or speaking at the graduate level in a Research 1 university.

**B=89-80 points:** Student provides solid work that meets basic requirements with evident language competency and few errors. Student ably engages, but generally does not go beyond, information and ideas readily accessible through class, readings, and discussions. Student’s research, writing, and speaking are commensurate with graduate standing in a Research 1 university.

**C=79-70 points:** Student’s work is of marginal quality. Student’s written work and participation in classroom discussions demonstrate limited ability or effort to engage ideas and information. Written and oral assignments have many errors (sentence structure, spelling, grammar, etc.) and/or are underprepared. Student’s research, writing, and speaking are slightly below expectations for students with graduate standing in a Research 1 university and should be improved with additional effort.

**D=69-60 points:** Quantity and quality of work falls far below the expectations of graduate students in a Research 1 university. Student should reflect on their working habits and seek out additional help where it is needed.

**F=59-0 points:** Student has not completed significant portions of the course in a satisfactory manner.

**ATTENDANCE POLICY:** Students are expected to attend class. Excused absences require proper documentation. For more details on university excused absences and acceptable forms of documentation, see Rule 7 of TAMU Student Rules, http://student-rules.tamu.edu/rule07.

Expected absences should be communicated to Dr. Ball in writing (via email) as soon as you are aware of an engagement that will conflict with our class schedule. Unexpected absences (e.g. illness) should be communicated to Dr. Ball in writing (via email) as soon as you are able.

Students are responsible for content from all class sessions, even those they miss; in case of absence, keep up with readings and refer to your colleagues for notes from class discussions.

**ACADEMIC INTEGRITY:** “An Aggie does not lie, cheat, or steal, or tolerate those who do.” Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations and written assignments. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit http://aggiehonor.tamu.edu.

**AMERICANS WITH DISABILITIES ACT (ADA):** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.
COPYRIGHT STATEMENT: Class lectures and other materials are copyrighted and they may not be reproduced for anything other than personal use without written permission from the instructor.

SCHEDULE OF CLASSES:
Week 1: Course Introduction

Week 2: Politics and Aesthetics

Week 3: Space
Ngugi wa Thiong'o “Enactments of Power: The Politics of Performance Space” *TDR* 41.3 (Fall 1997): 11–30


Week 4: Politics of Spectacle

Week 5: Power and Governmentality
SELECTION: Chapters 4, 5, 8-13; Pages 87-134, 191-361.

Week 6: Electoral Spectacles
SELECTION: Introduction and Chapters 2-3; Pages 1-42, 121-201

Week 7: Legislative Performance

Week 8: Theatre in the Courtroom


Political Performance Analysis Due in class.

Week 9: Diplomacy

Week 10: Human Rights


Week 11: Peacekeeping

SELECTION: Chapters Introduction, 2, 3, 6-8; Pages 1-22, 42-73, 99-154


Week 12: Revolution


SELECTION: Pages 1-85

Week 13: War

SELECTION: Chapters 1, 4-7; Pages 1-21, 79-176

Week 14: The Magic of the State

Final Paper Due via email.
Syllabus subject to change throughout the semester!
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:  □ Undergraduate  □ Graduate  □ First Professional (DOS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): School of Public Health - Environmental and Occupational Health
3. Course prefix, number and complete title of course: PHEO 639, Hazardous Materials Management and Compliance
4. Catalog course description (not to exceed 50 words): Types of hazardous materials; system of environmental laws governing management of hazardous materials as well as contaminants in air, water and solid waste; appropriate management and regulatory compliance; hazardous materials spills and response; hazard communication and right-to-know regulations, hazard communication benchmarking and performance criteria.

5. Prerequisite(s):  none
   Cross-listed with:  N/A
   Stacked with:  N/A

6. Is this a variable credit course?  □ Yes  □ No  If yes, from _____ to _____
7. Is this a repeatable course?  □ Yes  □ No  If yes, this course may be taken _____ times.
   Will this course be repeated within the same semester?  □ Yes  □ No
8. Will this course be submitted to the Core Curriculum Council?  □ Yes  □ No
   P/F (CLMD)
9. How will this course be graded:  □ Grade  □ S/U  □ P/F (CLMD)
10. This course will be:
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
       None
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
       Any master's or doctoral program
11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-control-basics-for-distance-education).

13. Prefix:  PHEO  Course #:  639  Title (excluding punctuation):  HAZ. MATLS MGMT & COMPLIANCE

   Lect.  Lab  Other  S/C #  CIP and Fund Code  Admin Unit  Acct. Year  EIC Code
   3.00  0.00  0.00  3.00  512202  1056  15  -  16  0  0  3  6  3  2

   Approval recommended by:
   Department Head or Program Chair (Type Name & Sign)  Date  6/14/2015
   Chair, College Review Committee  Date  10/15/15
   Department Head or Program Chair (Type Name & Sign)  Date  10/19/15
   Dean of College  Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC  Date

   Associate Director, Curricular Services  Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 07/14
Instructor Information

Course title and number: Hazardous Materials Management and Compliance, PHEO 639
Term: Fall 2016
Meeting times and location: TBA
Instructor Name(s): Leslie Cizmas, PhD
Teaching Assistant(s): TBA
Telephone number: (979)-436-9324
Email address: LHCizmas@sphtamhsce.edu
Office hours: By appointment
Office location: Room 102, SPH Administration Building

Course Description

Types of hazardous materials; system of environmental laws governing management of hazardous materials as well as contaminants in air, water and solid waste; appropriate management and regulatory compliance; hazardous materials spills and response; hazard communication and right-to-know regulations, hazard communication benchmarking and performance criteria.

Prerequisites

None

Course Competencies and Course Objectives

<table>
<thead>
<tr>
<th>MPH Competency</th>
<th>Course Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the direct and indirect human health and safety effects of major environmental and occupational agents.</td>
<td>Describe hazardous materials.</td>
</tr>
<tr>
<td>Recognize adverse human health effects related to occupational and environmental exposures in both industrial and rural settings.</td>
<td>Explain the potential toxic effects or other health/safety effects of hazardous materials. Describe appropriate methods for management of hazardous materials.</td>
</tr>
<tr>
<td>Use information technology to access, evaluate, and interpret public health data.</td>
<td>Demonstrate use of Internet resources to gain up-to-date information regarding hazardous materials management and compliance</td>
</tr>
<tr>
<td>Describe the process in which policies are developed and implemented to handle and reduce environmental health risks and hazards.</td>
<td>Explain how policies are implemented and enforced to reduce environmental hazards.</td>
</tr>
<tr>
<td>Develop and implement strategies for mitigating environmental health hazards.</td>
<td>Describe the laws/regulations that govern hazardous materials management at the federal and state level. Explain measures needed to comply with these laws/regulations. Describe methods for controlling environmental hazards, including solid waste, air emissions and...</td>
</tr>
</tbody>
</table>
Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities

Describe appropriate procedures for transporting hazardous waste according to Department of Transportation regulations.

Explain methods for hazard communication and hazard communication training.

Describe how cultural and literacy issues may be addressed so that hazard communication is effective.

Textbook and/or Resource Material

Course Textbook:


Additional Recommended texts/materials:
Web resources as needed will be posted for the class.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings/Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course introduction; hazardous materials and related occupational diseases</td>
<td>Quiz; Haight, Environmental Safety and Health Regulations, Ch 1</td>
</tr>
<tr>
<td>2</td>
<td>Air pollution control and mitigation</td>
<td>Quiz; Haight, Environmental Safety and Health Regulations, Ch 2</td>
</tr>
<tr>
<td>3</td>
<td>Water and wastewater</td>
<td>Quiz; Haight, Environmental Safety and Health Regulations, Ch 3</td>
</tr>
<tr>
<td>4</td>
<td>Solid waste</td>
<td>Quiz; Haight, Environmental Safety and Health Regulations, Ch 4</td>
</tr>
<tr>
<td>5</td>
<td>Hazardous waste</td>
<td>Quiz; Haight, Hazardous Material Management and Hazard Communication, Ch 1</td>
</tr>
<tr>
<td>6</td>
<td>Hazardous material spills and response</td>
<td>Quiz; Haight, Hazardous Material Management and Hazard Communication, Ch 2</td>
</tr>
<tr>
<td>7</td>
<td>Midterm Exam</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Hazard communication and right-to-know regulations</td>
<td>Quiz; Haight, Hazardous Material Management and Hazard Communication, Ch 3</td>
</tr>
<tr>
<td>9</td>
<td>Management systems</td>
<td>Quiz; Haight, Environmental Safety and Health Regulations, Ch 7</td>
</tr>
<tr>
<td>10</td>
<td>Hazard communication benchmarking and performance criteria</td>
<td>Quiz; Haight, Hazardous Material Management and Hazard Communication, Ch 4</td>
</tr>
<tr>
<td>11</td>
<td>Best practices in hazard communication</td>
<td>Quiz; Haight, Hazardous Material Management and Hazard Communication, Ch 5</td>
</tr>
<tr>
<td>12</td>
<td>Incidence management; liability and enforcement, best practices; ISO 14000;</td>
<td>Quiz; TBD</td>
</tr>
</tbody>
</table>
### EPA's Next Generation Compliance

<table>
<thead>
<tr>
<th></th>
<th>Evaluation of program effectiveness</th>
<th>Quiz; TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Student presentations</td>
<td>Student papers due at beginning of class</td>
</tr>
<tr>
<td>15</td>
<td>Final Exam - Cumulative</td>
<td></td>
</tr>
</tbody>
</table>

### Grading Policies

<table>
<thead>
<tr>
<th>Grading Policy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Class participation</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes over reading at beginning of class (lowest grade will be dropped)</td>
<td>20%</td>
</tr>
<tr>
<td>Student presentation and paper</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

### Grading Scale

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.0-100</td>
<td>A</td>
</tr>
<tr>
<td>80.0-89.9</td>
<td>B</td>
</tr>
<tr>
<td>70.0-79.9</td>
<td>C</td>
</tr>
<tr>
<td>60.0-69.9</td>
<td>D</td>
</tr>
<tr>
<td>&lt;60</td>
<td>F</td>
</tr>
</tbody>
</table>

### Attendance and Make-up Policies

Students are expected to attend all class presentations. The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07). It is the student’s responsibility to provide satisfactory evidence to the instructor to substantiate the reason for absence. Only the reasons specified by the university for being absent from an exam will be accepted. They include:

1. Participation in an activity appearing on the Univ. Authorized Activity List;
2. Confinement because of injury or illness that is too severe or contagious for the student to attend class;
3. Death or major illness in a student’s immediate family;
4. Illness of a dependent family member;
5. Participation in legal proceedings or administrative procedures that require the student to be present;
6. Religious holy day;
7. Required participation in military duties;
8. Mandatory admission interviews for professional or graduate school that cannot be rescheduled.

To be excused from an exam for one of these reasons, the student must make arrangements with the instructor before the test is given. For authorized absences, the instructor will choose to either give a make-up test or modify the grading procedure to adjust for a missing test grade in a way that does not reduce the credits previously earned. For unauthorized absences, the instructor will decide on a course of action depending on the circumstances. Loss of credit for the missed test is a possible course of action.

### Other Pertinent Course Information

Every effort will be made to ensure that power point lecture files, notes, articles and assignments are available online in a timely manner. Written assignments will be delivered thru the Blackboard course website. Handouts, changes in assignments or the schedule of class modules will be announced on the Bb course webpage. E-mail contact will be initiated with all students the first week of class. If you do not have
access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made. You are expected to use Blackboard e-mail address for all official correspondence.

**eCampus (Blackboard)**

If this course uses eCampus: Within the course's eCampus site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects.

In order to access the course material you will need to go to login into **Howdy** and then click the eCampus button on the top right or look for Quick Links on the bottom of the School's homepage or go to http://ecampus.tamu.edu. Please do not contact your instructor with technical problems. If you are having a technical problem with the course, review the **Blackboard Learn Tutorial** (at the top-right of School's Office of Academic Assessment and Instructional Technology website), or contact John C. Lingsweller in the School's Office of Academic Assessment and Instructional Technology. John may be reached at (979) 436-9409 or at lingsweller@sph.tamhsc.edu. For login issues (password not working), please contact TAMU Help Desk at helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300. *Your eCampus login is the same as your Howdy login (NetID).*

**Computer Requirements for Online Courses**

For this and all online courses we recommend the minimum technical requirements outlined on our "SPH Computer Requirements for Online Courses" web page, located at http://www.sph.tamhsc.edu/assessment-instructional/com-requirement.html#distance-education/technical-specifications.html

All computing problems or other technical issues *not related to eCampus*, please contact:

- TAMHSC related account: helpdesk@tamhsc.edu via E-mail, or phone to (979) 862-8029
- TAMU related account: helpdesk@tamu.edu via E-mail, or phone to (979) 845-8300

**Important!!!** Save your work as you go along. Nothing is more discouraging than to lose an assignment due to a computer hang ups! You may want to also make hard copies of your work to have "proof" and save yourself time and trouble!

**Plagiarism Virtual Course**

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under "Content." In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@sph.tamhsc.edu for additional information.

**Course Evaluation**

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School's courses as part of your professional responsibility.
SPH Mission

Our mission is to create and apply knowledge acquired from the disciplines of public health to the education of public health leaders and practitioners through our research, practice, and service in the state of Texas, nationally, and globally.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student's responsibility to have a clear understanding of how to reference other individuals' work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html. A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at http://aggiehonor.tamu.edu

Remember:
"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Copyright Statement

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

FERPA

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

By enrolling in this course you agree to the following statement: "I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor."

Equal Opportunity Statement
The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

**DISCLAIMER**

This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change. These changes will be communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

**Title IX**

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

WHERE TO REPORT:
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-436-9207
nachlinger@tamhsc.edu

The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.
Texas A&M University  
Departmental Request for a New Course  
Undergraduate • Graduate • Professional  
* Submit original form and attach a course syllabus.*

**Form Instructions**

1. Course request type:  
   - [ ] Undergraduate  
   - [x] Graduate  
   - [ ] First Professional (DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):  
   Environmental & Occupational Health Department (PHEO)

3. Course prefix, number and complete title of course:  
   PHEO 722 Introduction to One Health

4. Catalog course description (not to exceed 50 words):  
   Concepts incorporating subject matter from experts and researchers, case studies, and  
   scientific readings, includes leadership, epidemiology, zoonoses, architecture, engineering,  
   food safety, water security, travel and human health

5. Prerequisite(s):  
   Graduate or Professional Classification

   Cross-listed with:  
   VIBS 922

   Stacked with:  

6. Is this a variable credit course?  
   [ ] Yes  
   [x] No  
   If yes, from ________ to ________

7. Is this a repeatable course?  
   [ ] Yes  
   [x] No  
   If yes, this course may be taken ________ times.
   Will this course be repeated within the same semester?  
   [ ] Yes  
   [x] No

8. Will this course be submitted to the Core Curriculum Council?  
   [ ] Yes  
   [ ] No

9. How will this course be graded?  
   [ ] Grade  
   [ ] S/U  
   [ ] P/F (CLMD)

10. This course will be:  
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)  
      Certificate in One Health
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. [x] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control-basics-for-distance-education).

13. **Title (Excluding Punctuation)**  
   PHEO 722  
   INTRO TO ONE HEALTH

<table>
<thead>
<tr>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>UCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.00</td>
<td>3.00</td>
<td>2601020002</td>
<td>2888</td>
<td>15</td>
<td>16</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

   Approval recommended by:  
   Dr. Mark Bellary  
   Department Head or Program Chair (Type Name & Sign)  
   Date: 10/19/15

   Dr. Ranjan Mehra  
   Chair, College Review Committee  
   Date: 10/19/15

   Dr. Ray Maddock  
   Dean of College  
   Date: 10/19/15

   Submitted to Coordinating Board by:  
   Chair, GC or UCC  
   Date:  

   Effective Date: 

**Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.  
Curricular Services - 07/14**
**SYLLABUS**

### Instructor Information

**Course title and number**

PHEO 722: Introduction to One Health

**Term**

Summer 2016

**Meeting times and location**

MWF 3:00 p.m. – 6:00 p.m.

**Instructor Name(s)**

Rosina Krecik, PhD, MAP, MBA

Merrideth Holub, MS

**Telephone number**

979-845-5039

**Email address**

mholub@cvm.tamu.edu

**Office hours**

An open door policy is maintained for all students; however, please make every effort to schedule an appointment ahead of time.

**Office location**

Room 87, Veterinary Medical Sciences building

### Course Description

The Introduction to One Health course incorporates subject matter from researchers, case studies, and scientific readings. Topics include, but are not limited to: leadership, epidemiology, zoonosis, architecture, engineering, food safety, water security, travel, and human health. The course is designed to provide an in-depth look of the research, education, and outreach which form the basis for the area of One Health.

### Prerequisites

Professional student classification at Texas A&M University, or, if graduate student classification, must receive approval from instructor.

### Course Competencies and Objectives

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.</td>
<td>Gain the fundamental understanding of the conceptual framework of One Health and its significance and influence towards ecosystem health through case studies, class discussions, and projects with presentations.</td>
</tr>
<tr>
<td>Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental and occupational hazards.</td>
<td>Articulate the socioeconomic impact on the human and animal health, as well as the impact of connections between health and natural/man-made environments as evidenced by written papers for the grade level, written responses, and classroom discussions.</td>
</tr>
<tr>
<td>Describe federal and state regulatory programs, guidelines and authorities that control environmental and occupational health issues.</td>
<td></td>
</tr>
<tr>
<td>Specify current environmental and occupational risk assessment methods.</td>
<td></td>
</tr>
<tr>
<td>Explain the general mechanisms of toxicity in eliciting a toxic response to various chemical exposures.</td>
<td></td>
</tr>
</tbody>
</table>

**Updated 7/22/15**
Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.

Demonstrate effective written skills for communicating with different audiences in the context of professional public health activities.

Textbook and/or Resource Material

Recommended Texts:

Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading/Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (June 1/3)</td>
<td>Course introduction, syllabus and expectations, defining One Health, how human and animal health and wellbeing are intertwined/nurturing interdisciplinary relationships - leadership - epidemiology</td>
<td></td>
</tr>
<tr>
<td>2 (June 6/8/10)</td>
<td>Global Human and Animal Health</td>
<td>Annotated Bibliography Due</td>
</tr>
<tr>
<td>3 (June 13/15/17)</td>
<td>Animal health/transportation, trade, &amp; travel of humans, animals, and agriculture products</td>
<td>Field of Study Due</td>
</tr>
<tr>
<td>4 (June 20/22/24)</td>
<td>Food safety/water security and safety (as they related to human and animal health)</td>
<td>Group Project Due/Group Presentations</td>
</tr>
<tr>
<td>5 (June 27/29)</td>
<td>Diseases of human and animal health and how the human animal bond impacts the health of humans and animals / Nurturing interdisciplinary relationships through leadership and how architecture and engineering affect the health of humans and animals.</td>
<td>Final Project Due</td>
</tr>
</tbody>
</table>

Assignment Descriptions

Weekly Case Study Analysis:
In addition to reading each weekly article, you are expected to contribute to class discussions through the use of threaded discussions on the course webpage. You are expected to apply the theoretical knowledge gained from in-class discussions to support your discussions online. You should follow the discussion posts daily and respond to postings from other class members. However, when commenting on other members of the class, be sure to respect the opinions of others. The assignment will be graded on your ability to provide in-depth discussion, frame and lead discussions, synthesize relevant points, and reference literature. Postings to discussion boards should begin on Monday of each week and conclude by Friday.

Annotated Bibliography:
With the topic and design of this course, you will get a rather broad overview of One Health. In order to get a thorough understanding of the concepts, you will need to compile current literature related to One Health research within your specific field of study and develop a scholarly annotated bibliography based on your
findings. The citations in an annotated bibliography are more than just a summary of the articles. The citation should describe and analyze the resource, provide a brief glimpse of what each work contains, inform readers about the usefulness, accuracy, limitations, reliability and/or credentials of the author, relevance, and quality of the resource.

The annotated bibliography will be completed with at least 10 resources that will help you examine and evaluate the concepts within your specific field of study. The bibliography should include a mixture of resource types including print journals, websites, popular press articles, etc. Bibliographic citations for the resources should be in the print format that is required in your home department.

Field of Study:
To broaden your understanding of the application of One Health within your specific field of study, you should select at least five research articles related to One Health concepts within your specific field of study. Using these articles, you will write a six to eight page double spaced paper. Your paper should consist of the following sections:

- A summary of the type of research being conducted within your specific field of study (using the articles from Annotated Bibliography)
- How the One Health concept provides a unique framework for research in your specific field of study
- The strengths and weaknesses (or lack of research and need) of One Health related research being conducted within your field of study (your evaluation of the contribution of the research to your field)
- A discussion of where you believe One Health research in your specific field of study should be heading (should One Health research continue, and if so, what should it look like, how can the research be applied, how it meets societal needs)

Group Project/Presentations:
1. Case Study (80%)
   a. Case studies raise the level of critical thinking skills, develop problem solving skills, help students connect theory and practice, and facilitate the social learning process. Groups will choose from a provided list of One Health case studies. Each group is to summarize the following in their paper:
   i. Determine the facts of the case
   ii. Provide an understanding of the dynamics of the situation
   iii. Define the presenting problem
   iv. Determine the problem to be solved
   v. Generate a possible course of action or generate, assess, and propose a number of possible solutions
   vi. Evaluate the strengths, weaknesses, opportunities, and threats to each course of action
   vii. Make a decision regarding a satisfactory or at least workable plan of action

2. Presentation (20%)
   a. Each group will make a formal presentation of their analysis and findings to the entire class. The presentation should include a thorough analysis of the case study, complete with findings and recommendations for solutions. The quality of the presentation, speaking ability, use of audiovisual or other presentation materials, ability to answer questions, and materials provided to the rest of the class will be evaluated by the instructor only. However, the classmates are recommended to ask questions after each presentation.

Final Project:
One way to bring some of the One Health concepts “alive” is to experience what departments, colleges and the university are accomplishing. This assignment is designed to provide you with the opportunity to integrate class concepts through an experiential learning activity. To complete this assignment, you will need to choose a faculty member outside of your college or school for whom you can obtain reasonable access. You will visit with the faculty member and their department/organization, and observe ongoing One Health research, education, or service work. You will also talk to and ask questions of people within the faculty member’s department or organization and ultimately gather data related to the One Health.
education, research, and service work of the faculty member. It is important that this assignment reflects
the conceptual and theoretical basis that we have studied throughout the semester. This assignment will
require a great deal of time and effort to fully complete and, at a minimum, this assignment should include
the following:

1. A thorough description of the organization (department, college, or lab/office) that you selected for
   this assignment. In your description be sure to include
   a. Why you choose this specific organization
   b. Outline of organizational structure

2. An analysis of the One Health programs or projects that are being done within the
   organization
   a. Demonstrate by providing evidence of the programs or projects where areas provide
      collaborations that would benefit One Health.
   b. Identify possible roadblocks that would hinder the success of the One Health
      programs or projects.
   c. Identify areas that make the programs or projects successful/strong in concept and
      application.

3. How you believe the work in the organization will benefit society – human health, animal
   health, and the environment.

4. The written report should follow these guidelines:
   a. 12 – 15 pages typed, double spaced 12 pt font as above, not including supporting
      evidence
   b. The supporting evidence should include, but is not restricted to, references,
      supporting documentation of the One Health programs or projects, pictures of your
      experience, etc.
   c. Follow the publication manual within your college and be free of grammatical errors

---

**Grading Policies**

(Policies or grading rules should cover late work, grade assignment and weighting, attendance policy, and
make-up guidelines. Must include a grading scale (A=90-100, B=80-89, etc.). Changing grading policies
should occur only under extraordinary circumstances. If more than 10% of grade is based on participation,
syllabus should explicitly define and outline how grade is determined.)

**Grading Scale**

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>900-1000 Points</td>
<td>A</td>
</tr>
<tr>
<td>800-899 Points</td>
<td>B</td>
</tr>
<tr>
<td>700-799 Points</td>
<td>C</td>
</tr>
<tr>
<td>600-699 Points</td>
<td>D</td>
</tr>
<tr>
<td>0-599 Points</td>
<td>F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Assignments</th>
<th>Due Date</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Case Study</td>
<td>Weekly</td>
<td>200</td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annotated</td>
<td>June 10</td>
<td>150</td>
</tr>
<tr>
<td>Bibliography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field of Study</td>
<td>June 17</td>
<td>150</td>
</tr>
<tr>
<td>Group Project/</td>
<td>June 24/June</td>
<td>250</td>
</tr>
<tr>
<td>Presentations</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Final Project</td>
<td>June 29</td>
<td>250</td>
</tr>
</tbody>
</table>

- Assignments will not be accepted via email except in extenuating circumstances and with prior
  approval of the instructor(s).
- Unless otherwise stated, submit all written assignments typed, double-spaced with 1" margins, and
- Assignments will be graded on professionalism, spelling, grammar, completeness, and how well
  the objects of the assignments were met. Citing all resources used in assignment is mandatory.

---

**Attendance and Make-up Policies**

*Updated 7/22/15*
The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/rule07.

Other Pertinent Course Information

E-mail contact will be initiated with all students the first week of class. If you do not have access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made.

Course Structure
- PEOH 722 is a graduate/professional-level learning experience and students are expected to participate in a manner that allows them to master the course content. Your attendance and participation are critical to your success. Late arrivals and early departures are disruptive to class, and students are expected to be on time for all sessions regardless of meeting location. If you miss a class session, it is your responsibility to obtain all notes, handouts, and materials for that class session from another student.
- Class will take place at the College of Veterinary Medicine and Biomedical Sciences, unless otherwise indicated by the instructors. We will be visiting different facilities on campus throughout the semester. Sessions will begin promptly at 3:00 pm. Students are expected to be on time for all sessions, regardless of the meeting location.

Plagiarism Virtual Course

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under “Content.” In addition, please find Turnitin, a software package that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@asp.tamhs.edu for additional information.

Course Evaluation

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School's courses as part of your professional responsibility.

SPH Mission

Our mission is to create and apply knowledge acquired from the disciplines of public health to the education of public health leaders and practitioners through our research, practice, and service in the state of Texas, nationally, and globally.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Updated 7/22/15
Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student's responsibility to have a clear understanding of how to reference other individuals' work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html. A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at http://aggiehonor.tamu.edu.

Remember:
"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Copyright Statement

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

FERPA

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy. By enrolling in this course you agree to the following statement: "I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor."

Equal Opportunity Statement

The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsc.edu, or by mail at 200 Technology Way, College Station, TX 77845.

DISCLAIMER

This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change. These changes will be communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

Title IX

"Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual
violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

WHERE TO REPORT:
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-438-9207
nachlinger@tamhsc.edu

The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.

Updated 7/22/15
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions
1. Course request type: ☐ Undergraduate ☒ Graduated ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by Department or Program Name: Environmental & Occupational Health Department (PHEO)
3. Course prefix, number and complete title of course: PHEO 723 Ecosystem and Economic Impact on Human and Animal Health
4. Catalog course description (not to exceed 50 words): Ther world is interconnected biologically, socially, diplomatically, by commerce, travel and weather and these elements contribute to a strengthening junction between animal, human and ecosystem health and therefore the course will review how each of these entities impact the one health convergence.

5. Prerequisite(s): Graduate or Professional Classification
Cross-listed with: VIBS 923
Stacked with: 

6. Is this a variable credit course? ☐ Yes ☒ No If yes, from _____ to _____
7. Is this a repeatable course? ☐ Yes ☒ No If yes, this course may be taken _____ times.
   Will this course be repeated within the same semester? ☐ Yes ☒ No
8. Will this course be submitted to the Core Curriculum Council? ☐ Yes ☒ No
9. How will this course be graded? ☐ Grade ☐ S/U ☐ P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   Certificate in One Health
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. ☒ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix: Course #: Title (Excluding punctuation)
PHEO 723 INTRO TO ONE HEALTH

<table>
<thead>
<tr>
<th>Lec.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admn. Unit</th>
<th>Acad. Year</th>
<th>ECE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.00</td>
<td>3.00</td>
<td>260120002</td>
<td>2888</td>
<td>15 - 16</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Approval recommended by:
Dr. Mark Benda
Department Head or Program Chair (Type Name & Sign) Date 10/19/15
Dr. Ranjana Mehla
Chair, College Review Committee Date 10/19/15
Dr. Jay Maddock
Dean of College Date 10/19/15

Submitted to Coordinating Board by:
Chair, GC or UCC Date 10/19/15

Associate Director, Curricular Services Date 10/19/15

Questions regarding this form should be directed to Sandra Williams at 845-3201 or sandra.williams@tamu.edu
Curricular Services – 07/14
# Syllabus

## Instructor Information

**Course title and number**  
PHEO 723: Ecosystem and Economic Impact on Human and Animal Health

**Term**  
Summer 2016

**Meeting times and location**  
TWR 3:00 p.m. – 6:00 p.m.

**Instructor Name(s)**  
Rosina Krecsk, PhD, MAP, MBA  
Merrideth Holub, MS

**Telephone number**  
979-845-5039

**Email address**  
mholub@cvm.tamu.edu

**Office hours**  
An open door policy is maintained for all students; however, make every effort to schedule an appointment ahead of time.

**Office location**  
Room 87, Veterinary Medical Sciences building

## Course Description

The world is interconnected biologically, socially, diplomatically, and economically, by commerce, travel, and weather. These elements contribute to a strengthening junction between animal, human, and ecosystem health. This course will review how each of these entities impact the One Health convergence. In the course we will take a look at students as professionals and scientists and how your responsibility and obligation is to reach out and teach the “community” about One Health and its benefits to society as a whole. The course will be over seen by Dr. Rosina Krecsk but will be taught by the professional/faculty in those specific topic areas within the course outline.

## Prerequisites

Professional student classification at Texas A&M University, or, if graduate student classification, must receive approval from instructor.

## Course Competencies and Objectives

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.</td>
<td>Be able to evaluate scientific research critically and participate in the research community through constructive discussions in the One Health arena;</td>
</tr>
<tr>
<td>Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental and occupational hazards.</td>
<td>Understand the need for collaborative approaches to One Health issues — both scientific and clinical and political/leadership, etc. through the weekly case study analysis and final research project;</td>
</tr>
<tr>
<td>Describe federal and state regulatory programs, guidelines and authorities that control environmental and occupational health issues.</td>
<td>Demonstrate knowledge attainment and application of research by conducting a final research report.</td>
</tr>
<tr>
<td>Specify current environmental and occupational risk assessment methods.</td>
<td></td>
</tr>
<tr>
<td>Explain the general mechanisms of toxicity in eliciting a toxic response to various chemical exposures.</td>
<td></td>
</tr>
</tbody>
</table>
Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.

Demonstrate effective written skills for communicating with different audiences in the context of professional public health activities.

**Textbook and/or Resource Material**

- Required readings will be provided weekly by each faculty presenter.

**Course Topics, Calendar of Activities, Major Assignment Dates**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading/Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (July 5/6/7)</td>
<td>Course introduction, syllabus and expectations&lt;br&gt;Defining One Health through public policy and One Health models</td>
<td>Review and include discussion of how human and animal health and well-being are intertwined</td>
</tr>
<tr>
<td>2 (July 12/13/14)</td>
<td>Human and animal health that is influenced or affected by climate change</td>
<td></td>
</tr>
<tr>
<td>3 (July 19/20/21)</td>
<td>Economic impact on health</td>
<td></td>
</tr>
<tr>
<td>4 (July 26/27/28)</td>
<td>Ecosystem sciences and laws affecting the health policies of humans and animals</td>
<td></td>
</tr>
<tr>
<td>5 (August 2/3/4)</td>
<td>International trade and travel and how it influences human &amp; animal health</td>
<td>Final research report due</td>
</tr>
</tbody>
</table>

**Assignment Descriptions**

**Weekly Case Study Analysis and Class:**

Each week a different topic will be presented and a number of articles will be a part of your required readings. Each week a student representative will be assigned who is responsible for developing discussion questions and important points of intent that were noticed throughout the article for the class and/or the speaker to discuss. The questions will be used to create a discussion session between the guest lecturer for that week and the class as a whole. All students are expected to come to class prepared to discuss the articles in depth.

**Final Research Report:**

Your final report topic will be the same as your topic that is assigned for the weekly Case Study Analysis and class discussions. The report should be an in-depth analysis of how your respective topic is integrated into One Health and how it has the opportunity to be integrated with other areas. You need to make the clear connection from your topic to other areas (minimum of three) and how they are interconnected. Using these ideas and connections, provide a minimum of three concepts of how your respective topic can be incorporated and make future connections with other focuses. For example: public policy (in future projects) can work with education, medicine, and emergency management supporting evidence for these ideas.

1. The written report should follow these guidelines:
   a. 15–20 pages typed, double spaced 12 pt font as above, not including supporting evidence
   b. Supportive evidence includes, but is not restricted to, references, supporting documentation of the One Health research, notes from guest lecturers, and any documentation that was collected throughout the semester.
   c. Follow the publication manual within your college and be free of grammatical errors

**Grading Policies**

(Policies or grading rules should cover late work, grade assignment and weighting, attendance policy, and make-up guidelines. Must include a grading scale (A=90-100, B=80-89, etc.). Changing grading policies

*Updated 7/22/15*
should occur only under extraordinary circumstances. If more than 10% of grade is based on participation, syllabus should explicitly define and outline how grade is determined.

Grading Scale

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-600</td>
<td>A</td>
</tr>
<tr>
<td>419-499</td>
<td>B</td>
</tr>
<tr>
<td>360-420</td>
<td>C</td>
</tr>
<tr>
<td>319-359</td>
<td>D</td>
</tr>
<tr>
<td>0-318</td>
<td>F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Assignments</th>
<th>Due Date</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Case Study</td>
<td>Weekly</td>
<td>200</td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation &amp;</td>
<td>Weekly</td>
<td>150</td>
</tr>
<tr>
<td>Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Report</td>
<td>August 4</td>
<td>250</td>
</tr>
</tbody>
</table>

- Assignments will not be accepted via email except in extenuating circumstances and with prior approval of the instructor(s).
- Unless otherwise stated, submit all written assignments typed, double-spaced with 1” margins, and in 12pt. Times New Roman font.
- Assignments will be graded on professionalism, spelling, grammar, completeness, and how well the objects of the assignments were met. Citing all resources used in assignment is mandatory.

Attendance and Make-up Policies

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

Sessions will begin promptly at 3:00 p.m. Students are expected to be on time for all sessions, regardless of the meeting location.

Other Pertinent Course Information

E-mail contact will be initiated with all students the first week of class. If you do not have access to your assigned TAMHSC e-mail account, it is your responsibility to make the instructor aware of that fact so that other arrangements may be made.

Course Structure

- PEOH 723 is a graduate/professional-level learning experience and students are expected to participate in a manner that allows them to master the course content. Your attendance and participation are critical to your success. Late arrivals and early departures are disruptive to class, and students are expected to be on time for all sessions regardless of meeting location. If you miss a class session, it is your responsibility to obtain all notes, handouts, and materials for that class session from another student.
- Class will take place at the College of Veterinary Medicine and Biomedical Sciences, unless otherwise indicated by the instructors. We will be visiting different facilities on campus throughout the semester; meeting locations are indicated for each session on the calendar of events (below).

Plagiarism Virtual Course

Plagiarism is the leading form of academic dishonesty that the School of Public Health has to address. As a SPH student, you are responsible for knowing what plagiarism is and how to avoid it. All SPH students are automatically enrolled in Plagiarism Virtual Course on eCampus. This virtual course provides you with information and examples related to plagiarism in an effort to reduce the number of reported incidents. Please find a tutorial and resources under "Content." In addition, please find Turnitin, a software package.

Updated 7/22/15
that allows you to check whether you may have plagiarized your document. Please see Phuong Huynh: phuong@sph.tamhsc.edu for additional information.

Course Evaluation

Constructive feedback from students on course evaluations is taken very seriously at the School of Public Health. I am asking for your assistance in helping the School in its assessment of courses and faculty through your participation in the evaluation of your courses. As public health professionals you will one day have the responsibility to evaluate colleagues and health initiatives. The School views providing feedback on the School’s courses as part of your professional responsibility.

SPH Mission

Our mission is to create and apply knowledge acquired from the disciplines of public health to the education of public health leaders and practitioners through our research, practice, and service in the state of Texas, nationally, and globally.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity

Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, TAMU, HSC, and School policies regarding academic integrity and classroom conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty. A tutorial on this issue is available at: http://SPH.tamhsc.edu/academic-affairs/academic-integrity.html. A plagiarism tutorial can be found in Blackboard. Information on the Aggie Honor Code can be found at http://aggiehonor.tamu.edu.

Remember:
“An Aggie does not lie, cheat, or steal, or tolerate those who do.”

Copyright Statement

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted by the instructor.

FERPA

The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

Updated 7/22/15
By enrolling in this course you agree to the following statement: "I understand that as a result of registering for this course, my HSC/Blackboard assigned e-mail address will be revealed to classmates and the instructor."

**Equal Opportunity Statement**

The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 436-9208, email hr@tamhsce.edu, or by mail at 200 Technology Way, College Station, TX 77845.

**DISCLAIMER**

This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change. These changes will be communicated via email or posted as announcements. If you have any problems related to this course, please feel free to discuss them with the instructor.

**Title IX**

Title IX of the Education Amendments of 1972 protects people from sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Texas A&M University and the Texas A&M Health Science Center are committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, the University does not discriminate on the basis of sex in its education programs and activities, and it encourages any student or non-student who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct by another student, member of the faculty or staff, or campus visitor or contractor, to immediately report the incident to any of the individuals persons or offices listed below.

WHERE TO REPORT:
James Nachlinger,
Executive Director, Payroll and HR Services
Title IX Coordinator
979-436-9207
nachlinger@tamhsce.edu

The University encourages students to immediately consult with or report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to the TAMHSC Title IX Coordinator. Students may also report incidents of sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to any School of Public Health administrator, university administrator, official or unit supervisor, who is then responsible for promptly notifying any of the above Title IX coordinators of the reported incident.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:
   [ ] Undergraduate [ ] Graduate [ ] First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):
   Select or Type Department/Program Name
   PSAA 624: Water Policy and Management

4. Catalog course description (not to exceed 50 words):
   Examines the role of governmental institutions, political parties, political processes and behavior, public policies, and
   the political history in water governance, policy, policymaking, and management; focuses primarily on water policy in
   the U.S., but will address serious water issues in other parts of the world as well.

5. Prerequisite(s):
   Graduate Classification
   Cross-listed courses require the signature of both department heads.
   Stacked with:
   Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course? [ ] Yes [ ] No
   If yes, from _______ to ________

7. Is this a repeatable course? [ ] Yes [ ] No
   If yes, this course may be taken _______ times.
   Will this course be repeated within the same semester? [ ] Yes [ ] No

8. Will this course be submitted to the Core Curriculum Council? [ ] Yes [ ] No

9. How will this course be graded: [ ] Grade [ ] S/U [ ] P/F (CLMD)

10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   Master of Public Service and Administration

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix  Course #  Title (excluding punctuation)
    PSAA    624  WATER POLICY AND MGMT

    Lect.  Lab  Other  SCH  CRIP and Fund Code  Admin. Unit  Acad. Year  FICE Code
    3.00  0.00  0.00  3.00  0302010002  1364  16 - 17  0 0 3 6 3 2

   Approval recommended by:
   [Signature]

   Department Head or Program Chair (Type Name & Sign)  Date
   Chair, College Review Committee  Date

   Department Head or Program Chair (Type Name & Sign)  Date (if cross-listed course)
   Dean of College  Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC  Date

   Date  Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
PSAA 689-601: Water Policy and Management
Fall 2015

Prof. Kent Portney
Tuesdays, 9:35 AM - 12:15 PM
Allen Building Room 1055

Office Hours
My office hours are 2:30 pm to 4:00 pm on Wednesdays. Additional times will be set aside as needed. If these hours are not convenient, just let me know and we can make alternative arrangements. Due to other commitments, I will not generally be available on Fridays. My e-mail address is: kportney@tamu.edu. My office is located in the Allen Building, Room 1118. I can be reached there by telephone at extension 88031 (979-458 8031 from off campus).

Course Description
This course examines look at water policy, policymaking, management, conflict, and diplomacy. The primary focus of the course will be on water policy in the U.S., but it will also include substantial attention to the serious water issues as they are manifest in other parts of the world as well. It discusses the role of governmental institutions, political parties, political processes and behavior, public policies, and the political history in water governance, policy, policymaking, and management. It assumes that you have no particular knowledge of the political system or of environmental problems. This is an elective course for the PPA track, and counts toward the Energy, Environment, & Technology Policy and Management concentration.

One of the main missions of this course will be descriptive. In other words, we will spend much of our time trying to build a fairly detailed picture of how American, national, and international political institutions have tried to deal with issues of associated with water as a limited natural resource. To do this we will focus on a little historical background to policies and programs, and on what I call the "mechanics of public policy making." But, of course, we will go more deeply into some specific issues of water politics. For example, we will take a focused look at the operations of the U.S. Environmental Protection Agency to see how science and technology interact with politics to influence the decisions that are rendered there. We will also take a critical look at the social and political values that underlie contemporary environmental problems and the policies that purport to deal with them.

Course Prerequisites
Graduate classification.
Learning Objectives
The learning outcomes for this course include: being conversant with the federal (national) public policies associated with various aspects of water policy and management; becoming familiar with the rules and rulemaking processes as practiced by the U.S. Environmental Protection Agency; understanding the roles of federal, state, and sub-state agencies in implementing national water protection policies; and application of frameworks for analyzing and understanding water policymaking; evaluating the ability of government and governance systems to deal with water challenges during increasing times of water shortage; and becoming familiar with efforts within nations other than the U.S., and in the international context to address trans-boundary and trans-sector water conflicts.

Textbook and Readings
In order to investigate these and other issues, we will be reading from a number of sources, including several books that you can and should purchase. These include:


- Additional reading material is available on line (with links in the syllabus), or will be distributed in class from time to time. In addition to the usual in-class discussions, we will also take advantage of some other types of resources. For example, you may be asked to view a couple of videos, possibly to hear from a couple of guest speakers, and to make short in-class presentations on an assigned topic. An effort will be made to arrange two field trips. More information about these will be available in class. All of this is designed to try to make the experience of learning about environmental policies as fruitful and enjoyable as possible.

Grading Policies
The course will be graded using the standard TAMU grading policy as follows:
A = 90-100; B = 80-89; C = 70-79; D = 60-69; F = 59 and below

We will have an in-class, multiple-choice, mid-term exam on Tuesday October 20. The exam will only take about 30 minutes. This mid-term will be focused on the readings, and will count 20% of your total grade.

The class will be oriented around team-based integrated in-class presentations and written work based on these presentations. We will form some number of teams (most likely three teams), and each team will specialize in a particular area of water policy and management. Teams will be defined by the class based on student interests. Each team will be responsible for deciding which specific policies and aspects of these policies will be presented, and who on the team will be responsible for making each presentation. Each team member will be responsible for making a presentation on the designated aspect of the policy area. Immediately after the presentation, a short written summary of the presentation will be handed in, and this summary will be graded. This written summary will count 20% toward the final course grade.

There will be a final team project report due by noon on Friday December 11 (the first day of final exams). This final project will consist of a compilation of the individual written (revised)
assignments for each member of the team. Each team will prepare a single document or report that represents the accumulation and revision of the written work prepared by members of the team over the course of the semester. In this, the team will collectively endeavor to integrate and mold the individual papers into a coherent single document. Each team member will take responsibility for reading, commenting on, and editing the entire document. This report will be graded in two stages: First, each team member’s individual contribution will be graded, and this will count 40% of the total course grade. Second, the report as a whole will be graded based on how thoroughly and well-integrated it is. This will count 20% of the total grade.

Remember, it is your responsibility to make sure that your work is received, and it is always advisable for you to make a copy of all of your work before you turn it in.

All written work will be graded on the basis of performance in three areas or categories of equal importance (usually a maximum of 33.3 points each): 1) Writing quality and organization of material; 2) factual accuracy and completeness; and 3) synthesis of ideas and creativity.

The final grade will be an average of the mid-term exam, the written summary of the in-class presentation, the individually-written portion of the final team report, and the overall grade on the team report taken as a whole (all members of the team will receive the same grade on this component). These components of the grade will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-term exam</td>
<td>20%</td>
</tr>
<tr>
<td>Summary of in-class presentation</td>
<td>20%</td>
</tr>
<tr>
<td>Portion of final team report</td>
<td>40%</td>
</tr>
<tr>
<td>Team report as a whole</td>
<td>20%</td>
</tr>
</tbody>
</table>

CLASS DATES BY TOPICS AND READINGS

Tuesday September 1: Introduction to Water Policy and Management

Tuesday September 8: Water Policy and Management Areas; Water from a Systems Science Perspective; Social-Ecological Systems; Socio-hydrology; Threats to Water Quality and Quantity.
Drinking Water, Wastewater management, produced, reused, and recycled water; surface water; groundwater; oceans and large marine eco-systems; coastal zone and estuary management; floods, flood control, and emergency management; irrigation and agricultural uses. Hydrology and hydrologic cycle basics. Water recharge and storage; Urbanization, climate change, and sea level rise as threats.

Tuesday September 15: Water as a Common Pool Resource; characteristics and implications for policy and management; Alternative Perspectives on Governing the Commons; Water Economics and Policy

Tuesday September 22: U.S. Water Laws and Policies -- The Broad Overview
Tuesday September 29: Water Policymaking and Management Processes
Problem formation, policy formulation and agenda-setting, policy legitimation and adoption, policy implementation, rulemaking, and negotiated regulatory processes, policy evaluation, policy re-formulation. Water policy change frameworks, models, and theories. The core U.S. federal legislation.
Read:
• Punctuated equilibrium

Tuesday October 6: Water Wars I -- Water Policy and Management in the International Context; Integrated Water Resource Management (IWRM)
International Transboundary Water Conflicts; NGOs, the UN, and Global Water Partnership; survey of conflict situations and analysis; Methods of anticipating and avoiding potential conflicts; cross-national water conflicts that arise from threats of violence and coercion; and sub-national conflicts that arise from policy and legal flaws; Integrated Water Resource Management as a policy tool.
Read:
• Chapters 1, 2 and 3 in Jerome Delli Priscoli and Aaron Wolf, eds. *Managing and Transforming Water Conflicts*. Cambridge University Press, pp. 1-49.

Tuesday October 13: Water Wars II – Water Policy and Management Across and Within U.S. States
Conflict in the Southeast US: The ACF-ACT Case
Read:
Tuesday October 20: Water Governance I – The Organization and Jurisdictions of Institutions (Mid-term exam today)
Broad overview of the organization and management of public water systems, and how decisions about water are made under different conditions. Comparison of municipal water jurisdiction, regional water authorities, water sheds, aquifers, and ecosystems. Development of new organizations, e.g. flood control districts, to manage water.

Tuesday October 27: Water Governance II – Collaborative and Participatory Approaches to Water Management
How well does collaborative watershed and participatory water management work?
Read:


Tuesday November 3: Water Governance III – The Special Case of Texas
Read:


Tuesday November 10: Economic Mechanisms and Privatization
Read:


Tuesday November 17: Will Technology Save Us? Understanding the Water-Energy-Food Nexus
Read:


Tuesday November 24: Emerging Systems of Water Governance
Mutual Gains Approaches to Water Conflict Resolution; Water Diplomacy
Read:

• Adil Najam, Ioli Christopoulou, and William R. Moomaw. The Emergent “System” of Global Environmental Governance *Global Environmental Politics* 4:4, November 2004. Found at:

• The Mutual Gains Approach to Negotiation  Found at:

**Tuesday December 1: Student Presentations**

**Statement of Policy on Students with Disabilities**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu. Every effort will be made to accommodate the needs of students with registered disabilities. This includes accommodations expressly outlined within the University’s policies as indicated above and may include others as agreed upon by me and the student.

**Statement of Policy on Attendance and Missed Work**
This class is designed to be a seminar, and requires everyone to engage in discussions. Additionally, each student is required to make a scheduled in-person presentation. Failure to attend class interferes with both of these features of the class. Consistent with University and School policy, class attendance is mandatory. In the case of excused absence, consistent with Student Rule 7 (http://studentrules.tamu.edu/rule07), arrangements will be made for work to be made up in a timely fashion. In general, extensions on assignments and incompletes at final grading time are not granted.

**Statement on Academic Integrity**
"An Aggie does not lie, cheat or steal, or tolerate those who do."
Consistent with University policy (http://aggiehonor.tamu.edu), the expectation in this course is that your work will be your own. The preparation of the final team reports will require some level of collaboration among team members. Under no circumstances should this requirement be understood as an opportunity to take credit for the work of someone else. The section or chapter of the final report that has your name on it must be your work. You are advised to share your work with others on your team, and to incorporate their recommendations and suggestions for revisions into your final product. But the material you submit with your name on it must be substantially your work.
Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
Submit original form and attach a course syllabus.

Form Instructions:
1. Course request type: ☐ Undergraduate ☑ Graduate ☐ First Professional (DDS, MD, JD, PharmD, DVMD)
2. Request submitted by (Department or Program Name): Select or Type Department/Program Name
   PSAA 625: Urban Sustainability Policies and Management
3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Studies the relationship between local political processes and the pursuit of sustainable development; focuses on theoretical underpinnings of sustainability and sustainable development as applied to the local city context of the United States and the ways that these concepts actually get defined through local political and policy making processes.

5. Prerequisite(s):
<table>
<thead>
<tr>
<th>Graduate Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-listed with:</td>
</tr>
<tr>
<td>Stacked with:</td>
</tr>
<tr>
<td>Cross-listed courses require the signature of both department heads.</td>
</tr>
</tbody>
</table>

6. Is this a variable credit course? ☐ Yes ☑ No If yes, from ______ to ______
7. Is this a repeatable course? ☐ Yes ☑ No If yes, this course may be taken ______ times.
   Will this course be repeated within the same semester? ☐ Yes ☑ No
8. Will this course be submitted to the Core Curriculum Council? ☐ Yes ☑ No
9. How will this course be graded: ☑ Grade ☐ S/U ☐ P/F (CLMD)
10. This course will be:
   a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   Master of Public Service and Administration

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☐ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix Course # Title (excluding punctuation)

<table>
<thead>
<tr>
<th>PSAA</th>
<th>625</th>
<th>URBAN SUST POL MGMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>S/U</td>
<td>CHI</td>
<td>and Fund Code</td>
</tr>
<tr>
<td>3.00</td>
<td>4512010100</td>
<td></td>
</tr>
<tr>
<td>Admin. Unit</td>
<td>Acad. Year</td>
<td>P/CU Code</td>
</tr>
<tr>
<td>1364</td>
<td>16 -</td>
<td>17 0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

   Approval recommended by:

   Department Head or Program Chair (Type Name & Sign) Date

   Chair, College Review Committee Date

   Department Head or Program Chair (Type Name & Sign) (if cross-listed course) Date

   Dean of College Date

   Submitted to Coordinating Board by:

   Chair, GC or UCC Date

   Effective Date

   Associate Director, Curricular Services Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services - 07/14
Urban Sustainability Policies and Management
Spring Term, 2015
Kent E. Portney

A Dallas, TX, Brownfield Development Project:
Does This Contribute to Creating a Sustainable City?

Jefferson North End during redevelopment

Austin Energy's Wind Turbine Farm in West Texas:
Is the Development of Renewable Energy Sources the Way for Sustainable Cities to go?

A Green Roof in Atlanta
An electric bus manufactured and used in Chattanooga, TN
PSAA 689-601

Urban Sustainability Policies and Management

Spring Term, 2015
Mondays, 9:35 AM - 12:15 PM
1041 Allen Building

Instructor: Kent E. Portney
Phone: 458-8031
Email: kportney@tamu.edu

Office: 1118 Allen Building
Office Hours: MW 1:30-3:00 or by appointment

Course Description and Objectives:

This is an advanced research seminar that is dedicated to the study of the relationship between local political processes and the pursuit of sustainable development. It focuses on the theoretical underpinnings of the concepts of sustainability and sustainable development as applied in the local city context of the United States. It examines the ways that these concepts actually get defined through local political and policy making processes. Readings and class discussions are designed to interweave several themes, including the obvious tension between maximizing economic growth and protecting the environment, local politics and policy decision making in the context of the U.S. federal system, and the practice of planning for the environment.

This is referred to as a research seminar because students will engage in conducting original research as a capstone experience. After addressing various conceptions of sustainability and sustainability policies, as well as important issues of research design and hypothesis testing, the class will embark on a research project designed to examine a central hypothesis to be defined by the class. Each student will be required to prepare a final research paper. Details on the content of this paper will be presented in class.

As a seminar, the class meets once a week for two and a half hours. One of the defining characteristics of a seminar is that it involves extensive in-class discussion. So there is an expectation that each student will take responsibility for doing the assigned readings and for being prepared to discuss them in class. Another characteristic of a seminar is that it typically involves the preparation of a substantial term paper. For this class, students will prepare their term papers based on topics and hypotheses developed over the course of the semester. The term paper will be described in more detail later.

Prerequisite: Graduate Classification.

Required Readings: Books

Because a substantial amount of the reading can be found in three books, they should be considered “required.” Essentially we will be reading all three of these books cover-to-cover during the semester. You should feel free to purchase these books from whatever source you wish, including Amazon.com. Other books are listed on the syllabus, but should be considered
optional and supplemental. All required readings on the syllabus are designated with bold face type.


Optional and Supplemental (recommended but not required):


Additional readings will be made available as photocopies distributed in class, as pdf files sent via email, or on-line through the course’s web site.

**Required Readings: Articles**

Some of the required readings will come in the form of journal articles or book chapters. These readings, designated in bold face on the syllabus, will be made available to you though one of several sources: pdf files distributed to you via email or accessible on the class Trunk web site; online readings accessible directly from the various journals; rarely, on paper handed out in class. The syllabus contains active links to many of these readings, although you may need to access them through an A&M IP address computer (through, for example, the A&M Library web site). If for any reason you cannot access a required reading please email Professor Portney ASAP and he will make the reading accessible.
Assigned Readings:

Each class meeting will have a student presentation summarizing a designated reading. Assignments will be made at the end of each class meeting for the next subsequent class. It is your responsibility to make sure you are prepared when a reading has been assigned to you. The presentation should succinctly do the following: 1) present the issue or problem that the reading addresses; 2) explain the approach or methods used to try to address the issue; and 3) the conclusions. Feel free to prepare any materials to support your presentation. If you elect to prepare an electronic presentation, make it short.

The Research Challenge:

This course is both a seminar and a methodologically-focused research class. Therefore, a good portion of what we do in the class will be dedicated to learning about and conducting research on sustainable cities in the U.S. or cross-nationally. The primary issue of interest in this course will be the relationship between local governance and politics, on one hand, and the pursuit of sustainability on the other. In short, we would like to know whether there is any relationship between the ways cities are governed and whether (and to what extent) they decide to try to become more sustainable. Much of the time we spend in class will be dedicated to understanding what local sustainability is, what cities can and actually do to try to become more sustainable, and how cities are governed. The exact hypotheses we will focus on will evolve over the course of the semester. The methodological portions of the course will tend to focus more on issues of research design and less on methods of statistical analysis. There is one foundational reading related to the research challenge, the Hoover and Donovan book listed above. Thus is required reading, and frequent reference will be made to it throughout the course. You should get a copy of any edition and read it cover-to-cover as soon as possible.

The research component of the course will be defined during class time. We will create four or five three or four person teams to focus on particular research areas or problems. One team might focus on climate mitigation policies, another on sustainable economic development, still another on sustainable food systems, etc. We will define these topic areas in a way that matches the specific interests of the students in the class. Each member of the team will be responsible for researching and preparing a piece of a larger "report" to be presented by the full team. The exact division of labor will be determined on a project-specific basis, but will be made clear to everyone as early in the semester as possible. An initial set of tasks will focus on describing a policy in a specific place, e.g. Boston, or Somerville, or another city. This will provide the primary content for the midterm assignment, mentioned below. After midterm time, our attention will focus on broadening the project to look at more cities, with the central task of examining a specific hypothesis or set of hypotheses concerning why some cities are more aggressive in their policies than others. These hypotheses will evolve over the course of the semester. The final term paper will incorporate material from the midterm assignment, and will present a full examination of the selected hypothesis.
Grading:

The final grade for the course will be based on the average of the grade on the take-home mid-term assignment and the final research paper. There will be no other graded assignments. The grading of these papers will be based on assessment of three categories: 1) writing and organization; 2) factual accuracy and completeness; and 3) idea synthesis and creativity. Writing and organization includes all the mechanics of writing, spelling, word usage, and diction, and also includes the effectiveness of the logical presentation of the paper. In other words, is the argument in the paper presented in a logical way? Factual accuracy and completeness focuses on whether the statements made can be said to be correct, and whether there is directly relevant information that was omitted. Idea synthesis and creativity focuses on the extent to which the paper develops some fresh ideas or approaches the argument from a novel or unique perspective. Each of these categories can earn up to 33.3 points, and the aim of the three categories points will be used to determine the final grade. The grading scale will be as follows:

- A = 90-100
- B = 80-89
- C = 70-79
- D = 60-69
- F = < 60

The mid-term assignment will be due in class on March 4. The final term paper will be due on Friday, May 1, by noon. No extensions will be granted and no grades of Incomplete can be issued without prior arrangement. Failure to turn in a final term paper will not automatically result in a grade of Incomplete.

Class Attendance:

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at http://student-rules.tamu.edu/rule07.

Americans with Disabilities Act:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.
Academic Integrity:

*An Aggie does not lie, cheat, or steal or tolerate those who do.*

Students are expected to adhere to standards of academic integrity. Scholastic dishonesty consists of lying, cheating or stealing academic information with intent to gain academic advantage. Academic dishonesty comes in a variety of forms. The most common forms are plagiarism, cheating, and academic misconduct. Students who participate in any of these activities will be subject to appropriate University disciplinary action. Students are expected to review, utilize and adhere to the University’s Honor Council Rules and Procedures, which are posted on the University’s web site at [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu). This website provides detailed information and clarification policies, procedures, and rights and responsibilities related to academic integrity.

**Plagiarism**
The attention of each student is directed to the requirement to avoid plagiarism or the appearance of plagiarism through sloppy citation. As commonly defined, academic dishonesty/plagiarism consists of passing off as one's own ideas, words, writings, etc., that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of the person. It does not matter from where the material is borrowed—a book, an article, material off the web, another student’s paper—all constitute plagiarism unless the source of the work is fully identified and credited. It is important when using a phrase, a distinct idea, concept, a sentence, or sentences from another source to credit explicitly that source either in the text, a footnote or endnote.

Plagiarism is a violation of academic and personal integrity and carries extremely serious consequences. Scholastic dishonesty (including cheating and plagiarism) will not be tolerated and will be punished in accordance with Texas A&M University Student Rules. If you have any questions, please consult the course instructor.

Attendance and Make-up Assignment Policy:

The policy for attendance and making up missed assignments is consistent with Texas A&M University Student Rule 7: [https://student-rules.tamu.edu/rule07](https://student-rules.tamu.edu/rule07).
## Syllabus Meeting Numbers and Associated Meeting Dates:

**Fourteen Wednesday Meeting Dates, Spring 2015**

<table>
<thead>
<tr>
<th>Meeting Number</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>January 21</td>
</tr>
<tr>
<td>1</td>
<td>January 28</td>
</tr>
<tr>
<td>2</td>
<td>February 4</td>
</tr>
<tr>
<td>3</td>
<td>February 11</td>
</tr>
<tr>
<td>4</td>
<td>February 18</td>
</tr>
<tr>
<td>5</td>
<td>February 25</td>
</tr>
<tr>
<td>6</td>
<td>March 4</td>
</tr>
<tr>
<td>7</td>
<td>March 11</td>
</tr>
<tr>
<td>8</td>
<td>March 25</td>
</tr>
<tr>
<td>9</td>
<td>April 1</td>
</tr>
<tr>
<td>10</td>
<td>April 8</td>
</tr>
<tr>
<td>11</td>
<td>April 15</td>
</tr>
<tr>
<td>12</td>
<td>April 22</td>
</tr>
<tr>
<td>13</td>
<td>April 29</td>
</tr>
</tbody>
</table>

---

Friday, May 1, at 12 noon Final Papers are due

Please note: There is no class on Wednesday, March 18 (spring break)
Class Meeting 1: An Introduction to the Concepts of Sustainable Cities and Sustainable Communities; The Conceptual Framework for Analyzing Sustainability in Cities; An Introduction to the Research Endeavor

Today we will begin discussing the broad concept of sustainability, and how it is thought to apply to communities and cities. We will develop an introduction to the course, along with an explanation of the “logic” of the syllabus and its topics. We will begin a discussion of conducting research on or about sustainable cities with special emphasis on “analytical” rather than “descriptive” research.

Read:


Class Meeting 2: The General Concepts of Sustainability, Sustainable Development, and Sustainable Communities and Cities

Today we will devote our time to discussing readings on the concept of sustainability and sustainable development. Most of these readings will be fairly general, consisting of broad conceptual works that set the stage for more concrete and better-defined concepts that will be of use to us in our effort to apply the concept to local areas, and in our task of operationalizing sustainability. We will also discuss efforts to apply the broader concepts to small geographic areas, especially cities.

Read:


Herman E. Daly and John B. Cobb, Jr., 1994. *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*. Beacon Press.


**Classes 3 through 6**

*The Major Elements of Local Sustainability Policies and Programs: Environmental, Economic, and Social*

**Class Meeting 3: Sustainable Cities, the Biophysical Environment, Ecosystem Health, and Pollution Prevention**

Today we will focus on what some people would argue is the key element to sustainable cities: the environment and eco-system health. We will look at the wide array of environmental issues that sustainability addresses, and the relationship between what goes on in cities and the quality of the environment and related eco-systems. We will develop a number of different ways of looking at the city’s environment and eco-systems, including “ecological footprints,” environmental bubbles, and “closed loops,” to name a few.


Read:


Frederic O. Sargent, Paul Lusk, Jose A. Rivera, and Maria Varela, 1991, Rural Environmental Planning for Sustainable Communities. Island Press.


Class Meeting 4: Sustainable Cities, Climate Change Mitigation and Adaptation, Energy, Water, and Transportation

Today we will discuss the central issue of climate change as an element of sustainability, and the role of energy conservation, transportation planning, and related issues, such as “green building” programs. Energy and transportation play important roles in initiatives that seem to take sustainability seriously. Today’s topics will focus on how these issues manifest themselves in the operations of sustainable cities in the U.S.

Read:


Class Meeting 5: Sustainable Cities and Economic Development – Land Use, Zoning, Smart Growth, Regional Growth Management, and the Role of Comprehensive Planning

Today we will examine the ways that sustainable communities do (or do not) engage in economic development activities. We will look at the conceptual tension between economic development and sustainability. We will address the question of whether any amount of economic growth is necessarily bad for the environment. Then we will look at various ways that cities have tried to engage in economic development or to pursue economic growth without complete disregard for the environment. So we will look at the general issue of “smart growth” approaches to development, and some of debates concerning the issue of urban sprawl.

Read:


Class Meeting 6: Sustainable Cities and the Critical Importance of Environmental and Social Justice

Today we will look at the argument that a sustainable city is necessarily a more socially just city. We will examine the general issue of environmental justice and social justice in urban settings, and compare and contrast these with the concepts of sustainability and sustainable communities.

Read:


Classes 7 through 10
Major Explanations for Why Some Cities Do More than Others

Class Meeting 7: Mainstream Views of the City Governance:
Politics (and Economics) as Usual; Economic and Financial Causes
of Local (Un)Sustainability; The Environmental Kuznets Curve;
“Vulnerability” and “Capacity”

Before we begin to develop a deeper understanding of the idea of sustainable communities and
cities, we will take a look at what might be called “mainstream views” of city politics and
economics; the relationship between economic growth and environmental quality; and the
relationship of city politics to local economies. This is done so that we can contrast these
mainstream views with the alternative conceptions of cities that tend to be associated with
sustainability.

Read:

Kent E. Portney, 2013. Taking Sustainable Cities Seriously: Economic Development, the

Kent E. Portney, 2013, “Local Sustainability Policies and Programs as Economic Development:
45-62.

University Press, Chapter 1.

Harvey Molotch, 1976, “The City as Growth Machine: Toward a Political Economy of Place,” in

Vulnerability and Capacity: Explaining Local Commitment to Climate-Change Policy,”

Analysis of Local Climate Change Policy in the United States: Risk, Stress, and Opportunity,”


Class Meeting 8: Social and Demographic Influences on Local Sustainability — Education, Postmaterialism, “Social Culture,” the “Creative Class,” “The Consumer City” and the Pursuit of “Amenities”

Today we will look at several related specific explanations for why some cities seem to do more to advance the cause of local sustainability than others. Broadly, these “social and demographic” influences focus on education and postmaterial values, and the attraction of urban amenities as the possible primary forces behind city decisions to pursue sustainability policies and programs.

Read:


**Class Meeting 9: Governance and Sustainability – Urban Governance Regimes**

Today we will look at the concept of “urban governance regimes” -- what they are, what their components are, how cities differ – and what differences in governance regime types might imply for the kinds of local policies and programs that get adopted and implemented.

Read:


Rick Feiock, Kent Portney, Jungah Bae, and Jeffrey Berry. “Governing Local Sustainability: Agency Venues and Business Group Access,” in *Urban Affairs Review*. This paper became available in online first November 2103.


Class Meeting 10: Democracy, Urban Governance, and Sustainability – The Role of Nonprofits (NGOs), Public Participation, and Civic Engagement

Today we will revisit the issues of city politics and economics as usual, and we will examine the ways in which these conspire to act as impediments to achieving progress on sustainability at the local level. We will look specifically at the role of aspects of “civil society” in helping to shape the pursuit of sustainability. We will also at whether these aspects of civil society offer realistic prescriptions for overcoming these impediments, particularly at ways in which the sustainable communities process can be integrated with economic development types of activities.

Read:


Classes 11 through 14
Implementation and Management of City Sustainability Policies and Programs
Class Meeting 11: Implementing Local Sustainability Policies and Programs: Measurement and Sustainable Indicators Issues; The Natural Step; Triple Bottom Line; Adaptive Management; CitiStat Approaches.

Today we will look at a variety of issues related to how sustainability policies and programs are implemented. For the most part, this focuses our attention on the dynamics of management internal to municipal government, with special emphasis on systems and approaches that have been developed in specific cities around the U.S. and Europe.

Read:


Ellen Perlman, 2008, “Mr. Sustainability,” in Governing, April. Available at: http://www.governing.com/articles/0804sustain.htm


Class Meeting 12-14: Some Case Studies of Sustainable Cities – Seattle, Portland, Chattanooga, Boulder, San Francisco, Austin, Jacksonville, and Toronto; Student Presentations; Semester Summary.

Today we will look at three specific examples and case studies of sustainable cities projects around the country, as described in the literature. We will take a critical look at what seem to be the underlying motivations for embarking on a sustainability effort, and we will try to understand some of the locality-specific pre-conditions that contribute to such an effort. We will also entertain the question of whether the sustainable cities process has been able to change aspects of local economics, business, politics, and the environment. We will focus on three cities that are considered by many to be among the best examples of what cities can do – Seattle, Portland, and
Chattanooga serve as the case examples. We will also have one or two presentations from fellow students based on their respective final papers; there will also be a semester summary.

Read:


CHCRPA. 1997. Chattanooga Hamilton County Regional Planning Agency. *Futurescape Survey Results*. Chattanooga, Tenn.: CHCRPA.


Steven Reed Johnson, *The Ark of Sustainability: The Shape of Portland’s Sustainability Infrastructure at the Turn of the Century.* Unpublished manuscript.


Texas A&M University
Departmental Request for a New Course
Undergraduate ♦ Graduate ♦ Professional
♦ Submit original form and attach a course syllabus ♦

Form Instructions
1. Course request type: ☑ Graduate
☐ First Professional (M.S.T., M.ED.)
☐ Undergraduate

2. Request submitted by (Department or Program Name):
Department of Health and Kinesiology

3. Course prefix, number and complete title of course:
SPMT 630 - Economic Issues in Sport

4. Catalog course description (not to exceed 50 words):
This course focuses on the economics of North American professional sport. Topics include supply and demand, the market for broadcast rights, league structure, market power, revenue redistribution mechanisms and the market for playing talent.

5. Prerequisite(s):
Graduate standing

6. Is this a variable credit course? ☑ No
☐ Yes

7. Is this a repeatable course? ☑ No
☐ Yes

8. Will this course be repeated within the same semester? ☑ No
☐ Yes

9. Will this course be submitted to the Core Curriculum Council? ☑ No
☐ Yes

10. How will this course be graded: ☑ Grade
☐ S/U
☐ P/F (CLMD)

11. This course will be:
a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

12. M.S. in Sport Management

13. Prefix Course # Title (excluding punctuation)

<table>
<thead>
<tr>
<th>SPMT</th>
<th>630</th>
<th>Economic Issues in Sport</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td></td>
<td>16 -</td>
<td>17 0 0 3 6 3 2</td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:

Department Head or Program Chair (Type Name & Sign) Date

Chair College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
SPMT 689 – Economic Issues in Sport (Special Topics)  
Texas A&M University  
Department of Health and Kinesiology I Division of Sport Management  
Course Syllabus – Fall 2015 (online)

Instructor:  Steve Salaga, Ph.D.  
Division of Sport Management  
Department of Health and Kinesiology  
College Of Education and Human Development  
Texas A&M University  

Office:  Blocker 342BB  
Office Hours:  Tuesday & Thursday 2:15PM to 3:45PM  
Telephone:  979-845-1088  
Email:  salaga@hkn.tamu.edu

Course Description:  
This course focuses on the economics of North American professional sport. Topics include supply and demand, the  
market for broadcast rights, league structure, market power, revenue redistribution mechanisms and the market for  
playing talent.

Prerequisites:  None

Required Textbook:  

Course Purpose and Learning Objectives:  
The primary purpose of the course is to provide the student with a detailed understanding of the unique economic  
structure of North America professional sports leagues.

After completing this course you will be able to:  
- Explain the essential principles of economics as they relate to professional sport in North America  
- Assess the unique organization of professional sports leagues and the resulting economic outcomes  
- Explain the value of playing talent to professional franchises  
- Identify and describe the relationships that exist between professional sports franchises and governments

Accessing the Course:  http://ecampus.tamu.edu  
This is a fully online course. This means that all teaching and learning activities, including learning modules, quizzes,  
exams, and communication with your instructor take place in a Web-based environment. Please read the "eCampus  
Technical Information" provided to you in the "**Start Here!**" area on the course site.

Institutional, Department, Division, & Course Policies and Expectations:  
1. Make up exams/quizzes are only provided under very special circumstances. A student may be given a make-  
up exam/quiz only when he/she notifies the instructor prior to the exam date. Make-up exams will only be  
given for documented medical emergencies, the death of an immediate family member or for university  
sponsored events. For university sponsored events notification must occur at least one month prior to the  
exam. Make up exams for documented medical emergencies require a signed medical excuse from a board  
certified physician. Make up exams must be taken within a time frame defined by the instructor. Make up  
exams will be given under no other circumstances. I do not regard previous purchased tickets for travel, plans  
to be in someone’s wedding or plans to travel without first looking at the exam schedule as valid reasons to  
miss an exam. You should email me as soon as possible if a valid reason for an exam absence arises.

2. Email correspondence is the preferred method of contact for this course. Please email me at  
salaga@hkn.tamu.edu should you have any questions concerning the class. You must email me from your
TAMU email address in order for me to respond to you regarding any class material or questions. This is a requirement in order to comply with the Federal Family Educational Rights and Privacy Act (FERPA)

regulations from the U.S. Department of Education. Accordingly, the public posting of grades either by student name, institutional student number or social security number without the student's written permission is a violation of FERPA. Further, student grades may not be forwarded via e-mail (even in response to the student's request).

3. Academic Honesty – Texas A&M University and the Division of Sport Management mandate the highest standards of academic conduct and will not tolerate any form of academic dishonesty or plagiarism. Due to the importance placed on academic integrity, any student believed to be in violation of the Texas A&M Aggie Honor System will be immediately reported to the Division Chair. Non-familiarity with academic rules is not an excuse. Honor system guidelines can be found at: http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx

The penalties for academic dishonesty or plagiarism are at the instructor's discretion. Penalties range from receiving an “F” in the course to a student's suspension or expulsion from the university.

4. Aggie Honor Code:
"An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: www.tamu.edu/aggiehonor/ On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge shall be preprinted and signed by the student:

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."

5. TAMU Netiquette Policy: http://its.tamu.edu/Distance_Education/Netiquette_Aggie_Honor_Code.php

6. ADA Accommodations:
The following ADA Policy Statement (part of the Policy on Individual Disabling Conditions) was submitted to the University Curriculum Committee by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for information. The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of Cain Hall or call 845-1637. Additional information is available at http://disability.tamu.edu.


8. COPYRIGHT STATEMENT:
The materials used in this course are copyrighted. These materials include, but are not limited to, the syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted.
Course Assessment Format

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Points</th>
<th>Your Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (10 total)</td>
<td>40 each</td>
<td></td>
</tr>
<tr>
<td>Discussion Board Participation/Introduction</td>
<td>40 total</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>440 Pts. Possible</strong></td>
<td><strong>of 440</strong></td>
</tr>
</tbody>
</table>

Grading Structure

<table>
<thead>
<tr>
<th>Grade</th>
<th>% of Total Points</th>
<th>Point Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 to 100%</td>
<td>396 to 440</td>
</tr>
<tr>
<td>B</td>
<td>80 to 89.99%</td>
<td>352 to 395</td>
</tr>
<tr>
<td>C</td>
<td>70 to 79.99%</td>
<td>308 to 351</td>
</tr>
<tr>
<td>D</td>
<td>60 to 69.99%</td>
<td>264 to 307</td>
</tr>
<tr>
<td>F</td>
<td>Below 60%</td>
<td>263 and below</td>
</tr>
</tbody>
</table>

Quizzes
- Quizzes will be comprised of multiple choice questions (approximately 20 questions per quiz) and are to be completed directly on eCampus.
- Questions are based on topics covered in textbook readings, online video lectures, required course readings and supplementary course materials (links posted on eCampus).
- These assessments are geared to evaluate how well you understand and can apply the concepts covered in the course.
- Quizzes are timed and are to be completed within the specified time frame (30 minutes). No additional time will be given.
- Quizzes will be posted on eCampus during the specified time frame (see the schedule below). If a quiz is not completed by the time specified, there will be no opportunity to retake it. Failure to complete a quiz will result in a score of 0.
- Only enter the link to take a quiz when you are ready. You will have only one opportunity to take each quiz. Once the link to start the quiz is opened, your time to complete it will begin to elapse.

Discussion Boards
- Discussion boards are included primarily for students to be able to interact with each other throughout the course of the semester. The discussion boards can be accessed by clicking on the "Discussions" tab on the left hand side of the course homepage. You are required to complete a discussion board introduction. This is located under "Discussions → Introductions." You are required to introduce yourself, tell us about your background, interests, why you are taking this course and any other interesting/pertinent information about yourself. **This must be completed no later than Monday, September 7 at midnight.**
- There will also be discussion board forums for each chapter and for the supplementary web readings. Use these discussion boards to ask each other questions and assist other classmates regarding course material, concepts and readings. You will be graded on your participation in the discussion boards. Activity in the discussion board associated with each section is required in order to receive full credit for this assessment. I highly encourage all students to use the discussion boards as a way to communicate and assist each other with course content as the inability to personally interact with classmates is largely eliminated in the online course setting.
- Please note that discussion board commenting is not allowed during the ten quiz periods (see schedule below).
- If you are new to eCampus Discussions, please review the following tutorial from Helpdesk Central: [http://hdc.tamu.edu/Academics/eCampus/Using_Discussion_Tool_In_eCampus.php](http://hdc.tamu.edu/Academics/eCampus/Using_Discussion_Tool_In_eCampus.php)
**Course Schedule**

Students are free to cover the course content at their own pace. However, quizzes and assignments must be completed by the timeframes specified.

<table>
<thead>
<tr>
<th>Section</th>
<th>Dates</th>
<th>Content</th>
<th>Read</th>
<th>Assessment Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Aug 31-Sept 6</td>
<td>Warm Up: The Business of Sports</td>
<td>Ch. 1</td>
<td>Quiz 1: Complete by Sept 6 (midnight)</td>
</tr>
<tr>
<td>2</td>
<td>Sept 7-Sept 13</td>
<td>Demand &amp; Sports Revenues: Part 1</td>
<td>Ch. 2</td>
<td>Quiz 2: Complete by Sept 13 (midnight)</td>
</tr>
<tr>
<td>3</td>
<td>Sept 14-Sept 27</td>
<td>Demand &amp; Sports Revenues: Part 2</td>
<td>Ch. 2</td>
<td>Quiz 3: Complete by Sept 27 (midnight)</td>
</tr>
<tr>
<td>Module 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sept 28-Oct 4</td>
<td>The Market for Sports Broadcast Rights</td>
<td>Ch. 3</td>
<td>Quiz 4: Complete by Oct 4 (midnight)</td>
</tr>
<tr>
<td>5</td>
<td>Oct 5-Oct 11</td>
<td>Team Costs, Profit &amp; Winning: Part 1</td>
<td>Ch. 4</td>
<td>Quiz 5: Complete by Oct 11 (midnight)</td>
</tr>
<tr>
<td>6</td>
<td>Oct 12-Oct 25</td>
<td>Team Costs, Profit &amp; Winning: Part 2</td>
<td>Ch. 4</td>
<td>Quiz 6: Complete by Oct 25 (midnight)</td>
</tr>
<tr>
<td>Module 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Oct 26-Nov 1</td>
<td>League Structure &amp; Market Power Franchise</td>
<td>Ch. 5</td>
<td>Quiz 7: Complete by Nov 1 (midnight)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relocation, Expansion &amp; Rival Leagues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Nov 2-Nov 15</td>
<td></td>
<td>Ch. 5</td>
<td>Quiz 8: Complete by Nov 15 (midnight)</td>
</tr>
<tr>
<td>Module 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Nov 16-Nov 22</td>
<td>Competitive Balance</td>
<td>Ch. 6</td>
<td>Quiz 9: Complete by Nov 22 (midnight)</td>
</tr>
<tr>
<td>10</td>
<td>Nov 23-Dec 6</td>
<td>Revenue Sharing, Luxury Taxes &amp; Salary Caps</td>
<td>Ch. 6+</td>
<td>Quiz 10: Complete by Dec 6 (midnight)</td>
</tr>
</tbody>
</table>

**Note:** The course schedule may be altered at the discretion of the instructor. Advance notice will be given.

*Discussion Board Introduction: Due by June 5 (by midnight)*

**Quiz Schedules on eCampus**

- There are ten quizzes in this course. You will have 30 minutes to complete each quiz. You will be able to complete each quiz only during the specified "quiz period," which is described in the next bullet point. Make sure to remember that you are only able to enter and complete a quiz one time. So only enter the quiz link when you are ready to complete it in its entirety.
- This course requires a quiz to be completed at the end of each section. Sections (contained within modules) are either one or two weeks long. The eCampus link to take your quiz will open on Thursday (8:00 AM CT) of each quiz period and will remain open until Sunday (11:59 PM CT) of each quiz period.

**Required Readings in the Textbook**

- The required textbook reading list is provided under the "Content" tab on the left-hand side of the course homepage. Textbook readings are vital in your understanding of the material. Video lectures are intended to supplement the broader material covered in your textbook. Please read the required textbook readings in full. Questions from the textbook readings will be included in each quiz.

**Required Supplementary Readings**

- A required supplementary reading list is provided under the "Content" tab on the left-hand side of the course homepage. Supplementary readings are required and are intended to reinforce the material covered in the required textbook readings and in the video lecture. Please read the supplementary readings in full. Questions from these supplementary readings will be included in each quiz.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Course request type: ☑ Undergraduate  ☐ Graduate  ☐ First Professional (DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name): Department of Landscape Architecture and Urban Planning

3. Course prefix, number and complete title of course: URSC 601 Foundations of Research in Urban and Regional Science

4. Catalog course description (not to exceed 50 words):
Introduction to the research process and its application to problems in urban, planning, and regional science; presentation of philosophy and logic underlying the scientific method; critical analysis of planning and design literature according to each step of the research process; problem definition, hypothesis development, study design, analysis and interpretation of the findings.

5. Prerequisite(s):

6. Is this a variable credit course? ☐ Yes  ☑ No
If yes, from ___ to ___

7. Is this a repeatable course? ☑ Yes  ☐ No
If yes, this course may be taken ___ times.

8. Will this course be repeated within the same semester? ☐ Yes  ☑ No

9. Will this course be submitted to the Core Curriculum Council? ☐ Yes  ☑ No

10. How will this course be graded? ☑ Grade  ☐ S/U  ☐ P/F (CLMD)

11. This course will be:
a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   Ph.D. in Urban and Regional Science
b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
in any masters or Ph.D. program

12. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

13. Prefix Course # Title (excluding punctuation)

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>URSC</td>
<td>601</td>
<td>RESEARCH FOUNDATIONS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HIC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>04.0301</td>
<td>1694</td>
<td>16 - 17</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:
Ming-Han Li

Department Head or Program Chair (Type Name & Sign) Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:
Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
URSC 601

Dr. Shannon Van Zandt, AICP
Office: Scoates 120
E-mail: svanzandt@tamu.edu
Office phone: 458-1223
Office hours: TBD, or by appointment

Course Description: Introduction to the research process and its application to problems in urban, planning, and regional science; presentation of philosophy and logic underlying the scientific method; critical analysis of planning and design literature according to each step of the research process: problem definition, hypothesis development, study design, analysis and interpretation of the findings.

Course Objectives:

- Learn how to connect research design to social problems and prescriptions
- Understand strength and weaknesses of predominant research designs used in social sciences
- Critically assess prominent designs used in planning, social science, and applied policy research
- Understand data collection and analysis methods associated with a given research design
- Understand research ethics, particularly those related to the use of human subjects

Upon completion of the course, students will be able to:

- Conduct a literature review
- Write a proposal for external funding
- Critically review a journal manuscript
- Properly structure an academic manuscript
- Properly prepare for a standard conference presentation
- Develop good research and writing habits

Required Texts:


NOTE: These are not the most current editions, but they are fine. Much cheaper. Buy used.

Recommended (especially for PhD students):


CLASS STRUCTURE

This class uses a "flipped" structure. That means that rather than the professor lecturing in class, she will record her lectures ahead of time, and you will watch them prior to class meetings, along with completing class readings, and writing assignments for each session. This will allow each class session to focus on reviewing, critiquing, and improving student writing and work. This approach demands that students prepare ahead of time, and come to class prepared to engage with the material.

Please also be aware that your work will be shared with the class. Grades will not. But since peer review is a hallmark of academic work, we will use this method in class to build your skills at reviewing and improving both your own work and that of others. It will also teach you to always be constructive in your criticism of others' work, and to always put your own best work forward.

When written work will be discussed in class, you should upload your written work to the ecampus site designated. This will allow me to access the files during class. You should also bring your laptops to class so that you can access yours and others' work. If you cannot bring a laptop, you should bring a hard copy of your own work.

GRADING

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Review (due Sep 29)</td>
<td>20%</td>
</tr>
<tr>
<td>Manuscript Reviews (three reviews due by Nov 17)</td>
<td>30%</td>
</tr>
<tr>
<td>Proposal (Final due Dec 8; preliminary should be complete by Dec 1)</td>
<td>20%</td>
</tr>
<tr>
<td>Final Presentation (presented in class, Dec 1, 3 and 8)</td>
<td>10%</td>
</tr>
<tr>
<td>Weekly progress (having work ready to critique in class)</td>
<td>10%</td>
</tr>
<tr>
<td>Class participation (actively and constructively critiquing others' work)</td>
<td>10%</td>
</tr>
</tbody>
</table>

Total: 100%
COURSE OUTLINE

PART I. DEVELOPING A PROJECT

WEEK 1, Sep 1 and 3

Topic: What is research?

Reading: Leedy, Chapter 1, the nature and tools of research

Assignment: Draft a max 300-word statement of research interests and a list of 5 journals in your area of interest, upload to e-campus prior to September 3rd class session.

WEEKS 2, 3, 4, Sep 8 -24 (Shannon out September 8)

Topic: Conducting a literature review

- Identifying high quality sources
- Attribution
- Synthesis
- Software for bibliographies
- Identifying a gap and justifying a need

Reading: Leedy, Chapter 3 Review of Related Literature

Complete Academic Integrity tutorial at http://library.tamu.edu/help/help-yourself/using-materials-services/online-tutorials/academic-integrity/

Other readings as posted on e-campus

Assignments: Identify 5 journal articles, bring in for critique, complete weekly tasks (see e-campus); Literature review, due Sep 29.

WEEK 5, Sep 29 and Oct 1

Topic: Responding to an RFP, Writing a research question

Reading: Leedy, Chapter 2, The Problem, Chapter 4, Planning your research project
Assignments: Bring in an RFP from a major funder in your area of interest; draft justification and problem part of proposal

PART II. ANSWERING THE QUESTIONS: QUANTITATIVE AND QUALITATIVE RESEARCH DESIGNS

WEEK 6, Oct 6 and 8

Topics: Exploratory, descriptive, explanatory. What is appropriate for a dissertation?

Quantitative, Qualitative, mixed methods

Reading: Leedy, Chapters 6 Qualitative, 8 Descriptive, 10 Mixed Methods

Assignments: Assess the method type in each of your 5 journal articles

WEEK 7, Oct 13 and 15

Topics: Conceptual models/framing research/model building

Measurement

Reading: Leedy, Chapter 11, Strategies, other as assigned on e-campus; Shadish Chapter 1 Causal Inference

Assignment: Develop a conceptual model for your research proposal

WEEK 8, Oct 20 and 22 (Shannon and URSC students out Oct 22)

Topics: Validity, reliability, generalizability (threats to)

Reading: Shadish Chapters 2 and 3 Validity

Assignment: Critique each article for threats to validity, reliability, and generalizability. Identify threats within your own research design.
WEEKS 9-11, Oct 27-Nov 12 (Shannon out Nov 5)

Topic: Causal inference/Quasi-experimental designs

Reading: Shadish, Chapters 4 and 5, others as necessary

Assignment: Critique each article with regard to its research design. Develop your own research design.

PART III. RESEARCH ETHICS

WEEK 12, Nov 17 and 19

Topic: IRB/Human Subjects

Reading: Complete CITI Training on Human Subjects (approximately 2 hours) at http://rcb.tamu.edu/humansubjects/training

WEEK 13, Nov 24 (Nov 26 is Thanksgiving Holiday)

Topics: Knowledge Attribution

Peer Review

Reading: See e-campus

WEEKS 14-15, Dec 1-8

Research Presentations

Students present their research proposals
Attendance
If you cannot attend class for any reason please let the professor know ahead of time if at all possible. If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor has a regularly scheduled make up exam, students are expected to attend unless they have a university approved excuse. The make-up work must be completed in a timeframe not to exceed 30 calendar days from the last day of the initial absence. The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for the absence. Among the reasons absences are considered excused by the university are the following (see Student Rule 7 for details http://student-rules.tamu.edu/rule07 ). The fact that these are university excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

Americans with Disabilities Act (ADA) Policy Statement
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu .

Academic Integrity Statement and Policy
"An Aggie does not lie, cheat or steal, or tolerate those who do."
http://aggiehonor.tamu.edu
Texas A&M University
Departmental Request for a New Course
Undergraduate * Graduate * Professional
* Submit original form and attach a course syllabus. *

Form Instructions
1. Course request type:
   - [ ] Undergraduate
   - [x] Graduate
   - [ ] First Professional (D.O., M.D., J.D., Pharm.D., D.V.M.)

2. Request submitted by (Department or Program Name):
   Department of Landscape Architecture and Urban Planning

3. Course prefix, number and complete title of course:
   URSC 602 Research Methods in Urban and Regional Science

4. Catalog course description (not to exceed 50 words):
   Basic empirical research methods used in urban, planning, and regional science research: experimental, survey and case study designs; comparisons of various methods; application of techniques in sample selection, data collection and analytical approaches.

5. Prerequisite(s):
   URSC 641 or STAT 651 or approval of Instructor

6. Is this a variable credit course?
   - [ ] Yes
   - [x] No
   If yes, from ________ to ________

7. Is this a repeatable course?
   - [x] Yes
   - [ ] No
   If yes, this course may be taken ________ times.

8. Will this course be repeated within the same semester?
   - [x] Yes
   - [ ] No

9. Will this course be submitted to the Core Curriculum Council?
   - [x] Yes
   - [ ] No

10. How will this course be graded?
    - [x] Grade
    - [ ] S/U
    - [ ] P/F (CLMD)

11. This course will be:
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in History)
    Ph.D. in Urban and Regional Science
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in Geography)

12. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

13. Right side
   Course #  Title (excluding punctuation)
   URSC 602 Research Methods

   Lect. Lab Other  S-H  CP and Fund Code  Admin. Unit  Acad. Year  UCC Code
   3.00  0.00  0.00  3.00  04.0301  1694  16 - 17  0  0  3  6  3  2

   Approval recommended by:
   Ming-Han Li
   Department Head or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee Date
   Dean of College Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC Date

   Associate Director, Curricular Services Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 07/14

[Stamp: RECEIVED OCT 16 2015]
URSC 602 Research Methods in Urban and Regional Science
Spring 2016 Semester
Department of Landscape Architecture and Urban Planning

Yu Xiau, Ph.D. Associate Professor
Email: YUXIAO@TAMU.EDU
Phone: 979-458-2731
http://ecampus.tamu.edu/
Office Hours T/H 1:30 pm to 2:20 pm

Class Schedule
TU and TH 2:20 pm to 3:35 pm
Langford Architecture 209B

Course Description
Basic empirical research methods used in planning and design research: experimental, survey and case study designs; comparisons of the various methods; application of techniques in sample selection, data collection and analytic approaches.

Prerequisites: URSC 641 or STAT 651 or approval of instructor

Learning Outcomes
Students will learn the basics of

- Conducting empirical research to support planning and design decisions.
- Conducting survey research, including survey design, sampling, survey management, survey implementation, and coding and codification of resulting data
- The advantages and disadvantages of various survey techniques
- About causal inference from quasi-experimental designs
- The value of randomization in sampling and research design
- Ethics in conduction human subject based research

Required Reading
Course Overview

I. Survey Research Methods

II. Experimental and Quasi-Experimental Designs

III. Outcome Measurement

IV. Human Participant Protections Education for Research

Weekly Reading Assignments: Weeks 1-11


1. Chapters 1-2. Turbulent Times for Survey Methodology; The Tailored Design Method
2. Chapter 4. The Basics of Crafting Good Questions
4. Chapter 6. From Questions to a Questionnaire
5. Chapter 3. Coverage and Sampling
6. Chapter 7. Implementation Procedures
7. Chapter 8. When More than One Survey Mode is Needed
8. Chapter 9. Longitudinal and Internet Panel Surveys
10. Chapter 11. Effects of Sponsorship and the Data Collection Organization
11. Chapters 12-13. Surveying Businesses and Other Establishments; Coping with Uncertainty

Weekly Reading Assignments: Weeks 12+


12. Chapter 1. Experiments and Generalized Causal Inference
13. Chapters 4-5. Quasi-Experimental Designs

Grade Percentage

Course grade will use the grading scale A= 90 to 100, B=80 to 89, C= 70 to 79, D= 60 to 69, F=Below 60
Students will be awarded points as follows (Up to):

- 50 pts for Research Proposal Paper: 5-6000 words
- 20 pts for Class PowerPoint Presentation on Research Proposal
- 20 pts for Survey Manuscript Review: 5 pages (two 2 1/2 page reports)
- 10 pts for Completion of Human Participation Protections Education for Research [link to http://researchcompliance.tamu.edu/irb]

Attendance

Students are expected to be in class except during University excused absences. See rule 7 at [link to http://student-rules.tamu.edu/rule07]

Americans with Disabilities Act (ADA) Policy Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit [link to http://disability.tamu.edu].

Academic Integrity Syllabus Statement

Aggie Code of Honor: For many years Aggies have followed a Code of Honor, which is stated in this very simple verse:

"An Aggie does not lie, cheat or steal or tolerate those who do."

See [link to http://student-rules.tamu.edu/aggiecode] for more details.
Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
Submit original form and attach a course syllabus.

Form Instructions

1. Course request type: □ Undergraduate □ Graduate □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Veterinary Pathobiology
3. Course prefix, number and complete title of course: VPAT 610 Cell Mechanisms of Disease
4. Catalog course description (not to exceed 50 words):
   Cellular mechanisms, morphologic manifestations and clinical presentations of illustrative disease processes. Prerequisites: Enrollment as a graduate student in BIMS, VTPB or BMEN, and permission of instructor.

5. Prerequisite(s): Permission of instructor.
   Cross-listed with: 
   Stacked with: VTPB 410

6. Is this a variable credit course? □ Yes □ No If yes, from _______ to _______
7. Is this a repeatable course? □ Yes □ No If this course may be taken ______ times.
   Will this course be repeated within the same semester? □ Yes □ No
   Will this course be submitted to the Core Curriculum Council? □ Yes □ No
8. How will this course be graded? □ Grade □ S/U □ P/F (CLAS)

9. This course will be:
   a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   Graduate students in BIMS, VTPB, BMEN

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
12. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education)

13. Prefx Course # Title (excluding punctuation)
   VPAT 610 Cell Mechanisms of Disease

<table>
<thead>
<tr>
<th>Lect</th>
<th>Lab</th>
<th>Other</th>
<th>STU</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Year</th>
<th>Year</th>
<th>CRIP Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>51.2505</td>
<td>2907</td>
<td>15</td>
<td>16</td>
<td>0 0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:

Dr. Roger Smith III □ Signature □ Date
Department Head or Program Chair (Type Name & Sign)

Dr. Jane Welsh □ Signature □ Date
Chair, College Review Committee

Department Head or Program Chair (Type Name & Sign) □ Signature □ Date
Dean of College

Submitted to Coordinating Board by:
Chair, GC or UCC □ Date

Associate Director, Curricular Services □ Date

Effective Date □

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services - 07/14
VPAT 610, Special Topics in Cell Mechanisms of Disease  
Fall Semester, 2015

General Course Description and Goals:
A special-topics graduate course in the basic cellular mechanisms and general manifestations of disease. Clinical and anatomical/morphological aspects of various diseases are used for illustration. Upon completion of this course, the student will have a basic medical vocabulary, understand the basic mechanisms of disease, and have an understanding of the descriptive terms used in pathology.

Instructor: B.R. Weeks, DVM, PhD
Diplomate, American College of Veterinary Pathologists (ACVP) 
Professor, Department of Veterinary Pathobiology
Office: 54XB College of Veterinary Medicine
E-mail: bweeks@cvm.tamu.edu

Prerequisites:
Graduate Student Enrollment in BIMS, VTPB, or BMEN curriculum and permission of instructor

Class meetings:
Attendance at all scheduled class meetings is expected. Per University policy, attendance will be checked and recorded.

Tuesday and Thursday,
Room ???, College of Veterinary Medicine

Schedule of Events:
First class meeting  
September 1
First Examination (100 pts.)  
October 6
Second Examination (100 pts.)  
November 10
Term Project Due (100 points)  
November 10
Last class meeting  
December 8
Final Examination (100 pts.)  
Set by the Registrar’s office

Textbook and Course Materials:
No textbook is required. The Introductory / General Pathology sections of any current medical Pathology textbook would provide good supplemental reading. A printed set of class notes is available, in the Media Resources department. Reading assignments from various scientific literature sources are an option.

Students with Disabilities:
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 979-845-1637. For additional information visit http://disability.tamu.edu.
Exams and Grading

The first two examinations will take the place of regularly-scheduled lectures. The third, final exam will be administered as scheduled by the Office of the Registrar, during "finals week". Examinations may consist of any combination of multiple-choice questions, written short / long answers, True / False, matching, etc. Examination topics may include any class activity: regular lectures, guest lectures, reading assignments, demonstrations, video, in-class discussions, etc. All examinations are comprehensive, due to the fact that concepts presented throughout the course are interrelated.

In the event of a student's excused absence from an exam, a make-up examination will be provided in written format (see below). Unexcused absence from an examination will result in a grade of "zero" (no grading points) for that examination. The final examination is mandatory, comprehensive, and equal in value to the others (100 points). The semester course grade is based upon the student's total score (points accumulated) for the 3 examinations and the required Term Paper / Project.

Term Paper or Project:
In addition to regularly-scheduled examinations, a term paper or project will be required. This project or paper will be in a topic relevant to the course and to the student's area of interest. The topic and scope of the project must be pre-approved by the instructor. The project/paper will be worth up to 100 grading points.

Course Grading Scale:
(400 total grading points are possible).
360 to 400 points: A
320 to 359 points: B
280 to 319 points: C
240 to 279 points: D
239 or fewer points: F

Missed Examinations:
The Fall 2015 class meeting and examination schedule is included in this syllabus. Notify Dr. Weeks immediately if you must request an excused absence from an examination. Refer to the Texas A&M University "Student Rules" (available online at http://student-rules.tamu.edu/rule07) for explanations of attendance policy, excused vs. unexcused absences, and make-up exam policies. Note that class assignments and examinations in other courses (other than specific, defined circumstances for final examinations) are not an excuse for missing an examination in this course. Requests for alternative final examination time/date are made through the student's College administrative office.

Excused absences from examinations must be made-up promptly at a time and place agreed upon between student and instructor. Makeup examinations will be in written format. A student's unexcused absence from an examination results in a grade of "zero" (no grading points) for that examination.

Questions about Grading:

Any question about grading on an examination must be brought to the instructor's attention within 1 week after grades for the examination are posted or otherwise made available to the class.

If scanned grading forms are used, the answer marked on the scanned form is your response. Unmarked responses and multiple responses are graded as incorrect.

Aggie Code of Honor

For many years Aggies have followed a Code of Honor, which is stated in this very simple verse: An Aggie does not lie, cheat or steal or tolerate those who do.
http://aggiehonor.tamu.edu
Copyright Notice: All handouts used in this course are copyrighted. Handouts include (but are not limited to) syllabus, quizzes, examinations, laboratory problems, take-home problem sets, in-class materials, review sheets, and computer module programs. Students do not have the right to copy any of the handouts without expressed permission of the course instructors.

Class Meeting and Examination Schedule: Fall Semester, 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1</td>
<td>Introductions, Syllabus, Background information.</td>
</tr>
<tr>
<td>September 3</td>
<td>Sectioning and Staining, Microscopy Techniques</td>
</tr>
<tr>
<td>September 8</td>
<td>Cell Injury: Reversible injury</td>
</tr>
<tr>
<td>September 10</td>
<td>Lethal Cell Injury and Cell Death</td>
</tr>
<tr>
<td>September 15</td>
<td>Necrosis</td>
</tr>
<tr>
<td>September 17</td>
<td>Pigments</td>
</tr>
<tr>
<td>September 22</td>
<td>Pigments / Tissue Deposits</td>
</tr>
<tr>
<td>September 24</td>
<td>Tissue Deposits / Cellular Adaptation</td>
</tr>
<tr>
<td>September 29</td>
<td>Tissue Adaptation and Growth Disturbances</td>
</tr>
<tr>
<td>October 1</td>
<td>Growth Disturbances</td>
</tr>
<tr>
<td>October 6</td>
<td>(Tuesday) Test One</td>
</tr>
<tr>
<td>October 8</td>
<td>Inflammation</td>
</tr>
<tr>
<td>October 13</td>
<td>Inflammation</td>
</tr>
<tr>
<td>October 15</td>
<td>Inflammation</td>
</tr>
<tr>
<td>October 20</td>
<td>Wound Healing</td>
</tr>
<tr>
<td>October 22</td>
<td>Basic Immunology Concepts</td>
</tr>
<tr>
<td>October 27</td>
<td>Basic Immunology Concepts</td>
</tr>
<tr>
<td>October 29</td>
<td>Immune-mediated Injury</td>
</tr>
<tr>
<td>November 3</td>
<td>Immune-mediated Injury</td>
</tr>
<tr>
<td>November 5</td>
<td>Immunological Diseases</td>
</tr>
<tr>
<td>November 10</td>
<td>(Tuesday) Test Two &amp; Term Paper / Project Due.</td>
</tr>
<tr>
<td>November 12</td>
<td>Immune Deficiency Diseases</td>
</tr>
<tr>
<td>November 17</td>
<td>Disturbances of Blood Flow</td>
</tr>
<tr>
<td>November 19</td>
<td>Disturbances of Blood Flow</td>
</tr>
<tr>
<td>November 24</td>
<td>Clotting and Thrombosis</td>
</tr>
<tr>
<td>November 26</td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>December 1</td>
<td>Clotting and Thrombosis</td>
</tr>
<tr>
<td>December 3</td>
<td>Neoplasia</td>
</tr>
<tr>
<td>December 8</td>
<td>Neoplasia (last class meeting)</td>
</tr>
<tr>
<td>December X</td>
<td>Final Examination</td>
</tr>
<tr>
<td></td>
<td>Room</td>
</tr>
</tbody>
</table>
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

1. Course request type: □ Undergraduate  ○ Graduate  □ First Professional (DO, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name): Department of Veterinary Small Animal Clinical Sciences

3. Course prefix, number and complete title of course: VSCS 697 Teaching Neuroanatomy Lab

4. Catalog course description (not to exceed 50 words):
Theory and practical aspects of teaching neuroanatomy lab and clinical neurology; emphasis on content, instructional methods and practical aspects of neuroanatomy lab.

5. Prerequisite(s):
Prerequisites: Graduate classification in VIBS/VSCS; appointment as TA for VIBS 913 anatomy lab.

6. Is this a variable credit course? □ Yes  ○ No
If yes, from _______ to _______.

7. Is this a repeatable course?  ○ Yes  □ No
If yes, this course may be taken _______ times.
Will this course be repeated within the same semester? □ Yes  ○ No

8. Will this course be submitted to the Core Curriculum Council? □ Yes  ○ No

9. How will this course be graded?  ○ Grade  □ S/U  □ P/F (CLME)

10. This course will be:
a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   M.S., Ph.D. in Biomedical Science

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix: Course #  Title (excluding punctuation)

<table>
<thead>
<tr>
<th>VSCS</th>
<th>697</th>
<th>Teaching Neuroanatomy Lab</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>ECC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>12.00</td>
<td>4.00</td>
<td>2615020002</td>
<td>2683</td>
<td>16</td>
<td>17</td>
<td>0</td>
</tr>
</tbody>
</table>

Approval recommended by:
Jonathan Levine

Department Head or Program Chair (Type Name & Sign) Date 9-22-15

Chair, College Review Committee Date

Dean of College Date 9-24-15

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 07/14
Course title and number  VSCS 697 Teaching Neuroanatomy Lab
Term (e.g., Fall 200X)  Spring 2017
Lecture (room 101)
Lab (histology lab)
Meeting times and location  Lecture occurs twice weekly for the first six weeks of the course (W/F) and once weekly for the last 9 weeks of the course (W). Laboratory occurs twice weekly throughout the course (T/W).

Course Description and Prerequisites

Theory and practical aspects of teaching neuroanatomy lab and clinical neurology, with emphasis on content, instructional methods and practical aspects of neuroanatomy lab. May be repeated for credit. Prerequisites: Graduate classification in VIBS/VSCS; appointment as a TA for VIBS 913 neuroanatomy lab.

Course Learning Outcomes

By the end of this class, students will be able to:
- Prepare neuroanatomy laboratories for veterinary students
- Show veterinary students important neuroanatomic structures
- Apply classroom management strategies in the facilitation of a course within your discipline
- Develop a reflective and purposeful approach to teaching
- Apply anatomic knowledge to surgical and clinical scenarios

Instructor Information
Co–Instructors

Name  Kelley Thieman Mankin
Telephone number  979-845-2351
Email address  kthieman@cvm.tamu.edu
Office hours  By appointment
Office location  VSCS 2001

Name  Anton Hoffman
Telephone number  979-845-5948
Email address  AHoffman@cvm.tamu.edu
Office hours  By appointment
Office location  VMS 156 (adjacent to anatomy lab)

Grading Policies

This course will be graded. Student grades will be determined by development of a teaching portfolio (25%) and participation (75%). Participation grades will be determined based on laboratory attendance, and interaction with the veterinary students, specifically the ability to assist and explain anatomy to the veterinary students. Knowledge of the anatomy of the dog and cat based on prosection and assistance
during laboratory will also be used to determine the final grade. The teaching portfolio will consist of the TA’s reflective teaching statement which will include his/her personal teaching philosophy, strategies and objectives. Further, the portfolio will include suggested activities to improve instruction. The instructor will evaluate the teaching portfolio. Following the completion of the course, the TA will be able to include documentation of teaching in the form of student evaluations.

Grading scale

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = ≤59%

Attendance and Make-up Policies

Students are expected to attend all laboratories and complete all assignments. Students are highly encouraged to attend all lectures. See student rule 7 for information on excused absences and make-up work. [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07)

Course Topics, Calendar of Activities, Major Assignment Dates

This course will emphasize functional neuroanatomy and clinical neurology. The course will begin with prosection times for TA familiarity. Exams are not given. Prosection times and days are flexible. The students will follow the calendar provided. TAs are expected to attend each laboratory session and be prepared by performing prosections ahead of schedule.

The laboratory topics correspond with the lecture topics listed below. Some shorter lecture topics are combined into one lecture hour but listed individually below.

The teaching portfolio is due Wednesday, May 4th, 2016.

<table>
<thead>
<tr>
<th>Lecture Number</th>
<th>Lecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overview of CNS/PNS</td>
</tr>
<tr>
<td>2</td>
<td>Basic nervous system concepts</td>
</tr>
<tr>
<td>3</td>
<td>Solving neurological problems</td>
</tr>
<tr>
<td>4</td>
<td>Spinal cord</td>
</tr>
<tr>
<td>5</td>
<td>LMNs, UMNs</td>
</tr>
<tr>
<td>6</td>
<td>Spinal and peripheral nerves</td>
</tr>
<tr>
<td>7</td>
<td>Spinal reflexes</td>
</tr>
<tr>
<td>8</td>
<td>Cranial nerves</td>
</tr>
<tr>
<td>9</td>
<td>Cranial nerve reflexes</td>
</tr>
<tr>
<td>10</td>
<td>Vision and PLR</td>
</tr>
<tr>
<td>11</td>
<td>UMN descending tracts</td>
</tr>
<tr>
<td>12</td>
<td>Horner’s syndrome</td>
</tr>
<tr>
<td>13</td>
<td>Radiographic imaging of the CNS</td>
</tr>
<tr>
<td>14</td>
<td>Ascending tracts – proprioception and nociception</td>
</tr>
<tr>
<td>15</td>
<td>Cerebellum and cerebellar disease</td>
</tr>
<tr>
<td>16</td>
<td>Vestibular system and vestibular disease</td>
</tr>
<tr>
<td>17</td>
<td>Postural responses</td>
</tr>
<tr>
<td>18</td>
<td>Overview of the neurological exam</td>
</tr>
<tr>
<td>19</td>
<td>Small animal neurological exam</td>
</tr>
<tr>
<td>20</td>
<td>Autonomic nervous system</td>
</tr>
<tr>
<td>21</td>
<td>Autonomic nervous system</td>
</tr>
<tr>
<td>22</td>
<td>Equine neurological exam</td>
</tr>
<tr>
<td>23</td>
<td>Diffuse neuromuscular disease</td>
</tr>
<tr>
<td>24</td>
<td>Micturition</td>
</tr>
<tr>
<td>----</td>
<td>-------------</td>
</tr>
<tr>
<td>25</td>
<td>Food animal neurological exam</td>
</tr>
<tr>
<td>26</td>
<td>Lesion localization – forebrain, brainstem, spinal cord</td>
</tr>
</tbody>
</table>

**Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu)

**Academic Integrity**

For additional information please visit: [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu)

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

**Resources**

VIBS 913 Class Notes, Anton Hoffman, 2015


Center for Teaching Excellence at Texas A&M University. [Cte.tamu.edu](http://cte.tamu.edu)


Center for Teaching Excellence [http://cte.tamu.edu/](http://cte.tamu.edu/)
Course Changes
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type:
   - Undergraduate  [ ] Graduate  [ ] First Professional (DDS, MD, JD, PharmD, D1/M)
2. Request submitted by (Department or Program Name):
   - Department of Architecture
3. Course prefix, number and complete title of course:
   - ARCH 619 - Applied Solar Energy

4. Change requested
   a. Prerequisite(s): From: ARCH 335 or ARCH 615 or equivalent
   b. Withdrawal (reason):
   c. Cross-list with:

5. Is this an existing core curriculum course?
   - Yes  [ ] No  [ ]
6. If grade type is changing for existing course, indicate the new grade type:
   - Grade  [ ] S/U  [ ] P/F (EMDI)
7. If this course will be stacked, please indicate the course number of the stacked course:
   - [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vcr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education)

8. Complete current course title and current catalog course description:
   - ARCH 619 (3-0) Credit 3. Technology behind applied solar energy design including: calculating solar radiation, heat transfer related to solar design; active systems; FCHART and economics.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

10. As currently in course inventory:
    a. Course: ARCH 619 Applied Solar Energy
    b. Change to:

11. Approval recommended by:
    - Ward V. Wells
    - Leslie Feigenbaum
    - Chair, College Review Committee

   Date
   Date
   Date

   Department Head or Program Chair (Type Name & Sign)
   (If crosslisted course)

   Department Head or Program Chair (Type Name & Sign)
   Date

   Submitted to Coordinating Board by:
   - Chair, GC or UCC

   Date

   Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
   Curricular Services - 08/14

   Received Oct 15 2015
ARCH 619 – Applied Solar Energy

Change in Course Request to remove “ARCH 335 or equivalent” from prerequisite so that students who did not attend our undergraduate program are not excluded from registering for the course. Howdy cannot process “or equivalent” to allow them open registration (they must have had the equivalent to have been accepted in the graduate program).
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions:
1. Course request type: ☐ Undergraduate ☑ Graduate ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Select or Type Department/Program Name
ARCH 621 - Energy Optimization in Building Design
3. Course prefix, number and complete title of course:

4. Change requested
a. Prerequisite(s): From: ARCH 633 or ARCH 615 or equivalents To: Graduate classification or approval of instructor
c. Cross-list with:

d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

5. Is this an existing core curriculum course? ☐ Yes ☐ No
6. If grade type is changing for existing course, indicate the new grade type: ☐ Grade ☐ S/U ☐ P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:

☐ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
8. Complete current course title and current catalog course description:
ARCH 621 - Energy Optimization in Building Design (3-0) Credit 3. Optimum energy use strategies for commercial buildings, hourly energy simulation methods, building envelope and HVAC system energy optimization by computer techniques; life-cycle cost analysis of building energy systems; case studies in commercial building applications.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

10. Complete proposed course title and proposed catalog course description:

11. a. As currently in course inventory:
   
   Prefix: ARCH
   Course #: 621
   Title (excluding punctuation): ENERGY OPTM BLDG DSGN
   
   b. Change to:
   
   Prefix: ARCH
   Course #: 621
   Title (excluding punctuation): ENERGY OPTM BLDG DSGN

   Approval recommended by:
   Ward V. Wells

   Department Head or Program Chair (Type Name & Sign) Date

   Chair, College Review Committee
   Leslie Feigenbaum
   Date

   Dean of College
   Leslie Feigenbaum
   Date

   Submitted to Coordinating Board by:
   Assistant Director, Curricular Services
   Date

Questions regarding this form should be directed to Sandra Williams at 845 8201 or sandra.williams@tamu.edu
Curricular Services – 08/14
ARCH 621 – Energy Optimization in Building Design

Change in Course Request to remove "ARCH 633 or ARCH 615 or equivalent" from prerequisite so that students who did not attend the Career Change program are not excluded from registering for the course and ARCH 633 is no longer a prerequisite for this course. Howdy cannot process "or equivalent" to allow them open registration (they must have had the equivalent to have been accepted in the graduate program).
Texas A&M University

Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type: ☑ Undergraduate ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Architecture
3. Course prefix, number and complete title of course: ARCH 633- Applied Architectural Systems
4. Change requested
   a. Prerequisite(s): From: ARCH 335 or ARCH 615 or equivalent

5. Is this an existing core curriculum course?
   ☐ Yes ☑ No

6. If grade type is changing for existing course, indicate the new grade type: ☑ Grade ☐ S/U ☐ P/F (CLMED)

7. If this course will be stacked, please indicate the course number of the stacked course:
   ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

8. Complete current course title and current catalog course description:
   ARCH 633 (3-0) Credit 3, Building energy consumption patterns and conservation strategies; natural and mechanical subsystems for environmental control; subsystem design criteria, economic considerations and selection methods.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH</td>
<td>633</td>
<td>Applied Architectural Systems</td>
</tr>
<tr>
<td>Text</td>
<td>3.00</td>
<td>Lab 0.00</td>
</tr>
<tr>
<td>SUI</td>
<td>3.00</td>
<td>SCH CIP and Final Code 1404610006</td>
</tr>
<tr>
<td>Adobe Unit</td>
<td>0290</td>
<td>0 0 3 6 3 2</td>
</tr>
<tr>
<td>Level</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Text</td>
<td>0.00</td>
<td>Lab 0.00</td>
</tr>
<tr>
<td>SUI</td>
<td>0.00</td>
<td>SCH CIP and Final Code</td>
</tr>
<tr>
<td>Adobe Unit</td>
<td>-</td>
<td>0 0 3 6 3 2</td>
</tr>
<tr>
<td>Level</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:
Ward V. Wells

Department Head or Program Chair (Type Name & Sign) Date

Department Head or Program Chair (Type Name & Sign) Date
(if cross-listed course)

Submitted to Coordinating Board by:
Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 08/14

OCT 15 2015
CURRICULAR SERVICES
ARCH 633 – Applied Architectural Systems

Change in Course Request to remove “ARCH 335 or ARCH 615 or equivalent” from prerequisite so that students who did not attend our undergraduate program or those who did not attend the Career Change program are not excluded from registering for the course. Howdy cannot process “or equivalent” to allow them open registration (they must have had the equivalent to have been accepted in the graduate program).
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

1. Course request type:  □ Undergraduate  ✔ Graduate  □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Architecture
3. Course prefix, number and complete title of course: ARCH 634 - Architectural Lighting

4. Change requested: Graduate classification or approval of instructor, ARCH 335 or equivalent
   a. Prerequisite(s): From:  
   b. Withdrawal (reason): 
   c. Cross-list with: 
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?
   □ Yes  □ No

6. If grade type is changing for existing course, indicate the new grade type:
   □ Grade  □ S/U  □ P/F (CMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control-basics-for-distance-education).

8. Complete current course title and current catalog course description:
   ARCH 634 (2-2). Credit 3. Attributes of the lighting environment, lighting and energy issues, daylight availability, building design for daylighting, heat loss control, solar shading, daylighting models, graphical analytical and computer methods of analysis, visual and lighting comfort evaluation, integration of daylight and electric light, energy analysis.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:
    Prefix  Course #  Title (excluding punctuation)
    ARCH  634  ARCH LIGHTING

    Lect  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  HCC Code
    2.00  2.00  3.00  0402010006  0290  0  3  6  3  2

    b. Change to:
    Prefix  Course #  Title (excluding punctuation)
    ARCH  634  ARCH LIGHTING

    Lect  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  HCC Code

    Approval recommended by:
    Ward V. Wells

    Department Head or Program Chair (Type Name & Sign)  Date

    Department Head or Program Chair (Type Name & Sign)  Date

    Submitted to Coordinating Board by:
    Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 08/14
ARCH 634 – Architectural Lighting

Change in Course Request to remove “ARCH 335 or equivalent” from prerequisite so that students who did not attend our undergraduate program are not excluded from registering for the course. Howdy cannot process “or equivalent” to allow them open registration (they must have had the equivalent to have been accepted in the graduate program).
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

Form Instructions
1. Course request type: ☐ Undergraduate ☑ Graduate ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Architecture
3. Course prefix, number and complete title of course: ARCH 643 - Software Analysis for HVAC Systems in Low Energy Buildings

4. Change requested
a. Prerequisite(s): From: __________________________ To: __________________________
   c. Cross-list with: __________________________

5. Is this an existing core curriculum course? ☐ Yes ☐ No
6. If grade type is changing for existing course, indicate the new grade type: ☐ Grade ☐ S/U ☐ P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:
   (Cross-listed courses require the signature of both department heads)
8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
9. Complete current course title and current catalog course description:
   Software Analysis for HVAC Systems in Low Energy Buildings. (2-3) Credit 3. Energy analysis (using Energy Plus software) with an emphasis on developing strategies for low energy use; simulation of various heating and cooling systems in low energy buildings; analysis of the mechnical equipment (including air handling systems, chiller and boilers), the building envelope, energy management control systems and indoor air quality.
10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH</td>
<td>643</td>
<td>SFT ALNY HVAC SYS LOW ENERGY</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
   b. Change to:
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by: 
Ward V. Wells
Department Head or Program Chair (Type Name & Sign) Date 10.15.15

Leslie Feigenbaum
Chair, College Review Committee Date 10.15.15

Dean of College Date

Submitted to Coordinating Board by: 
Chair, GC or UCC Date

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services - 08/14
ARCH 643 — Software Analysis for HVAC Systems in Low Energy Buildings

Change in Course Request to remove "ARCH 633 or equivalent" from prerequisite as ARCH 633 is no longer a prerequisite for this course.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

Form Instructions
2. Request submitted by (Department or Program Name): Chemistry Department
3. Course prefix, number and complete title of course: CHEM 636 Mechanistic Inorganic Chemistry

4. Change requested
   a. Prerequisite(s): From: _____________________________ To: _____________________________
   b. Withdrawal (reason): _____________________________
   c. Cross-list with: _____________________________

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? □ Yes □ No

6. If grade type is changing for existing course, indicate the new grade type: □ Grade □ S/U □ P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course: _____________________________

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>636</td>
<td>Mechanistic Inorg Chem</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>HICE Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>4005030002</td>
<td>0600</td>
<td>0 3 6 3 2 6</td>
<td></td>
</tr>
</tbody>
</table>

   b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>636</td>
<td>Mechanistic Inorg Chem</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.00</td>
<td>4005030002</td>
<td>0600</td>
<td>16 - 17</td>
<td>0 3 6 3 2</td>
</tr>
</tbody>
</table>

   Approval recommended by: _____________________________

   Date: _____________________________

   Department Head or Program Chair (Type Name & Sign) _____________________________

   Date: _____________________________

   Chair, College Review Committee: _____________________________

   Date: _____________________________

   Department Head or Program Chair (Type Name & Sign) _____________________________

   (If cross-listed course) _____________________________

   Date: _____________________________

   Dean of College: _____________________________

   Date: _____________________________

   Submitted to Coordinating Board by: _____________________________

   Date: _____________________________

   Chair, GC or UCC: _____________________________

   Date: _____________________________

   Effective Date: _____________________________

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
Chem 636: Inorganic Reaction Rates and Pathways
Fall 2016
TTH / 9:35 – 10:25 AM / Room - 2122

Instructor: Dr. Donald J. Darenbourg 406 Chemistry Bldg. 845-5417 or -2983
Office Hours: by appointment
Email: djdaren@mail.chem.tamu.edu
Course Web: ecampusprod.tamu.edu
DJD Research Homepage: http://www.chem.tamu.edu/rgroup/djd

Reference Texts:

We will use reviews and papers from the current literature extensively.

Grading:
Midterm Exam – Tuesday, October 13 100
Problem Sets & Other Assignments 50
Final Exam – Friday, December 11 150
Total 300 points

Scale:
A ≥ 90%;  89 % ≥ B ≥ 80%;  79% ≥ C ≥ 70%;  69% ≥ D ≥ 60%;  F < 60 %

Exam Schedule:
Midterm Exam: Tuesday, October 13
Final Exam: Friday, December 11, 12:30 – 2:30 PM

Course Description:
Reaction pathways in transition-metal complexes; factors which influence the reaction rate including nature of the metal, the coordination sphere, reaction conditions and catalytic intermediates.

Prerequisites: Chem 633
**CELL PHONES, TABLETS AND OTHER ELECTRONIC DEVICES:** Use of cell phones and other electronic devices in class is strictly limited to course-related activities (e.g., taking notes). Students violating this policy will be required to leave immediately. If you have an emergency, please be courteous and step outside, so as not to disrupt the class.

**ATTENDANCE/MAKE-UP POLICY**

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences and make up work are located on-line at [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07)

**AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu).

**AGGIE HONOR CODE**

“AN AGGIE DOES NOT LIE, CHEAT, OR STEAL OR TOLERATE THOSE WHO DO.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.

For additional information please visit: [http://www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)

**TOPICS TO BE COVERED INCLUDE:**

- Reaction Energetics
- Chemical Kinetics and Rate Laws
- The Determination of the Rate Law
- The Deduction of Mechanism
- Ligand Substitution Reactions
- Square-planar complexes
- Werner $O_3$ complexes
- Organometallic complexes
- Reactions of Extreme Rates, including stereochemical nonrigidity
- Electron-Transfer Reactions and Marcus Theory
- Reaction Mechanisms of selected processes, including isotope rate effects, and Catalytic processes.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate ● Graduate ● Professional
● Submit original form and attachments ●

Form Instructions
1. Course request type:  ☑ Undergraduate  ☑ Graduate  ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Chemistry Department
3. Course prefix, number and complete title of course: CHEM 673 Symmetry and Group Theory in Chemistry

Attach a brief supporting statement for changes made to items 4 through 10 below.

4. Change requested
   a. Prerequisite(s): From: ____________________________ To: ____________________________
   b. Withdrawal (reason): ____________________________
   c. Cross-list with: ____________________________

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

   e. Change in course number, contact hours [lab & lecture], and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?  ☑ Yes  ☐ No
6. If grade type is changing for existing course, indicate the new grade type:  ☑ Grade  ☐ S/U  ☐ P/F (C/M/F)

7. If this course will be stacked, please indicate the course number of the stacked course: ____________________________

8. [Verification statement]
   I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control/export-control-basics-for-distance-education).

9. Complete current course title and current catalog course description:
   673. Symmetry and Group Theory in Chemistry. (3-0). Credit 3. Applications of symmetry and group theory to various types of chemical systems; classification of molecules into symmetry point groups and use of character tables. Prerequisite: Bachelor’s degree in chemistry.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    673. Symmetry and Group Theory in Chemistry. (3-0). Credit 2 to 3 Applications of symmetry and group theory to various types of chemical systems; classification of molecules into symmetry point groups and use of character tables. Prerequisite: Bachelor’s degree in chemistry.

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>673</td>
<td>Sym &amp; Grp Theory in Chem</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>4005060002</td>
<td>0600</td>
<td>0 3 6 3 2</td>
<td>6</td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM</td>
<td>673</td>
<td>Sym &amp; Grp Theory in Chem</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>0.00</td>
<td>4005060002</td>
<td>0600</td>
<td>16 - 17</td>
<td>0 0 3 6 3 2</td>
<td>Level 5</td>
<td></td>
</tr>
</tbody>
</table>

(Approval recommended by)

Department Head or Program Chair (Type Name & Sign)  Date  Chair, College Review Committee  Date

Department Head or Program Chair (Type Name & Sign)  Date  Dean of College  Date

Submitted to Coordinating Board by:  Chair, GC or UCC  Date

Associate Director, Curricular Services  Date  Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 08/14
Chemistry 673
Symmetry and Group Theory in Chemistry – Variable Credit Format

Instructor: Dr. Timothy Hughbanks
Time: TTh 12:45 - 2:00 PM; Room 2121
Office Hours: Tuesday 2:00 - 4:00. Other times are OK too, if I have time!

Texts:
(4) Handouts on the class web site are required reading. Of these, those followed most closely are:
   (a) Survival Facts from Quantum Mechanics (the basics)
       (www.chem.tamu.edu/rgroup/hughbanks/courses/673/handouts/gm_notes.pdf)
   (b) Translation Groups
       (http://www.chem.tamu.edu/rgroup/hughbanks/courses/673/handouts/translation_groups1.pdf,
        http://www.chem.tamu.edu/rgroup/hughbanks/courses/673/handouts/translation_groups2.pdf,
        http://www.chem.tamu.edu/rgroup/hughbanks/courses/673/handouts/translation_groups3.pdf)
   (c) Perturbation Theory and Subgroups
       (http://www.chem.tamu.edu/rgroup/hughbanks/courses/673/handouts/subgroups&p perturbation_theory.pdf)
   (d) Antisymmetric Wavefunctions: Slater Determinants
       (www.chem.tamu.edu/rgroup/hughbanks/courses/673/handouts/antisymmetry.pdf)

The course provides a partially modularized introduction to the fundamentals and applications of the theory of group representations in chemistry. For students who elect to take the course for 3 credits, the total content of the 3-credit course will be similar to our current Chem 673. After a brief introduction to the abstract theory of groups is given, applications of symmetry groups will constitute the major emphasis of the course. The student will be encouraged to develop both the formal skills of using group theory to “grind out answers” and to acquire some intuitive and pictorial sense of “what it all means”. For the more mathematical (formal) first third of the course, the lectures will probably more closely follow the text than the second half. For many topics, particularly with aspects of quantum mechanics and those dealing with solids, additional handouts and reference materials are necessary and available.

Grades will be based on the homework (≈ 33%), and one exam for each module (two for 2 credit version, three for 3 credit version). There will be 4 (or 6) problem sets (two for each module, 25 points each), and an exam to cover each module (100 pts). Students are expected to make a serious attempt at every assigned homework problem before consulting with peers, otherwise collaboration is permitted as long as significant contributions are made by all collaborators. Students should not expect to be able to do all problems in a problem set in a single sitting.
Module #1 – required of all students  

I. Basic Properties of Groups and Symmetry Groups  
A. Multiplication of elements  
   closure, existence of an identity element and reciprocals, associative law  
   noncommutation of operations  
   multiplication tables  
   subgroups and supergroups  
B. Symmetry groups  
   symmetry elements and operations  
   assigning point groups (flow chart)  
   examples of subgroups  
   abelian groups, cyclic groups  
C. Similarity transformations and classes  
   similarity transformations  
   geometrical significance of classes of symmetry operators  

II. Group Representations and elementary Physical Implications  
A. Matrices as representations for symmetry operations  
   review of vector and matrix properties; matrix operations  
   some special properties of matrices  
   character (trace) of a matrix  
   orthogonal matrices, matrices as geometric transformation operators  
   inverses  
B. Group representations  
   reducible and irreducible representations  
   the “Great Orthogonality Theorem” and its consequences  
   character tables  
C. Group theory as a tool in quantum mechanics  
   operators in quantum mechanics  
   the importance of operators that commute with the Hamiltonian  
   symmetry operators as special cases of commuting operators  
   the direct product and its uses  
   bases for group representations and nonzero matrix elements  
   transition probabilities – including application to selection rules for vibrational  
   spectra (IR and Raman single quantum transitions, i.e., fundamentals)  
D. Symmetry-Adapted Linear Combinations (SALCs) and Bases for Irreducible  
   Representations.  
   projection operators and the construction of SALCs  
   symmetry patterns, SALCs, and the intuitive nature of bases for irreducible  
   representations - a pictorial survey, Mulliken notation  

Module #2, nine 75 minute lectures  

III. Selected Applications: MO Theory, Vibrational Spectra  
A. Molecular Orbitals in Organic Molecules (Hückel Theory – a quickie version)
the LCAO method - secular determinants and the Hückel approximation
MO diagrams
using group theory to “block factor” secular determinants
carbocyclic molecules and other examples of π bonding
more examples (e.g., heteroatoms, pericyclic reactions, etc.)

B. Molecular Orbitals in Inorganic Molecules
   MOs for octahedral and tetrahedral molecules
   other molecular shapes (trigonal prisms, low coordination numbers)
   Some basics of ligand field theory (some spin worries)

C. Molecular Vibrations
   normal modes
   symmetries of normal modes
   mixing of internal coordinates in normal modes
   selection rules for vibrational spectra (IR and Raman)
   mixing of internal coordinates in normal modes

D. Ligand Field Theory (Some spin worries)
   atomic states
   connecting atomic states and molecular states
   high-spin and low-spin molecules
   selection rules for electronic transitions in molecules

Module #3, nine 75 minute lectures

III. Advanced Topics (an introduction for materials chemists)

A. Translation Groups (big cyclic groups!)
   the various meanings of “k” – the wavevector, an irreducible representation label,
   determinant of wavefunction phases
   pictorial representation of crystal orbitals and vibrational modes (phonons)
   π carbon-based chains and layers (e.g., polyacetylene and graphene)
   more examples (e.g., a few inorganic solids, e.g., perovskites, skutterudites, etc.)
   selection rules for electronic transitions in solids
   vibronic coupling, the solid state analog: electron-phonon coupling

D. More on Ligand Field Theory
   Slater determinants as bases for reducible and irreducible representations
   Jahn-Teller effects - applications of subgroups
   use of group theory as an aid in getting electronic state energies and understanding
     the interplay between ligand fields and e-e repulsion
   broken symmetry – when to expect it
   applications to magnetism and EPR
### Chemistry 673 - Other Suggested Books (more advanced texts in italics)

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballhausen</td>
<td>Introduction to Ligand Field Theory</td>
</tr>
<tr>
<td>Ballhausen</td>
<td>Q. M. and Chemical Bonding in Inorganic Complexes</td>
</tr>
<tr>
<td>Bishop</td>
<td>Group Theory and Chemistry</td>
</tr>
<tr>
<td>Burdett</td>
<td>Molecular Shapes</td>
</tr>
<tr>
<td>Albright, Burdett, Whangbo</td>
<td>Orbital Interactions in Chemistry, 2nd Edition</td>
</tr>
<tr>
<td>Burns &amp; Glazer</td>
<td>Space Groups for Solid State Scientists</td>
</tr>
<tr>
<td>Butler</td>
<td>Point Group Symmetry Applications</td>
</tr>
<tr>
<td>Figgis</td>
<td>Introduction to Ligand Fields</td>
</tr>
<tr>
<td>Flurry</td>
<td>Symmetry Groups</td>
</tr>
<tr>
<td>Franzen</td>
<td>Physical Chemistry of Solids, Basic Principles ...</td>
</tr>
<tr>
<td>Hanna</td>
<td>Quantum Mechanics in Chemistry</td>
</tr>
<tr>
<td>Hoffmann</td>
<td>Solids and Surfaces, A Chemist's View…</td>
</tr>
<tr>
<td><strong>Heine</strong></td>
<td><em>Group Theory in Quantum Mechanics (Dover)</em></td>
</tr>
<tr>
<td>Kettle</td>
<td>Symmetry and Structure</td>
</tr>
<tr>
<td><strong>Lax</strong></td>
<td><em>Symmetry Principles in Solid State and Molecular Physics</em></td>
</tr>
<tr>
<td>McQuarrie &amp; Simon</td>
<td>Physical Chemistry</td>
</tr>
<tr>
<td>Molloy</td>
<td>Group Theory for Chemists</td>
</tr>
<tr>
<td>Murrell, Kettle &amp; Tedder</td>
<td>The Chemical Bond</td>
</tr>
<tr>
<td>Molloy</td>
<td>Group Theory for Chemists</td>
</tr>
<tr>
<td>Pearson</td>
<td>Symmetry Rules for Chemical Reactions</td>
</tr>
<tr>
<td><strong>Tinkham</strong></td>
<td><em>Group Theory and Quantum Mechanics (Dover)</em></td>
</tr>
<tr>
<td>Walton</td>
<td>Beginning Group Theory for Chemistry</td>
</tr>
</tbody>
</table>

See also:

Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

- Submit original form and attachments -

Form Instructions

1. Course request type:  
   - Undergraduate  
   - Graduate  
   - First Professional (DDS, MD, JD, PharmD, DVM)

2. Request submitted by: (Department or Program Name):  
   Educational Psychology

3. Course prefix, number and complete title of course:  
   EDTC 602 Educational Technology: Field, Theory, Profession

4. Change requested:  
   Approval of Department Head  
   To:  
   EDTC Major; Approval of Instructor

   a. Prerequisite(s):  
      From:  
      To:  

   b. Withdrawal (reason):  

   c. Cross-list with:  

   (Cross-listed courses require the signature of both department heads.)

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?  
   - Yes  
   - No

6. If grade type is changing for existing course, indicate the new grade type:  
   - Grade  
   - S/U  
   - P/F (C/LMD)

7. If this course will be stacked, please indicate the course number of the stacked course:  
   - I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

8. Complete current course title and current catalog course description:
   EDTC 602 Educational Technology: Field, Theory, Profession. Introduces the student to the educational technology profession and provides a conceptual map of the theory, research and practice of the field; a historical overview of the field aids in bringing current educational technology practices into perspective.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   EDTC 602 Educational Technology: Field, Theory and Profession. Introduction to the field of educational technology, including media, instructional design, theory, and research; exploration of the history and future direction of the field, as well as careers in educational technology through interaction with professionals currently working in the field.

10. As currently in course inventory:
    Prefix  Course #  Title (excluding punctuation)
    EDTC  602  EDUC TECH FIELD THEORY

    Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  HICE Code  Level
    3.00  0.00  0.00  3.00  130501004  0920  0 0 3 6 3 2 6

    a. Change to:
    Prefix  Course #  Title (excluding punctuation)
    
    Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  HICE Code  Level
    
    Approval recommended by:
    Victor Williams, Ph.D.  Date

    Department Head or Program Chair (Type Name & Sign)

    George Cunningham, Ph.D.  Date  
    Chair, College Review Committee

    Department Head or Program Chair (Type Name & Sign)  Date
    (if cross-listed course)

    Mark Zoran, Ph.D.  Date  
    Chair, GC or UCC

    Submitted to Coordinating Board by:
    Associate Director, Curricular Services  Date

    Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
    Curricular Services – 08/14
MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: George Cunningham, Ph.D.
Associate Dean, College of Education and Human Development

FROM: Victor Willson, Ph.D.
Professor and Head

SUBJECT: Course Change – Educational Technology Course Changes

Attached, please find the appropriate paperwork for changing the course titles and descriptions for six educational technology courses.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: These course titles and descriptions are being updated to reflect changes in the field of educational technology. The current titles and description are outdated.

2. Vote by the Executive Committee: The changes have the unanimous support of our executive Committee and were voted on at the meeting held on 9/7/15.

We appreciate your consideration of this course. Please contact us should you require any additional information.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional (DDS, MD, JD, PharmD, DPA)
2. Request submitted by (Department or Program Name): Educational Psychology
3. Course prefix, number and complete title of course: EDTC 621 Graphic Communication and Interface Design

Approval of Department Head
Approval of Department Head
Graduate Classification; Approval of Department Head

Attachments/Supporting statement for changes made to items 1 through 10, Please see Attachments.

4. Change requested
   a. Prerequisite(s): From: __________________________ To: __________________________
   b. Withdrawal (reason): __________________________
   c. Cross-list with: __________________________

   Cross-listed courses require the signature of both department heads.
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? [ ] Yes [ ] No

6. If grade type is changing for existing course, indicate the new grade type:
   - [ ] Grade
   - [ ] S/U
   - [ ] P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   [ ] Yes

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

9. Complete current course title and current catalog course description:
   Graphic Communication and Interface Design. Application of research findings and design principles to the critical analysis of the interfaces of everyday objects, print materials, and Web sites; effective design of graphical displays to communicate functionality and structure; issues related to flawed interfaces, elegant design solutions, user-centered design, usability testing, and Web site accessibility.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    Graphic Communication and Interface Design. Effective communication using the visual channel humans use to process information; application of research findings and design principles to the effective design of graphical displays to communicate functionality and structure and the critical analysis of the interfaces of everyday objects and e-learning resources; includes flawed interfaces, elegant design solutions, user-centered design, and usability.

11. a. As currently in course inventory:
    
    | Prefix | Course # | Title (excluding punctuation) |
    |--------|----------|------------------------------|
    | EDTC   | 621      | GRAPHIC COMM & INTERFACE DSN |
    | 3.00   | 0.00     | SCH | CHP and Fund Code | Admin. Unit | HCC Code | Level |
    | 0.00   | 1107010004 | 0920 | 0 | 3 | 3 | 2 | 6 |

    b. Change to:
    
    | Prefix | Course # | Title (excluding punctuation) |
    |--------|----------|------------------------------|
    | EDTC   | 621      | GRAPHIC COMM & INTERFACE DSN |
    | 3.00   | 0.00     | SCH | CHP and Fund Code | Admin. Unit | HCC Code | Level |
    | 0.00   | 1305010004 | 0920 | 16 | - | 17 | 0 | 3 | 6 | 3 | 2 |

    Approval recommended by: Victor Willson, Ph.D.
    Department Head or Program Chair (Type Name & Sign) / Date
    George Cunningham, Ph.D.
    Chair, College Review Committee / Date
    George Cunningham, Ph.D.
    Dean of College / Date
    Mark Zoran, Ph.D.
    Chair, GC or UCC / Date

Submitted to Coordinating Board by: Associate Director, Curricular Services / Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 08/14
MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: George Cunningham, Ph.D.
        Associate Dean, College of Education and Human Development

FROM: Victor Willson, Ph.D.
      Professor and Head

SUBJECT: Course Change – Educational Technology Course Changes

Attached, please find the appropriate paperwork for changing the course titles and descriptions for six educational technology courses.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: These course titles and descriptions are being updated to reflect changes in the field of educational technology. The current titles and description are outdated.

2. Vote by the Executive Committee: The changes have the unanimous support of our executive Committee and were voted on at the meeting held on 9/7/15.

We appreciate your consideration of this course. Please contact us should you require any additional information.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

1. Course request type: □ Undergraduate  ✔ Graduate  □ First Professional (DOS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name): Educational Psychology

3. Course prefix, number and complete title of course: EDTC 631 Educational Video

4. Change requested
a. Prerequisite(s): From: ____________________________ To: ____________________________

b. Withdrawal (reason): ____________________________

c. Cross-list with: ____________________________

d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? □ Yes  □ No

6. If grade type is changing for existing course, indicate the new grade type: □ Grade □ S/U □ P/F (FLMD)

7. If this course will be stacked, please indicate the course number of the stacked course: ____________________________

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control/export-control-basics-for-distance-education).

9. Complete current course title and current catalog course description:
Educational Video. Design and development of educational video programs using an effect-to-cause model: message definition, scriptwriting, storyboarding, production, post-production editing and evaluation; topics include lighting, sound, the operation of digital video cameras, the use of digital editing software, visual effects, compression, video sharing websites, copyright law, production personnel, medium requirements.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
Educational Video. Design and development of educational videos using choice of video editing program; experience the entire process of developing educational videos, from concept to finished project; emphasis on instructional message design, treatment, and storyboarding.

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC</td>
<td>631</td>
<td>EDUCATIONAL VIDEO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin Unit</th>
<th>FTEE Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>0907010004</td>
<td>0920</td>
<td>0 0 3 6 3 2 6</td>
<td></td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC</td>
<td>631</td>
<td>EDUCATIONAL VIDEO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin Unit</th>
<th>Acad. Year</th>
<th>FTEE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>1305010004</td>
<td>0920</td>
<td>16 - 17</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:

Victor Williams, Ph.D.
Department Head or Program Chair (Type Name & Sign) Date/George Cunningham, Ph.D.
Chair, College Review Committee Date

George Cunningham, Ph.D.
Dean of College Date

Mark Zoran, Ph.D.
Chair, GC or UCC Date

Submitted to Coordinating Board by:

Associate Director, Curricular Services Date Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu

Curricular Services – 08/14
September 4, 2015

MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: George Cunningham, Ph.D.
Associate Dean, College of Education and Human Development

FROM: Victor Willson, Ph.D.
Professor and Head

SUBJECT: Course Change – Educational Technology Course Changes

Attached, please find the appropriate paperwork for changing the course titles and descriptions for six educational technology courses.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: These course titles and descriptions are being updated to reflect changes in the field of educational technology. The current titles and description are outdated.

2. Vote by the Executive Committee: The changes have the unanimous support of our executive Committee and were voted on at the meeting held on 9/7/15.

We appreciate your consideration of this course. Please contact us should you require any additional information.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions:
1. Course request type:  □ Undergraduate  ✓ Graduate  □ First Professional (DO, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):  Educational Psychology
3. Course prefix, number and complete title of course:  EDTC 645: Instructional Applications of Computer Technologies I

4. Change requested
   a. Prerequisite(s):  From: .................................................. To: ..................................................
   b. Withdrawal (reason): ..................................................
   c. Cross-list with: ..................................................

5. Is this an existing core curriculum course?  □ Yes  □ No
6. If grade type is changing for existing course, indicate the new grade type:  □ Grade  □ S/U  □ P/F (CR/MD)
7. If this course will be stacked, please indicate the course number of the stacked course:

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control-basics-for-distance-education).

9. Complete current course title and current catalog course description:
   Instructional Applications of Computer Technologies I. Introduction to the integration of computers, telecommunications, and related technologies into educational practice; resources for personal productivity and development/delivery of instructional materials; applications for both educators and students (word processing, databases, etc.); projects include hands-on development of HyperText, Multimedia, and Internet (web-based) resources in participant's own area of study.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    Emerging Technologies for Learning I. Evaluation of emerging trends and technologies and their impact on learning and performance; emphasis on technologies currently being adopted in organizations and driving changes in education; hands-on activities examining multiple technologies and identifying best practices.

11. a. As currently in course inventory:
    Prefix  Course #  Title (excluding punctuation)
    EDTC  645  INSTR APPS/COM TECH I
    Lect.  Lab  Other  SCH  CIP and Fund Code  Admin Unit  FCE Code  Level
    3.00  0.00  0.00  3.00  1103010004  0920  0  3  6  3  2  6

    b. Change to:
    Prefix  Course #  Title (excluding punctuation)
    EDTC  645  EMERGING TECH FOR LEARN I
    Lect.  Lab  Other  SCH  CIP and Fund Code  Admin Unit  Year  FCE Code  Level
    3.00  0.00  0.00  3.00  1305010004  0920  16  17  0  0  3  6  3  2

   Approval recommended by:  ________________________________  Level  6
   Victor Wilson, Ph.D.  Date  09/21/15
   Department Head or Program Chair (Type Name & Sign)

   George Cunningham, Ph.D.  Date  09/21/15
   Chair, College Review Committee

   George Cunningham, Ph.D.  Date  09/21/15
   Dean of College

   Mark Zoran, Ph.D.  Date  09/21/15
   Chair, GC or UCC

   Submitted to Coordinating Board by:

   Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 08/14
MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: George Cunningham, Ph.D.
Associate Dean, College of Education and Human Development

FROM: Victor Willson, Ph.D.
Professor and Head

SUBJECT: Course Change – Educational Technology Course Changes

Attached, please find the appropriate paperwork for changing the course titles and descriptions for six educational technology courses.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: These course titles and descriptions are being updated to reflect changes in the field of educational technology. The current titles and description are outdated.

2. Vote by the Executive Committee: The changes have the unanimous support of our executive Committee and were voted on at the meeting held on 9/7/15.

We appreciate your consideration of this course. Please contact us should you require any additional information.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

Course request type:  
☐ Undergraduate  ☑ Graduate  ☐ First Professional (DDS, MD, JD, PharmD, DVM)

Request submitted by (Department or Program Name):  Educational Psychology

Course prefix, number and complete title of course:  EDTC 646: Instructional Applications of Computer Technologies II

Change requested:

a. Prerequisite(s): From: ___________________________ To: ___________________________

b. Withdrawal (reason):

c. Cross-listed with: ___________________________

d. Change in course title and description. Enter complete current course title and current course description in item 9, enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

Is this an existing core curriculum course?  
☐ Yes  ☐ No

If grade type is changing for existing course, indicate the new grade type:  
☐ Grade  ☑ S/U  ☐ P/F (CLMD)

If this course will be stacked, please indicate the course number of the stacked course:

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-control-basics-for-distance-education).

Complete current course title and current catalog course description:
Instructional Applications of Computer Technologies II. Issues (social, educational, etc.) and techniques associated with educational applications of computers and related resources and techniques (graphics, multimedia, etc.); relationship of course activities and products to individual educational/instructional philosophies; web-supported.

Complete proposed course title and proposed catalog course description (not to exceed 50 words):
Emerging Technologies for Learning II. Critical examination of trends and technologies expected to have an impact on learning and performance over the next five years; educational futurist predictions, key factors to consider in adoption/integration decisions, and theoretical as well as technological underpinnings; hands-on activities field of interest.

As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC</td>
<td>646</td>
<td>INST APPS/COMP TECH II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CP# and Fund Code</th>
<th>Admin Unit</th>
<th>HCL Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>1103010004</td>
<td>0620</td>
<td>0 0 3 6 3 2 6</td>
</tr>
</tbody>
</table>

Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC</td>
<td>646</td>
<td>EMERGING TECH FOR LEARN II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CP# and Fund Code</th>
<th>Admin Unit</th>
<th>Acad. Year</th>
<th>HCL Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>1305010004</td>
<td>0620</td>
<td>16 - 17</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:
Victor Willson, Ph.D.
Department Head or Program Chair (Type Name & Sign)  Date

George Cunningham, Ph.D.
Chair, College Review Commitee  Date

Mark Zoran, Ph.D.
Chair, GC or UCC  Date

Effective Date
September 4, 2015

MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: George Cunningham, Ph.D.
Associate Dean, College of Education and Human Development

FROM: Victor Willson, Ph.D.
Professor and Head

SUBJECT: Course Change – Educational Technology Course Changes

Attached, please find the appropriate paperwork for changing the course titles and descriptions for six educational technology courses.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: These course titles and descriptions are being updated to reflect changes in the field of educational technology. The current titles and description are outdated.

2. Vote by the Executive Committee: The changes have the unanimous support of our executive Committee and were voted on at the meeting held on 9/7/15.

We appreciate your consideration of this course. Please contact us should you require any additional information.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate ☑ Graduate ☐ Professional ☐
Submit original form and attachments ☐

Form instructions
1. Course request type: ☐ Undergraduate ☑ Graduate ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by: (Department or Program Name): Educational Psychology
3. Course prefix, number and complete title of course: EDTC 651: Tutorials and Simulations

4. Change requested
   a. Prerequisite(s): From: ____________________________ To: ____________________________
   b. Withdrawal (reason): ____________________________
   c. Cross-list with: ____________________________

CROSS-LISTED COURSES REQUIRE THE SIGNATURE OF BOTH DEPARTMENT HEADS.

d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

5. Is this an existing core curriculum course? ☐ Yes ☐ No

6. If grade type is changing for existing course, indicate the new grade type:
   ☐ Grade ☐ S/U ☐ P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   ☒ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-control-basics-for-distance-education)

8. Complete current course title and current catalog course description:
   Tutorials and Simulations. Application of theory to the design and development of two types of computer-based instructional programs: tutorials and simulations; critique of existing instructional software for K-12 students and adult training programs; guidelines for design decisions related to rich media, navigation, learner/program control, practice, interactivity, and feedback.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   E-Learning Design and Development. Design and development of stand-alone instructional programs for independent learning; consideration of research-based principles for the design of these programs, including guidelines for design decisions related to rich media, navigation, learner/program control, practice, interactivity, and feedback; application of these principles to design and develop a program on a topic of choice; use of Adobe Captivate and image editing software.

10. As currently in course inventory:
    Prefix    Course #    Title (excluding punctuation)
    EDTC 651    TUTORIALS AND SIMULATIONS

    Lect.  Lab  Other  SHH  CIP and Fund Code  Admin. Unit  FICE Code  Level
    3.00  0.00  0.00  3.00  1305010004  0920  0  3  6  3  2  6

    Change to:
    Prefix    Course #    Title (excluding punctuation)
    EDTC 651    E-LEARNING DESIGN & DEV

    Lect.  Lab  Other  SHH  CIP and Fund Code  Admin. Unit  Acad. Year  FICE Code  Level
    3.00  0.00  0.00  3.00  1305010004  0920  16  -  17  0  3  6  3  2  6

Approval recommended by:
Victor Willson, Ph.D.  George Cunningham, Ph.D.
Department Head or Program Chair (Type Name & Sign)  Chair, College Review Committee
Date  Date

Department Head or Program Chair (Type Name & Sign)  Dean of College
(Date if cross-listed course)
Mark Zoran, Ph.D.
Chair, GC or UCC
Date  Date

Submitted to Coordinating Board by:
Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
MEMORANDUM

TO: Graduate Instruction Committee, CEHD

THROUGH: George Cunningham, Ph.D.
Associate Dean, College of Education and Human Development

FROM: Victor Willson, Ph.D.
Professor and Head

SUBJECT: Course Change – Educational Technology Course Changes

Attached, please find the appropriate paperwork for changing the course titles and descriptions for six educational technology courses.

Pursuant to the directives of the College, the following information is provided:

1. Rationale: These course titles and descriptions are being updated to reflect changes in the field of educational technology. The current titles and description are outdated.

2. Vote by the Executive Committee: The changes have the unanimous support of our executive Committee and were voted on at the meeting held on 9/7/15.

We appreciate your consideration of this course. Please contact us should you require any additional information.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions

1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional
   [ ] Undergraduate
   [ ] Graduate
   [ ] First Professional

2. Request submitted by (Department or Program Name):
   [ ] Department of Finance
   [ ] Finance

3. Course prefix, number and complete title of course:
   FINC 635 Financial Management for Non-Business

4. Change requested
   - Prerequisite(s):
     - From: ACCT 640 or equivalent or approval of
     - To: Graduate classification
   - Withdrawal (reason):
   - Cross-list with:

5. Is this an existing core curriculum course?
   [ ] Yes
   [ ] No

6. If grade type is changing for existing course, indicate the new grade type:
   - Grade
   - S/U
   - P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education

8. Complete current course title and current catalog course description:
   Financial Management for Non-Business. External and internal factors affecting financial decision-making in the firm; fundamental concepts of accounting and managerial economics.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   Survey of Finance. Financial markets, the investment banking process, interest rates, financial intermediaries and the banking system, financial instruments, time value of money concepts, security valuation and selection, and international finance. Graduate classification only. May not be used for elective credit by a master's candidate in business administration.

10. As currently in course inventory:
    - FINC 635 Financial Management for Non-Business
    - FINC 635 Survey of Finance
    - FINC 635 Survey of Finance

11. Change to:
    - FINC 635 Financial Management for Non-Business
    - FINC 635 Survey of Finance

Approval recommended by:

R. T. Dye
Department Head or Program Chair (Type Name & Sign) Date

Bale Shepby
Chair, College Review Committee Date

Bale Shepby
Dean of College Date

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 08/14
FINC recently refreshed FINC 635 so that we could have the option of offering it either online or in the traditional classroom setting. We redesigned topic coverage so that students could take FINC 635 while co-enrolled in ACCT 640 or even without a previous course in accounting.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

Form Instructions

1. Course request type:
   - [ ] Undergraduate
   - [x] Graduate
   - [ ] First Professional Category

2. Request submitted by (Department or Program Name): Department of Finance

3. Course prefix, number and complete title of course: FINC 685 Directed Studies

4. Change requested
   a. Prerequisite(s): From: ____________________________ To: ____________________________
   b. Withdrawal (reason):
   c. Cross-list with:

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?
   - [ ] Yes
   - [x] No

6. If grade type is changing for existing course, indicate the new grade type:
   - [ ] Grade
   - [ ] S/U
   - [ ] P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   - [x] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

8. Complete current course title and current catalog course description: Directed Studies. Credit 1 to 4 each semester. Directed study of selected problems using recent developments in business research methods. Classification 6 students may not enroll in this course. Prerequisites: Graduate classification and approval of instructor.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words): Directed Studies. Credit 0 to 6 each semester. Directed study of selected problems using recent developments in business research methods. Classification 6 students may not enroll in this course. Prerequisites: Graduate classification and approval of instructor.

10. As currently in course inventory:

    | Prefix | Course # | Title (excluding punctuation) |
    |--------|----------|------------------------------|
    | FINC   | 685      | DIRECTED STUDIES             |

    | Lect. | Lab | Other | SCH | CIP and Fund Code | Admin. Unit | HCC Code | Level |
    |-------|-----|-------|-----|-------------------|-------------|----------|-------|
    | 4.00  | 0.00| 0.00  | 4.00| 5208010016        | 1110        | 0 0 3 6 3 2 6 |

b. Change to:

    | Prefix | Course # | Title (excluding punctuation) |
    |--------|----------|------------------------------|
    | FINC   | 685      | DIRECTED STUDIES             |

    | Lect. | Lab | Other | SCH | CIP and Fund Code | Admin. Unit | Acad. Year | HCC Code | Level |
    |-------|-----|-------|-----|-------------------|-------------|-----------|----------|-------|
    | 6.00  | 0.00| 0.00  | 6.00| 5208010016        | 1110        | 16        | 17 0 0 3 6 3 2 |

Approval recommended by:

R. T. Dye
Department Head or Program Chair (Type Name & Sign)
Date

Chair, College Review Committee
Date

Dean of College
Date

Submitted to Coordinating Board by:

Chair, GC or UCC
Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 08/14
FINC 685 – Directed Studies
Section 601 – Fall 2016

Instructor: TBD
Office: TBD
Phone: TBD
E-Mail: TBD
Office Hours: TBD

Course Description

FINC 685 is a customized problems course supervised by a faculty member. Students request creation of a FINC 685 section by submitting an Application for Problems Course (attached) to the department head. The Application specifies credit hours (subject to approval from the directing faculty member and the department head), along with a description of the problems to be addressed and the techniques that will be used to tackle the problems. By design, learning objectives are unique for every section of FINC 685.

Course Learning Outcomes

At the completion of the course, successful students should be able to:

- Apply concepts learned in required FINC courses to solve academic or business-related problems that are not encountered in other established courses.

For example, a recent multi-disciplinary directed studies course provided students of finance, marketing, supply chain management and engineering an opportunity to work together with Boeing to develop a business plan for delivery of small packages and goods using autonomous air vehicles such as quad copters. Finance-related objectives for the project include

- Measure potential demand for autonomous delivery services.
- Specify financial operational requirements and performance objectives.
- Create a business plan and budget for the project.

Catalog Description

Directed study of selected problems using recent developments in business research methods.

Course Prerequisites

Graduate classification and approval of instructor. Classification 6 students may not enroll in this course.
COURSE MATERIALS

Course materials vary by project and may include academic textbooks, practitioner-oriented publications, or materials provided by a corporate business partner.

GRADING AND COURSE REQUIREMENTS

Students are required to submit deliverables required by the project (such as a business plan in the Boeing example) or to submit a paper describing the problems encountered and approaches used to solve the problems. Letter grades follow the standard 90/80/70/60 scale.

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 - 100</td>
<td>A</td>
</tr>
<tr>
<td>80 - 89</td>
<td>B</td>
</tr>
<tr>
<td>70 - 79</td>
<td>C</td>
</tr>
<tr>
<td>60 - 69</td>
<td>D</td>
</tr>
<tr>
<td>0 - 59</td>
<td>F</td>
</tr>
</tbody>
</table>

Required deliverables or term paper 100%

ATTENDANCE POLICY

The university views class attendance as an individual student responsibility. Students are expected to attend class and to complete all assignments.

MAKE-UP WORK POLICY

Students with excused absences will receive adequate time and opportunities to submit the required deliverables that are delayed due to those absences. To submit work under the “make-up” policy requires documentation as specified in the TAMU student rules (see Student Rules: Rule 7 – http://student-rules.tamu.edu).

Students with unexcused absences will receive no credit for missed deliverables.

LATE WORK POLICY

Any course deliverable turned in late will be discounted by 10% per day. “Late” means submitting deliverable any time after the assignment deadline has passed. Deliverables submitted more than 72 hours late will not be graded.

**Exception:** Students with excused absences will receive adequate time and opportunities to submit work they missed due to absence. Students must provide documentation and notice to the instructor as specified in TAMU student rules. (Student Rules: Rule 7 – http://student-rules.tamu.edu).
STUDENTS WITH DISABILITIES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 979-845-1637. For additional information visit http://disability.tamu.edu.

AGGIE HONOR CODE

“An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. You can learn more about the Honor Council Rules and Procedures as well as your rights and responsibilities at the following URL:

http://aggiehonor.tamu.edu

For each assignment or project that is submitted for grading in this course, students must affirm their commitment to the Aggie Honor Code with the following statement.

“On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work.”

Even if you do not explicitly state the above, by submitting any course deliverable, you affirm your adherence to the Aggie Honor Statement for that deliverable.

“Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one’s work, should the instructor request it, is sufficient grounds to initiate an academic dishonesty case.” (http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx)

I will follow the steps and processes outlined in the Honor Council Rules and Procedures in all cases of academic misconduct in this class (see http://aggiehonor.tamu.edu/RulesAndProcedures).

STATEMENT ON PLAGIARISM

As commonly defined, plagiarism consists of passing off as one’s own, ideas, words, writing, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic offenses, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please review additional information provided under Student Rule 20 and Aggie Honor System Rules under “Plagiarism” (see Student Rule 20 http://student-rules.tamu.edu and Aggie Honor System Rules http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx).
To: Dr. Sorin Sorescu  
FINC Department Head

From: ________________________________  ________________________________  
Name of Applicant (Please Print)  UIN

Subject: Request for enrollment in FINC 685 Directed Studies

1. I request enrollment in FINC 685 for the Spring / Summer / Fall semester, 20___ for ____ semester hours credit.

2. ________________________________ has agreed to direct this study.  
(Full name of faculty supervisor)

3. Describe briefly the problems to be solved. Add additional pages as necessary.

4. Describe the technique you will use to solve the problem(s). Provide a brief overview of experiments, statistics, readings, observations, etc., that will be employed.

5. I have read and I understand the general directions on the reverse side of this application. My grade point average is ____, which meets the departmental requirement (3.0 or better overall and in FINC) for enrolling in a problems course.

6. I will submit three copies of this form, one each for the department head, faculty supervisor, and myself.

_____________________________  ________________________________  
Applicant Signature  Date

_____________________________  ________________________________  
Faculty Supervisor Signature  Date

_____________________________  ________________________________  
Department Head Signature  Date
Certain programs and colleges limit the total number of seminar, research, or directed studies courses that can appear in a curriculum. It is the student's responsibility to consult with an advisor to determine whether or not this problems course can appear in your degree plan.

Required activities for a Directed Studies course must be consistent with course loads for regularly scheduled courses. It is the faculty supervisor's responsibility to ensure that course requirements are adequate for the number of credit hours registered.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

Form Instructions
1. Course request type: ☐ Undergraduate ☑ Graduate ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Genetics
3. Course prefix, number and complete title of course: GENE 608 Critical Analysis of Genetics Literature

Attach a brief supporting statement for changes made to items 4a thru 4d and 10 below.

4. Change requested
   a. Prerequisite(s): From: ___________________________ To: ___________________________
   b. Withdrawal (reason): ___________________________
   c. Cross-list with: ___________________________

Cross-listed courses require the signature of both department heads.

5. Is this an existing core curriculum course? ☐ Yes ☑ No
6. If grade type is changing for existing course, indicate the new grade type: ☐ Grade S/U ☐ P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:
   ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
8. Complete current course title and current catalog course description:
   Critical Analysis of Genetics Literature. An introduction to primary literature in the field of genetics which will give students experience in critically evaluating scientific papers and develop an appreciation of how genetics can be used to address important biological questions.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

10. Complete current course title and course description:
   CRIT ANALYSIS GENE LIT

11. a. As currently in course inventory:
   Prefix  Course #  Title (excluding punctuation)
   GENE  608  CRIT ANALYSIS GENE LIT

   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  FICE Code
   1.00  1.00  26.0801.00  GENE  0 0 3 6 3 2
   Level  6

   b. Change to:
   Prefix  Course #  Title (excluding punctuation)
   GENE  608  GENETIC MODEL SYSTEMS

   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  FICE Code
   2.00  2.00  26.0801.00  GENE  16 - 17 0 0 3 6 3 2
   Level  6

   Approval recommended by:
   Craig Coates

   Department Head or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee Date

   Department Head or Program Chair (Type Name & Sign) Date
   (If cross-listed course)
   Dean of College Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC Date

   Associate Director, Curricular Services Date

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type: □ Undergraduate ☑ Graduate □ First Professional (DDS, MD, JD, PharmD, DVMD)
2. Request submitted by (Department or Program Name): Marine Sciences
3. Course prefix, number and complete title of course: MARS 675 Environmental Management Strategies for Scientists

4. Change requested
a. Prerequisite(s): From: ___________________________ To: ___________________________
   crossed-listed courses require the signature of both department heads.
b. Withdrawal (reason): ___________________________
c. Cross-list with: ___________________________
d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? □ Yes □ No
6. If grade type is changing for existing course, indicate the new grade type: □ Grade □ S/U □ P/F (LMD)
7. If this course will be stacked, please indicate the course number of the stacked course:
8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls-basics-for-distance-education).
9. Complete current course title and current catalog course description:
   ENVIRONMENTAL MANAGEMENT STRATEGIES FOR SCIENTISTS. (2-0) Credit 2. The course is designed to
   provide and EMS strategist's skills with focus on international standards, including structure and elements of an EMS,
   determining how an effective EMS can reduce costs and increase profits, case studies. Prerequisites: graduate status or approval of instructor.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    ENVIRONMENTAL MANAGEMENT STRATEGIES FOR SCIENTISTS (3-0) Credit 3. The elements of EMS
    strategist's skills, including what environmental laws may be triggered by scientific activities; the fundamental
    structure of an EMS; EMS alternatives; concepts in an audit; uses of an effective EMS to reduce costs and increase
    profits. Prerequisite: graduate status or approval of instructor.

11. a. As currently in course inventory:

   Prefix | Course # | Title (excluding punctuation) |
   ------ | -------- | ----------------------------- |
   MARS  | 675      | ENV MGMT STRATEGIES           |

<table>
<thead>
<tr>
<th>Lecl.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.00</td>
<td>03020500005</td>
<td>1810</td>
<td>3 1 0 2 9 8</td>
</tr>
</tbody>
</table>

   b. Change to:

   Prefix | Course # | Title (excluding punctuation) |
   ------ | -------- | ----------------------------- |
   MARS  | 675      | ENV MGMT STRATEGIES           |

<table>
<thead>
<tr>
<th>Lecl.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>03020500005</td>
<td>1810</td>
<td>3 1 0 2 9 8</td>
<td></td>
</tr>
</tbody>
</table>

   Approval recommended by:

   [Signature] [Date]

   Department Head or Program Chair (Type Name & Sign) Date

   Chair, College Review Committee [Signature] [Date]

   Dean of College [Signature] [Date]

   Submitted to Coordinating Board by:

   Chair, GC or UCC [Date]

   Effective Date [Date]

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
Texas A&M University
Departmental Request for a Change in Course
Undergraduate ☐ Graduate ☐ Professional

I am requesting a change in credit hours for MARS 675: Environmental Management Strategies for Scientists. The request increases the SCHs from 2 to 3 hours, the number of hours originally assigned to this course. The increase to 3 hours will better reflect the course content, contact hours, and overall expectations of students enrolled in the course.

Thanks for your consideration.

W.M. von Zharen, Regents Professor
Department of Marine Sciences
Texas A&M University at Galveston
dr_vonzharen@msn.com
MARS 675 – Environmental Management Strategies for Scientists (Distance Learning);  
Professor W.M. von Zharen; dr_vonzharen@msn.com  
Spring 2016 (3 credit hours)

Course Description and Prerequisites: The elements of EMS strategist's skills, including what 
environmental laws may be triggered by scientific activities; the fundamental structure of an EMS; 
EMS alternatives; concepts in an audit; uses of an effective EMS to reduce costs and increase 
profits. Prerequisite: graduate status or approval of instructor.

GENERAL GOAL: Environmental Management Strategies have become a critical component of 
business and organizational strategies. This course explores the development and 
implementation of this management system.

By the conclusion of this course, the student will be able to:
- Explain the origins of environmentalism
- Discuss the history of and explain the rationale for ISO 14001
- Apply the concepts of an EMS to a hypothetical company
- Discuss the economic benefits of implementing an EMS
- Discuss the role of stakeholders in an EMS strategy and the role of cultural diversity 
within an EMS

Specific objectives may be found at the beginning of each module.

REQUIRED TEXTBOOK (Available from the campus bookstore or Amazon):

Contacting Dr. von Zharen: Please email Dr. v via eCampus mail on the MARS 675 class, 
which can be accessed through the eCampus link. Mail will be checked on a regular basis.

For questions that require a faster response, please use this email: dr_vonzharen@msn.com. Dr. 
v is almost always available and ready to help!

LOGISTICS: READ CAREFULLY
1. DISTANCE LEARNING: The course is available via distance learning. All material will be 
posted in the form of Modules, in Power Point, in eCampus. The eCampus can be 
accessed through the eCampus link under the Howdy portal.
2. LOGISTICS MODULE; Module 0 is the Logistics module; read it carefully as well as 
these instructions.
3. DISCUSSION: All modules are available to you on eCampus. There will be discussion 
questions embedded in the modules. These questions are to be answered and 
examined with a partner through the appropriate discussion board. You must also 
critique and discuss your partner's answers he/she exchanged with you.
4. PARTNER LIST; EXCHANGE WITH PARTNER; CHOOSING YOUR PARTNER EACH 
WEEK; Each week, you will exchange with a partner. The TA will provide a list of 
partners beginning with Module 1; however, if a student registers late or there are other 
changes, a revised Partner List will be generated. So keep your eyes open for any 
revised list.
5. MODULE QUIZ: Each module has a quiz at the end. You will take the quiz and 
exchange your answers with your partner through the appropriate discussion board.
6. STUDENT QUIZ: You will also be developing five short answer questions (multiple choice or true/false – no fill-in-the-blank or sentence required answers) and answers from the required reading material noted at the beginning of each module. Exchange these with your partner for that module. When you provide the quiz answers, include the page number or slide number of the reading or other identification on which you found the material so that your partner can review her or his response more thoroughly.

7. COPY YOUR RESPONSES: Please copy all eCampus emails to Dr. v and the TA.

8. DO NOT BE LATE: Remember, if you are late on an assignment, this is penalizing your partner. DO NOT procrastinate. Always contact Professor von Zharen immediately with any questions.

9. RATE OF MODULE COMPLETION: Beginning with the first week of class, a module should be completed at the rate of one per week minimum.

10. WEEKLY DUE DATES: All modules, exchanges, and discussions are due by Sunday of each week. All partner critiques will be due no later than every Wednesday following the discussion post.

11. DON'T HAVE TYPOS OR GRAMMAR ISSUES: Use the spelling and grammar check programs on your computer and on eCampus; that includes checking for errors on any and all emails. Bad spelling and grammar make it difficult to read and understand your work and may result in a poor grade. If you have trouble writing and footnoting legal papers, 1) see The Elements of Style by Strunk and White (available online); 2) look over the “Ocean Governance” article by von Zharen and available on Lexis; and 3) ask someone to proofread your papers.

12. TIME REQUIRED EACH WEEK: For this course, a student is expected to dedicate a minimum of nine hours per week. And have a positive attitude; Dr. v. worked hard to make this course enjoyable as well as informative.

MEETING IN PERSON: Dr. v. will host an optional weekly meeting for anyone who would like to discuss EMS issues in person. Typically, it will be on Tuesday (or Wednesday) afternoon, from 3:00 – 5:00 p.m., but she will post the date.

METHODOLOGY AND GRADING:
The objectives of the course will be met through readings, modules including Camtasia lectures, and involvement in specific projects:

1. Current Module, Reading, Development of and Response to Quizzes AND Critiquing and Evaluation of Colleagues’ Submission including final module – In other words, actively and effectively participating in all requirements by the due date (60%)
2. Research and Development of Interactive Environmental Management Strategy Module in PowerPoint with Camtasia and/or videos (35%)
3. Self-Evaluation (5%)
4. Bonus Modules: You may complete these at any time; if you don’t complete any bonus module, you will not be penalized. If you do complete a bonus module, you will earn extra credit depending on how many you complete.
5. Bonus Points: Bonus points may be posted throughout the semester. They are optional.

Current Module, Reading, and Quizzes:

Current Power Point Modules: Within each module, there is a quiz and discussions; evaluate your partner’s discussion and quizzes through the appropriate discussion board. The following provides a list of when specific modules are addressed as per the schedule noted in this syllabus and the logistics module (note that this comports with the chapters in the textbook):
Week 1 – Logistics
Week 2 – Genesis of Environmental Management Systems (EMS)
Week 3 – ISO 14000 Series and Tools
Week 4 – Benefits of Implementing ISO 14001 and Environmental Systems
Week 5 – Beginning the EMS Process
Week 6 and 7 – Environmental Policy
Week 8 – Planning
Week 9 – Implementation and Operation
Week 10 – Checking and Corrective Action
Week 11 – Management Review
Week 12 – Research Project Posted and Reviewed
Week 13 – Auditing and Certification
Week 14 – Case Study: Applying EMS Strategy

Research: Development of Interactive Environmental Management Strategy (EMS)
Module in PowerPoint

Each student must select an EMS topic and develop a Power Point module with interactive components that emphasizes an area of interest to the student and would help meet a career goal and/or complements areas learned in the course. The module should be posted to eCampus by the 12th week of class. The module should be both informative and enjoyable to read. Include any relevant reading assignments, quizzes, videos, among other materials.

The module must be critiqued and evaluated by all other members of the class, not just a partner; these critiques should be posted to everyone in the class. These critiques are due 13th week of class. The student then has until the last “regular” day of class to make any final changes to her or his module and post it again.

It is critical that the student cite all sources including photos and videos. If the idea or photo is not your own (if the information did not come from your own scientific, legal, or management research), then you must give a reference citation at the exact place where the quote, paraphrasing, bulleting, photo, etc., is inserted in the PowerPoint. If you did not take the photo or your research did not arrive at a conclusion or a statistic, for example, then you must provide the source. Also, give a list of sources/references at the end of the presentation.

Critique and Evaluation of Colleagues’ Submission

Again, students must critique the questions and answers submitted. Development of species-specific modules should also be critiqued by everyone in the class.

Self-Evaluation

One of the most powerful complex structures of self-assessment in thinking is that of completing a global analysis of the strengths and weaknesses of your overall performance in class. Therefore, you are required to argue for a grade you believe you deserve and “make a case” for receiving a particular grade using criteria provided in this syllabus and citing specific evidence from your work throughout the semester. Understand that if you argue for a higher grade than you deserve, your grade will be negatively affected. However, an accurate documentation of a lower grade will raise that grade. For example, if you do an excellent job documenting that you have done “D” work on the course, then you will receive an “A” on the self-assessment, thereby raising your final grade by a certain percentage. The self-evaluation should be no fewer than two single-typed pages.
Grading Scale:
90 - 100% = A
80 - 89.9% = B
70 - 79.9% = C
60 - 69.9% = D
<59.9 = F

What Each Grade Represents:
F – The essence of F-level work is that the student demonstrated a pattern of non-critical thinking and/or failed to do the required work of the course. Typical characteristics of the work of a student who receives an F include: the student does not understand the basic nature of thinking in this subject area and does not display the related skills and abilities which are the heart of the course. The work at the end of the course is vague, imprecise, and unreasoned as it was in the beginning. There is little evidence that the student is genuinely engaged in the task of taking charge of her/his thinking. Many assignments appear to have been done pro forma with the student simply going through the motions without really putting any significant effort into thinking her or his way through them.

D – The essence of D-level work is that it demonstrates only a minimal level of understanding and skill in critical thinking in the course area. D work at the end of the course shows only occasional environmental thinking skills. Most assignments are poorly done. There is little evidence that the student is “reasoning through the assignment in a critical manner. D work rarely shows any effort to take charge of ideas, assumptions, inferences, and intellectual processes. In general, D-level thinking lacks discipline and clarity.

C – The essence of C-level work is that it demonstrates more than a minimal level of skill, but it is also highly inconsistent with as many weaknesses as strengths. C-level work illustrates some but inconsistent achievement in grasping what environmental thinking is along with the development of modest critical thinking skills or ability. Though some assignments are reasonably well done, others are poorly done or at best are mediocre. On the whole, C-level work shows only modest and inconsistent reasoning and problem-solving skills.

B – The essence of B-level work is that it demonstrates more strengths than weaknesses and is more consistent in high level performance than C-level work. It nevertheless has some distinctive weaknesses though no major ones. B-level work represents demonstrable achievement in grasping what environmental thinking is. B-level work at the end of the course is, on the whole, clear, precise, and well-reasoned, though with occasional lapses into weak reasoning. The work demonstrates a mind beginning to take charge of its own ideas, assumptions, inferences, and intellectual processes with the student often analyzing issues clearly and precisely.

A – The essence of A-level work is excellence overall with no major weaknesses. A-level work demonstrates real achievement in grasping what environmental thinking is, along with the clear development of a range of specific skills and abilities. The work at the end of the course is, on the whole, clear, precise, and well-reasoned. The A-level students analyzes issues clearly and precisely, formulates information clearly, usually distinguishes the relevant from the irrelevant, recognizes key questionable assumption. A-level work displays excellent reasoning and problem-solving skills and is consistently at a high level of intellectual excellence.

**BONUS MODULES**
These will be posted as “Bonus Modules” and then the title. Select any you choose. Complete the module and then submit an evaluation of the module including telling me what worked to help you learn the subject matter as well as suggestions on how to improve the module if necessary.
Americans with Disabilities Act (ADA) Policy Statement The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this law requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409) 740-4587. For additional information visit http://www.tamug.edu/counsel/services/dssprocedures.htm.

Academic Integrity Statement and Policy "An Aggie does not lie, cheat, or steal or tolerate those who do. For further details, refer to the Honor Council Rules and Procedures on the web: http://www.tamug.edu/HonorSystem.

Statement on Absences: Information concerning absences is contained in the University Student Rules Section 7. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45). http://www.tamug.edu/stu/MB/Academic%20Rules/Rule%2017.pdf.

Statement on the Family Educational Rights and Privacy Act (FERPA): FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Records Office. Items that can never be identified as public information are a student's social security number or institutional identification number, citizenship, gender, grades, SPR or class schedule. No efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.
Form Instructions:

1. Course request type:
   - [ ] Undergraduate
   - [ ] Graduate
   - [ ] First Professional

2. Request submitted by (Department or Program Name):
   Department of Performance Studies

3. Course prefix, number and complete title of course:
   PERE605: Topics in Globalization and Performance

4. Change requested
   a. Prerequisite(s): From:
   b. Withdrawal (reason):
   c. Cross-list with:
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?
   - [ ] Yes
   - [ ] No

6. If grade type is changing for existing course, indicate the new grade type:
   - [ ] Grade
   - [ ] S/U
   - [ ] P/F (KLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://pvr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

8. Complete current course title and current catalog course description:
   PERE605: Topics in Globalization and Performance
   Examines expressive cultures in global contexts; theoretical and methodological approaches to globalization and in performance and as practices of everyday life. May be taken two times for credit.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   PERE605: Globalization and Performance
   Examines global performances; theoretical and methodological approaches to globalization and as practices of everyday life.

10. As currently in course inventory:

    | Prefix | Course # | Title (excluding punctuation) |
    |--------|----------|-----------------------------|
    | PERE   | 605      | Topics Global Performance   |

    | Lect. | Lab | Other | SCH | CHI and Fund Code | Admin. Unit | FICE Code |
    |-------|-----|-------|-----|------------------|-------------|-----------|
    | 3     | 0   |       | 3   | 50010            | 2196        | 0 3 6 3 2 |

    | Level |
    |-------|
    | 0     |

    Change to:

    | Prefix | Course # | Title (excluding punctuation) |
    |--------|----------|-----------------------------|
    | PERE   | 605      | Globalization Performance   |

    | Lect. | Lab | Other | SCH | CHI and Fund Code | Admin. Unit | Acad. Year | FICE Code |
    |-------|-----|-------|-----|------------------|-------------|------------|-----------|
    | 3     | 0   |       | 3   | 50010            | 2196        | 0 3 6 3 2 |

    | Level |
    |-------|
    | 6     |

Approval recommended by:

Donna Lee Fox
Department Head or Program Chair
Date 12/15

Chair, College Review Committee
Dean of College
Date 12/15

Submitted to Coordinating Board by:

Associate Director, Curricular Services
Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 08/14
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
- Submit original form and attachments -

Form Instructions
1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional (EDD, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   Department of Performance Studies

3. Course prefix, number and complete title of course:
   PERF611: Contemporary Religions and Performance

4. Change requested
   a. Prerequisite(s): From: ____________________________ To: ____________________________
   b. Withdrawal (reason): ____________________________
   c. Cross-list with: ____________________________
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?
   - Yes
   - No

6. If grade type is changing for existing course, indicate the new grade type:
   - Grade
   - S/U
   - P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   - I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

8. Complete current course title and current catalog course description:
   PERF611: Contemporary Religions and Performance
   Examines the intricate relationship between religious traditions and performance. Focus on contemporary religious movements.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   PERF611: Religions, Spirituality, and Performance
   Examines global performances: theoretical and methodological approaches to globalization and/in performance and/as practices of everyday life.

10. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>611</td>
<td>Contemp Religions Performance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>HEC Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>50010</td>
<td>2196</td>
<td>0 6 3 6 3 2</td>
<td>6</td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>611</td>
<td>Religions Spirits Performance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HEC Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>50010</td>
<td>2196</td>
<td>16 - 17</td>
<td>0 0 3 6 3 2</td>
<td>6</td>
</tr>
</tbody>
</table>

Approval recommended by:

Donnelle Day
Department Head or Program Chair (Type Name & Sign) Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Associate Director, Curricular Services Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type:
   □ Undergraduate  ✔ Graduate  □ First Professional (MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):
   Department of Performance Studies
3. Course prefix, number and complete title of course:
   PERF615: Spectacle, Performance, and Politics

   Attach a brief supporting statement for changes made to items 1a through 10 below.
4. Change requested
   a. Prerequisite(s): From: ____________________________ To: ____________________________
   b. Withdrawal (reason): ____________________________
   c. Cross-list with:
   (Cross-listed courses require the signatures of both department heads)
   d. Change in course title and description. Enter complete current course title and current course description in Item 9; enter proposed course title and proposed course description in Item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?
   □ Yes  ✔ No
6. If grade type is changing for existing course, indicate the new grade type:
   □ Grade  □ S/U  □ P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:
   ✔ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-basics-for-distance-education).
8. Complete current course title and current catalog course description:
   PERF615: Spectacle, Performance, and Politics
   Interdisciplinary and international exploration of spectacle as political performance.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   PERF615: Spectacle and Performance
   Examines various popular performances as spectacle.

10. As currently in course inventory:
  
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>615</td>
<td>Spec Perf Politics</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

   b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>605</td>
<td>Spectacle Performance</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

   Approval recommended by:
   Donnalee Dow  Oct 6, 2015
   Department Head or Program Chair (Type Name & Sign)  Date

   Chair, College Review Committee  Date
   Dean of College  Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC  Date  Effective Date

   Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 08/14
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments.

Form Instructions
1. Course request type: [ ] Undergraduate [ ] Graduate [ ] First Professional (MFA, MA, MEng, etc.)
2. Request submitted by (Department or Program Name): Department of Performance Studies
3. Course prefix, number and complete title of course: PERF621: Topics in Popular Music Studies
4. Change requested
   a. Prerequisite(s): From: [ ] To: Graduate Classification.
   b. Withdrawal (reason):
   c. Cross-list with:
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? [ ] Yes [ ] No
6. If grade type is changing for existing course, indicate the new grade type: [ ] Grade [ ] S/U [ ] P/F (CLMM)
7. If this course will be stacked, please indicate the course number of the stacked course:
   [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
8. Complete current course title and current catalog course description:
   PERF621: Topics in Popular Music Studies
   Examination of context, politics, and political economy of specific popular music forms. May be repeated for a total of 9 credits.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   PERF621: Graduate Studies in Popular Music Research
   Examination of context, politics, and political economy of specific popular music forms.

10. a. As currently in course inventory:
    Prefix  Course #  Title (excluding punctuation)
    PERF  621  Topics Pop Music
    Lect.  Lab  Other  SCH  CHP and Fund Code  Admin. Unit  HEC Code  Level
    3  0  3  50010  219E  0  3  6  3  2
    b. Change to:
    Prefix  Course #  Title (excluding punctuation)
    PERF  621  Grad Stud Pop Music Research
    Lect.  Lab  Other  SCH  CHP and Fund Code  Admin. Unit  Year  HEC Code  Level
    3  0  3  50010  219E  16  17  0  0  3  6  3  2

Approval recommended by:
Department Head or Program Chair (Type Name & Sign) [Signature]
Date Oct 16, 2015
Chair, College Review Committee [Signature]
Date 10-12-15
Dean of College [Signature]
Date 10-12-15

Submitted to Coordinating Board by:
Associate Director, Curricular Services [Signature]
Date
Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 08/14
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type: □ Undergraduate  □ Graduate  □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Information and Operations Management
3. Course prefix, number and complete title of course: SCMT 610. Quantitative Analysis for Business Decisions

4. Change requested
   a. Prerequisite(s): From: ________________________________ To: ________________________________
   b. Withdrawal (reason): ________________________________
   c. Cross-list with: ____________________________________
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.
   f. Is this an existing core curriculum course? □ Yes □ No
   g. If grade type is changing for existing course, indicate the new grade type: □ Grade □ S/U □ P/F (CLMD)
   h. If this course will be stacked, please indicate the course number of the stacked course:
   i. I verify that I have reviewed the FAQ for Export Controls Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

5. Complete current course title and current catalog course description:
Quantitative Analysis for Business Decisions.
Formulation and structuring of business problems using selected quantitative techniques; modeling and statistical analysis of computer applications.

6. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
Business Analytics.

7. Approval recommended by:
   Dr. Rich Matters

8. Department Head or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee

9. Department Head or Program Chair (Type Name & Sign) Date
   Dean of College

10. Submitted to Coordinating Board by:
    Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
* Submit original form and attachments *

Form Instructions
1. Course request type: [ ] Undergraduate [ ] Graduate [ ] First Professional (DOS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Visualization
3. Course prefix, number and complete title of course: VIZA 617 Advanced Animation

4. Change requested
   a. Prerequisite(s): From: [VIZA 615 or approval of instructor] To: [VIZA 613 or approval of instructor]
   b. Withdrawal (reason):
   c. Cross-list with:

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. [Attach a course syllabus.]

5. Is this an existing core curriculum course? [ ] Yes [ ] No
6. If grade type is changing for existing course, indicate the new grade type: [ ] Grade [ ] S/U [ ] P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

   Prefix: Course: Title (excluding punctuation):

   Lect. Lab Other SCH CPI and Fund Code Admin Unit HCJ Code Level
   b. Change to:

   Prefix: Course: Title (excluding punctuation):

   Lect. Lab Other SCH CPI and Fund Code Admin Unit Academic Year HCJ Code Level

   Approval recommended by: [Signature]
   Department Head or Program Chair (Type Name & Sign) Date

   Chair, College Review Committee Date

   Department Head or Program Chair (Type Name & Sign) Date
   (If cross-listed course)

   Submitted to Coordinating Board by:
   Chair, GC or UCC Date
   Date Affective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sanders@tamu.edu
Curricular Services – 08/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
* Submit original form and attachments *

Form Instructions
1. Course request type:
   - [ ] Undergraduate  [x] Graduate  [ ] First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):
   - Visualization
3. Course prefix, number and complete title of course:
   - VIZA 622 Design Communication I

   Change requested
   a. Prerequisite(s): From: VIZA 612, graduate classification or approval of instructor.
   b. Withdrawal (reason): 
   c. Cross-list with: 

   Cross-listed courses require the signature of both department heads.
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.
5. Is this an existing core curriculum course?
   - [ ] Yes  [ ] No
6. If grade type is changing for existing course, indicate the new grade type:
   - [ ] Grade  [ ] S/U  [ ] P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:
   - I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://ver.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
8. Complete current course title and current catalog course description:

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

10. As currently in course inventory:
    a. Prefix
    - [ ] VIZA
    - [ ] Course
    - [ ] Title (excluding punctuation):
        - [ ] SUG
    - [ ] LST
    - [ ] OTH
    - [ ] SCH
    - [ ] CIP and Fund Code
    - [ ] Admin. Unit
    - [ ] HRL Code
    - [ ] Level
   b. Change to:
    a. Prefix
    - [ ] VIZA
    - [ ] Course
    - [ ] Title (excluding punctuation):
        - [ ] SUG
    - [ ] LST
    - [ ] OTH
    - [ ] SCH
    - [ ] CIP and Fund Code
    - [ ] Admin. Unit
    - [ ] Level
    - [ ] HRL Code

   Approval recommended by:
   - Frederic L. Pang
   - Department Head or Program Chair
   - Type Name & Sign

   [Signature]

   Date: 06-15-16

   Chair, College Review Committee
   - Type Name & Sign
   - Date: 06-15-16

   Dean of College
   - Type Name & Sign
   - Date: 06-15-16

   Chair, GC or UCC
   - Type Name & Sign
   - Date: 06-15-16

   Submitted to Coordinating Board by:
   - Associate Director, Curricular Services
   - Type Name & Sign
   - Date: 06-15-16

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor  
Associate Department Head  
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type: □ Undergraduate □ Graduate □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Visualization
3. Course prefix, number and complete title of course: VIZA 627 Design Communication III

Change requested
a. Prerequisite(s): From: ____________________________
   To: ____________________________
   Withdrawal (reason): ____________________________
   Cross-list with: ____________________________

   Cross-listed courses require the signature of both department chairs.

   Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

   Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

   Is this an existing core curriculum course? □ Yes □ No
   If grade type is changing for existing course, indicate the new grade type: □ Grade □ S/U □ P/F (CLMD)
   If this course will be stacked, please indicate the course number of the stacked course:
   [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education [http://erp.tamu.edu/resources/export-contROLS/EXPoRT-CONTROLS-BASICS-FoR-DISTANCE-EDUCATION].

9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>HCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acct. Year</th>
<th>HCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 0 3 6 3 2</td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:

Frederic L. Parke
Department Head or Program Chair (Type Name & Sign) Date 10-16-15

Dean of College
Chair, College Review Committee Date 10-14-15

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 06/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Fredric I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
* Submit original form and attachments *

Form Instructions
1. Course request type: □ Undergraduate ✓ Graduate □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Visualization

<table>
<thead>
<tr>
<th>Change requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite(s): From:</td>
</tr>
<tr>
<td>Withdrawal (reason):</td>
</tr>
<tr>
<td>Cross-list with:</td>
</tr>
</tbody>
</table>

Graduate classification in visualization or approval of instructor. To:
Graduate classification or approval of instructor.

Cross-listed courses require the signature of both department chairs.

d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? □ Yes □ No

6. If grade type is changing for existing course, indicate the new grade type: □ Grade □ S/U □ P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course: I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

8. Complete current course title and current catalog course description:

9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab</td>
<td>Other</td>
<td>SCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab</td>
<td>Other</td>
<td>SCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:

Frederic L. Parks
Department Head or Program Chair (Type Name & Sign) Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu

Curricular Services – 08/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

1. Course request type:
   □ Undergraduate  ✔ Graduate  □ First Professional (DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   Visualization

3. Course prefix, number and complete title of course:
   VIZA 630 Contemporary Art Studio/ Seminar I

4. Change requested:
   a. Prerequisite(s): From: ____________________________ To: ____________________________
      ____________________________
   b. Withdrawal (reason):
   c. Cross-list with:
      ____________________________
      ____________________________
      ____________________________
      ____________________________
      ____________________________
      ____________________________
      ____________________________
      ____________________________
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?
   □ Yes  □ No

6. If grade type is changing for existing course, indicate the new grade type:
   □ Grade  □ S/U  □ P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:
   ✔ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpe.tamu.edu/resources/export-
      controls/export-control-basics-for-distance-education).

9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:
    
    Prefix  Course #  Title (excluding punctuation)
    
    Lecc.  Lab  Other  SCH  CRN and Limit Code  Admin. Unit  HEC Code  Level
    0 0 3 6 3 2

    b. Change to:
    
    Prefix  Course #  Title (excluding punctuation)
    
    Lecc.  Lab  Other  SCH  CRN and Limit Code  Admin. Unit  Acct. Year  HEC Code  Level
    - 0 0 3 6 3 2

Approval recommended by:

Frederic L. Parks

Department Head or Program Chair (Type Name & Sign) Date
Chair, College Review Committee Date

Department Head or Program Chair (Type Name & Sign) Date
(If cross-listed course)
Dean of College Date

Submitted to Coordinating Board by:

Chair, GC or UCC

Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14

RECEIVED Dec 16, 2015
CURRICULAR SERVICES
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments.

**Form Instructions**
1. Course request type:
   - [ ] Undergraduate
   - [ ] Graduate
   - [ ] First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Visual Arts
3. Course prefix, number and complete title of course: VIZA 631 Contemporary Art Studio/Seminar II

**Prerequisite(s):** From: MFA or MS in Visualization and VIZA 630 or approval of instructor; graduate classification. To: VIZA 630 or approval of instructor.

4. Cross-list with:

   - Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   - Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?
   - [ ] Yes
   - [ ] No

6. If grade type is changing for existing course, indicate the new grade type:
   - [ ] Grade
   - [ ] S/U
   - [ ] P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:

   - [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control-export-controls-basics-for-distance-education).

8. Department Head or Program Chair (Type Name & Sign) Date

9. Chair, College Review Committee Date

10. Department Head or Program Chair (Type Name & Sign) Date

11. Department Head or Program Chair (Type Name & Sign) Date

**Submitted to Coordinating Board by:**

- Chair, GC or UCC Date

- Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandrawilliams@tamu.edu.
Curricular Services — 08/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
Submit original form and attachments

Form Instructions
1. Course request type: [ ] Undergraduate [ ] Graduate [ ] First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Visualization
3. Course prefix, number and complete title of course: VIZA 843 Time Based Media I

4. Change requested
   a. Prerequisite(s): From: VIZA 612 or approval of instructor
      To: VIST 485 or equivalent, graduate classification in visualization or approval of instructor.
   b. Withdrawal (reason):
   c. Cross-list with:
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.
5. Is this an existing core curriculum course? [ ] Yes [ ] No
6. If grade type is changing for existing course, indicate the new grade type: [ ] Grade [ ] S/U [ ] P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:
   [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control-express-basics-for-distance-education).
8. Complete current course title and current catalog course description:

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:
    Prefix: 
    Course #: 
    Title (excluding punctuation):
    Lecture: 
    Lab: 
    Other: 
    SCH: 
    CPF and Fund Code: 
    Admin Unit: 
    CCPA Code: 
    Level: 0 0 3 6 3 2

   b. Change to:
    Prefix: 
    Course #: 
    Title (excluding punctuation):
    Lecture: 
    Lab: 
    Other: 
    SCH: 
    CPF and Fund Code: 
    Admin Unit: 
    Acad. Year: 
    CCPA Code: 
    Level: 0 0 3 6 3 2

   Approval recommended by:
   Frederic L. Parke
   Department Head or Program Chair (Type Name & Sign) Date 10-16-15
   Chair, College Review Committee Date 10-16-15
   Department Head or Program Chair (Type Name & Sign) Date
   (If cross-listed course)
   Dean of College Date

   Submitted to Coordinating Board by:
   Chair, GC or UCC Date
   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14

CURRICULAR SERVICES
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type: □ Undergraduate  ✓ Graduate  □ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Visualization
3. Course prefix, number and complete title of course: VIZA 686 Experimental Visual Techniques.

<table>
<thead>
<tr>
<th>Change requested</th>
<th>VIZA 654 or VIZA 656 or approval of instructor</th>
<th>Graduate classification or approval of instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Prerequisite(s): From:</td>
<td>To:</td>
<td></td>
</tr>
<tr>
<td>b. Withdrawal (reason):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Cross-list with:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Change in course number, contact hours (lab &amp; lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Is this an existing core curriculum course?</td>
<td>□ Yes</td>
<td>□ No</td>
</tr>
<tr>
<td>g. If grade type is changing for existing course, indicate the new grade type:</td>
<td>□ Grade</td>
<td>□ S/U</td>
</tr>
<tr>
<td>h. If this course will be stacked, please indicate the course number of the stacked course:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (<a href="http://vpr.tamu.edu/resources/export-controlexport-controls-basics-for-distance-education">http://vpr.tamu.edu/resources/export-controlexport-controls-basics-for-distance-education</a>).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Complete current course title and current catalog course description:

5. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

6. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 0 3 6 3 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 0 3 6 3 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Approval recommended by:

<table>
<thead>
<tr>
<th>Department Head or Program Chair (Type Name &amp; Sign)</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Department Head or Program Chair (Type Name &amp; Sign)</th>
<th>Date</th>
</tr>
</thead>
</table>

9. Submitted to Coordinating Board by:

<table>
<thead>
<tr>
<th>Chair, GC or UCC</th>
<th>Date</th>
</tr>
</thead>
</table>

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
* Submit original form and attachments *

Form Instructions
1. Course request type:  
   - Undergraduate  
   - Graduate  
   - First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):  
   Visualization
3. Course prefix, number and complete title of course:  
   VIZA 880 Professional Practice in Visualization

4. Change requested
   a. Prerequisite(s): From:  
   b. Withdrawal (reason):  
   c. Cross-list with:  
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.
5. Is this an existing core curriculum course?  
   - Yes  
   - No
6. If grade type is changing for existing course, indicate the new grade type:  
   - Grade  
   - S/U  
   - P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course:  
8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vcr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab.</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>HCL Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 0 3 6 3 2</td>
<td></td>
</tr>
</tbody>
</table>

   b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab.</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>HCL Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:

Frederic I. Parks  
Department Head or Program Chair (Type Name & Sign)  
Date  
10-16-15

Chair, College Review Committee  
Date  
10-16-15

Dean of College  
Date  
10-16-15

Submitted to Coordinating Board by:

Chair, GC or UCC  
Date  
10-16-15

Associate Director, Curricular Services  
Date  
10-16-15

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions
1. Course request type:
   □ Undergraduate  ☑ Graduate  □ First Professional (D.D.S., M.D., J.D., PharmD, D.V.M.)
2. Request submitted by (Department or Program Name): Visualization
3. Course prefix, number and complete title of course: VIZA 691 Research

Change requested:
4. a. Prerequisite(s): From: __________________________ To: __________________________
   b. Withdrawal (reason): __________________________
   c. Cross-list with: __________________________

Change course title and description. Enter current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

5. Is this an existing core curriculum course? □ Yes  □ No
6. If grade type is changing for existing course, indicate the new grade type:
   □ Grade  □ S/U  □ P/F(CLMG)

7. If this course will be stacked, please indicate the course number of the stacked course:
   □ Yes  □ No
8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-exports/rules-basics-for-distance-education).

9. Complete current course title and current catalog course description:
   Research. Credit 1 or more each semester. Research for preparation of thesis. Prerequisite: Approval of instructor.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    Research. Credit 1 or more each semester. Research for preparation of MS thesis. May be repeated for credit.
    Prerequisite: Graduate classification in visualization and approval of instructor.

11. a. As currently in course inventory:

   Prefix | Course # | Title (excluding punctuation)
   ------- | -------- | ---------------------------
   [Table with columns for credit, lab, other, SCH, CP and fund code, Admin Unit, ELC Code, Level]

   Approval recommended by:
   [Signature]
   [Date]

   Department Head or Program Chair (Type Name & Sign) Date
   Department Head or Program Chair (Type Name & Sign) Date
   Department Chair, College Review Committee Date
   Death of College Date

b. Change to:

   Prefix | Course # | Title (excluding punctuation)
   ------- | -------- | ---------------------------
   [Table with columns for credit, lab, other, SCH, CP and fund code, Admin Unit, Academic Year, ELC Code, Level]

   Submitted to Coordinating Board by:
   [Signature]
   [Date]

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 08/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University
Departmental Request for a Change in Course
Undergraduate ∙ Graduate ∙ Professional
Submit original form and attachments

Form Instructions
1. Course request type:
   - [ ] Undergraduate
   - [ ] Graduate
   - [ ] First Professional (DMD, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):
   Visualization
3. Course prefix, number and complete title of course:
   VIZA 683 Professional Study

Change requested
- a. Prerequisite(s): From: ___________________________ To: ___________________________
- b. Withdrawal (reason):
- c. Cross-list with:
- d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
- e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.
- f. Is this an existing core curriculum course?
   - [ ] Yes
   - [ ] No
- g. If grade type is changing for existing course, indicate the new grade type:
   - [ ] Grade
   - [ ] S/U
   - [ ] P/F (CLMD)
- h. If this course will be stacked, please indicate the course number of the stacked course:
- [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
- i. Complete current course title and current catalog course description:
   Professional Study. Credit 1 to 9. Research and writing combined with studio projects; prepare and present a public exhibition of a final body of work; related paper submitted to a scholarly journal as approved by the committee Chair. May be repeated for credit. Prerequisites: MFA in Visualization; graduate classification.
- j. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   Professional Study. Credit 1 to 9. Research and writing combined with MFA studio projects; prepare and present a public exhibition of a final body of work; submit a related scholarly journal paper as approved by the committee Chair. May be repeated for credit. Prerequisite: Graduate classification in visualization and approval of instructor.

11. a. As currently In course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SUI</th>
<th>CIP and Fund Code</th>
<th>Admin Unit</th>
<th>DRC Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SUI</th>
<th>CIP and Fund Code</th>
<th>Admin Unit</th>
<th>DRC Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:
Frederic L. Parker

Department Chair

Chair, College Review Committee

Date: 10-16-15

Dean of College

Date: 10-16-15

Submitted to Coordinating Board by:
Chair, GC or UCC

Date: 10-16-15

Effective Date: OCT 15 2015

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
October 15, 2015

Rationale for requested VIZA catalog changes

The requested prerequisite change for VIZA 617 recognizes that VIZA 613 is sufficient preparation.

The requested prerequisite changes for VIZA 629, VIZA 630, VIZA 631, VIZA 658 and VIZA 680 are minor and intended to more clearly communicate the needed preparation for these courses.

For VIZA 622 and VIZA 643, changes are needed because the currently listed VIZA 612 prerequisite is no longer taught on a regular basis, while the regularly taught VIST 465 can serve as the needed prerequisite.

For VIZA 627, the prerequisite needs to reflect that explicit instructor permission is required and to recognize that VIZA 613 also provides sufficient preparation.

The requested minor changes to the VIZA 691 and VIZA 693 descriptions are intended to clarify the distinction between these two courses for our MS and MFA students.

Frederic I. Parke, Ph.D., Professor
Associate Department Head
Graduate Programs Coordinator
Texas A&M University  
Departmental Request for a Change in Course  
Undergraduate • Graduate • Professional  
- Submit original form and attachments -  

Form Instructions  
1. Course request type:  
   - Undergraduate  [ ]  Graduate  [ ]  First Professional (DDS, MD, JD, PharmD, DVM)  
2. Request submitted by (Department or Program Name):  
   Department of Performance Studies  
3. Course prefix, number and complete title of course:  
   PERF612: Music Capitalism  

   Attach a brief supporting statement for changes made to items 4a through 4d and 10 below.  
4. Change requested  
a. Prerequisite(s): From:  
   To:  
   The instructor who developed the course is no longer at TAMU.  

b. Withdrawal (reason):  
   Cross-listed courses require the signature of both department heads.  

c. Cross-list with:  

   Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.  

c. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.  
5. Is this an existing core curriculum course?  
   [ ] Yes  [ ] No  
6. If grade type is changing for existing course, indicate the new grade type:  
   [ ] Grade  [ ] S/U  [ ] P/F (CLMD)  
7. If this course will be stacked, please indicate the course number of the stacked course:  

   I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).  
8. Complete current course title and current catalog course description:  

   -  
9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):  

   -  

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):  

   -  

11. a. As currently in course inventory:  

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CHF and Fund Code</th>
<th>Admin. Unit</th>
<th>HEC Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>612</td>
<td>Music Capitalism</td>
<td>3</td>
<td>0</td>
<td></td>
<td>3</td>
<td>50010</td>
<td>2196</td>
<td>0 0 3 6 3 2</td>
<td>6</td>
</tr>
</tbody>
</table>

   b. Change to:  

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CHF and Fund Code</th>
<th>Admin. Unit</th>
<th>HEC Code</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Approval recommended by:  
   Donnalee Doss  
   Department Head or Program Chair (Type Name & Sign)  
   Date  
   Chair, College Review Committee  
   Date  
   Dean of College  
   Date  

   Submitted to Coordinating Board by:  
   Chair, GC or UCC  
   Date  

   Effective Date  

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.  
Curricular Services – 06/14
Curriculum Changes
Date: October 14, 2015

To: Mark Zoran
Chair
Graduate Council

Through Ryan Crocker
Dean
Bush School of Government and Public Service

Arnold Vedlitz
Executive Associate Dean
Bush School of Government and Public Service

From: Leonard Bright
Graduate Instruction Committee Chair
Assistant Dean of Graduate Education
Bush School of Government and Public Service

Jeryl Mumpower
Department Head
Department of Public Service and Administration

Subject: Revisions the Executive Masters of Public Service and Administration (EMPSA) Degree

The Bush School's Department of Public Service and Administration seeks to revise its recently approved EMPSA degree. The changes that are proposed better align the core and track requirements of the EMPSA with the in resident MPSA degree. The Bush School's Graduate Instruction Committee have issued their support of this action.
Texas A&M University
Request for a Change in Curriculum
Undergraduate • Graduate • Professional

1. Program request type:  
   - ☐ Undergraduate  ☑ Graduate  ☐ First Professional (e.g., DVM, JD, MD, etc.)

2. Request change for:
   - ☑ Degree Program  ☐ Minor  ☐ Certificate

3. Request submitted by (Department or Program Name):
   - Department of Public Service and Administration

4. Program Designation and Name
   - (e.g., B.A. in History, Minor in History, Certificate in European Union):
   - Executive Master of Public Service and Administration (EMPSA)

5. Brief description of change:
   We are requesting the following curricular changes: adding PSAA 630 Program Evaluation in Public and Nonprofit Organizations as a core required course for all EMPSA students. In addition, to the Nonprofit Management track, we are adding an additional required track course of PSAA 632, Fiscal Management for Nonprofits. To the Homeland Security Track, we are adding the required course of PSAA 623 Budgeting in Public Service and PSAA 634 Public Management, while removing PSAA 605 Homeland Security Policies, Strategies and Operations as a required Homeland Security in Nonprofit Management Track course. Finally, we are adding an additional Public Management track.

6. Rationale for change:
   These modifications and course additions are needed in order to provide students with the knowledge and competencies that are expected of an graduate of a Master of Public Service and Administration program. Program evaluation, budgeting, and public management are critical knowledge areas that each Master of Public Service and Administration graduate must have in order to be successful in public service. Also, we seek to more closely align our executive online master's of public service & administration with the curriculum of our residential master's of public service and administration.

   The additional offering of the Public Management track aligns with the current Public Management track offered by the residential MPSA program. Furthermore, public management have been identified as a high need area in which employers request more graduates who have this area of expertise.

Use the checkboxes below to make sure that all information is included.

7. a. Proposed curriculum attached.  ☑ Yes  ☐ No
   b. Current catalog curriculum with handwritten edits attached.  ☐ Yes  ☑ No
   c. Current Howdy degree evaluation with handwritten edits attached.  ☐ Yes  ☑ No

   Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes?  ☐ Yes  ☑ No
   b. If yes, degree program hours will change from: ________ to: ________
   c. If yes, is the Texas Higher Education Coordinating Board form attached?  ☑ Yes  ☐ No

   http://www.thecb.state.tx.us/index.cfm?objectid=A0F9F7FA-9A92-4F11-2756AD3BBFF91D60

9. If proposed changes affect other unit(s), are letters of support attached?  ☐ Yes  ☑ No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/GC, January-Faculty Senate, February-Presidents) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

[Signatures and dates for Department Head, Program Chair, Dean of College, Chair, College Review Committee, and Chair, GC or UCC]

Questions regarding this form should be directed to Curricular Services at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 04/14
## MPSA Degree Overview

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Full-time Residential Program</th>
<th>Executive Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TRACKS</td>
<td>Public Management</td>
</tr>
<tr>
<td>601 Foundations of Public Service</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>611 Public Policy</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>621 Economic Analysis</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>631 Quantitative Methods I</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>643 Foundations of the Non-Profit Sector</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Methods II</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>675 Capstone</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>676 Capstone</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**Track Core Courses (FT) or Prescribed Electives (EMPSA)**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Full-time Residential Program</th>
<th>Executive Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TRACKS</td>
<td>Public Management</td>
</tr>
<tr>
<td>623 Budgeting</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>634 Public Management</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>615 Public Policy Analysis</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>622 Public Finance</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>631 Fiscal Management of NP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>643 Foundations of the Non-Profit Sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>644 Non Profit Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>605 Homeland Security Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>656 Fundamentals of Homeland Security</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Track Electives**

<table>
<thead>
<tr>
<th>Elective</th>
<th>Full-time Residential Program</th>
<th>Executive Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective 1</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Elective 2</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Elective 3</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

**Concentration Electives**

<table>
<thead>
<tr>
<th>Elective</th>
<th>Full-time Residential Program</th>
<th>Executive Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective 1</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Elective 2</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Elective 3</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Elective 4</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Core Courses</td>
<td>TRACKS</td>
<td>Public Management</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td>601 Foundations of Public Service</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>611 Public Policy</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>621 Economic Analysis</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>631 Quantitative Methods I</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>643 Foundations of the Non-Profit Sector</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>630 Program Evaluation</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>656 Fundamentals of Homeland Security</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>676 Capstone</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Track Core Courses (FT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>623 Budgeting</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>615 Public Policy Analysis</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>622 Public Finance</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>631 Fiscal Management of NP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>643 Foundations of the Non-Profit Sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>644 Non Profit Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>605 Homeland Security Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Track Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentration Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

proposed revision
Date: October 14, 2015

To: Mark Zoran  
Chair  
Graduate Council

Through Ryan Crocker  
Dean  
Bush School of Government and Public Service

Arnold Vedlitz  
Executive Associate Dean  
Bush School of Government and Public Service

From: Leonard Bright  
Graduate Instruction Committee Chair  
Assistant Dean of Graduate Education  
Bush School of Government and Public Service

Jeryl Mumpower  
Department Head  
Department of Public Service and Administration

Subject: Political Science 3+2 BA-MPSA and BS-MPSA Revisions

The Political Science Department notified the Bush School of revisions they were making to our B.A.-MPSA and B.S.-MPSA 3+2 degree programs. The Bush School support these actions and notes that these changes only affect the undergraduate portion of these joint degree programs.
Texas A&M University
Request for a Change in Curriculum
Undergraduate + Graduate + Professional

1. Program request type:  ☒ Undergraduate   ☐ Graduate   ☐ First Professional (e.g., DVM, JD, MD, etc.)

2. Request change for:  ☒ Degree Program   ☐ Minor   ☐ Certificate

3. Request submitted by (Department or Program Name):  POLS

4. Program Designation and Name (e.g., B.A. in History, Minor in History, Certificate in European Union):  FIVE YEAR JOINT B.A.-M.P.S.A. IN POLITICAL SCIENCE AND PUBLIC SERVICE ADMINISTRATION

5. Brief description of change: The revised degree plan will provide greater structure to undergraduate degrees in political science. It requires students to take an introductory course in political science theory along with an expanded set of introductory (200 level) courses in various subfields of political science. This revision also includes minor changes to harmonize catalog copy among the department's degree programs. The changes affect only the undergraduate component of the joint degree plan.

6. Rationale for change: Departmental assessments of undergraduate programs and a recent external review indicated the need for students to improve their comprehension of basic theoretical knowledge in political science before advancing to higher level coursework. This degree program revision expands the set of introductory courses required of POLS majors in an effort to promote command of core theoretical knowledge and enhances the scope of students' introductory exposure to political science as an academic discipline.

7. Use the checkboxes below to make sure that all information is included.

   a. Proposed curriculum attached.  ☒ Yes   ☐ No

   b. Current catalog curriculum with handwritten edits attached.  ☒ Yes   ☐ No

   c. Current Howdy degree evaluation with handwritten edits attached.  ☒ Yes   ☐ No

   Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes?  ☐ Yes   ☒ No

   b. If yes, degree program hours will change from:  _______  to:  _______

   c. If yes, is the Texas Higher Education Coordinating Board form attached?  ☐ Yes   ☐ No

   http://www.thecb.state.tx.us/index.cfm?objectid=A0P9F7FA-9A92-4F11-756AD3BBFF01D60

9. If proposed changes affect other unit(s), are letters of support attached?  ☒ Yes   ☐ No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/GC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

William Clark  9-21-15
Department/Head or Program Chair (Type Name & Sign) Date

Dean of College  10-15-15
Date

Chair, College Review Committee  01/14/15
Date

Chair, GC or UCC  04/14
Date

Questions regarding this form should be directed to Curriculum Services at 845-2201 or sandra.williams@tamu.edu.
Curriculum Services – 04/14
Proposed Curriculum
Political Science - Bachelor of Arts/Master of Public Administration

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 200</td>
<td>Foundations of Political Science</td>
<td>3</td>
</tr>
<tr>
<td>POLS 206</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 207</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 209</td>
<td>Introduction to Political Science Research¹</td>
<td>3</td>
</tr>
<tr>
<td>Select three of the following:</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>POLS 203</td>
<td>Introduction to Political Theory</td>
<td></td>
</tr>
<tr>
<td>POLS 229</td>
<td>Introduction to Comparative Politics</td>
<td></td>
</tr>
<tr>
<td>POLS 231</td>
<td>Introduction to World Politics</td>
<td></td>
</tr>
<tr>
<td>POLS 233</td>
<td>Politics and Policy in the United States</td>
<td></td>
</tr>
</tbody>
</table>

Political Science electives 15

College and University Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 104</td>
<td>Composition and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Writing about Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Technical and Business Writing</td>
<td></td>
</tr>
<tr>
<td>COMM 203</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>COMM 205</td>
<td>Communication for Technical Professions</td>
<td></td>
</tr>
<tr>
<td>COMM 243</td>
<td>Argumentation and Debate</td>
<td></td>
</tr>
</tbody>
</table>

Literature in English 6

Foreign language 14

Mathematics6

Language, philosophy and culture 3

Creative arts 3

Literature, philosophy, and culture or creative arts 3

Life and physical sciences 9

Social and behavioral sciences³ 6

American history 6

International and cultural diversity⁴

Free electives ²²

Total Semester Credit Hours 120

¹Students must complete this course before taking more than six hours of 300- or 400-level courses in Political Science.

²At least 3 hours must be in MATH except MATH 102, MATH 150, MATH 167, MATH 365, and MATH 386. Three hours may be PHIL 240.

³POLS 100-POLS 499 cannot be used to fulfill this requirement.

⁴Course may be used to satisfy any other requirement.

No more than 36 credits in political science may be applied to the degree.

A grade of C or better is required for a course to be counted in the major field.
Other courses may qualify for the college and university requirements. Students should consult the approved list of courses in the Undergraduate Student Services Office in the College of Liberal Arts. No course can be counted in more than one category.

See the MPSA program in the Graduate Catalog for MPSA requirements.
Political Science - 5-Year Bachelor of Arts/Master of Public Service Administration

Students admitted into this program will be enrolled in Bush School graduate courses with an undergraduate classification for the fall of their fourth year and will be reclassified as degree seeking master's degree students upon completing 120 credit hours, typically in the following semester. These credit hours must include all specific course prerequisites for a baccalaureate degree in Political Science, as well as the courses required by the College of Liberal Arts and by Texas A&M University for an undergraduate degree. Students will be required to complete the same two-year, 48 hour curriculum as other students admitted to the Bush School's MPSA program.

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 206</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 207</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 209</td>
<td>Introduction to Political Science Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Political Science electives</td>
<td></td>
</tr>
<tr>
<td>ENGL 104</td>
<td>Composition and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Writing about Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Technical and Business Writing</td>
<td></td>
</tr>
<tr>
<td>COMM 203</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>COMM 205</td>
<td>Communication for Technical Professions</td>
<td></td>
</tr>
<tr>
<td>COMM 243</td>
<td>Argumentation and Debate</td>
<td></td>
</tr>
<tr>
<td>Literature in English</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Foreign language</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Language, philosophy and culture</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Creative arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature, philosophy, and culture or creative arts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Life and physical sciences</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Social and behavioral sciences</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>American history</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>International and Cultural Diversity</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Free electives</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total Semester Credit Hours</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

A grade of C or better is required for a course to be counted in the major field.

Other courses may qualify for the college and university requirements. Student should consult the approved list of courses in the Undergraduate Student Services Office in the College of Liberal Arts. No course can be counted in more than one category.

See the MPSA program in the Graduate and Professional Catalog for MPSA requirements.

Notes:
1. Students must complete this course before taking more than six hours of 300- or 400-level courses in Political Science.
2. At least 3 hours must be in MATH except MATH 102, MATH 150, MATH 167, MATH 365, and MATH 368. Three hours may be PHIL 240.
3. Courses must deal with fundamental principles and include a critical evaluation and analysis of data and processes.
4. POLS 100-POLS 499 cannot be used to fulfill this requirement.
5. Course may be used to satisfy any other requirement.

No more than 3 credit hours in political science may be applied to the degree.
Detail Requirements

Information for Degree Evaluation

This is NOT an official evaluation.

Program Evaluation

Limitation Correspondence: No more than 12 hours of correspondence earned through an accredited institution may be used for an undergraduate degree.

Limitation Combination: Maximum combination of 18 hours of 401, 482, 485 and/or 491 courses may be used for an undergraduate degree.

Limitation Only one course from MATH 141, 165 may be used in this degree program.

Limitation Only 14 hours of 300-409, 400-495, 500-599, 600-699 may be used in this degree program to include hours counted toward residency.

Limitation The following courses may not be used to satisfy requirements in this program: CAEN 001-003; DEV 001-003.

<table>
<thead>
<tr>
<th>Program 1: BA POLS - 3+2 Program</th>
<th>Catalog Term: Fall 2015 - College Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus : College Station</td>
<td>Evaluation Term: Fall 2015 - College Station</td>
</tr>
<tr>
<td>College : Liberal Arts</td>
<td>Expected Graduation Date:</td>
</tr>
<tr>
<td>Degree : Bachelor of Arts</td>
<td>Request Number: 195</td>
</tr>
<tr>
<td>Level : Undergraduate</td>
<td>Results as of: Sep 10, 2015</td>
</tr>
<tr>
<td>Majors : Political Science</td>
<td>Minors:</td>
</tr>
<tr>
<td>Departments: Political Science</td>
<td>Concentrations:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Met</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required</td>
<td>Used</td>
</tr>
<tr>
<td>No</td>
<td>120.000</td>
<td>.00</td>
</tr>
<tr>
<td>Program GPA:</td>
<td>Yes</td>
<td>.00</td>
</tr>
<tr>
<td>Overall GPA:</td>
<td>No</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Other Course Information

This is NOT an official evaluation.

Area Major Coursework (120.000 credits) - Not Met

Term Subject Course Title Attribute Credits Grade Source

No 1. A. POLS 206
   Must make a grade of 'C' or better.

No AND 2. B. POLS 207
   Must make a grade of 'C' or better.

No AND 3. C. POLS 209
   Must make a grade of 'C' or better.

   Must make a grade of 'C' or better.

No AND 5. E. POLS 400-499
   Must make a grade of 'C' or better.

D. POLS 200
   Must make a grade of "C" or better

unofficial evaluation

Total Credits and GPA: 0.000 .00

9/10/2015 10:22 AM
**Detail Requirements**

<table>
<thead>
<tr>
<th>Area</th>
<th>Communication (12.000 credits) - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits</td>
</tr>
<tr>
<td>No</td>
<td>A.</td>
</tr>
<tr>
<td>No AND</td>
<td>B.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area</th>
<th>Mathematics (6.000 credits) - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits</td>
</tr>
<tr>
<td>No</td>
<td>A.</td>
</tr>
<tr>
<td>No AND</td>
<td>B.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area</th>
<th>Life and Physical Sciences (9.000 credits) - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits</td>
</tr>
<tr>
<td>No</td>
<td>A.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area</th>
<th>Foreign Language (14.000 credits) - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits</td>
</tr>
<tr>
<td>No</td>
<td>A.</td>
</tr>
<tr>
<td>No</td>
<td>B.</td>
</tr>
<tr>
<td>No</td>
<td>C.</td>
</tr>
<tr>
<td>No</td>
<td>D.</td>
</tr>
</tbody>
</table>

2 of 5 9/10/2015 10:22 AM
Learn Requirements

1. 6 hours. Take GRMN 101 and 102.
2. 3 hours. Select from GRMN 201 or 221.
3. 3 hours. Select from GRMN 202 or 222.

No JON E. Greek 14hrs
1. 6 hours. Take CLAS 101 and 102.
2. 3 hours. Take CLAS 211.
3. 2 hours. Select from CLAS 311 or 312.

No JON F. Italian 14hrs
1. 6 hours. Take ITAL 101 and 102.
2. 6 hours. Take ITAL 201 and 202.

No JON G. Japanese 14hrs
1. 8 hours. Take JAPN 101 and 102.
2. 6 hours. Take JAPN 201 and 202.

No JON H. Latin 14hrs
1. 8 hours. Take CLAS 121 and 122.
2. 6 hours. Take CLAS 221 and 222.

No JON I. Portuguese 14hrs
1. 8 hours. Take PORT 101 and 102.
2. 6 hours. Take PORT 201 and 202.

No JON J. Russian 14hrs
1. 8 hours. Take RUSS 101 and 102.
2. 6 hours. Select from RUSS 201, 202, 221, 222.

No JON K. Spanish 14hrs
1. 4 hours. Take SPAN 101.
2. 4 hours. Select from SPAN 102 or 140.
3. 3 hours. Select from SPAN 201 or 221.
4. 3 hours. Select from SPAN 202, 203 or 222.

Total Credits and GPA 0.000 0.00

unofficial evaluation

Area Lang, Phil, Crit, & Cr. Arts (9.000 credits) - Not Met

Met Condition Rule Subject Attribute Low High Required Credits Required Term Subject Course Title Attribute Credits Grade Source

No J. Creative Arts 3hrs
Select from any course with the Creative Arts [KCRA] attribute.

No AND E. Lang, Phil, & Cul. 3hrs
Select from any course with the Language, Philosophy, and Culture [KLCPC] attribute.

No AND C. Lang, Phil, Cul, & Cr, Art 3hrs
Select from any course with the Language, Philosophy, and Culture [KLCPC] attribute or with the Creative Arts [KCRA] attribute.

Total Credits and GPA 0.000 0.00

unofficial evaluation

Area Social and Behavioral Science (6.000 credits) - Not Met

Met Condition Rule Subject Attribute Low High Required Credits Required Term Subject Course Title Attribute Credits Grade Source

No A. Social Science 3hrs
Select from any course with the Social Science attribute [KSOC] (except POLS 100-499).

3 of 5

9/10/2015 10:22 AM
<table>
<thead>
<tr>
<th>Area</th>
<th>Citizenship (6.000 credits) - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits Required Courses Term Subject Course Title Attribute Credits Grade Source</td>
</tr>
<tr>
<td>No</td>
<td>A. History 6hrs</td>
</tr>
</tbody>
</table>

Total Credits and GPA 0.000  .00

unofficial evaluation

<table>
<thead>
<tr>
<th>Area</th>
<th>General electives (25.000 credits) - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits Required Courses Term Subject Course Title Attribute Credits Grade Source</td>
</tr>
<tr>
<td>No</td>
<td>A. General Electives 25hrs</td>
</tr>
<tr>
<td></td>
<td>Select from any 100-499 course not used elsewhere including BUSH 622 or 635 or PSSA 630; PSSA 622 or 634; 6 hours PSSA 600-699; (excluding POLS 100-499)</td>
</tr>
</tbody>
</table>

Total Credits and GPA 0.000  .00

unofficial evaluation

<table>
<thead>
<tr>
<th>Area</th>
<th>Work Not Applied - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Term Subject Course Title Attribute Credits Grade Source</td>
</tr>
<tr>
<td>No</td>
<td>A. Courses not applied</td>
</tr>
</tbody>
</table>

Total Credits and GPA 0.000  .00

unofficial evaluation

<table>
<thead>
<tr>
<th>Area</th>
<th>University Writing Requirement - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits Required Courses Term Subject Course Title Attribute Credits Grade Source</td>
</tr>
<tr>
<td>No</td>
<td>A. Writing Requirement</td>
</tr>
<tr>
<td></td>
<td>[UWRT] may be used to satisfy this requirement. Two courses required. Only sections of POLS 209, 304, 307, 309, 312, 314, 323-324, 328, 350, 352, 358, 367, 413, 423-424, 439-440, 442, 454, 456, 481; UGST 401 with the Writing attribute</td>
</tr>
</tbody>
</table>

Total Credits and GPA 0.000  .00

unofficial evaluation

<table>
<thead>
<tr>
<th>Area</th>
<th>Int'l &amp; Cult Diversity - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Credits Required Courses Term Subject Course Title Attribute Credits Grade Source</td>
</tr>
<tr>
<td>No</td>
<td>A. Int'l &amp; Cultural Diversity 6hr</td>
</tr>
</tbody>
</table>

9/10/2015 10:22 AM
Select from courses with the International and Cultural Diversity attribute (LICID) (except sections of BUSN 289 with the UWRT attribute).

<table>
<thead>
<tr>
<th>Area</th>
<th>Residence Requirement</th>
<th>Met</th>
<th>Condition</th>
<th>Rule Subject Attribute Low High Required Term Subject Course Title Attribute Credits Grade Source</th>
<th>Total Credits and GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence Requirement</td>
<td>Not Met</td>
<td></td>
<td>No</td>
<td>A. Residence - Major 12hrs; Includes POLS 300-499; PSAA 601, 611, 615, 621, 622, 631, 632, 634, 675, 676.</td>
<td>0.000 .00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td>AND B. Residence - 300-499 24hrs; Includes any 300-499 course; PSAA 601, 611, 615, 621, 622, 631, 632, 634, 675, 676.</td>
<td>0.000 .00</td>
</tr>
</tbody>
</table>

**unofficial evaluation**

**Area:** GPR-Major - Not Met

**Description:** A GPR of 2.00 must be maintained in all major field courses.

<table>
<thead>
<tr>
<th>Area</th>
<th>GPR-Major - Not Met</th>
<th>Met</th>
<th>Condition</th>
<th>Rule Subject Attribute Low High Required Term Subject Course Title Attribute Credits Grade Source</th>
<th>Total Credits and GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td>A. Major GPR 3.0 hrs; Includes BUSN 601, 611, 615, 634; POLS 100-499.</td>
<td>0.000 .00</td>
</tr>
</tbody>
</table>

**unofficial evaluation**

**Back to Display Options**
Leonard,

Thank you for passing along the good news. Please do move ahead with submitting the proposal to your GC.

Thank you again.

Joe

Joseph Daniel Ura
Associate Professor of Political Science
Texas A&M University
jura@tamu.edu

On Oct 7, 2015 1:18 PM, "Bright Jr, Leonard A" <lbright@tamu.edu> wrote:

Joe,

Just so you know, below is a response from the PSA Department regarding the changes to the B.A.-M.P.S.A. and the B.S.-M.P.S.A. programs. I will send this through the GC side of the process, unless you want to or have other plans.

Let me know,

Leonard Bright, Ph.D.
Associate Professor
Assistant Dean of Graduate Education
Public Service and Administration Department
Bush School of Government and Public Service
Texas A&M University
College Station, TX
Leonard,

This was the first item considered by the curriculum meeting yesterday and the committee unanimously approved the proposed changes. In my capacity as Department Head, I also endorse the proposed changes.

Jeryll

__________________________
Jeryll L. Mumpower
Professor and Joe R. and Teresa Lozano Long Chair
Head, Department of Public Service and Administration
The Bush School of Government and Public Service
Texas A&M University
1092 Allen Building, 4220 TAMU
College Station, TX 77843-4220
979-458-8022
jmumpower@tamu.edu
From: Bright Jr, Leonard A  
Sent: Wednesday, October 07, 2015 12:52 PM  
To: Reeves, Kimberly A <reevesk@tamu.edu>  
Cc: Brown, William A <wbrown@tamu.edu>; Mumpower, Jeryl L <jmumpower@tamu.edu>  
Subject: RE: Items for Curriculum Committee Meeting

Jeryl,

Is there an update on the Political Science 3+2 program changes to their B.A.-M.P.S.A. and the B.S.-M.P.S.A. programs. I need a statement or memo from you as the department head that states something to the effect that the Department reviewed the proposal and addresses whether there are any concerns. An email will work.

Thanks,

Leonard,

Leonard Bright, Ph.D.  
Associate Professor  
Assistant Dean of Graduate Education  
Public Service and Administration Department  
Bush School of Government and Public Service  
Texas A&M University  
College Station, TX  
lbright@tamu.edu  
Phone: 979-862-3028
Texas A&M University  
Request for a Change in Curriculum  
Undergraduate • Graduate • Professional

1. Program request type:  
   - [ ] Undergraduate  
   - [X] Graduate  
   - [ ] First Professional (ex., DVM, JD, MD, etc.)

2. Request change for:  
   - [ ] Degree Program  
   - [ ] Minor  
   - [X] Certificate

3. Request submitted by (Department or Program Name):  
   College of Education and Human Development

   Program Designation and Name  
   (e.g., B.A. in History, Minor in History, Certificate in European Union):  
   Education and Social Sciences Advanced Research Methods Certificate

4. Brief description of change:  
   Remove the three EDCI 689 courses currently listed.  
   Add the following courses: EPSY 637, EPSY 650, EPSY 652, EPSY 653, EPSY 654, EPSY 655, EPSY 656, EDCI 628, EHRD 690 (Statistics III), and HLTH 689.

5. Rationale for change:  
The previous courses offerings were largely dated, included many 689 courses, and did not include many of the advanced statistics and research methods courses the college currently offers.

6. Use the checkboxes below to make sure that all information is included.

   a. Proposed curriculum attached.  
      - [X] Yes  
      - [ ] No

   b. Current catalog curriculum with handwritten edits attached.  
      - [X] Yes  
      - [ ] No

   c. Current Howdy degree evaluation with handwritten edits attached.  
      - [ ] Yes  
      - [ ] No

     Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

7. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes?  
   - [ ] Yes  
   - [X] No

   b. If yes, degree program hours will change from:  
   c. If yes, is the Texas Higher Education Coordinating Board form attached?  
      http://www.thecch.state.tx.us/index.cfm?objectid=A0F9F7FA-9A92-4F11-2756AD3BBFF01D60
      - [ ] Yes  
      - [ ] No

8. If proposed changes affect other unit(s), are letters of support attached?  
   - [X] Yes  
   - [ ] No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December- UCC/ GC, January- Faculty Senate, February- President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:  

[Signature]  
[Date: 10/14/15]  
Department Head or Program Chair (Type, Name & Sign)  
Date  
Dean of College  
Date

[Signature]  
[Date: 10/14/15]  
Chair, College Review Committee  
Date  
Chair, GC or UCC  
Date

Questions regarding this form should be directed to Curricular Services at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 04/14
MEMORANDUM

TO: Graduate Council

FROM: George B. Cunningham, PhD
Associate Dean, College of Education and Human Development

RE: Proposal for Change in Curriculum to the Education and Social Sciences Advanced Research Methods (ARM) Certificate

Attached, please find the paperwork for revising the courses required for the Educational and Social Sciences Advanced Research Methods (ARM) certificate. The Graduate Instruction Council in the college voted to:

1. Remove several courses from the list, all of which were listed as 689 at the time the certificate was approved
   a. EDCI 689: Special topics in... (Advanced Research Methods in EDCI)
   b. EDCI 689: Special topics in... (Advanced Research Methods in Qualitative Research)
   c. EDCI 689: Special topics in... (Models and Methods of Curriculum Evaluation)

2. Add several courses from which students can choose in order to satisfy the certificate requirements. All of the courses focus on advanced analytical or methodological concepts:
   a. EPSY 637: Qualitative Grounded Theory Methodologies
   b. EPSY 650: Multiple Regression and other Linear Models in Education Research
   c. EPSY 652: Theory of Hierarchical Linear Models
   d. EPSY 653: Advanced Structural Equation Modeling
   e. EPSY 654: Longitudinal Data Analysis
   f. EPSY 655: Item Response Theory
   g. HLTH 689: Special topics in... (System Thinking and Complexity in Population Health)
   h. EDCI 628: Analyzing and Reporting Field Based Research
   i. EDCI 688: Research Methods in EDCI III
   j. EHRD 690: Theory of Educational Human Resource Development Research (Part III)

We appreciate your consideration. Please contact us should you require additional information.
Education and Social Sciences Advanced Research Methods (ARM) - Certificate

Offered by the College of Education and Human Development (CEHD), a Graduate Certificate in Education and Social Sciences Advanced Research Methods allows students in the College of Education and Human Development to add to their degree’s minimum requirements for training in research methodology. The Certificate testifies to a student’s successful mastery of advanced competencies in education and social sciences research methods, with emphasis on quantitative or qualitative approaches. The Certificate requires 12 hours of advanced research methods courses, identified as such by the CEHD’s Research Certificate Committee. Enrollment in these advanced courses will require the completion of established prerequisites (designated in the Texas A&M University Graduate and Professional Catalog) and/or the approval of the course instructor and the student’s dissertation committee chair/faculty advisor. As part of the certificate completion requirements, students will provide evidence of submission of a manuscript for publication as the main author, or as a co-author. As a first step in applying for the Certificate, graduate students should contact their dissertation or program Chair(s).

Program Requirements

Certificate Requirements

Select 4 advanced Quantitative or Qualitative (or mixed methods) Research Methods Courses 12

Required for Completion: Evidence of submission of an article, for publication in a peer-reviewed journal, as main author or co-author

Current Research Methods Requirements by Departmental Programs for Ph.D. Degrees

<table>
<thead>
<tr>
<th>Department/Program</th>
<th>Minimum Research Methods Requirement In credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching, Learning and Culture</td>
<td>15 hours</td>
</tr>
<tr>
<td>Educational Administration and Human Resource Development</td>
<td>18 hours</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>15 hours</td>
</tr>
<tr>
<td>Health and Kinesiology</td>
<td>9-18 hours</td>
</tr>
</tbody>
</table>

CEHD Courses Approved for Certificate

Teaching, Learning and Culture

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 627</td>
<td>Teaching and Learning Data Analysis and Uncertainty Concepts</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 689</td>
<td>Special Topics in... (Advanced Research Methods in EDCI)</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 689</td>
<td>Special Topics in... (Advanced Research Methods in Qualitative Res)</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 689</td>
<td>Special Topics in... (Models and Methods of Curriculum Evaluation)</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 661</td>
<td>Mixed Methods Research in Curriculum and Instruction</td>
<td>3</td>
</tr>
</tbody>
</table>

Educational Administration & Human Resource Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAD 623</td>
<td>Advanced Fieldwork Methods</td>
<td>3</td>
</tr>
<tr>
<td>EHRD 656</td>
<td>Narrative Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EHRD 657</td>
<td>Life History Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Educational Psychology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 625</td>
<td>Advanced Psychometric Theory</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 642</td>
<td>Meta-Analysis of Behavioral Research</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 643</td>
<td>Applied Multivariate Methods</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 651</td>
<td>Theory of Structural Equation Modeling</td>
<td>3</td>
</tr>
</tbody>
</table>
Education and Social Sciences Advanced Research Methods Certificate

Deleted Courses:
EDCI 689: Special topics in... (Advanced Research Methods in EDCI)
EDCI 689: Special topics in... (Advanced Research Methods in Qualitative Research)
EDCI 689: Special topics in... (Models and Methods of Curriculum Evaluation)

New Courses:
EPSY 637: Qualitative Grounded Theory Methodologies
EPSY 650: Multiple Regression and other Linear Models in Education Research
EPSY 652: Theory of hierarchical Linear Models
EPSY 653: Advanced Structural Equation Modeling
EPSY 654: Longitudinal Data Analysis
EPSY 655: Item Response Theory
HLTH 689: Special topics in... (System Thinking and Complexity in Population Health)
EDCI 628: Analyzing and Reporting Field Based Research
EDCI 688: Research Methods in EDCI III
EHRD 690: Theory of Educational Human Resource Development Research (Part III)
Education and Social Sciences Advanced Research Methods (ARM) – Certificate

Overview
Offered by the College of Education and Human Development (CEHD), a Graduate Certificate in Education and Social Sciences Advanced Research Methods allows students in the College of Education and Human Development to add to their degree’s minimum requirements for training in research methodology. The Certificate testifies to a student’s successful mastery of advanced competencies in education and social sciences research methods, with emphasis on quantitative or qualitative approaches. The Certificate requires 12 hours of advanced research methods courses, identified as such by the CEHD’s Research Certificate Committee. Enrollment in these advanced courses will require the completion of established prerequisites (designated in the Texas A&M University Graduate and Professional Catalog) and/or the approval of the course instructor and the student’s dissertation committee chair/faculty advisory. As part of the certificate completion requirements, students will provide evidence of submission of a manuscript for publication as the main author, or as a co-author. As a first step in applying for the Certificate, graduate students should contact their dissertation or program Chair(s).

Certificate Requirements
Select 4 advanced Quantitative or Qualitative (or mixed methods) Research Methods Courses (12 hours)
Required for Completion: Evidence of submission of an article, for publication in a peer-reviewed journal, as main author or co-author.

Current Research Methods Requirements by Departmental Programs for PhD Degrees

<table>
<thead>
<tr>
<th>Department/Program</th>
<th>Minimum Research Methods Requirement in credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching, Learning, and Culture</td>
<td>15 hours</td>
</tr>
<tr>
<td>Educational Administration and Human</td>
<td>18 hours</td>
</tr>
<tr>
<td>Resource Development</td>
<td></td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>15 hours</td>
</tr>
<tr>
<td>Health and Kinesiology</td>
<td>9-18 hours</td>
</tr>
</tbody>
</table>

CREHD Courses Approved for Certificate

Educational Administration and Human Resource Development

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAD 623</td>
<td>Advanced Fieldwork Methods</td>
<td>3</td>
</tr>
<tr>
<td>EHRD 656</td>
<td>Narrative Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EHRD 657</td>
<td>Life History Research</td>
<td>3</td>
</tr>
<tr>
<td>EHRD 690</td>
<td>Theory of Educational Human Resource Development (Part III)</td>
<td>3</td>
</tr>
</tbody>
</table>
**Educational Psychology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 625</td>
<td>Advanced Psychometric Theory</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 637</td>
<td>Grounded Theory Methodology</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 642</td>
<td>Meta-Analysis of Behavioral Research</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 643</td>
<td>Applied Multivariate Methods</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 650</td>
<td>Multiple Regression and Other Linear Models in</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Education Research</td>
<td></td>
</tr>
<tr>
<td>EPSY 651</td>
<td>Theory of Structural Equation Modeling</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 652</td>
<td>Theory of hierarchical Linear Models</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 653</td>
<td>Advanced Structural Equation Modeling</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 654</td>
<td>Longitudinal Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 655</td>
<td>Item Response Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Health and Kinesiology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 689</td>
<td>Special topics in... (System Thinking and Complexity in Population Health)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Teaching, Learning and Culture**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 627</td>
<td>Teaching and Learning Data Analysis and Uncertainty Concepts</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 628</td>
<td>Analyzing and Reporting Field Based Research</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 661</td>
<td>Mixed Methods Research in Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 688</td>
<td>Research Methods in EDCI III</td>
<td>3</td>
</tr>
</tbody>
</table>
Texas A&M University
Request for a Change in Curriculum
Undergraduate • Graduate • Professional

1. Program request type: □ Undergraduate    ☑ Graduate    □ First Professional (e.g., DVM, JD, MD, etc.)

2. Request change for: ☑ Degree Program    □ Minor    □ Certificate

3. Request submitted by (Department or Program Name):
Health and Kinesiology

4. Program Designation and Name
(e.g., B.A. in History, Minor in History, Certificate in European Union):
MS in Athletic Training

5. Brief description of change:
ATTR 654 Clinical Education IV (2 credits) will be deleted and replaced in the curriculum plan be ATTR 673 Manual Therapy in Athletic Training (2 credits).

6. Rationale for change:
ATTR 654 Clinical Education IV was a clinical experience class offered during the summer to fulfill accreditation requirements for practical experience during the summer. These requirements no longer exist so the program wants to use the 2 credit hours to strengthen the program in an area of weakness, manual therapy. Course objectives that were covered in the lecture portion of ATTR 654 will be divided as follows: Psychosocial intervention and referral will be covered in ATTR 670 General Medical Conditions and Therapeutic Medication. Cultural diversity is already embedded throughout the curriculum but specifics of cultural sensitivity and awareness will be covered in ATTR 671 Organization and Administration to support the communication module. Special populations in injury diversity was already embedded throughout the curriculum in various courses (ATTR 662 Clin Diag LE, ATTR 664 Clin Dig UE, ATTR 666 Phys Rehab, ATTR 670) and will continue to be taught in these courses.

Use the checkboxes below to make sure that all information is included.

7. a. Proposed curriculum attached. □ Yes    □ No

b. Current catalog curriculum with handwritten edits attached. □ Yes    □ No

c. Current Howdy degree evaluation with handwritten edits attached. □ Yes    □ No

Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes? □ Yes    □ No

b. If yes, degree program hours will change from: ___________ to: ___________

c. If yes, is the Texas Higher Education Coordinating Board form attached? □ Yes    □ No

http://www.thecb.state.tx.us/index.cfm?objectid=A0F9F7FA-9A92-4F11-2756AD3BBBFF01D60

9. If proposed changes affect other unit(s), are letters of support attached? □ Yes    □ No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/SC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

Richard Kreider
Department Head or Program Chair (Type Name & Sign) Date

George Cunningham
Dean of College

Mark Zoran
Chair, GC or UCC

Questions regarding this form should be directed to Curricular Services at 845-2201 or sandra.williams@tamu.edu
Curricular Services – 04/14
Texas A&M University  
Department of Health and Kinesiology  

Master of Science in Athletic Training  
Curriculum Plan  

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Research Core (7 hours):</strong></td>
<td></td>
</tr>
<tr>
<td>KINE 601 Reading Research (Research Methods)</td>
<td>3</td>
</tr>
<tr>
<td>KINE 690S Theory of Kinesiology (Statistics)</td>
<td>3</td>
</tr>
<tr>
<td>KINE 681 Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Required Athletic Training Core (53 hours):</strong></td>
<td></td>
</tr>
<tr>
<td><em>ATTR courses are new course proposals</em></td>
<td></td>
</tr>
<tr>
<td>ATTR 651 Clinical Education I</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 652 Clinical Education II</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 653 Clinical Education III</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 654 Clinical Education IV</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 655 Clinical Education V</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 656 Clinical Education VI</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 660 Prevention and Care of Injuries</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 661 Prevention and Care of Injuries Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 662 Clinical Examination and Diagnosis-Lower Extremity</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 663 Clinical Examination and Diagnosis-Lower Extremity Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 664 Clinical Examination and Diagnosis-Upper Extremity</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 665 Clinical Examination and Diagnosis-Upper Extremity Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 666 Physical Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 667 Physical Rehabilitation Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 668 Therapeutic Modalities</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 669 Therapeutic Modalities Lab</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 670 General Medical Conditions and Therapeutic Medication</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 671 Organization and Administration in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 672 Professional Preparation and Issues in Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 673 Manual Therapy in Athletic Training</td>
<td>2</td>
</tr>
<tr>
<td>KINE 628 Nutrition in Sports and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KINE 629 Physiology of Strength and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>KINE 685 Directed Studies</td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 60 hours
MEMORANDUM

To: Dr. Chris Houser, Associate Dean, Undergraduate and Faculty Affairs, College of Geosciences

To: Dr. Eric Riggs, Assistant Dean, Graduate Affairs and Diversity, College of Geosciences

From: Dr. Debbie Thomas, Department Head, Oceanography
Dr. Ping Yang, Department Head, Atmospheric Sciences

RE: Revisions to the Joint degree program between Oceanography and Atmospheric Sciences Meteorology program

I have attached a revision to the 3+2 program for METR and the non-thesis MS in Oceanography. It has been modified to swap out the non-thesis MS in Oceanography with the newly approved Master of Ocean Science and Technology. This is simply a swap in the designation non thesis Master’s degree.

The degree plan remains the same with one correction. In footnote #4, “GEOS 470/OCNG 657” needs to be removed from the list where both courses cannot count for credit. These courses are sufficiently different, and both will count for credit.

If you have any questions, please contact the assistant department head, Dr. Shari Yvon-Lewis (979-458-1816; syvon-lewis@tamu.edu).
Meteorology - 5-Year Bachelor of Science/Master of Science in Oceanography

The Fast Track Program offers motivated and exceptional students the opportunity to achieve aspirations in an efficient program at Texas A&M, completing the Bachelor of Science degree in the Department of Atmospheric Sciences Meteorology Program and the Oceanography non-thesis M.S. degree in 5 years. There will be only two courses used for dual credit in this program. There is a total of 150 hours of coursework. The concurrent degree program will enable these motivated students to coordinate the required B.S. coursework (114 undergraduate credit hours plus 6 dual credit graduate courses) and non-thesis M.S. coursework (36 credit hours including the 6 dual credit graduate courses) to complete the required credit hours for each degree without diminishing scope or quality of work and within 5 years.

Application and Eligibility

- Applications to the Fast Track program will be submitted by July 1 after the completion of the student’s junior year. Applications submitted after that time will be evaluated on a case by case basis.

- Applicants must have a minimum undergraduate GPR of 3.0. Applicants must also earn a C or better in all Chemistry, Calculus and Physics courses. Once admitted to the program, students must maintain a minimum 3.0 GPR.

- A faculty advisor will be assigned to each student. Students may seek additional mentors, but a formal committee is not required.

- Students admitted into the Fast Track program must finish the entire 150 credit hours to obtain both the Bachelor’s and Master’s degrees. These students will be conferred with two degrees once they complete the 5th year of the concurrent program.

- Students admitted to the program will change from U4 to G7 status when they are admitted having completed at least 99 hours (end of spring semester, year 3).

- Students not accepted or not allowed to continue with the Fast Track Program will complete the 120 hour Bachelor’s degree under the standard 4 year curriculum. These students may still apply to the traditional graduate program.

- Students will graduate at the completion of the 5th year in the Fast Track Program coursework (150 credit hours) with both Bachelor’s and Master’s degrees. Students will complete the coursework in May of the 5th year.

Program Requirements

First Year

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 201</td>
<td>Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>Fundamentals of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 111</td>
<td>Fundamentals of Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>MATH 171</td>
<td>Analytic Geometry and Calculus</td>
<td>4</td>
</tr>
</tbody>
</table>

or MATH 151

ENGL 104 | Composition and Rhetoric                          | 3                     |

GEOS 101 | Introduction to the Geosciences                   | 1                     |

**Term Semester Credit Hours** 15

Spring

ATMO 203 | Weather Forecasting Laboratory                    | 1                     |

CHEM 102 | Fundamentals of Chemistry II                      | 4                     |

& CHEM 112 | Fundamentals of Chemistry Laboratory II       |                       |

MATH 172 | Calculus                                          | 4                     |

or MATH 152

PHYS 218 | Mechanics                                        | 4                     |

American history elective 3

**Second Year**

Fall

ATMO 251 | Weather Observation and Analysis 1               | 3                     |

ATMO 383 | Introduction to Atmospheric Chemistry and Air Pollution 1 | 3 |

MATH 251 | Engineering Mathematics III 1                    | 3                     |

ATMO 321 | Computer Applications in the Atmospheric Sciences 1 | 3 |

POLS 206 | American National Government 1                    | 3                     |

General elective 1,8,9 3

**Term Semester Credit Hours** 16

Spring

ATMO 324 | Physical and Regional Climatology 1              | 3                     |

MATH 308 | Differential Equations 1                         | 3                     |

PHYS 208 | Electricity and Optics 1                         | 4                     |

American history elective 1 3

Social and behavioral sciences 1 3

**Third Year**

Fall

ATMO 335 | Atmospheric Thermodynamics 1                     | 3                     |

ATMO 336 | Atmospheric Dynamics 1                           | 4                     |

STAT 211 | Principles of Statistics 1                       | 3                     |

POLS 207 | State and Local Government 1                     | 3                     |

General Elective 1,8,9 3

**Term Semester Credit Hours** 16

Spring

ATMO 435 | Synoptic-Dynamic Meteorology 1                   | 3                     |

ATMO or technical elective 2 6

Communication elective 1 3
Detail Requirements

Information for Degree Evaluation
⚠️ This is NOT an official evaluation.

Program Evaluation

Limitation Correspondence: No more than 12 hours of correspondence earned through an accredited institution may be used for an undergraduate degree.

Limitation Combination: Maximum combination of 18 hours of 481, 482, 485 and/or 491 courses may be used for an undergraduate degree.

Limitation Geology: Only one course from GEOL 101, 103 and 104 may be used for this degree.

<table>
<thead>
<tr>
<th>Program</th>
<th>Catalog Term</th>
<th>Fall 2015 - College Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus</td>
<td>Evaluation Term</td>
<td>Fall 2015 - College Station</td>
</tr>
<tr>
<td>College</td>
<td>Expected Graduation Date</td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>Request Number</td>
<td>13</td>
</tr>
<tr>
<td>Level</td>
<td>Results as of</td>
<td>Jul 22, 2015</td>
</tr>
<tr>
<td>Majors</td>
<td>Minors</td>
<td></td>
</tr>
<tr>
<td>Departments</td>
<td>Concentrations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Met</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required</td>
<td>Used</td>
</tr>
<tr>
<td>Total Required</td>
<td>No</td>
<td>120.00</td>
</tr>
<tr>
<td>Program GPA</td>
<td>Yes</td>
<td>.00</td>
</tr>
<tr>
<td>Overall GPA</td>
<td>No</td>
<td>2.00</td>
</tr>
</tbody>
</table>

This is NOT an official evaluation.

Area: Major Coursework (48.000 credits) - Not Met

| Met | Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses |
|-----|-------------------------------------------------------------|---------------------------------------------------|
| No  | A. ATMO 201                                                |                                                  |
| No  | AND B. ATMO 203                                            |                                                  |
| No  | AND C. ATMO 251                                            |                                                  |
| No  | AND D. ATMO 324                                            |                                                  |
| No  | AND E. ATMO 335                                            |                                                  |
| No  | AND F. ATMO 336                                            |                                                  |
| No  | AND G. ATMO 363                                            |                                                  |
| No  | AND H. ATMO 435                                            |                                                  |
| No  | AND I. ATMO 446                                            |                                                  |
| No  | AND J. ATMO Elect 3hrs                                     |                                                  |
|     | Select from ATMO 441, 443                                   |                                                  |
| No  | AND K. METR Additional Rqmt 19hrs                           |                                                  |
|     | Select from ATMO 281, 300-499 (except ATMO 321); GEOG 400-499; GEOS 400-499; MATH 311 400-499; OCNG 400-499. Two of these electives will be the dual credit 600 level courses taken in year four. Up to 3 hours may be ATMO 484-Broadcast Internship and up to 6 hours may be ATMO 484 NWS Internship. SCSC 301; BESC 403; BCLI 111; FRSC 302, 304; CHEM 227, 237. |
Detail Requirements

2. 4 hours required. Take CHEM 101 and 111.

D. Chemistry II Reqmt 4hrs

Select from the following:

1. 4 hours required. Take CHEM 102.
2. 4 hours required. Take CHEM 102 and 112.

unofficial evaluation

Area: Language, Philosophy & Culture (3.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td></td>
<td>Lang, Phil, Culture Reqmt 3hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select any course with the Language, Philosophy and Culture attribute [KLPC].

unofficial evaluation

Area: Creative Arts (3.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td></td>
<td>Creative Arts Requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select three hours from any course with the Creative Arts attribute [KCRA].

unofficial evaluation

Area: Social and Behavioral Sciences (3.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td></td>
<td>Social Science Reqmt 3hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select from courses with the Social and Behavioral Science attribute [KSOC].

unofficial evaluation

Area: Citizenship (12.000 credits) - Not Met

Description: Completion of 4 semesters of Upper-Level ROTC may be substituted for 3 hours of American History and 3 hours of Political Science.

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td></td>
<td>American History Reqmt 5hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select from any course with the [KHis] attribute.

No AND B. Political Science Reqmt 6hrs

Take POLS 206 and POLS 207.

Total Credits and GPA
### Foreign Language Rqmt

Complete one of the following:
1. Two years of the same foreign language in High School.
2. A two semester sequence of the same foreign language for University credit.

<table>
<thead>
<tr>
<th>No</th>
<th>A. Foreign Language Rqmt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete one of the following:</td>
</tr>
<tr>
<td></td>
<td>1. Two years of the same foreign language in High School.</td>
</tr>
<tr>
<td></td>
<td>2. A two semester sequence of the same foreign language for University credit.</td>
</tr>
</tbody>
</table>

**Unofficial Evaluation**

**Area:** Residence Requirement - Not Met  
**Description:** A minimum of 36 hours of 300-400 level coursework must be completed at Texas A&M University. 12 hours must be in the major field.

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>Residence-Major 12hrs</td>
<td>Select from ATMO 300-499.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>B. Residence 300-499 24hrs</td>
<td>Select any 300 or 400 level courses.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Unofficial Evaluation**

**Area:** GPR-Major - Not Met  
**Description:**

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>Major GPR 25+hrs</td>
<td>Select from ATMO 100-499; GEOS 100-499.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Unofficial Evaluation**

**Back to Display Options**
MEMORANDUM

To: Dr. Chris Houser, Associate Dean, Undergraduate and Faculty Affairs, College of Geosciences

To: Dr. Eric Riggs, Assistant Dean, Graduate Affairs and Diversity, College of Geosciences

From: Dr. Debbie Thomas, Department Head, Oceanography
      Dr. Christian Brannstrom, Director Environmental Programs, College of Geosciences

RE: Revisions to the Joint degree program between Oceanography and Environmental Geosciences

I have attached a revision to the 3+2 program for ENGS and the non M.S. in Oceanography. It has been modified to swap out the non-thesis MS in Oceanography with the newly approved Master of Ocean Science and Technology. This is simply a swap in the designation non thesis Master’s degree.

The degree plan remains the same with one correction. In footnote #4, “GEOS 470/OCNG 657” needs to be removed from the list where both courses cannot count for credit. These courses are sufficiently different, and both will count for credit.

If you have any questions, please contact the assistant department head, Dr. Shari Yvon-Lewis (979-458-1816; syvon-lewis@tamu.edu).
Environmental Geosciences - 5-Year Bachelor of Science/Master of Science in Oceanography

The Fast Track Program offers motivated and exceptional students the opportunity to achieve aspirations in an efficient program at Texas A&M, completing the Bachelor of Science (B.S.) degree in the Environmental Geosciences program and the Oceanography non-thesis M.S. degree in 5 years. There will be only two courses used for dual credit in this program. There is a total of 150 hours of coursework. The concurrent degree program will enable these motivated students to coordinate the required B.S. coursework (114 undergraduate credit hours plus 6 dual credit graduate courses) and non-thesis M.S. coursework (36 credit hours including the 6 dual credit graduate courses) to complete the required credit hours for each degree without diminishing scope or quality of work and within 5 years.

Application and Eligibility:

- Applications to the Fast Track program will be submitted by July 1 after the completion of the student’s junior year. Applications submitted after that time will be evaluated on a case by case basis.
- Applicants must have a minimum undergraduate GPR of 3.0. Applicants must also earn a C or better in all Chemistry, Calculus and Physics courses. Once admitted to the program, students must maintain a minimum 3.0 GPR.
- A faculty advisor will be assigned to each student. Students may seek additional mentors, but a formal committee is not required.
- Students admitted into the Fast Track program must finish the entire 150 credit hours to obtain both the Bachelor’s and Master’s degrees. These students will be conferred with two degrees once they complete the 5th year of the concurrent program.
- Students admitted to the program will change from U4 to G7 status when they are admitted having completed at least 96 hours (end of spring semester, year 3).
- Students not accepted or not allowed to continue with the Fast Track Program will complete the 120 hour Bachelor’s degree under the standard 4 year curriculum. These students may still apply to the traditional graduate program.
- Students will graduate at the completion of the 5th year in the Fast Track Program coursework (150 credit hours) with both Bachelor’s and Master’s degrees. Students will complete the coursework in May of the 5th year.

Program Requirements

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOS 105</td>
<td>Introduction to Environmental Geoscience</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 111</td>
<td>Introductory Biology I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Engineering Mathematics I</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 104</td>
<td>Composition and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 101</td>
<td>Introduction to the Geosciences</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 206</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 112</td>
<td>Introductory Biology II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Engineering Mathematics II</td>
<td>4</td>
</tr>
<tr>
<td>American History</td>
<td>Language, philosophy and culture</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Year

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 201</td>
<td>Weather and Climate</td>
<td>4</td>
</tr>
<tr>
<td>&amp; ATMO 202</td>
<td>and Weather and Climate Laboratory</td>
<td></td>
</tr>
<tr>
<td>GEOG 203</td>
<td>Planet Earth</td>
<td>4</td>
</tr>
<tr>
<td>&amp; GEOG 213</td>
<td>and Planet Earth Lab</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Principles of Geology</td>
<td>4</td>
</tr>
<tr>
<td>OCNG 251</td>
<td>Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>&amp; OCNG 252</td>
<td>and Oceanography Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 101</td>
<td>Fundamentals of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; CHEM 111</td>
<td>and Fundamentals of Chemistry Laboratory I</td>
<td></td>
</tr>
<tr>
<td>GEOG 201</td>
<td>Introduction to Human Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

American History | 3

Environmental Policy Elective | 3

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 350</td>
<td>Environmental and Natural Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td>BESC 367</td>
<td>U.S. Environmental Regulations</td>
<td></td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 203</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 323</td>
<td>Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 435</td>
<td>Economics of Resource Scarcity</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 304</td>
<td>Economic Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 306</td>
<td>Introduction to Urban Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 309</td>
<td>Geography of Energy</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 401</td>
<td>Political Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 406</td>
<td>Geographic Perspectives on Contemporary Urban Issues</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 430</td>
<td>Environmental Justice</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 314</td>
<td>Environmental Ethics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 347</td>
<td>Politics of Energy and the Environment</td>
<td>3</td>
</tr>
<tr>
<td>RENR 470</td>
<td>Environmental Impact Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 328</td>
<td>Environmental Sociology</td>
<td>3</td>
</tr>
<tr>
<td>URPN 202</td>
<td>Building Better Cities</td>
<td>3</td>
</tr>
<tr>
<td>URPN 360</td>
<td>Issues in Environmental Quality</td>
<td>3</td>
</tr>
<tr>
<td>URPN 371</td>
<td>Environmental Health Planning and Policy</td>
<td>3</td>
</tr>
<tr>
<td>URPN 460</td>
<td>Sustainable Communities</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Subject</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Semester Credit Hours</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>
Environmental Geosciences - 5-Year Bachelor of Science/Master of Science in Oceanography

GEOG 450 Field Geography
GEOG 462 Advanced GIS Analysis for Natural Resources Management
GEOG 467 Dynamic Modeling of Earth and Environmental Systems
GEOG 475 Advanced Topics in GIS (Geographic Information Systems)
GEOG 476 GIS Practicum
GEOL 309 Introduction to Geological Field Methods
GEOL 330 Geologic Field Trips
GEOL 352 GNSS in the Geosciences
GEOP 413 Near-surface Geophysics
OCNG 451 Mathematical Modeling of Ocean Climate

Term Semester Credit Hours 15
Total Semester Credit Hours: 126

Fifth Year

Fall

Advanced specialized OCNG graduate course 3
Advanced specialized OCNG graduate course 3
Advanced specialized OCNG graduate course 3

Semester Credit Hours 9

Spring

Advanced specialized OCNG graduate course 3
Advanced specialized OCNG graduate course 3
Capstone Experience 3

Term Semester Credit Hours 9
Total Semester Credit Hours: 18

1 Freshmen entering the program take a first year seminar, GEOS 101. The choice is not restricted. Students transferring or changing majors into the program, who have not taken GEOS 101, are required to take GEOS 481 in their junior or senior year.

2 It is recommended to select a course that also fulfills an International and Cultural Diversity requirement.

3 Select from course list below. If students use nine credits of allowed OCNG courses (e.g., OCNG 401, OCNG 350, OCNG 451, OCNG 485) as Coastal and Marine Environments theme electives, they will receive an OCNG minor with their BS in ENGS degree. If one of the Introductory Geoscience course and associated labs listed in Year Two is OCNG 251 with OCNG 252, then only two (six credits) of the theme electives needs to be from OCNG to still get the minor.

4 Students will not be permitted to receive credit for both the 400- and 600-level versions of certain courses because the content and learning outcomes are too similar (e.g., OCNG 440/OCNG 640; GEOG 460/OCNG 667).

5 These two graduate courses will be taken for dual undergraduate/graduate credit and will contribute to the minor.

Coastal and Marine Environments Theme List

GEOG 370 Coastal Processes 3
MARS 370 3
OCNG 401 Interdisciplinary Oceanography 3

Select the remaining courses from the following:

GEOG 331 Geomorphology 3
GEOG 360 Natural Hazards 3
GEOL 306 Sedimentology and Stratigraphy 4
GEOL 440 Engineering Geology 3
GEOS 444 The Science and Politics of Global Climate Change 3
GEOS 484 Internship 0-6
OCNG 350 Marine Pollution 3
OCNG 410 Introduction to Physical Oceanography 3
OCNG 420 Introduction to Biological Oceanography 3
OCNG 425 Microbial Oceanography 3
OCNG 430 Introduction to Geological Oceanography 3
OCNG 440 Introduction to Chemical Oceanography 3
WFSC 418 Ecology of the Coastal Zone 3
WFSC 425 Marine Fisheries 3
WFSC 428 Wetland Ecosystem Management 4

Two courses in the degree plan must be writing intensive courses designated by the Environmental Programs in the schedule of classes. Also, international and cultural diversity electives (6 hours) must be incorporated into the degree.

Any of the required courses may be taken during the summer sessions to diminish the heavy semester loads during Years 2 and 3.
<table>
<thead>
<tr>
<th>Area:</th>
<th>Credits (3.000 credits)</th>
<th>Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Credits and GPA</td>
<td>0.000</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Accounting (12.000 credits)**

- Select from any course with the [KINS attributes].
- Description: 4 semesters of upper-level HIST may be substituted for 3 hours of American History and 2 hours of Political Science.
- Area: 4 credits (12.000 credits) - Not Met
<table>
<thead>
<tr>
<th>Total Credits and GPA</th>
<th>0.000</th>
<th>0.000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Required</th>
</tr>
</thead>
</table>

Unofficial Evaluation

1. Back to Display Options

Area: CPR Major - Not Met

Unofficial Evaluation

<table>
<thead>
<tr>
<th>Total Credits and GPA</th>
<th>0.000</th>
<th>0.000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Required</th>
</tr>
</thead>
</table>

Unofficial Evaluation

2. A two semester sequence of the same foreign language for University credit.

2. Four years or the same foreign language in high school

Net Condition Rule Subject Attribute Low Required Credits Required Course Title Attribute Course Title Attribute Course Title Attribute
DATE: 7 October 2015

TO: Leroy Dorsey, Associate Dean, College of Liberal Arts

CC: Tiffany Green, Senior Administrative Coordinator, Office of the Dean, College of Liberal Arts

FROM: Kirsten Pullen, Associate Professor and Director of Graduate Studies

RE: Curricular Changes to the MA in Performance Studies

This memo details several curricular changes to the MA in Performance Studies. We are in the 6th year of offering the MA degree, and are revising the curriculum to reflect what we are doing in practice, rather than what we assumed we’d do when we developed the program.

Course Withdrawal:
- PERF612: Music Capitalism is being withdrawn because it has never been and never will be offered.

Course Changes:
- **PERF605:** Changing the name because the program does not actually offer topics courses; changing the description because it may not be taken twice; changing the prerequisites to bring it in line with other departmental prerequisites.
- PERF611: Changing the name to better reflect the content of the course; changing the description to better reflect the content of the course.
- PERF615: Changing the name to more clearly differentiate the course from PERF608 (see below); changing the description to better reflect the content of the course.
- PERF621: Changing the name because the program does not actually offer topics courses; changing the description because it may not be taken twice; changing the prerequisites to bring it in line with other departmental prerequisites.

Course Proposals:
- PERF606: Developed to take advantage of new faculty expertise.
- PERF607: Developed to take advantage of new faculty expertise.
- PERF608: Developed to take advantage of new faculty expertise.
Texas A&M University  
Request for a Change in Curriculum  
Undergraduate • Graduate • Professional

1. Program request type:  
   - [ ] Undergraduate  
   - [X] Graduate  
   - [ ] First Professional (MD, DDS, etc.)

2. Request change for:  
   [ ] Degree Program  
   - [X] Minor  
   - [ ] Certificate

3. Request submitted by (Department or Program Name)  
   Program Designation and Name:  
   Genetics

4. (e.g., B.A. in History, Minor in History, Certificate in European Union):  
   M.S. in Genetics

5. Brief description of change:  
   Modified requirements for core curriculum classes, defined competency areas, added requirements for oral presentation, ethics, and grant writing.

6. Rationale for change:  
   These changes were part of the recommendations from our recent Academic Program Review and also reflect the changing nature of genetics research. A course in computational genetics is an essential training component for all genetics students. The competency areas were defined to ensure that each student had some breadth to their course work. Ethics training is required for all students supported on federal funds. A course in grant writing will improve the writing skills of the students and is an essential part of their career development.

<table>
<thead>
<tr>
<th>Use the checkboxes below to make sure that all information is included.</th>
</tr>
</thead>
</table>
| 7. a. Proposed curriculum attached.  
   [X] Yes  
   [ ] No |
| b. Current catalog curriculum with handwritten edits attached.  
   [X] Yes  
   [ ] No |
| c. Current Howdy degree evaluation with handwritten edits attached.  
   [X] Yes  
   [ ] No |
| Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match. |
| 8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes?  
   [ ] Yes  
   [X] No |
| b. If yes, degree program hours will change from:  
   [ ] to:  
   [ ] |
| c. If yes, is the Texas Higher Education Coordinating Board form attached?  
   [ ] Yes  
   [ ] No |
| http://www.thecb.state.tx.us/index.cfm?objectid=A0F9F7FA-9A92-4F11-2756AD2D0B60 |
| 9. If proposed changes affect other unit(s), are letters of support attached?  
   [ ] Yes  
   [ ] No |

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UGC/GC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:  
Craig Cooper  
10-16-15  
[Signature]

Department Head or Program Chair (Type Name & Sign)  
Date

Dean of College  
Date

Chair, College Review Committee  
[Signature]  
10-12-15  
Date

Chair, GC or UCC  
Date

Questions regarding this form should be directed to Curricular Services at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 04/14
COURSE REQUIREMENTS FOR DOCTORATE AND MASTER'S DEGREES IN GENETICS

- GENE 603 Introduction to Genetics (4 CR)
- GENE 612 Population Genetics (3 CR) OR GENE 613 Quantitative Genetics (3 CR) - Removed, replaced with Computational Genetics (3 CR)
- GENE 631 Biochemical Genetics (3 CR) - Removed
- One additional course (elective) in Genetics or a related field to be chosen by the student and the student's advisory committee. * - Now 9 CR from at least 3 competency areas.
- GENE 608 Critical Analysis of the Genetics Literature (1 CR) - Changed name to model genetic systems and increased to 2 credit units
- GENE 697 Teaching Genetics (for students who are T.A.s for GENE 301 or 432) - for all students.
- GENE 685 Directed Studies: Lab Rotation (1 CR)
- 681 (seminar/journal club) any departmental prefix, 3 semesters for Ph.D. students and 1 semester for M.S. students - Changed to at least 2 GENE 681 for both Ph.D. and M.S.

* Courses that would meet this requirement include, but are not limited to GENE 620 Cytogenetics, GENE 643 Quantitative Genetics and Plant Breeding, GENE 655 Complex Genomes, GENE/ANSC 614 Maximum Likelihood Estimation of Genetics, ANSC 628 Animal Breeding, BIOL 650 Genomics, ANSC 689 Special Topics in Databases and Programming for Biologists, or MICR 614 Microbial Signaling and Development.

Note: GENE 603 is a prerequisite for GENE 612, 613, and 620. Most graduate students will begin their studies with GENE 603, however, if they come to Texas A&M with an advanced level course in Genetics, they may skip GENE 603; the Chair of the Faculty of Genetics will make this decision after reviewing the documentation provided by the student.

Also, the course requirements are essentially the same for MS and Ph.D. degrees for the first year of study.

Fall semester courses (YR. 1):
Typically, new students entering in the fall semester will start with:
GENE 603 (4 hrs.) - Genetics
GENE 608 (1 hr.) - Critical Analysis of Genetics Literature - 2 hrs. + name change
GENE 697 (1 hr.) - Teaching Genetics Labs - removed
(Regent's fellowship students do not take this course; they take
GENE 685 (3 hr.) - Directed Studies (rotation credit) - 1 cr. or only.

TOTAL: 9 hours
- Added GENE 681 - Seminar
- Added BIOL 681 - Grant Writing.
Spring semester course (YR. 1)s:
GENE 631 (3 hrs.) - Biochemical Genetics (removed, replaced with Computational Genet)
GENE 697 (1 hr.) - Teaching Genetics Labs
GENE 685 (1 hr.) - Directed Studies (rotation credit) (removed, replaced with GENE 691 - Resa)
Elective course (3hr) (Added 1 hr. - Research Ethics requirement)

Other Course requirements
GENE 697 (1 hr.) – Teaching Genetic Labs (Required for TAs)

Students with do not take GENE 697. Instead they can register for GENE 685 - (1 hr) Directed Studies, another 681 (Seminar), or a 1 hr. module.

TOTAL: 9 hours

Summer:
STAT 651 - Statistics in Research I, if needed (removed)

If the graduate student has chosen a lab at this time, he/she will take:
GENE 691 (hrs.) - Research (removed)

IF NOT...he/she will take
GENE 685 (3 hrs. each 5 week session) - Directed Studies
Summer Total: 6 hrs. for 10-wk. Session, or, 3 hrs. for each 5 week session (removed)

The 4th semester, the graduate student will continue to take the required courses from the "core" courses and select a thesis committee. At this time, the student's committee advisor will prescribe additional courses for the student to take to complete his/her degree.

Fall YR.2 GENE 612 (Pop.Gen.-3 hrs.) or
Spring YR.2 GENE 613 (Quant.Gen.-3 hrs.) (removed)

TOTAL HOURS FOR MASTERS = Thesis - minimum 32 hours, plus completion of thesis.
Non-thesis - 36 hours
minimum 96 HOURS, plus completion of thesis.
64 HOURS, plus completion of thesis if one has already completed a M.S. degree.

TOTAL HOURS FOR Ph.D. =
M.S. in Genetics

Required Courses
1) GENE 603 (4 hrs.) Genetics
2) Computational Genetics (3 hrs.)
   • can be met through a variety of courses such as CSCE 601, BIOL 651, VTPP 638, STAT 657
3) GENE 608 (2 hrs.) Model Genetics Systems
4) GENE 681 (1 hr.) Seminar
   • Students will take at least 2 GENE 681 Seminars.
5) GENE 685 (1 hr.) Research Rotations
   • Students will perform at least 1 semester of research rotations.
6) GENE 697 (1 hr.) Teaching Genetics Labs
   • Students will teach as a lab TA for at least 1 semester
7) Research Ethics (1 hr.)
   • can be met through a variety of existing courses.
8) Grant Writing (1 hr.)
   • can be met through a variety of existing courses.

Elective Courses (9 hrs.) – Students will take a minimum of 9 hrs. (can be a mix of 3 hrs., or 1-2 hr. modular courses) spread across at least three of the following competency areas, which can be satisfied by courses such as the following.
1) Molecular genetics
   • GENE 626, GENE 631, GENE 648, GENE 655, GENE 677
2) Quantitative and population genetics
   • GENE 606, GENE 612, GENE 613, GENE 614, GENE 638, GENE 643, ANSC 628, ANSC 689 – Advanced Quantitative Genetics, SCSC 641, SCSC 642
3) Statistics
   • STAT 651, STAT 652, STAT 643, PHEB 613, PHEB 614
4) Organismal genetics
   • GENE 633, BIOL 611, ANSC 624, VTPP 638, BIOL 652, MSCI 630, BIOL 635
5) Cytogenetics
   • GENE 620
1st Year

Fall
GENE 603 (4 hrs.) – Genetics
GENE 608 (2 hrs.) – Model Genetic Systems
GENE 681 (1 hr.) - Seminar
GENE 685 (1 hr.) - Rotations
BIOL 689 (1 hr.) – Grant Writing

Spring
XXXX ### (3 hrs.) - Computational Genetics
XXXX ### (3 hrs.) - Elective
XXXX ### (1 hr.) - Research Ethics
GENE 697 (1 hr.) - Teaching Genetics Labs
GENE 691 (1 hr.) - Research

2nd Year

Fall
XXXX ### (3 hrs.) - Elective
XXXX ### (3 hrs.) - Elective
GENE 691 (3 hrs.) - Research
Submit Degree Plan

Spring
GENE 691 (9 hrs.) – Research

Total Hours for M.S.
- Thesis – 32 hrs, plus completion of thesis
- Non-Thesis – 36 hrs,
Texas A&M University
Request for a Change in Curriculum
Undergraduate • Graduate • Professional

1. Program request type: ☑Graduate ☐First Professional (M.D., D.D.S., etc.)

2. Request change for: ☑Degree Program ☐Minor ☐Certificate

3. Request submitted by (Department or Program Name): Genetics

Program Designation and Name
(e.g., B.A. in History, Minor in History, Certificate in European Union):
Ph.D. in Genetics

5. Brief description of change:
Modified requirements for core curriculum classes, defined competency areas, added requirements for oral presentation, ethics, and grant writing.

6. Rationale for change:
These changes were part of the recommendations from our recent Academic Program Review and also reflect the changing nature of genetics research. A course in computational genetics is an essential training component for all genetics students. The competency areas were defined to ensure that each student had some breadth to their course work. The oral presentation requirement will improve the presentation skills of the students and provides them a platform to present their research to the faculty as a whole. Ethics training is required for all students supported on federal funds. A course in grant writing will improve the writing skills of the students and is an essential part of their career development.

Use the checkboxes below to make sure that all information is included.

7. a. Proposed curriculum attached. ☑Yes ☐No
b. Current catalog curriculum with handwritten edits attached. ☑Yes ☐No
c. Current Howdy degree evaluation with handwritten edits attached. ☑Yes ☐No

Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes? ☑Yes ☐No
b. If yes, degree program hours will change from: _________ to: _________
c. If yes, is the Texas Higher Education Coordinating Board form attached?
http://www.thecb.state.tx.us/index.cfm?objectid=A0F9EF7A-9A92-4F11-2756AD3BBFF01D60 ☑Yes ☐No

9. If proposed changes affect other unit(s), are letters of support attached? ☑Yes ☐No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/GC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

Craig Coates 10-16-15
Dean of College

Chair, College Review Committee 10-21-15
Chair, GC or UCC
What-if Analysis

Information for Degree Evaluation

Step 3: Select a major. Click "add more" to add minors to the What-If evaluation.

Program Description: Doctor of Philosophy

Time Limits: All requirements for the degree must be completed within ten consecutive years.

Degree Plan: A Graduate Degree Plan of at least 96 hrs beyond a baccalaureate degree or 64 hrs beyond a master's degree or a DVM or a MD from a U.S. institution.

Course Limitations: Courses exceeding limits below will not be considered for meeting degree requirements.

1. Only approved courses on the degree plan will be considered for this program.
2. No correspondence study may be used.
3. No credit hours of FREN 601 or GERM 603 may be used.
4. No credit hours of extension course work may be used.
5. For other course exclusions refer to the Graduate Catalog.

Advisory Committee: The Advisory Committee consists of at least four members of the Graduate Faculty, one of which must be from outside the student's major department.

Residence Requirement: If entering with a baccalaureate degree, one year plus one semester must be spent in resident study. If entering with a master's degree, or a DVM or MD from a U.S. institution, one year must be spent in resident study. One year may include two adjacent long semesters or one long semester and one adjacent 10-week summer term of 9 hrs each.

Research Proposal: A dissertation proposal approved by the Advisory Committee, Department Head and the Office of Graduate Studies is required.

Preliminary Examination: The result of the Preliminary Exam must be received, along with the Checklist, by the Office of Graduate Studies within ten days of the oral examination date. All degree requirements must be completed within a four year time period following the preliminary exam or the preliminary exam is voided and must be repeated.

To be eligible to hold a preliminary exam, the student:

1. must have a Degree Plan approved by the Office of Graduate Studies no later than ninety days prior to the preliminary exam,
2. must have a graduate GPR of at least 3.0 (listed as "Program GPA" below),
3. must have a degree plan GPR of at least 3.0,
4. must be registered in the university,
5. must be within 6 hrs of completing all formal (graded) course work on the degree plan (i.e., all course work except 681, 684, 690, and 691).

Admission to Candidacy: To achieve Admission to Candidacy, the student:

1. must have completed all formal course work on the degree plan with the exception of any remaining 681, 684, 690 and 691,
2. must have a graduate GPR of at least 3.0 (listed as "Program GPA" below),
3. must have a Degree Plan GPR of at least 3.0 with no grade lower than C in any course on the degree plan,
4. must have passed the preliminary examination (written and oral portions),
5. must have an approved dissertation proposal,
6. must have met the residence requirements.

**Dissertation Defense:** The doctoral student is allowed only one opportunity to take the dissertation defense. The request to hold and announce the defense must be submitted to the Office of Graduate Studies a minimum of 10 working days in advance of the scheduled date.

To be eligible to hold the defense, the student:
1. must have a graduate GPR of at least 3.0 (listed as "Program GPA" below),
2. must have a Degree Plan GPR of at least 3.0,
3. must be admitted to candidacy,
4. must have completed or be registered for all remaining degree plan course work,
5. must be registered in the university,
6. must have the dissertation in final form and ready for distribution to all committee members,
7. must complete all degree requirements within a four year period following the preliminary exam.

**Dissertation:** The final version of the dissertation must be cleared by the Office of Graduate Studies no later than one year after the defense or within the ten year time limit, whichever is first.

---

**Entry Term:** Fall 2015 - College Station

**Program:** PHD [AG]

**Level:** Graduate

**Degree:** Doctor of Philosophy

**College:** Agriculture & Life Sciences

**Campus:** College Station

**First Major:** Genetics and Department: Biochemistry & Biophysics

---

---
COURSE REQUIREMENTS FOR DOCTORATE
AND MASTER'S DEGREES IN GENETICS

- GENE 603 Introduction to Genetics (4 CR)
- GENE 612 Population Genetics (3 CR) OR GENE 613 Quantitative Genetics (3 CR) - Removed, replaced with Computational Genetics region
- GENE 631 Biochemical Genetics (3 CR) - Removed
- One additional course (elective) in Genetics or a related field to be chosen by the student and the student's advisory committee. - Now 9 CR from at least 3 competency areas.
- GENE 608 Critical Analysis of the Genetics Literature (1 CR) - Changed name to Model Genetic systems and increased to 2 credit
- GENE 697 Teaching Genetics (for students who are T.A.s for GENE 301 or 432) - for all students.
- GENE 685 Directed Studies: Lab Rotation (1 CR)
- 681 (seminar/journal club) any departmental prefix, 3 semesters for Ph.D. students and 1 semester for M.S. students - Changed to at least 2 GENE 681 for both Ph.D. and M.S.

* Courses that would meet this requirement include, but are not limited to: GENE 620 Cytogenetics, GENE 643 Quantitative Genetics and Plant Breeding, GENE 655 Complex Genomes, GENE/ANSC 614 Maximum Likelihood Estimation of Genetics, ANSC 628 Animal Breeding, BIOL 650 Genomics, ANSC 689 Special Topics in Databases and Programming for Biologists, or MIRC 614 Microbial Signaling and Development.

Note: GENE 603 is a prerequisite for GENE 612, 613, and 620. Most graduate students will begin their studies with GENE 603, however, if they come to Texas A&M with an advanced (graduate) level course in Genetics, they may skip GENE 603; the Chair of the Faculty of Genetics will make this decision after reviewing the documentation provided by the student.
Also, the course requirements are essentially the same for MS and Ph.D. degrees for the first year of study.

Fall semester courses (YR. 1):
Typically, new students entering in the fall semester will start with:
GENE 603 (4 hrs.) - Genetics
GENE 608 (1 hr.) - Critical Analysis of Genetics Literature - 2hrs. + name change
GENE 697 (1 hr.) - Teaching Genetics Labs - removed
(Regent's fellowship students do not take this course; they take
GENE 685 (3 hr.) - Directed Studies (rotation credit) - 1 Cr/hr only.

TOTAL: 9 hours

- Added GENE 681 Seminar
- Added BIOL 689 - Grant Writing.
Spring semester course (YR. 1)s:
GENE 631 (3 hrs.) - Biochemical Genetics  - replaced with Computational Genetics
GENE 697 (1 hr.) - Teaching Genetics Labs
GENE 685 (1 hr.) - Directed Studies (rotation credit) - removed, replaced with GENE 691 - Res.
Elective course (3hr)  - added 1 hr. - Research Ethics requirement.

Other Course requirements
GENE 697 (1 hr.) - Teaching Genetic Labs (Required for TAs)

Students with do not take GENE 697. Instead they can register for GENE 685 - (1 hr) Directed Studies, another 681 (Seminar), or a 1 hr. module.

TOTAL: 9 hours

Summer:
STAT 651 - Statistics in Research I, if needed

If the graduate student has chosen a lab at this time, he/she will take:
GENE 691 (hrs.) - Research

If NOT... he/she will take
GENE 685 (3 hrs. each 5 week session) - Directed Studies
Summer Total: 6 hrs. for 10-wk. Session, or, 3 hrs. for each 5 week session

The 4th semester, the graduate student will continue to take the required courses from the "core" courses and select a thesis committee. At this time, the student's committee advisor will prescribe additional courses for the student to take to complete his/her degree.

Fall YR.2 GENE 612 (Pop.Gen.-3 hrs.) or
Spring YR.2 GENE 613 (Quant.Gen.-3 hrs.)

TOTAL HOURS FOR MASTERS = Thesis - minimum 32 hours, plus completion of thesis.
Non-thesis - 36 hours minimum 96 HOURS, plus completion of thesis.
64 HOURS, plus completion of thesis if one has already completed a M.S. degree.
Ph.D. in Genetics

Required Courses
1) GENE 603 (4 hrs.) Genetics
2) Computational Genetics (3 hrs.)
   • can be met through a variety of courses such as CSCE 601, BIOL 651, VTPP 638, STAT 657
3) GENE 608 (2 hrs.) Model Genetics Systems
4) GENE 681 (1 hr.) Seminar
   • Students will take at least 2 GENE 681 Seminars.
5) GENE 682 (1 hr.) Seminar Presentation
   • Students will take at least 2 GENE 682 Seminar Presentations
6) GENE 685 (1 hr.) Research Rotations
   • Students will perform at least 1 semester of research rotations.
7) GENE 697 (1 hr.) Teaching Genetics Labs
   • Students will teach as a lab TA for at least 1 semester
8) Research Ethics (1 hr.)
   • can be met through a variety of existing courses.
9) Grant Writing (1 hr.)
   • can be met through a variety of existing courses.

Elective Courses (9 hrs.) – Students will take a minimum of 9 hrs. (can be a mix of 3 hrs., or 1-2 hr. modular courses) spread across at least three of the following competency areas, which can be satisfied by courses such as the following.

1) Molecular genetics
   • GENE 626, GENE 631, GENE 648, GENE 655, GENE 677
2) Quantitative and population genetics
   • GENE 606, GENE 612, GENE 613, GENE 614, GENE 638, GENE 643, ANSC 628, ANSC 689 – Advanced Quantitative Genetics, SCSC 641, SCSC 642
3) Statistics
   • STAT 651, STAT 652, STAT 643, PHEB 613, PHEB 614
4) Organismal genetics
   • GENE 633, BIOL 611, ANSC 624, VTPP 638, BIOL 652, MSCI 630, BIOL 635
5) Cytogenetics
   • GENE 620
1st Year

Fall
GENE 603 (4 hrs.) - Genetics
GENE 608 (2 hrs.) - Model Genetic Systems
GENE 681 (1 hr.) - Seminar
GENE 685 (1 hr.) - Rotations
BIOL 689 (1 hr.) - Grant Writing

Spring
XXXX ### (3 hrs.) - Computational Genetics
XXXX ### (3 hrs.) - Elective
XXXX ### (1 hr.) - Research Ethics
GENE 697 (1 hr.) - Teaching Genetics Labs
GENE 691 (1 hr.) - Research

2nd Year

Fall
XXXX ### (3 hrs.) - Elective
XXXX ### (3 hrs.) - Elective
GENE 691 (3 hrs.) - Research
Submit Degree Plan

Spring
GENE 682 (1 hr.) - Seminar Presentation
GENE 691 (8 hrs.) - Research

3rd Year

Fall
GENE 691 (9 hrs.) - Research
Preliminary Exam

Spring
GENE 691 (9 hrs.) - Research

4th Year

Fall
GENE 682 (1 hr.) - Seminar Presentation
GENE 691 (8 hrs.) - Research

Total Hours for Ph.D.

- 96 hrs. plus completion of thesis.
- 64 hrs. plus completion of thesis if previously completed a M.S. degree
Texas A&M University
Request for a Change in Curriculum
Undergraduate + Graduate + Professional

1. Program request type:  □ Undergraduate  □ Graduate  □ First Professional (e.g., DVM, JD, MD, etc.)

2. Request change for:  □ Degree Program  □ Minor  □ Certificate

3. Request submitted by (Department or Program Name):  Institute for Scientific Computation (ISC)

Program Designation and Name
(e.g., B.A. in History, Minor in History, Certificate in European Union):  Computational Sciences Certificate Program

5. Brief description of change:  The ISC proposes changing the Computational Sciences Certificate Program by introducing clarity into the catalog description, changing the curriculum from requiring two core and two elective courses to one core and three elective courses, and adding additional elective course options.

6. Rationale for change:  Program changes will provide clarity in certificate requirements and facilitate increased student participation.

Use the checkboxes below to make sure that all information is included.

7. a. Proposed curriculum attached.  □ Yes  □ No

b. Current catalog curriculum with handwritten edits attached.  □ Yes  □ No

c. Current Howdy degree evaluation with handwritten edits attached.  □ Yes  □ No

Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes?  □ Yes  □ No

b. If yes, degree program hours will change from:  _________  to:  _________

c. If yes, is the Texas Higher Education Coordinating Board form attached?
http://www.thecb.state.tx.us/index.cfm?objectid=A9F9E7FA-9A92-4F11-2755AD3BBFF91D60  □ Yes  □ No

9. If proposed changes affect other unit(s), are letters of support attached?

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/GC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

Yalchin Efendiev  10/16/2015  10-21-15
Department/Head or Program Chair (Type Name & Sign)

10-20-15
Chair, College Review Committee

Dean of College  Date

Chair, GC or UCC  Date

Questions regarding this form should be directed to Curricular Services at 845-8201 or sandra-williams@tamu.edu.
Curricular Services - 04/14
Proposed Catalog Description for the Computational Sciences Certificate Program:

The Institute for Scientific Computation developed the Computational Sciences Certificate Program to meet the increased need for computational techniques that help solve complex science and engineering problems. This program targets science and engineering students enrolled in graduate studies, providing them with a broad-based multidisciplinary enhancement to their degree program and preparing them with the intellectual infrastructure necessary as a leader in computational science, engineering, and technology. By completing this certification program, a graduate will receive an official certified transcript that will add value and marketability to their advanced degree. The Computational Sciences Certificate Program provides formal documentation on a student’s transcript that they successfully completed courses focused on computational aspects that supplement their degree in science or engineering. To fulfill the certification requirements, a student must complete four total courses (one core and three electives), as described by the program curriculum, and a capstone project within their home department. For more information, visit http://isc.tamu.edu.
### Proposed Curriculum for the Computational Sciences Certificate Program:

#### Core Courses
Select one of the following:

- **MATH 609**  Numerical Analysis  3
- **STAT 604**  Topics in Statistical Computations
- **CSCE 659/ECEN 659**  Parallel/Distributed Numerical Algorithms and Applications

#### Elective Courses
Select three of the following, one of which must be exclusive of the student’s home department:

- **AERO 615**  Numerical Methods for Internal Flow
- **CSCE 603**  Database Systems and Applications
- **CSCE 605**  Compiler Design
- **CSCE 626**  Parallel Algorithm Design and Analysis
- **CSCE 654**  Supercomputing
- **CVEN 680**  Advanced Computation Methods for Fluid Flow
- **CVEN 688**  Computational Fluid Dynamics
- **GEOP 620**  Geophysical Inverse Theory
- **MATH 610**  Numerical Methods in Partial Differential Equations
- **MATH 648**  Computational Algebraic Geometry
- **MATH 661**  Mathematical Theory of Finite Element Methods
- **MATH 676**  Finite Element Methods in Scientific Computing
- **MEEN 672**  Introduction to Finite Element Method
- **NUEN 618**  Multiphysics Computations in Nuclear Science and Engineering
- **OCNG 615**  Numerical Modeling of Ocean Circulation I
- **PETE 656**  Advanced Numerical Methods for Reservoir Simulation
- **STAT 605**  Advanced Statistical Computations
- **STAT 608**  Regression Analysis
- **STAT 626**  Methods in Time Series Analysis
- **STAT 636**  Applied Multivariate Analysis
- **CSCE 620**  Computational Geometry
- **VIZA 670**
- **MATH 660/CSCE 660**  Computational Linear Algebra

#### Other
- **Capstone Project**

#### Total Semester Credit Hours
12

---

1. MATH 609 will also satisfy the CSCE 653 prerequisite.
2. With approval by the director of the Institute for Scientific Computation (ISC), students may substitute a course outside those listed as elective options. In such situations, the student must justify the substitution to and seek approval from the ISC’s director prior to enrolling in the course. The director will include their support for the substitution in a memorandum to the Office of Graduate Studies (OGS) after the student files their degree plan with OGS and copies of these documents with the ISC.
3. The capstone project’s goal is to provide students with experience in the computational sciences. The capstone project may be fulfilled by:
   1. an independent study graduate course within the student’s home department, or
   2. an independent study graduate course outside the student’s home department, or
   3. as part of a MS thesis or project required by the student’s home department, or
   4. as part of a PhD dissertation.

To fulfill this requirement, the ISC’s associate director or director must approve the capstone project, certify its computational component, and document its completion.
DATE: October 12, 2015

TO: Dr. Bradley Shumbera
Assistant Director, Institute for Scientific Computation

FROM: Rodney Bowersox
Professor and Head of Aerospace Engineering

SUBJECT: Computational Sciences Certificate Program

I support the Institute for Scientific Computation’s efforts to revitalize the Computational Sciences Certificate Program by including AERO 615, Numerical Methods for Internal Flow, from the Department of Aerospace Engineering in its curriculum.
MEMORANDUM:

TO: R. Bradley Shumbera  
Assistant Director, Institute for Scientific Computation

FROM: Dilma Da Silva  
Department Head, Professor and Holder of the Ford Motor Company Design Professorship II

DATE: October 9, 2015

SUBJECT: Computational Science Certificate Program Changes

I support the Institute for Scientific Computation’s efforts to revitalize the Computational Sciences Certificate Program by including the following courses from the Department of Computer Science and Engineering in its curriculum:

- CPSC 603, Database Systems and Applications
- CPSC 605, Compiler Design
- CPSC 620/VIZA 671, Computational Geometry
- CPSC 626, Parallel Algorithm Design and Analysis – CPSC 654, Supercomputing
- CPSC 659/ECEN/659, Parallel/Distributed Numerical Algorithms and Applications
- CPSC 660/MATH 660, Computational Linear Algebra

Should you have any questions or concerns, please feel free to contact me.
Shumbera, R. Bradley

From: Autenrieth, Robin
Sent: Thursday, October 15, 2015 10:03 AM
To: Shumbera, R. Bradley
Cc: Girimaji, Sharath S
Subject: Re: Computational Sciences Certificate Program Changes

Hello,
Yes it is acceptable to list these classes. I had to check with the new DH in OCEN and he agrees.
Thanks
Robin

Sent from my iPad

On Oct 15, 2015, at 8:26 AM, Shumbera, R. Bradley <shumbera@tamu.edu> wrote:

Dr. Autenrieth,

Could you please update regarding my request from 10/7 (included below)?

R. Bradley Shumbera, Ph.D. | Assistant Director
Institute for Scientific Computation | Texas A&M University
3404 TAMU | College Station, TX 7743-3404

ph: 979.458.0448 | mobile: 979.224.4415 | fax: 979.862.3983
shumbera@tamu.edu | http://isc.tamu.edu/

------------------------------------------
Developing Computational Technology to Advance Science & Engineering

------------------------------------------

From: Shumbera, R. Bradley
Sent: Wednesday, October 7, 2015 1:51 PM
To: Autenrieth, Robin <tautenrieth@civil.tamu.edu>
Subject: Computational Sciences Certificate Program Changes

Dr. Autenrieth,

The Institute for Scientific Computation is currently working to update its Computational Sciences Certificate program. This program targets science and engineering graduate students, providing them with formal documentation on their transcript that they successfully completed courses targeted at the computational sciences to supplement their degree. To promote increased student participation, we are updating the program’s curriculum by adding additional elective choices that will satisfy program requirements. Based on the recommendation of Dr. Chen, we are interested in adding the following courses from your department:

-- CVEN 680, Advanced Computation Methods for Fluid Flow
-- CVEN 688, Computational Fluid Dynamics

Would you kindly provide a short statement indicating your support for this move on departmental letterhead? Below you can find suggested wording you can use.
“I support the Institute for Scientific Computation’s efforts to revitalize the Computational Sciences
Certificate Program by including the following courses from the Department of Civil Engineering in its
curriculum:

— CVEN 680, Advanced Computation Methods for Fluid Flow
— CVEN 688, Computational Fluid Dynamics”

If you have any questions or concerns, please feel free to contact me.

Best Regards,

R. Bradley Shumbera, Ph.D. | Assistant Director
Institute for Scientific Computation | Texas A&M University
3404 TAMU | College Station, TX 7743-3404

ph: 979.458.0448 | mobile: 979.224.4415 | fax: 979.862.3983
shumbera@tamu.edu | http://isc.tamu.edu/

-----------------------------------------------
Developing Computational Technology to Advance Science & Engineering
Inclusion of GEOP 620, Geophysical Inverse Theory in Computational Sciences Certification

October 7, 2015

To Whom it May Concern:

I support the Institute for Scientific Computation’s efforts to revitalize the Computational Sciences Certificate Program by including GEOP 620, Geophysical Inverse Theory from the Department of Geology and Geophysics in its curriculum.

Sincerely,

Michael C. Pope

Dr. Michael C. Pope
Professor and Head
Department of Geology and Geophysics

108AA Halbouty Hall
3115 TAMU
College Station, TX 77843-3115
Ph: 979.845.4376  FAX: 979.845.6162
mcpope@tamu.edu
October 7, 2015

To Whom It May Concern:

I support the Institute for Scientific Computation's efforts to revitalize the Computational Sciences Certificate Program by including the following courses from the Department of Mathematics in its curriculum:

- MATH 609, Numerical Analysis
- MATH 610, Numerical Methods in Partial Differential Equations
- Math648, Computational Algebraic Geometry
- MATH 660/CSCE 660, Computational Linear Algebra
- MATH 661, Mathematical Theory of Finite Element Methods
- MATH 676, Finite Element Methods in Scientific Computing

Sincerely,

[Signature]

Emil J. Straube
Professor and Head
Shumbera, R. Bradley

From: Andreas Polycarpou
Sent: Thursday, October 15, 2015 8:42 AM
To: Shumbera, R. Bradley; Kate Goodman
Subject: Re: Computational Sciences Certificate Program Changes

Dear Dr. Schumbera

"I support the Institute for Scientific Computation’s efforts to revitalize the Computational Sciences Certificate Program by including MEEN 672, Introduction to Finite Element Method, from the Department of Mechanical Engineering in its curriculum."

Thanks, Andreas

Andreas A. Polycarpou, Ph.D.
Department Head & Meinhard H. Kotzebue ’14 Professor
Texas A&M University
Department of Mechanical Engineering
100 Mechanical Engineering Building, 3123 TAMU
College Station, TX 77843-3123
Tel (979) 458 - 4061; Fax (979) 845 – 3081
E-mail: tamu-me-head@mengr-tamu.org
Dept Web Site: http://www.mengr.tamu.edu
Dear Dr. Shumbera,

This this to inform you the Department of Nuclear Engineering supports the Institute for Scientific Computation's efforts to revitalize the Computational Sciences Certificate Program by including NUEN 618, Multiphysics Computations in Nuclear Science and Engineering, from the Department of Nuclear Engineering in its curriculum.

Should you need more information, please contact me.
Thanks,
Yassin

Yassin A. Hassan
Department Head, Nuclear Engineering
Sallie and Don Davis ’61 Professor of Engineering
Editor-in-Chief of Nuclear Engineering and Design Journal
Texas A&M University
MS 3133
College Station, Texas 77843-3133
Phone: 979 845 7090
Cell: 979 218 4417
Email: y-hassan@tamu.edu
To Whom It May Concern

I support the Institute for Scientific Computation's efforts to revitalize the Computational Sciences Certificate Program by including OCNG 615, Numerical Modeling of Ocean Circulation I, from the Department of Oceanography in its curriculum.

Please let me know if I may be of any assistance in enhancing this transformative educational program.

Sincerely,

Debbie Thomas
October 7, 2015

R. Bradley Shumbera, Ph.D.
Assistant Director
Institute for Scientific Computation
Texas A&M University
3404 TAMU
College Station, TX 7743-3404

Dear Dr. Shumbera:

I support the Institute for Scientific Computation’s efforts to revitalize the Computational Sciences Certificate Program by including PETE 656, Advanced Numerical Methods for Reservoir Simulation from the Harold Vance Department of Petroleum Engineering in its curriculum.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

A. Daniel Hill
Department Head
Noble Endowed Chair
October 7, 2015

R. Bradley Shumbera, Assistant Director  
Institute for Scientific Computation  
Texas A&M University  
3404 TAMU  
College Station, TX 7743-3404

Dear Dr. Shumbera,

I support the Institute for Scientific Computation’s efforts to revitalize the Computational Sciences Certificate Program by including the following courses from the Department of Statistics in its curriculum:

-- STAT 604, Topics in Statistical Computations  
-- STAT 605, Advanced Statistical Computations  
-- STAT 608, Regression Analysis  
-- STAT 626, Methods in Time Series Analysis  
-- STAT 636, Applied Multivariate Analysis

Sincerely,

[Signature]

Valen Johnson  
Professor and Head  
Department of Statistics  
Texas A&M University
Texas A&M University
Request for a Change in Curriculum
Undergraduate • Graduate • Professional

1. Program request type: ☑ Undergraduate ☑ Graduate ☐ First Professional (e.g., DVM, JD, MD, etc.)
   ☐ Degree Program ☐ Minor ☐ Certificate

2. Request change for:
   ☑ Degree Program

3. Request submitted by (Department or Program Name):
   Maritime Administration and Logistics
   Program Designation and Name
   MMAL: Masters in Maritime Administration and Logistics (3+2 thesis option)

4. Brief description of change:
   Change MGMT 211 to a required course and reduce number of required general elective hours. Add MARA 475 and MARA 675 (new course approvals in process) as MARA directed electives.

5. Rationale for change:
   Making MGMT 211 a required course is necessary for achieving the MARA department's AACSB accreditation goal and will reduce the number of general electives needed to fulfill the degree program. Adding MARA 475 and MARA 675 as permanent MARA directed electives to curriculum.

6. Use the checkboxes below to make sure that all information is included.
   a. Proposed curriculum attached. ☑ Yes ☐ No
   b. Current catalog curriculum with handwritten edits attached. ☑ Yes ☐ No
   c. Current Howdy degree evaluation with handwritten edits attached. ☑ Yes ☐ No

7. Will degree program hours change (increase/decrease) due to the proposed curriculum changes? ☐ Yes ☑ No
   a. If yes, degree program hours will change from: ______ to: ______
   b. If yes, is the Texas Higher Education Coordinating Board form attached? ☐ Yes ☑ No

8. If proposed changes affect other unit(s), are letters of support attached? ☐ Yes ☑ No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/GC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

[Signature] 9/6/15  
Chair, College Review Committee  
Date

Dean of College  
Date

Questions regarding this form should be directed to Curricular Services at 845-2201 or sandra.williams@tamu.edu
Curricular Services — 04/14
5-Year Curriculum: Maritime Administration (MARA) and Master of Maritime Administration and Logistics (MMAL)

This program allows Maritime Administration (MARA) majors to enter the graduate program for a Master of Maritime Administration and Logistics the beginning of their senior year, enabling students to receive their MARA undergraduate degree (B.S.) and a Master of Maritime Administration and Logistics (MMAL) graduate degree in five years.

Students admitted to the 5-year degree program will have completed 92 of the 120 hours of course work required to receive a bachelor's degree. These courses must include the specific prerequisites for a Bachelor of Science degree in Maritime Administration, as well as the required Texas A&M University core curriculum courses.

Maritime Administration majors who have at least a 3.25 GPA and who have taken all of their prerequisite courses and otherwise completed 92 hours by the fall of their fourth year will be eligible to apply for the 5-year program during their junior year. Applicants to the 5-year program will submit the same materials (including GMAT scores) as other MMAL applicants, and those whose records are judged to be competitive by the mid-January deadline will be admitted. Admission criteria will be the same as for other MMAL students.

Students who choose not to finish the MMAL degree after being admitted to the 5-year program may exit the program at any time. Completed MMAL courses will be applied to their bachelor’s degree in Maritime Administration, as appropriate. Failure to complete the MMAL program will in no way impede their ability to attain a bachelor’s degree in Maritime Administration when the requirements for that degree are completed. Those who pursue the joint program will receive both degrees upon completion of the entire 5-year program. Students will not graduate with a bachelor’s degree in year four, but rather will earn both their Bachelor of Science and Master of Maritime Administration and Logistics at the end of year five.

Admitted students will be enrolled in Maritime Administration and Logistics graduate courses with an undergraduate classification (U4) during the fall of their fourth year and will be re-classified as degree seeking master’s students (G7) upon completing 107 credit hours. This will normally occur at the beginning of the spring semester of year four. Students will take 12 fewer undergraduate credit hours. Graduate courses taken in the fifth year program will be counted double, as credit towards their MMAL degree and as substitutes for MARA and free electives required for the bachelor’s degree.

Students will be required to complete 36 graduate hours. The graduate hours will include 7 core courses (21 credits) in economics, management, operations and logistics with 15 credit hours of electives. The electives will be chosen according to the interest of the student in either the Maritime Policy and Law track or the Shipping and Port Management track. Students will also take 21 hours of undergraduate level MARA electives that must include MARA 416 in order to satisfy the TAMU intensive writing requirement.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>(Th-Py)</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARA 205  Introduction to Ships and Shipping</td>
<td>(3-2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 141  Business Math I</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>POLS 206  American National Government</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>Elective in American History</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>(Th-Py)</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARA 250  Management Information Systems</td>
<td>(2-0)</td>
<td>2</td>
</tr>
<tr>
<td>MATH 142  Business Math II</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>Elective in Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective in American History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective in Life and Physical Sciences</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>(Th-Py)</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 229  Introduction to Accounting</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202  Principles of Economics</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>MARA 301  Ocean Transportation I</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>Elective in Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective in Life and Physical Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

77
### Spring Semester
- **ACCT 230**  
  Introduction to Accounting  
  Credits: 3
- **ECON 203**  
  Principles of Economics  
  Credits: 3
- **MARA 212**  
  Business Law  
  Credits: 3
- **MARA 281**  
  Seminar in Undergraduate Research Methods  
  Credits: 1
- **MARA 304**  
  Ocean Transportation II  
  Credits: 3
- **POL 207**  
  State and Local Government  
  Credits: 3

**Total:** 16

### Junior Year
#### Fall Semester
- **MARA 373**  
  Personnel Management  
  Credits: 3
- **MARA 421**  
  Admiralty Law  
  Credits: 3
- **SCMT 303**  
  Statistical Methods  
  Credits: 3
- **Elective in MARA**

**Total:** 16

### Spring Semester
- **MARA 440**  
  Global Economy and Enterprise Management  
  Credits: 3
- **MGMT 481**  
  Seminar in Management  
  Credits: 1
- **Elective in MARA**
- **Elective in MARA**

**Total:** 16

**Total Hours to be completed prior to admission to the graduate courses:** 92

### Senior Year/First Year of Five-Year Program
#### Fall Semester
- **MARA 536**  
  Managerial Decision Making  
  Credits: 3
- **MARA 641**  
  Financial Management in Marine Transportation  
  Credits: 3
- **MARA 627**  
  Marketing of Transportation Services  
  Credits: 3
- **Elective in MARA**
- **Elective in MARA**

**Total:** 15

### Spring Semester
- **MARA 623**  
  Economics Issues in Shipping  
  Credits: 3
- **MARA 664**  
  Production, Operations and Logistics Management  
  Credits: 3
- **MARA 619**  
  International Strategic Planning and Implementation  
  Credits: 3
- **Elective in MARA**
- **Elective in MARA**

**Total:** 12

### Second Year of Five-Year Program
#### Fall Semester
- **MARA 624**  
  Intermodal Transportation Operations  
  Credits: 3
- **MMAL Elective**
- **MMAL Elective**
- **Elective (General)**

**Total:** 13

### Spring Semester
- **MMAL Elective**
- **MMAL Elective**
- **MMAL Elective**
- **Elective (General)**

**Total:** 12

**Total Hours:** 144
Notes for the MARA/MMAL 3+2 Program

Note: All electives must be chosen in consultation with, and approved by, the student's academic advisor. Unless courses are specifically listed, see University Core Curriculum at http://core.tamu.edu/ for a listing of course options for Communication; Mathematics; Life and Physical Sciences; Language, Philosophy, and Culture; Creative Arts; American History; Government and Political Science; and Social and Behavioral Science. The 6-hour University Core Curriculum requirement for International and Cultural Diversity may be met with courses used to satisfy other degree requirements.

† Indicates required courses in the Maritimo Administration major. These courses will be used to compute the major GPR. At the time of graduation, a MARA major must have a GPR of ≥ 2.25 in their major. A MARA major must achieve a grade of "C" or better in BCON 202, BCON 203, ACCT 239, ACCT 230 and BCMT 303 as a graduation requirement. These courses may be repeated as necessary to meet this requirement, and the requirement applies to courses taken at TAMU or offered for transfer from other institutions.

‡ Students must satisfy the 9-credit hours of Life and Physical Science requirement through any combination of one, three or four credit hour courses.

§ The total hours may be increased if the student is required to take remedial math, remedial English, foreign language or International and Cultural Diversity courses.

Ⅵ MARA Electives: Students are required to complete 21 credit hours of MARA electives that must include MARA 416 to satisfy the intensive writing requirement. Students should choose 6 from the following courses:

ACCT 315, ACCT 316, BCON 311, BCON 323, BCON 452, BCMT 336, MARA 342, MARA 401, MARA 402, MARA 416, MARA 424, MARA 435, MARA 450, MARA 460, MARA 470, MARA 484, MARA 485 * MARA 489 MARA 491 *, MARA 493 *, MARA 658, MARA 660, MARA 670, MARA 672; or MAR 620, MARS 640, MARA 650, MARA 652, MARA 658, MARA 660, MARA 670, MARA 672; or MAR 620, MARS 640, MARA 650, MARA 660, MARA 676 * approved in July 2015
**Detail Requirements**

**Information for Degree Evaluation**

This is NOT an official evaluation.

**Program Evaluation**

**Limitation** Correspondence: No more than 12 hours of correspondence earned through an accredited institution may be used for an undergraduate degree.

**Limitation** Combination: Maximum combination of 18 hours of 481, 482, 485 and/or 491 courses may be used for an undergraduate degree.

<table>
<thead>
<tr>
<th>Program</th>
<th>[GV] BS MARA - 3+2 Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Term</td>
<td>Fall 2015 - Galveston</td>
</tr>
<tr>
<td>Evaluation Term</td>
<td>Fall 2015 - Galveston</td>
</tr>
<tr>
<td>Expected Graduation Date</td>
<td></td>
</tr>
<tr>
<td>Request Number</td>
<td>289</td>
</tr>
<tr>
<td>Results as of</td>
<td>Sep 22, 2015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree</th>
<th>Bachelor of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Majors</td>
<td>Maritime Administration</td>
</tr>
<tr>
<td>Concentrations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Met Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>Used</td>
</tr>
<tr>
<td>Program GPA</td>
<td>120.000</td>
</tr>
<tr>
<td>Overall GPA</td>
<td>.00</td>
</tr>
<tr>
<td>Other Course Information</td>
<td></td>
</tr>
<tr>
<td>Transfer</td>
<td>2.00</td>
</tr>
</tbody>
</table>

This is NOT an official evaluation.

**Area**: Major Coursework (380.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Rule</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required</th>
<th>Term</th>
<th>Subject</th>
<th>Course Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>AND</td>
<td>A.</td>
<td>ACCT</td>
<td>229</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>B.</td>
<td>ACCT</td>
<td>230</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>C.</td>
<td>ECON</td>
<td>203</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>D.</td>
<td>SCMT</td>
<td>303</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>E.</td>
<td>MARA</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>F.</td>
<td>MARA</td>
<td>212</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>G.</td>
<td>MARA</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>H.</td>
<td>MARA</td>
<td>281</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>I.</td>
<td>MARA</td>
<td>301</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>J.</td>
<td>MARA</td>
<td>304</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>K.</td>
<td>MARA</td>
<td>363</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>L.</td>
<td>MARA</td>
<td>373</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>M.</td>
<td>MARA</td>
<td>421</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>N.</td>
<td>MARA</td>
<td>440</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>O.</td>
<td>MARA</td>
<td>466</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>P.</td>
<td>MGMT</td>
<td>481</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>Q.</td>
<td>MARA</td>
<td>623</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
unofficial evaluation

Area: Supporting Coursework (21.000 credits) - Not Met
Met Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses

No And A. MARA 416

No And B. Directed Electives 18hrs

*approved in July 2015

unofficial evaluation

Area: Communication (6.000 credits) - Not Met
Met Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses

No A. Communication Requirement

Select 6 hours from any courses with the Communication attribute [KCOM].

unofficial evaluation

Area: Mathematics (6.000 credits) - Not Met
Met Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses

No A. MATH 141

No And B. MATH 142

unofficial evaluation

Area: Life and Physical Sciences (9.000 credits) - Not Met
Met Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses

No A. Life/Physical Sciences 9hrs:

Select 9 hours from any courses with the Life and Physical Sciences attribute [KLPS].

unofficial evaluation

Area: Language, Philosophy & Culture (3.000 credits) - Not Met
Met Condition Rule Subject Attribute Low High Term Subject Course Title Attribute Credits
### Requirement Details

#### Required Courses

<table>
<thead>
<tr>
<th>No</th>
<th>A.</th>
<th>Credits</th>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lang, Phil, Culture Rqnt 3hrs</td>
<td></td>
<td></td>
<td>Select any course with the Language, Philosophy and Culture attribute (KLPC).</td>
</tr>
</tbody>
</table>

**Total Credits and GPA**: 0.000

---

#### Unofficial Evaluation

**Area**: Creative Arts (3.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| No | A. | Creative Arts Requirement |         | Select three hours from any course with the Creative Arts attribute (KCRA). |

**Total Credits and GPA**: 0.000

---

#### Unofficial Evaluation

**Area**: Social and Behavioral Science (3.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| No | A. | ECON 202 |         |        |         |         |        |       |           |         |        |

**Total Credits and GPA**: 0.000

---

#### Unofficial Evaluation

**Area**: Citizenship (12.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| No | A. | American History Rqnt 6hrs |         | Select 6 hours from any course with the [KHI] attribute. |
|    | AND | B. | Political Science Rqnt 6hrs |         | Take POLS 2X6 and POLS 207. |

**Total Credits and GPA**: 0.000

---

#### Unofficial Evaluation

**Area**: General Electives (7.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| No | A. | General Electives |         | 2 hours of coursework required. Must have advisor approval (ENGL 103 and CAEN 091-003 are excluded.) |

**Total Credits and GPA**: 0.000

---

#### Unofficial Evaluation
### Detail Requirements

**Area:** Work Not Applied - Met

**Description:** See advisor for acceptable substitutions.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>Courses not applied</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits and GPA

---

**unofficial evaluation**

---

**Area:** University Writing Requirement - Not Met

<table>
<thead>
<tr>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>Writing Requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select two courses with the Writing Requirement [UWRT] attribute.

Total Credits and GPA 0.000

---

**unofficial evaluation**

---

**Area:** Int'l & Cult Diversity - Not Met

<table>
<thead>
<tr>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>Int'l &amp; Cultural Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6 hours required. Select from courses with the International and Cultural Diversity attribute [UICD].

Total Credits and GPA 0.000

---

**unofficial evaluation**

---

**Area:** Foreign Language - Not Met

<table>
<thead>
<tr>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>Foreign Language reqmt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Complete one of the following:
  1. Two years of the same foreign language in High School.
  2. A two semester sequence of the same foreign language for University credit.

Total Credits and GPA 0.000

---

**unofficial evaluation**

---

**Area:** GPR-Major - Not Met

**Description:** Must have a minimum GPA of 2.25 must be maintained on all major field of study courses.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Subject</th>
<th>Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required</th>
<th>Required Term</th>
<th>Subject</th>
<th>Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>Major GPR 74+hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits and GPA

---

**unofficial evaluation**
Area 1  Residence Requirement - Not Met
Description: Student must complete minimum of 36 hours of 300-400 level course work at Texas A&M University, 12 hours must be in field of study.

<table>
<thead>
<tr>
<th>Met Condition</th>
<th>Rule Subject Attribute Low</th>
<th>High</th>
<th>Required Term Subject Course Title Attribute</th>
<th>C</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td></td>
<td>Residence - Major 12hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No AND</td>
<td>B.</td>
<td></td>
<td>Residence 24hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

unofficial evaluation

Back to Display Options
Detail Requirements

Information for

This is NOT an official evaluation.

Program Evaluation
Master of Maritime Administration and Logistics

Time Limit: All requirements for the degree must be completed within seven consecutive years.

Degree Plan: A Graduate Degree Plan of at least 36 hrs must be completed with a minimum GPA of 3.000 and no grade lower than C.

Course Limitations (non-thesis option): Courses exceeding limits below will not be considered for meeting degree requirements.

1. Only approved courses on the degree plan will be considered for this program.
2. No more than 12 hrs or one-third of the total hours on the degree plan, whichever is greater, may be used. Transfer course work must be completed at an accredited institution with a grade of B or better.
3. No more than 12 hrs taken in a non-degree seeking (vis) classification may be used.
4. No more than 25 percent of the total degree plan hours may be used in any combination of the following categories:
   a. Not more than 4 hrs 601 (Professional Internship) may be used.
   b. No more than 9 hrs of 605 (Directed Studies) may be used.
   c. Not more than 3 hrs of 690 (Theory of Research) may be used.
   d. No more than 3 hrs of 695 (Research in) may be used.
5. No more than 2 hrs of 601 (Seminar) may be used.
6. No more than 9 hrs of advanced undergraduate courses (300-499) may be used.
7. No correspondence study may be used.
8. No credit hours of extension course work may be used.
9. No credit hours of FREN 601 or GERM 603 may be used.
10. No credit hours of 691 (Research) may be used.

Advisory Committee: The Advisory Committee consists of the chair of the advisory committee.

Residence Requirements: During one semester or 2 consecutive 5-week summer terms, 9 hrs of resident credit must be completed.

Final Examination: A final comprehensive examination is required for thesis option students. The final examination may be written and/or oral. The request to hold and announce the final examination must be submitted to the Office of Graduates Studies a minimum of 10 working days in advance of the scheduled date.

To be eligible to hold the defense, the student:
1. must have a graduate GPA of at least 3.000 (listed as "Program GPA" below),
2. must have a Degree Plan GPA of at least 3.000 with no grade lower than a C in any course on the degree plan,
3. must have completed or be registered for all remaining degree plan course work.

A final comprehensive exam is not required for non-thesis option students.

Program: MNL [Galv] (312)
Campus: Galveston
College: Galveston Campus
Degree: Master of Maritime Admin & Log
Level: Graduate
Major: Maritime Admin & Logistics
Department: Maritime Administration

Catalog Term: Fall 2015 - Galveston
Evaluation Term: Fall 2015 - Galveston
Expected Graduation Date: May 20, 2016
Request Number: 7
Results as of: Sep 10, 2015

Met Credits

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Required</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required</td>
<td>Yes</td>
<td>6,000</td>
</tr>
<tr>
<td>Program GPA</td>
<td>No</td>
<td>3.00</td>
</tr>
<tr>
<td>Overall GPA</td>
<td>Yes</td>
<td>.00</td>
</tr>
</tbody>
</table>
| Other Course Information
| Transfer          | 0.000    | 0    |
| In Progress       | 6.000    | 2    |
| Unused            | 98.000   | 36   |

Courses

Met Credits

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Required</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required</td>
<td>Yes</td>
<td>6,000</td>
</tr>
<tr>
<td>Program GPA</td>
<td>No</td>
<td>3.00</td>
</tr>
<tr>
<td>Overall GPA</td>
<td>Yes</td>
<td>.00</td>
</tr>
</tbody>
</table>
| Other Course Information
| Transfer          | 0.000    | 0    |
| In Progress       | 6.000    | 2    |
| Unused            | 98.000   | 36   |
### Detail Requirements

This is NOT an official evaluation.

**Area:** Courses for Degree Plan GPR - Met

**Description:** A minimum degree plan GPR of 3.000 is required. Courses with grades of D, F or U are not acceptable for degree plan credit and must be better or Satisfactory (S).

| Met | Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses |
|-----|-------------------------------------------------|----------|----------------|----------------|----------------|----------------|----------------|
| No  | A. No Approved Degree Plan                      | 201532   | MARA 627       | MKTG TRANS SERVICES | 201532 | MARA 636       | MGRL DECISION MAKING |       |

**Area:** Supporting Coursework

- Choose 12 credit hours from the following graduate level MIML elective courses: MARA 604, MARA 616, MARA 640, MARA 650, MARA 652, MARA 658, MARA 660, MARA 670, MARA 672; or MARS 628, MARS 640, MARS 660, MARS 676, MARA 675

**Area:** Courses Not Applied - Met

**Description:** See Graduate Committee Chair or Graduate Advisor for acceptable changes to degree plan coursework.

| Met | Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses |
|-----|-------------------------------------------------|----------|----------------|----------------|----------------|----------------|----------------|
| Yes | A. Additional Unused Courses                    |          |                | Total Credits and GPA |        |

**Area:** Graded Degree Plan Courses - Not Met

**Description:** A grade of C or better is required in all courses listed.

| Met | Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses |
|-----|-------------------------------------------------|----------|----------------|----------------|----------------|----------------|----------------|
| No  | A. No Approved Degree Plan                      |          | Total Credits and GPA |        |

**Area:** S/U Degree Plan Courses - Met

**Description:** A grade of S is required in all courses listed.

| Met | Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses |
|-----|-------------------------------------------------|----------|----------------|----------------|----------------|----------------|----------------|
| Yes | A. No S/U Courses on Degree Plan                |          | Total Credits and GPA |        |

**E-mail:** Julieanna R. Cardoso

**Back to Display Options**  

**Print**

https://compass-ssb.tamu.edu/pls/PROD/bwckapp.P_VerifyDispEvalViewOption  

9/18/2015
# Texas A&M Galveston
## Maritime Administration - Five Year Program Thesis Option

### Freshman Year
- **Fall Semester**
  - History Elective 3 cr.
  - MATH 205: Statistics and Probability 4 cr.
  - MATH 141: Business Math I 3 cr.
  - POLS 206: National Government 3 cr.
  - **DEPT SIGN**
- **Spring Semester**
  - Communications Elective 3 cr.
  - History Elective 3 cr.
  - MATH 250: Mgmt Inf Systems 3 cr.
  - MATH 142: Business Math II 3 cr.
  - Elective in Science 5 cr.
  - **DEPT SIGN**

### Sophomore Year
- **Fall Semester**
  - ACCT 221: Acct Principles I 3 cr.
  - ECON 202: Microeconomic Principles 3 cr.
  - Communications Elective 3 cr.
  - MATH 304: Ocean Transportation I 3 cr.
  - MGMT 211 3 cr.
  - **DEPT SIGN**
- **Spring Semester**
  - ACCT 230: Acct Principles II 3 cr.
  - ECON 203: Macroeconomic Principles 3 cr.
  - MATH 212: Business Law 3 cr.
  - MATH 281: Seminar in Research 1 cr.
  - MATH 284: Ocean Transportation II 3 cr.
  - POL 207: State and Local Government 3 cr.
  - **DEPT SIGN**

### Junior Year
- **Fall Semester**
  - SCMT 303: Business Statistics 3 cr.
  - MATH 303: Human Resource Mgmt 3 cr.
  - MATH 421: Admistrative Law 3 cr.
  - Elective in Science 4 cr.
  - **DEPT SIGN**
- **Spring Semester**
  - Elective in Creative Arts 3 cr.
  - MATH 440: Global Econ & Entr. Mgmt 3 cr.
  - MGMT 481: Senior Seminar 1 cr.
  - Elective in Language, Philosophy & Culture 3 cr.
  - Elective in MATH 3 cr.
  - **DEPT SIGN**

### Senior Year
- **Fall Semester**
  - MATH 635: Mgmt Decision Making 3 cr.
  - MATH 541: Fin. Mgmt in Marine Trans 3 cr.
  - MATH 627: Mktg of Trans Services 3 cr.
  - Elective in MATH 3 cr.
  - Elective in MATH 3 cr.
  - **DEPT SIGN**
- **Spring Semester**
  - MATH 622: Econ Issues in Shipping 3 cr.
  - Elective in MATH 3 cr.
  - Elective in MATH 3 cr.
  - **DEPT SIGN**

### Fifth Year
- **Fall Semester**
  - MATH 626: Intermodal Trans. Ops 3 cr.
  - Graduate Level MMAL Elective 3 cr.
  - Graduate Level MMAL Elective 3 cr.
  - General Elective 4 cr.
- **Spring Semester**
  - Graduate Level MMAL Elective 3 cr.
  - Graduate Level MMAL Elective 3 cr.
  - Graduate Level MMAL Elective 3 cr.
  - MATH 610: Int'l Strategic Planning 3 cr.

### Comments:
1. Students may satisfy the 9 credit hour life and physical science requirement through any combination of one, three or four credit hour courses.
2. The 6 hours communications electives requirement can be satisfied at TAMUG using COMM 203, 104 or 203.

Legend:
- T - Credit by Transfer
- CR - Credit by Examination
- Q - Q-Drop
- R - Registered in Current Semester
- * - Courses requiring a grade of "C" or better
- # - Writing Intensive if Section 900 course

Revised: 9/23/2015

C:\\Users\\kowles\\Desktop\\Forms\\3Y2 Program Tian 650 - Advising Sheet with MGMT 211 required
Texas A&M University
Request for a Change in Curriculum
Undergraduate • Graduate • Professional

1. Program request type:  
   □ Undergraduate  □ Graduate  □ First Professional (e.g., DVM, J.D., MD, etc.)

2. Request change for:  
   ☑ Degree Program  □ Minor  □ Certificate

3. Request submitted by (Department or Program Name):  
   Marine Sciences

   Program Designation and Name  
   (e.g., B.S. in History, Minor in History, Certificate in European Union):  
   Master of Marine Resources Management

4. Brief description of change:  
   All MARM students will be required to take a new quantitative methods course, MARS 603, and MARS 681 seminar. There have been some shifts in required and elective courses. The proposed changes will also require the non-thesis option MARM students to complete a Technical Paper and pass a final examination. The preparation of the paper will be guided in a new course, MARS 693, and the credit hours (variable 1-3) will count towards their degree. Thesis option students will have increased flexibility in choosing coursework and an increase from a maximum of 8 to 12 credit hours of MARS 691 research hours.

5. Rationale for change:  
   These changes were driven primarily by the results of an Academic Program Review (APR) which was completed in early July of 2015. The external APR reviewers identified several action items that they believed would improve the program, and that found agreement with MARM related faculty. The program alterations address several of the action items outlined by the external reviewers, and were discussed and agreed upon by a committee of MARS faculty members that are close to or involved with the MARM program.

6. Use the checkboxes below to make sure that all information is included.

7. a. Proposed curriculum attached.  ☑ Yes  □ No
   b. Current catalog curriculum with handwritten edits attached.  ☑ Yes  □ No
   c. Current Howdy degree evaluation with handwritten edits attached.  ☑ Yes  □ No

   Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes?  ☑ Yes  □ No
   b. If yes, degree program hours will change from:  
   c. If yes, is the Texas Higher Education Coordinating Board form attached?  
   http://www.thecb.state.tx.us/index.cfm?objectid=A0F917FA-9A92-4F11-2756AD3B3BF01D60

9. If proposed changes affect other unit(s), are letters of support attached?  □ Yes  □ No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/GC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

Kycorg Park  9/13/15
Department Head or Program Chair (Type Name & Sign)  Date

Alms  10/15/15
Dean of College  Date

Chair, College Review Committee  Date

Chair, GC or UCC  Date

Questions regarding this form should be directed to Curricular Services at 845-8201 or sandra-williams@kmu.edu.
Curricular Services – 04/14
Master of Marine Resources Management (MARM)

The Master of Marine Resources Management (MARM) degree provides students with a broad understanding of coastal and ocean policy and management. The demand for graduates from this program in industry, government, academia and non-governmental organizations (NGO's) has never been stronger. Federal agencies employing graduates include the U.S. Coast Guard, the U.S. Army Corps of Engineers, and the Environmental Protection Agency. State agencies include the Texas General Land Office and the Texas Commission on Environmental Quality. Industries employing graduates include oil and natural gas, environmental consulting companies, ports, and tourism. These organizations have identified the need for a degree which focuses on national and international ocean resource law and policy; coastal zone management; physical and geochemical marine resources management strategies; and fisheries management. This degree program views marine natural resources management and policy development from both an ecological and policy perspective.

The degree may be viewed as a degree comparable to an MBA as an alternative terminal degree for people working in marine/ocean/coastal organizations. In addition, the degree program may address the needs of some public school science teachers seeking a degree outside the field of education.

Professional Track (Non-thesis Option)

The 36-hour professional track curriculum is structured with 24 hours of required courses and 12 hours of optional elective courses. The required courses include a 1 hour seminar to be taken in the student’s first year, 8 hours of management, 3 hours of Geographic Information Systems (GIS), 6 hours of resource economics and statistical methods, and 6 hours of law/policy courses. The student in the professional track will choose electives for the remaining 12 credit hours. Additional flexibility to replace required courses with courses targeted to their area of research is available to professional track students upon recommendation and approval by their committee and the department. Students in the professional track are not allowed to enroll in 691 (Research) for any reason and 691 may not be used for credit toward a professional track MARM degree.

A technical paper prepared on a topic relevant to Marine Resources Management is required for professional track students to complete the MARM degree. The technical paper will be developed under the guidance of the student's advisory committee. Professional track students may count up to 3 hours of 693 (Professional Studies) on their degree plan as work toward their technical paper requirement.

The professional track students must pass a final examination with their advisory committee that addresses the technical paper and prior coursework. The final examination must be by dates announced each semester by the Office of Graduate and Professional Studies. A request to hold and announce the final examination must be submitted to the Office of Graduate and Professional Studies a minimum of 10 working days in advance of the scheduled date for the examination.

### Professional track (non-thesis option) Curriculum in Master of Marine Resources Management

<table>
<thead>
<tr>
<th>Required Courses (24 hours required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARS 681 Seminar</td>
</tr>
<tr>
<td>MARS 625 GIS Based Modeling for Coastal Resources</td>
</tr>
<tr>
<td>MARS 603 Quantitative Methods for Resource Management</td>
</tr>
<tr>
<td>MARS 635 Environmental Impact Statements and NRDA</td>
</tr>
<tr>
<td>MARS 676 Environmental Policy</td>
</tr>
<tr>
<td>MARA 604 Marine Natural Resource Economics</td>
</tr>
<tr>
<td>MARS 675 Environmental Management Strategies for Scientists</td>
</tr>
<tr>
<td>MARS 680 Integrative Analyses in Marine Resources</td>
</tr>
<tr>
<td>PLAN 641 Problems of Environmental Planning Administration</td>
</tr>
</tbody>
</table>
Master’s in Marine Resource Management Program Curriculum Changes

The following summarizes and describes changes to the Marine Resource Management (MARM) program curriculum and requirements (see original, revised, and strike-through versions of the MARM catalog entry). These changes were driven primarily by the results of an Academic Program Review (APR) which was completed in early July of 2015. The external APR reviewers identified several action items that they believed would improve the program, and that found agreement with MARM related faculty. The program alterations outlined below address several of the action items outlined by the external reviewers, and were discussed and agreed upon by a committee of MARS faculty members that are close to or involved with the MARM program. The proposed MARM program changes fall into three broad categories:

**New Requirements for non-thesis (professional) MARM students**

The proposed changes will require non-thesis option MARM students to complete a Professional Paper and pass a final examination in order to successfully matriculate. In contrast to a traditional thesis, the professional paper is not intended to be original research, but rather provide an opportunity for MARM students to *individually* address a policy and/or management topic at an applied level and produce and individual product. The professional paper will be developed under the guidance of the student’s advisory committee, strengthening MARM students’ mentoring and overall involvement with their committee. In addition, non-thesis option MARM students may also count up to 3 hours of 693 (Professional Studies, see new Syllabus and course request) on their degree plan as work toward their professional paper requirement.

Lastly, the proposed changes will now require non-thesis option students to pass a final examination (as requested and filed with OGS). This final examination again adds strength to the role of MARM students’ advisory committee, provides an opportunity for MARM students to present their professional paper, and provides the advisory committee with the ability to assess overall student learning outcomes. The new examination requirement also leverages the *individual* assessment of student learning outcomes to contribute to larger MARM program data collection for program metrics. Considering that over 80% of MARM students select the non-thesis option, we believe these new requirements greatly strengthen the program and increase both the visibility of the students and the program as a whole.

**Changes in Coursework for all MARM students**

The proposed changes alter the required coursework for all MARM students (as outlined in the new catalog entry):

- Creates and adds MARS 603 (Quantitative Methods for Resource Management) as a required course (see MARS 603 Syllabus and new course request). This course addresses the lack of a methods/statistics course for all MARM students. No equivalent is currently available at TAMUG.
- Creates and adds MARS 693 (Professional Study; see MARS 693 Syllabus and new course request). This variable credit (1-3) elective course is intended for non-thesis option MARM students to focus on and prepare their newly required Professional Paper under the guidance of their advisory committee chair.
• Requires 1 hour seminar to be taken in the first semester. Seminar content will include talks by MARS/MARM related faculty about their research topics, courses offered, etc. This addition is intended to provide better and increased faculty exposure to MARM students early in their MARM degree tenure to better focus their choice of thesis/non-thesis option and degree planning.
• Shifts PLAN 641 (Problems in Environmental Planning Administration) from an elective course to a required course. This shift diversifies faculty involvement in the MARM program.
• Shifts MARS 615 (Physical and Geochemical Marine Resources), MARB 620 (Marine Biological Resources), and MARS 652 (Sustainable Management of Coastal Margins) from required to elective courses. The addition of MARS 603 and PLAN 641, coupled with an increase in hours of MARS 675 (from 2 to 3) would have led to a large increase in required courses. All three courses will remain acceptable MARM electives.

*Increased flexibility for MARM thesis-option students*

MARM thesis option students will adopt the required coursework outlined above, but will still lack the requirement of the capstone MARM course, MARS 680 (Integrative Analysis of Marine Resources). Previously, thesis-option MARM students were restricted to 6 (or sometimes 8) hours of MARS 691 (Research). The proposed changes increase the allowable hours of MARS 691 to a degree plan maximum of 12, allowing more time and flexibility to conduct research and prepare and defend theses.
Research Track (Thesis Option)

The MARM research track is designed to allow the student to demonstrate research capabilities through developing an independent and thorough investigation of a particular problem of interest. This also prepares the student for further graduate studies.

The 36-hour research track curriculum is structured with 22 hours of the required courses (MARS 680 is not taken by research track students) and 14 hours of optional elective courses of which up to 12 hours may be of 691 courses. Additional flexibility to replace required courses targeted to their area of research is available to research track students upon recommendation and approval by their advisory committees and the department.

No credit hours of 684 (Professional Internship) or 693 (Professional Studies) may be used for the research track MARM degree. A maximum of 12 credit hours of 691 (Research) or 485 and/or 685 (Directed Studies), and up to 3 credit hours of 690 (Theory of Research) or 695 (Frontiers in Research) may be used toward the research track MARM degree. In addition, any combination of 685, 690, 691 and 695 may not exceed 12 credit hours.

An acceptable thesis is required for the MARM degree for students who select the research track program. The finished work must reflect a comprehensive understanding of the pertinent literature and express in clear English, the problem(s) for study, the method, significance and results of the student’s original research. Guidelines for the preparation of the thesis are available in the Thesis Manual which is available online at http://thesis.tamu.edu.

After successful defense (or exemption from) and approval by the student’s advisory committee and the head of the student’s major department, students must submit their thesis to the Thesis Office. Students must submit their thesis in electronic format as a single PDF file. The PDF file must be uploaded to the Thesis Office website http://thesis.tamu.edu. Additionally, a signed approval page must be brought or mailed to the Thesis Office. Both the PDF file and the signed approval page are required by the deadline day.

Deadline dates for submitting are announced each semester or summer term in the Office of Graduate and Professional Studies Calendar (see Time Limit statement).

Before a student can be “cleared” by the Thesis Office, a processing fee must be paid at Financial Management Services. After commencement, theses are digitally stored and made available through the Texas A&M Libraries.

A thesis that, because of excessive corrections, is deemed unacceptable by the Thesis Office, will be returned to the student’s department head. The manuscript must be resubmitted as a new document, and the entire review process must begin anew. All original submittal deadlines must be met during the resubmittal process in order to graduate that semester.

Ocean and Coastal Resources/Master of Marine Resources Management 3+2 Program

This program allows Ocean and Coastal Resources (OCRE) undergraduate majors to enter the graduate program for a Master of Marine Resources Management at the beginning of their senior year, enabling students to receive their OCRE undergraduate degree (B.S.) and a Master of Marine Resources Management (MARM) graduate degree in five years.

Students admitted to the 5-year degree program will have completed 102 of the 120 hours of coursework required to receive a bachelor’s degree. These courses must include the specific prerequisites for a Bachelor of Science degree in Ocean and Coastal Resources, as well as the required Texas A&M University core curriculum courses. See the undergraduate section of this catalog for curriculum and enrollment information.
Master of Marine Resources Management (MARM)

The Master of Marine Resources Management (MARM) degree provides students with a broad understanding of coastal and ocean policy and management. The demand for graduates from this program in industry, government, academia and non-governmental organizations (NGO's) has never been stronger. Federal agencies employing graduates include the U.S. Coast Guard, the U.S. Army Corps of Engineers, and the Environmental Protection Agency. State agencies include the Texas General Land Office and the Texas Commission on Environmental Quality. Industries employing graduates include oil and natural gas, environmental consulting companies, ports, and tourism. These organizations have identified the need for a degree which focuses on national and international ocean resource law and policy; coastal zone management; physical and geochemical marine resources management strategies; and fisheries management. This degree program views marine natural resources management and policy development from both an ecological and policy perspective.

The degree may be viewed as a degree comparable to an MBA as an alternative terminal degree for people working in marine/ocean/coastal organizations. In addition, the degree program may address the needs of some public school science teachers seeking a degree outside the field of education.

Professional (Non-thesis option) Track

A thesis is not required for the Master of Marine Resources Management degree for students who select the non-thesis option program. The 36-hour professional track curriculum is structured with 24 hours of required courses and 12 hours of optional elective courses. The required courses include a 1-hour seminar to be taken in the student's first year, 8 hours of management, 3 hours of Geographic Information Systems (GIS), 6 hours of resource economics and statistical methods, and 6 hours of law/policy courses. The student in the professional track will choose electives for the remaining 12 credit hours. Additional flexibility to replace required courses with courses targeted to their area of research is available to professional track students upon recommendation and approval by their committee and the department. Students pursuing the non-thesis option professional track are not allowed to enroll in 691 (Research) for any reason and 691 may not be used for credit toward a non-thesis option professional track Master of Marine Resources Management degree.

A technical paper prepared on a topic relevant to Marine Resources Management is required for professional track students to complete the MARM degree. The technical paper will be developed under the guidance of the student's advisory committee. Professional track students may count up to 3 hours of 693 (Professional Studies) on their degree plan as work toward their professional paper requirement.

Of the total 36 hours of curriculum, 24 are required courses of study for the non-thesis degree in Masters of Marine Resources Management. The required courses include 6 hours of science, 8 hours of management, 2 hours of Geographic Information Systems (GIS) and 8 hours of law/policy courses. The student in the non-thesis option will choose electives for the remaining 12 credit hours, 3 hours of which will be additional science, and 3 hours of which will be additional law/policy management. The remaining 6 hours can be in an appropriate supporting field, if desired. Additional flexibility to replace required courses with courses targeted to their area of research is available to non-thesis option students upon recommendation and approval by their committee and the department.

The 36-hour non-thesis option curriculum is structured with 24 hours of required courses and 12 hours of optional elective courses, of which 3 are in additional science, three hours are in law/policy management, and six hours are of the student's choice.

The professional track student must pass a final examination with their advisory committee that addresses the technical paper and prior coursework. The final examination must be by dates announced each semester by the Office of Graduate and Professional Studies. A request to hold and announce the final examination must be submitted to the Office of Graduate and Professional Studies a minimum of 10 working days in advance of the scheduled date for the examination.
Professional Track (Non-thesis) Curriculum in Master of Marine Resources Management

Required Courses (24 hours required)

MARS 681  Seminar
MARS 625  GIS Based Modeling for Coastal Resources
MARS 613  Physical and Geochemical Marine Resources
MARS 603  Quantitative Methods for Resource Management
MARS 635  Environmental Impact Statements and NRDA
MARS 676  Environmental Policy
MARA 604  Marine Natural Resource Economics
MARR 620  Marine Biological Resources
MARS 675  Environmental Management Strategies for Scientists
MARS 680  Integrative Analyses in Marine Resources
MARS 652  Sustainable Management of Coastal Margins
PLSN 641  Problems of Environmental Planning and Administration

Research (Thesis Option) Track

The MARM thesis option research track is designed to allow the student to demonstrate research capabilities through developing an independent and thorough investigation of a particular problem of interest. This would also prepare the student for further graduate studies.

The 36-hour research track curriculum is structured with 22 hours of the required courses (MARS 680 is not taken by research track students) and 14 hours of optional elective courses of which up to 12 hours may be of 691 courses. Additional flexibility to replace required courses targeted to their area of research is available to research track students upon recommendation and approval by their advisory committees and the department.

No credit hours of 684 (Professional Internship) or 693 (Professional Studies) may be used for the research track Master of Marine Resources Management degree. A maximum of 12 credit hours of 691 (Research) or 485 and/or 685 (Directed Studies), and up to 3 credit hours of 690 (Theory of Research) or 695 (Frontiers in Research) may be used toward the research track Master of Marine Resources Management degree. In addition, any combination of 685, 690, 691 and 695 may not exceed 12 credit hours.

An acceptable thesis is required for the Master of Marine Resources Management degree for students who select the thesis option research track program. The finished work must reflect a comprehensive understanding of the pertinent literature and express it in clear English, the problem(s) for study, the method, significance and results of the student’s original research. Guidelines for the preparation of the thesis are available in the Thesis Manual which is available online at http://thesis.tamu.edu.

After successful defense (or exemption from) and approval by the student’s advisory committee and the head of the student’s major department, students must submit their thesis to the Thesis Office. Students must submit their thesis in electronic format as a single PDF file. The PDF file must be uploaded to the Thesis Office website http://thesis.tamu.edu. Additionally, a signed approval page must be brought or mailed to the Thesis Office. Both the PDF file and the signed approval page are required by the deadline day.

Deadline dates for submitting are announced each semester or summer term in the Office of Graduate and Professional Studies Calendar (see Time Limit statement).

Before a student can be “cleared” by the Thesis Office, a processing fee must be paid at Financial Management Services. After commencement, theses are digitally stored and made available through the Texas A&M Libraries.

A thesis that, because of excessive corrections, is deemed unacceptable by the Thesis Office, will be returned to the student’s department head. The manuscript must be resubmitted as a new document, and the entire review process must begin anew. All original submittal deadlines must be met during the resubmittal process in order to graduate that semester.

No credit hours of 684 (Professional Internship) may be used for the thesis option Master of Marine Resources Management degree.
Management degree. A maximum of 8 credit hours of 691 (Research) or 485 and/or 685 (Directed Studies), and up to 3 credit hours of 690 (Theory of Research) or 695 (Frontiers in Research) may be used toward the thesis option. Master of Marine Resources Management degree. In addition, any combination of 685, 690, 691 and 695 may not exceed 12 credit hours.

The 36-hour thesis-option curriculum is structured with 22 hours of the required courses (MARK 680 is not taken by thesis-option students) and 14 hours of optional elective courses of which at least 2 hours are in additional science. At least 3 hours are in law/policy/management and up to 6 hours may be of 691 courses. Additional flexibility to replace required courses targeted to their area of research is available to thesis-option students upon recommendation and approval by their committees and the department.

Ocean and Coastal Resources/Master of Marine Resources Management 3+2 Program

This program allows Ocean and Coastal Resources (OCRE) undergraduate majors to enter the graduate program for a Master of Marine Resources Management at the beginning of their senior year, enabling students to receive their OCRE undergraduate degree (B.S.) and a Master of Marine Resources Management (MARM) graduate degree in five years.

Students admitted to the 5-year degree program will have completed 102 of the 120 hours of course work required to receive a bachelor's degree. These courses must include the specific prerequisites for a Bachelor of Science degree in Ocean and Coastal Resources, as well as the required Texas A&M University core curriculum courses. See the undergraduate section of this catalog for curriculum and enrollment information.
Detail Requirements

Information for Degree Evaluation

This is NOT an official evaluation.

Program Evaluation

Master of Marine Resources Management - Thesis Option

Time Limits: All requirements for the degree must be completed within seven consecutive years.

Degree Plan: A Graduate Degree Plan of at least 36 hrs must be completed with a minimum GPR of 3.000 and no grade lower than C. At least one hour of 691 (Research) must be included.

Course Limitations: Courses exceeding limits below will not be considered for meeting degree requirements.

1. Only approved courses on the degree plan will be considered for this program.
2. No more than 12 hrs or one-third of the total hours on the degree plan, whichever is greater, may be used. Transfer course work may be completed at an accredited institution with a grade of B or better.
3. No more than 12 hrs taken in a non-degree seeking (60) classification may be used.
4. No more than 12 hrs may be used in any combination of the following categories:
   a. Not more than 12 hrs of 691 (Research) may be used.
   b. Not more than 8 hrs of 695 (Directed Studies) may be used.
   c. Not more than 3 hrs of 690 (Theory of Research) may be used.
   d. Not more than 3 hrs of 695 (Frontiers in Research) may be used.
5. No more than 2 hrs of 681 (Seminar) may be used.
6. No more than 9 hrs of advanced undergraduate courses (300-499) may be used.
7. No correspondence study may be used.
8. No credit hours of extension course work may be used.
9. No credit hours of FRBN 601 or GERH 603 may be used.
10. No credit hours of 684 or 695 may be used.

Advisory Committee: The Advisory Committee consists of at least three members of the Graduate Faculty, one of which must be from outside the student's major department.

Residence Requirement: During one semester or 2 consecutive 5-week summer terms, 9 hrs of resident credit must be completed.

Research Proposal: A thesis proposal approved by the Advisory Committee, Department Head and the Office of Graduate Studies is required.

Thesis Defense: The thesis defense may be written and/or oral. The defense may be waived for students with a 3.500 degree plan GPR and permission of the Advisory Committee, Department Head and the Office of Graduate Studies. The request to hold and announce the defense must be submitted to the Office of Graduate Studies a minimum of 10 working days in advance of the scheduled date.

To be eligible to hold the defense, the student:

1. must have a graduate GPR of at least 3.000 (listed as "Program GPA" below),
2. must have a Degree Plan GPR of at least 3.000 with no grade lower than a C in any course on the degree plan,
3. must have an approved research proposal,
4. must have completed or be registered for all remaining degree plan course work,
5. must be registered in the university,
6. must have the thesis in final form and ready for distribution to all committee members.

Thesis: The final version of the thesis must be cleared by the Office of Graduate Studies no later than one year after the defense or within the seven year time limit, whichever is first.

Program: MMR (Galv) Thesis option
Catalog Term: Fall 2015 - Galveston
Campus: Galveston
College: Galveston Campus
Degree: Master of Marine Res. Mgmt.
Level: Graduate
Majors: Marine Resources Management
Departments: Marine Science

<table>
<thead>
<tr>
<th>Met Credits</th>
<th>Courses</th>
<th>Required</th>
<th>Used</th>
<th>Required</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required:</td>
<td>Yes</td>
<td>0.000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program GPA:</td>
<td>No</td>
<td>3.00</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall GPA:</td>
<td>Yes</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Course Information:</td>
<td></td>
<td>0.000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This is NOT an official evaluation.

Area: Courses for Degree Plan GPR - Not Met
Description: A minimum degree plan GPR of 3.000 is required. Courses with grades of D, F or U are not acceptable for degree plan credit and must be repeated for a grade of C.
unofficial evaluation

Area: Courses Not Applied - Met
Description: See Graduate Committee Chair or Graduate Advisor for acceptable changes to degree plan coursework.

Met
Condition Rule Subject Attribute Low High Required Term Subject Course Title Attribute Credits Grade Source
No A. No Approved Degree Plan

Total Credits and GPA 0.000 .00

unofficial evaluation

Area: Graded Degree Plan Courses - Not Met
Description: A grade of C or better is required in all courses listed.

Met
Condition Rule Subject Attribute Low High Required Term Subject Course Title Attribute Credits Grade Source
No A. No Approved Degree Plan

Total Credits and GPA 0.000 .00

unofficial evaluation

Area: S/U Degree Plan Courses - Not Met
Description: A grade of S is required in all courses listed.

Met
Condition Rule Subject Attribute Low High Required Term Subject Course Title Attribute Credits Grade Source
No A. No Approved Degree Plan

Total Credits and GPA 0.000 .00

unofficial evaluation

Back to Display Options
Information for Degree Evaluation

This is NOT an official evaluation.

Program Evaluation

Master of Marine Resources Management

Time Limits: All requirements for the degree must be completed within seven consecutive years.

Degree Plan: A Graduate Degree Plan of at least 36 hrs must be completed with a minimum GPR of 3.000 and no grade lower than C.

Course Limitations (non-thesis option): Courses exceeding limits below will not be considered for meeting degree requirements.

1. Only approved courses on the degree plan will be considered for this program.
2. No more than 12 hrs or one-third of the total hours on the degree plan, whichever is greater, may be used. Transfer course work must be completed at an accredited institution with a grade of B or better.
3. No more than 12 hrs taken in a non-degree seeking (GG) classification may be used.
4. No more than 25 percent of the total degree plan hours may be used in any combination of the following categories:
   a. Not more than 4 hrs 684 (Professional Internship) may be used.
   b. Not more than 9 hrs of 685 (Directed Studies) may be used.
   c. Not more than 3 hrs of 690 (Theory of Research) may be used.
   d. Not more than 3 hrs of 695 (Frontiers in Research) may be used.
5. No more than 2 hrs of 681 (Seminar) may be used.
6. No more than 9 hrs of advanced undergraduate courses (300-499) may be used.
7. No correspondence study may be used.
8. No credit hours of extension course work may be used.
9. No credit hours of FREN 601 or GERM 603 may be used.
10. No credit hours of 691 (Research) may be used.

Advisory Committee: The Advisory Committee consists of at least three members of the Graduate Faculty, one of which must be from outside the student's major department.

Residence Requirements: During one semester or 2 consecutive 5-week summer terms, 9 hrs of resident credit must be completed.

Final Examination: A final comprehensive examination is required. The final examination may be written and/or oral. The request to hold and announce the final examination must be submitted to the Office ofGraduate Studies a minimum of 10 working days in advance of the scheduled date.

To be eligible to hold the defense, the student:

1. must have a graduate GPR of at least 3.000 (listed as "Program GPA" below),
2. must have a Degree Plan GPR of at least 3.000 with no grade lower than a C in any course on the degree plan,
3. must have completed or be registered for all remaining degree plan course work.

| Program:   | Master of Marine Resources Management |
| Campus:    | Galveston |
| College:   | Galveston Campus |
| Degree:    | Master of Marine Resources Management |
| Level:     | Graduate |
| Majors:    | Marine Resources Management |
| Departments: | Marine Science |

| Program:   | MMR (Galv) |
| Catalog Term: | |
| Evaluation Term: | |
| Expected Graduation Date: | |
| Request Number: | 292 |
| Results as of: | Sep 23, 2015 |
| Concentrations: | |

<table>
<thead>
<tr>
<th>Met Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>Used</td>
</tr>
<tr>
<td>Total Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Program GPA:</td>
<td>No</td>
</tr>
<tr>
<td>Overall GPA:</td>
<td>Yes</td>
</tr>
<tr>
<td>Other Course Information</td>
<td></td>
</tr>
<tr>
<td>Transfer:</td>
<td>0.000</td>
</tr>
</tbody>
</table>

This is NOT an official evaluation.

Area: Courses for Degree Plan GPR - Not Met

Description: A minimum degree plan GPR of 3.000 is required. Courses with grades of D, F or U are not acceptable for degree plan credit and must be repeated for a grade of C or better or Satisfactory (S).

Met Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Grade Source

<table>
<thead>
<tr>
<th>No</th>
<th>A.</th>
<th>No Approved Degree Plan</th>
</tr>
</thead>
</table>

Total Credits and GPA 0.000 .00
unofficial evaluation

<table>
<thead>
<tr>
<th>Area: Courses Not Applied - Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: See Graduate Committee Chair or Graduate Advisor for acceptable changes to degree plan coursework.</td>
</tr>
<tr>
<td>Met</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Total Credits and GPA</td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area: Graded Degree Plan Courses - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: A grade of C or better is required in all courses listed.</td>
</tr>
<tr>
<td>Met</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Total Credits and GPA</td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area: S/U Degree Plan Courses - Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: A grade of S is required in all courses listed.</td>
</tr>
<tr>
<td>Met</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Total Credits and GPA</td>
</tr>
</tbody>
</table>

Back to Display Options
Texas A&M University
Request for a Change in Curriculum
Undergraduate • Graduate • Professional

1. Program request type:
   ☑ Undergraduate   ☑ Graduate   ☐ First Professional (e.g., DVM, JD, MD, etc.)
   ☑ Degree Program   ☐ Minor   ☐ Certificate

2. Request change for:

3. Request submitted by (Department or Program Name):

   Program Designation and Name:
   Marine Sciences

4. (e.g., B.A. in History, Minor in History, Certificate in European Union):
   Ocean and Coastal Resources and Marine Resources Management

5. Brief description of change:
   Removal of ENGL 210 and 2 free elective credits, replaced by BIOL 111 and an introductory seminar with first year experience, MARS 101. Other housekeeping necessitated by changes in coursework by other departments. Changes also to the MARM curriculum and this 3+2 program requirements needed to reflect those changes.

6. Rationale for change:
   ENGL 210 is dropped leaving 6 credit hours of communications. BIOL 111 is included as a prerequisite for BIOL 112; our majors no longer have a waiver. The introductory MARS 101 adds a first year experience in the first semester with a cruise as part of the course. Geology split the lecture and lab into GEOL 101 (3cr) and GEOL 102 (1cr). The 2 contact hours for CCNG 252 lab do not give enough time for some field experiences in several lab sessions, so an intro marine science lab, MARS 252 (0-3) is proposed. For the graduate portion MARS 615 and MARB 620 are no longer required, and have been replaced with MARS 603 Quantitative Methods in Resource Management and PLAN 641 Problems in Environmental Planning Administration, and a seminar, MARS 681, is required, for a total of 24 hours of required MARM coursework. An additional 12 hours of electives in MARM bring the total graduate credits to 36. No other changes were made to the 3+2 plan.

7. a. Proposed curriculum attached.
   ☑ Yes   ☐ No

   b. Current catalog curriculum with handwritten edits attached.
   ☑ Yes   ☐ No

   c. Current Howdy degree evaluation with handwritten edits attached.
   ☑ Yes   ☐ No

   Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program change (increase/decrease) due to the proposed curriculum changes?
   ☐ Yes   ☐ No

   b. If yes, degree program hours will change from: __________ to: __________

   c. If yes, is the Texas Higher Education Coordinating Board form attached?
   □ Yes   □ No

   http://www.thecb.state.tx.us/index.cfm?objectid=A0F9F7FA-9A92-4F11-2756AD3BBBF01D60

9. If proposed changes affect other unit(s), are letters of support attached?
   □ Yes   □ No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/GC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

[Signature]
Department Head or Program Chair (Type Name & Sign)  Date

[Signature]  10/15/15
Dean of College  Date

[Signature]  10/15/15
Chair, GC or UCC  Date

Questions regarding this form should be directed to Curricular Services at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 04/14
5-Year Curriculum: Ocean and Coastal Resources (OCRE) and Master of Marine Resources Management (MARM)

This program allows Ocean and Coastal Resources (OCRE) majors to enter the graduate program for a Master of Marine Resources Management at the beginning of their senior year, enabling students to receive their OCRE undergraduate degree (B.S.) and a Master of Marine Resources Management (MARM) graduate degree in five years.

Students admitted to the 5-year degree program will have completed 102 of the 120 hours of course work required to receive a bachelor’s degree. These courses must include the specific prerequisites for a Bachelor of Science degree in Ocean and Coastal Resources, as well as the required Texas A&M University core curriculum courses.

Application to the 5-Year Program

Ocean and Coastal Resources majors who have at least a 3.25 GPA and who will have taken all of their prerequisite courses and otherwise completed 101 or 102 hours by the fall of their fourth year will be eligible to apply for the 5-year program during their junior year. Applicants to the 5-year program will submit the same materials (including GRE scores) as other MARM applicants, and those whose records are judged to be competitive by the mid-January deadline will be admitted. Admission criteria will be the same as for the other MARM students.

Admitted students will be enrolled in Marine Resources Management graduate courses with an undergraduate classification (U4) during the fall of their fourth year. They will then be reclassified as degree-seeking master’s students (G7) upon completing 120 credit hours. This will normally occur at the beginning of the fall semester of the fifth year. Students will be required to complete the same 2-year, 36-hour curriculum as other students admitted to the MARM non-thesis program. This curriculum combines nine core courses (24 credit hours) in resources management, policy and economics with 12 credit hours of electives (see MARM curriculum). At least one elective must be a science elective and at least one must be an additional law, policy, or management course.

If students are interested in the MARM thesis option, then there is additional flexibility to replace required courses for up to six hours of 691 (research) courses and electives chosen with the approval of their thesis advisor and committee. To comply with the course and work requirements of the thesis option, this program may extend beyond the 5-year window. For specific requirements to comply with the thesis option curriculum, students are asked to consult the MARM section of the TAMUG catalog.

Students who choose not to finish the MARM degree after being admitted to the 5-year program may exit the program at any time. Completed MARM courses will be applied to their bachelor’s degree in Ocean and Coastal Resources, as appropriate. Failure to complete the MARM program will in no way impede their ability to attain a bachelor’s degree in Ocean and Coastal Resources when the requirements for that degree are completed.

Those who pursue the 5-year program will receive both degrees upon the completion of the 5-year program. Students will not graduate with a bachelor’s degree in year four, but rather will earn both their Bachelor of Science and the Master of Marine Resources Management degrees at the end of year five.

Advising

Advising for the 5-year program is a coordinated effort by the Department of Marine Sciences undergraduate and graduate advisors and by the Office of Graduate Studies. Advising will help ensure that interested students have satisfied the prerequisite course requirements for the bachelor’s degree so that they may enter the 5-year program. OCRE students can speak to Dr. Melanie Lasko at laskom@tamu.edu or phone 409.740.4517. The MARM advisor is Dr. Frederick Sehlemmer at sehlemme@tamu.edu or phone 409.740.4518.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>FALL SEMESTER</th>
<th>ENGL 104</th>
<th>Composition and Rhetoric</th>
<th>(Th-Pr)</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101/102</td>
<td>GEOL 101</td>
<td>Principles of Geology</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td></td>
<td>Mathematics Requirement **</td>
<td>(3-2)</td>
<td>4</td>
</tr>
<tr>
<td>POLS 206</td>
<td></td>
<td>American National Government</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>Elective in American History</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>16 or 17</td>
<td>15 or 16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

86
<table>
<thead>
<tr>
<th>Fall 2016</th>
<th>GV</th>
<th>Core</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Year</td>
<td>Fall</td>
<td>Freshman</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biol 111</td>
<td>Introductory Biology I</td>
<td>(4-0)</td>
<td>4</td>
</tr>
<tr>
<td>engl 104</td>
<td>Composition and Rhetoric</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>math</td>
<td>math requirement</td>
<td>(3-2)</td>
<td>4</td>
</tr>
<tr>
<td>geol 101</td>
<td>Principals of Geology</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>geol 102</td>
<td>Principles of Geology Laboratory</td>
<td>(0-2)</td>
<td>1</td>
</tr>
<tr>
<td>mars 101</td>
<td>Marine Science Matters**</td>
<td>(1-0)</td>
<td>1</td>
</tr>
<tr>
<td>Total Hours</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biol 112</td>
<td>Introductory Biology II</td>
<td>(3-3)</td>
<td>4</td>
</tr>
<tr>
<td>pols 207</td>
<td>State and Local Government</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>math</td>
<td>math requirement</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>ocn 251</td>
<td>Oceanography**</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>mars 252</td>
<td>Intro Marine Science Laboratory**</td>
<td>(0-3)</td>
<td>1</td>
</tr>
<tr>
<td>mars 210</td>
<td>Marine Geography**</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore Year</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chem 101</td>
<td>Fundamentals of Chemistry I</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>chem 111</td>
<td>Fund. Of Chemistry Laboratory I</td>
<td>(0-3)</td>
<td>1</td>
</tr>
<tr>
<td>comm 203</td>
<td>Public Speaking</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Creative Arts core elective</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Coastal and Ocean Resources**</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mechanics</td>
<td>(3-3)</td>
<td>4</td>
</tr>
<tr>
<td>or phys 218</td>
<td>College Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mars 281</td>
<td>Sophomore Seminar in MARS**</td>
<td>(1-0)</td>
<td>1</td>
</tr>
<tr>
<td>Total Hours</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>chem 102</td>
<td>Fundamentals of Chemistry II</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>chem 112</td>
<td>Fund. Of Chemistry Laboratory II</td>
<td>(0-3)</td>
<td>1</td>
</tr>
<tr>
<td>L &amp; P C elec</td>
<td>Language, Philosophy &amp; Culture core Elective</td>
<td>3</td>
<td>3, 4, 5 L, P &amp; C Core Satisfied</td>
</tr>
<tr>
<td>mars 363</td>
<td>The Management Process</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>ecun 202</td>
<td>Principles of Economics</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>pols 206</td>
<td>American National Government</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>16</td>
<td>POLS Core Satisfied</td>
<td></td>
</tr>
<tr>
<td>Junior Year</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mars 350</td>
<td>Advanced Computer Applications**</td>
<td>(1-2)</td>
<td>2</td>
</tr>
<tr>
<td>ocn 420</td>
<td>Biological Oceanography**</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>mars 425</td>
<td>Coastal Wetlands Management**</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>and mars 426</td>
<td>Coastal Wetlands Management Laboratory**</td>
<td>(0-3)</td>
<td>1</td>
</tr>
<tr>
<td>or mars 430</td>
<td>Coastal Plant Ecology (3-3) credit 4**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pols 347</td>
<td>Politics of Energy and the Environment</td>
<td>(3-0)</td>
<td>3</td>
</tr>
<tr>
<td>Term</td>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Spring</td>
<td>mars 310</td>
<td>Field Methods in Marine **</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>stat 303</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>hist</td>
<td>History Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>mars 491</td>
<td>Research in Marine Sciences**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>mars 481</td>
<td>Seminar**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Senior Year and First Year of MARM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>mars 625</td>
<td>GIS Use in Coastal Resources</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>mars 676</td>
<td>Marine Policy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Professional elective**</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Spring</td>
<td>mars 604</td>
<td>Marine Natural Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>mars 675</td>
<td>Environmental Mgmt Strategies for Scientists</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>mars 603</td>
<td>Quantitative Methods for Resource Mgmt</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Professional elective**</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Second Year of MARM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>mars 635</td>
<td>Environmental Impact Statements and NRDA</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Professional elective**</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>mars 681</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>plan 641</td>
<td>Environmental Planning Administration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>marm elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Spring</td>
<td>mars 680</td>
<td>Integrative Analyses in Marine Resources</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>marm elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>marm elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Total Curriculum Hrs.</td>
<td></td>
<td></td>
<td>144</td>
</tr>
</tbody>
</table>

*Selected from mars 430, 431
**counts in major GPR
### Spring Semester
- **BIOL 112** Introductory Biology II * (3-3) 4
- **MARS 210** Marine Geography (3-0) 3
- **MATH** Mathematics Requirement ** (3-0) 3
- **OCNG 251** Oceanography (3-0) 3
- **MARS 489** Oceanography Laboratory for Science Majors † (0-3) 1
- **POLS 207** State and Local Government (3-0) 3

**Total Hours** 17

### Fall Semester
- **CHEM 101** Fundamentals of Chemistry I (3-0) 3
- **CHEM 111** Fundamentals of Chemistry Laboratory I (0-3) 1
- **COMM 203** Public Speaking (3-0) 3
- **MARS 280** Coastal and Ocean Resources † (3-0) 3
- **MARS 281** Sophomore Seminar in MARS † (3-0) 3
- **PHYS 218** Mechanics (3-3) 4
- **or PHYS 201** College Physics (3-3) 3

**Total Hours** 18

### Sophomore Year
- **CHEM 102** Fundamentals of Chemistry II (3-0) 3
- **CHEM 112** Fundamentals of Chemistry Laboratory II (0-3) 1
- **ECON 202** Principles of Economics (3-0) 3
- **MARA 363** The Management Process (3-0) 3
- **POLS 200** American National Government † (3-0) 3
- **Elective in Language, Philosophy and Culture** (3-0) 3

**Total Hours** 16

### Junior Year
- **MARS 350** Advanced Computer Applications † (1-2) 2
- **MARS 425** Coastal Wetlands Management (3-0) Credit 3 † (3-0) 4
- **and MARS 426** Coastal Wetlands Delineation Laboratory (0-3) Credit † (3-0) 4
- **or MARS 430** Coastal Plant Ecology (3-3) Credit 4 † (3-3) 4
- **MARS 481** Seminar † (1-0) 1
- **OCNG 420** Introduction to Biological Oceanography † (3-0) 3
- **POLS 347** Politics of Energy and the Environment (3-0) 3
- **or MARS 432** Peak Oil, Global Warming and Resource Scarcity (3-0) 3
- **Professional Elective †** (3-0) 3
- **General Elective** (3-0) 3

**Total Hours** 18

### Spring Semester
- **ENGL 210** Technical and Business Writing (3-0) 3
- **MARS 310** Field Methods in Marine Sciences † (1-6) 3
- **MARS 430** Geological Oceanography † (3-0) 3
- **or MARS 431** Geological Oceanography - Earth's Climate (3-0) 3
- **MARS 485** Directed Studies † (Research) (3-0) 3
- **STAT 303** Statistical Methods (2-2) 3
- **Professional Elective †** (3-0) 3

**Total Hours** 16

### Senior Year OCRE and First Year of MARM
- **MARS 615** Physical and Geochemical Marine Resources † (2-2) 3
- **MARS 625** GIS Use in Coastal Resources (1-3) 3
- **MARS 676** Environmental Policy (3-0) 3

**Total Hours** 12
<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Semester</td>
<td>MARA 604</td>
<td>Marine Natural Resource Economics</td>
<td>(3-0) 3</td>
</tr>
<tr>
<td></td>
<td>MARB 670</td>
<td>Marine-Biological Resources</td>
<td>(3-0) 3</td>
</tr>
<tr>
<td></td>
<td>MARS 675</td>
<td>Environmental Management Strategies for Scientists</td>
<td>(2-0) 3</td>
</tr>
<tr>
<td></td>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>SECOND YEAR OF MARM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Semester</td>
<td>MARS 655</td>
<td>Environmental Impact Statements and Natural Resource Damage Assessment</td>
<td>(3-0) 3</td>
</tr>
<tr>
<td></td>
<td>MARM elective ‡</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Professional Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Spring Semester</td>
<td>MARS 652</td>
<td>Sustainable Management of Coastal Margins</td>
<td>(3-0) 3</td>
</tr>
<tr>
<td></td>
<td>MARS 680</td>
<td>Integrative Analyses in Marine Resources</td>
<td>(2-0) 2</td>
</tr>
<tr>
<td></td>
<td>MARM Elective ‡</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MARM Elective ‡</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total Curriculum Hours for Combined OCRE/MARM 5-Year Program</td>
<td>144</td>
<td></td>
</tr>
</tbody>
</table>

**Notes for OCRE/MARM 3+2 Program**

- All electives must be chosen in consultation with, and approved by, the student's academic advisor. Unless courses are specifically listed, see University Core Curriculum at [http://core.tamu.edu](http://core.tamu.edu) for a listing of course options for Communication, Mathematics, Life and Physical Sciences; Language, Philosophy and Culture; Creative Arts; American History; Government and Political Sciences; and Social and Behavioral Sciences. The 6-hour University Core Curriculum requirement for International and Cultural Diversity may be met with courses used to satisfy other degree requirements.

- As indicated above, students in the 5-year program will take 12 fewer undergraduate credit hours than other OCRE students. Graduate courses taken in the fourth and fifth year will be counted as credit towards the OCRE degree.

- Credit by Exam credit will be awarded for ECON 203 and MARS 325 upon completion of examination in MARA 604 and MARS 625 respectively.

- Course adjustments will be allowed for 6 hours of undergraduate elective credit to use 6 hours of MARM elective credits.

---

**BIOE 141**: a prerequisite for BIOE 443.

**BIOE 142**: depending upon the math sequence selected, the number of credit hours will vary by 1 or 2 credits. The Math Requirement may be met by the following:

1. Either MATH 151 (4 credits), which is preferred for a science-oriented career path, or MATH 142 (3 credits) may be taken. Credit will not be given for both MATH 151 and MATH 142.

2. Either MATH 152 (4 credits), MATH 141 or MATH 142 may be taken.

† Indicates required courses in the Ocean and Coastal Resources major. These courses will be used to compute the major GPR. Also, if any upper level MARS or OCNCE elective courses are taken, they will be used in the major GPR.

‡ Recommended professional electives are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 310, 311</td>
<td>Marine Geology</td>
</tr>
<tr>
<td>MARA 470, 438, 445</td>
<td>Oceanography</td>
</tr>
<tr>
<td>MARS 305, 330, 370, 415, 432, 435, 440, 484, 490 or 489</td>
<td>Marine Science</td>
</tr>
</tbody>
</table>

Note: If you choose to take CHEM 316, then you must take CHEM 318 concurrently.

§-Field Experience may also be met with MARA 300 plus one credit hour of a field oriented lab course.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARA 300</td>
<td>Oceanographic Field Research</td>
</tr>
</tbody>
</table>

II-11-The 36-hour non-thesis option curriculum is structured with 24 hours of required courses and 12 hours of optional elective courses, of which three hours are additional requirements for the thesis option curriculum.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARA 300</td>
<td>Oceanographic Field Research</td>
</tr>
</tbody>
</table>

V-Students may choose to take MARA 484 and gain credit for MARA 310 and two hours of professional electives.

V-Designated writing intensive course.

‡‡ The 36-hour non-thesis option curriculum is structured with 24 hours of required courses and 12 hours of optional elective courses, of which three hours are additional requirements for the thesis option curriculum.
Information for Degree Evaluation

This is NOT an official evaluation.

Program Evaluation

Limitation Correspondence: No more than 12 hours of correspondence earned through an accredited institution may be used for an undergraduate degree.

Limitation Combination: Maximum combination of 18 hours of grades, 482, 485 and/or 491 courses may be used for an undergraduate degree.

<table>
<thead>
<tr>
<th>Program</th>
<th>[GV] BS OCIRE - 3+2 Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus:</td>
<td>Galveston Campus</td>
</tr>
<tr>
<td>College:</td>
<td>Galveston Campus</td>
</tr>
<tr>
<td>Degree:</td>
<td>Bachelor of Science</td>
</tr>
<tr>
<td>Level:</td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Majors:</td>
<td>Marine Science</td>
</tr>
<tr>
<td>Departments:</td>
<td>Ocean &amp; Coastal Resources</td>
</tr>
</tbody>
</table>

| Catalog Term: | Fall 2015 - Galveston       |
| Evaluation Term: | Fall 2015 - Galveston |
| Expected Graduation Date: | 3 |
| Request Number: | Sep 29, 2015 |
| Results as of: | 2015 |
| Minors: | Concentrations: |

<table>
<thead>
<tr>
<th>Met</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required</td>
<td>Used</td>
<td>Required</td>
</tr>
<tr>
<td>Total Required:</td>
<td>No</td>
<td>120.000</td>
</tr>
</tbody>
</table>

Program GPA: 

Overall GPA: 

Other Course Information

Transfer: 

0.000 

0

This is NOT an official evaluation.

Area Major Coursework (46.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition Rule</th>
<th>Subject Attribute</th>
<th>Low High</th>
<th>Required Credits</th>
<th>Required Courses</th>
<th>Term Subject Course Title Attribute</th>
<th>Credits</th>
<th>Grade Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>MARS 280</td>
<td></td>
<td></td>
<td></td>
<td>MARS 101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>MARS 281</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>MARS 310</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>MARS 325</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>MARS 430</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>MARS 481</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>OCNG 251</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>OCNG 420</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>Ecology Req 4hrs</td>
<td>Select from MARS 425, 428 or MARS 430.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>MARS 485</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>L.</td>
<td>MARS 350</td>
<td></td>
<td></td>
<td></td>
<td>MARS 252</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits and GPA 

0.000 .00

unofficial evaluation

Area Supporting Coursework (150.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition Rule</th>
<th>Subject Attribute</th>
<th>Low High</th>
<th>Required Credits</th>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A.</td>
<td>ECON 202</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
<td>Economics Req 3hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
unofficial evaluation

### Area Professional Electives (12.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met Condition</th>
<th>Subject Attribute</th>
<th>Low High</th>
<th>Required Credits</th>
<th>Required Courses</th>
<th>Term Subject Course Title Attribute Credits Grade Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**No** = 12 hrs.
- Subject from CHEM 316, 318, 386, MATH 470, MATH 320, 340, 345, 395, 423, 432, 438, 446, MATH 305, 340, 370, 349, 415, 432, 435, 440, 484, 485.

Total Credits and GPA 0.000 0.00

unofficial evaluation

### Area Communication (4.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met Condition</th>
<th>Subject Attribute</th>
<th>Low High</th>
<th>Required Credits</th>
<th>Required Courses</th>
<th>Term Subject Course Title Attribute Credits Grade Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**No** =
- A. ENGL 104
- B. ENGL 210
- C. COMM 203

Total Credits and GPA 0.000 0.00

unofficial evaluation

### Area Mathematics (10.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met Condition</th>
<th>Subject Attribute</th>
<th>Low High</th>
<th>Required Credits</th>
<th>Required Courses</th>
<th>Term Subject Course Title Attribute Credits Grade Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**No** =
- A. MATH 151
- B. Math Reqmt 3hrs
  - Select from MATH 141, 152 or 166.
- C. STAT 303

Total Credits and GPA 0.000 0.00

unofficial evaluation

### Area Life and Physical Sciences (20.000 credits) - Not Met

<table>
<thead>
<tr>
<th>Met Condition</th>
<th>Subject Attribute</th>
<th>Low High</th>
<th>Required Credits</th>
<th>Required Courses</th>
<th>Term Subject Course Title Attribute Credits Grade Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**No** =
- A. Phys Reqmt 4hrs
  - Select from PHYS 201 or 218.
- B. BIOL 112
- C. CHEM 101
- D. CHEM 111
- E. CHEM 102
- F. CHEM 112
- G. GEOL 101
  - BIOL 111
  - GEOL 102

Total Credits and GPA 0.000 0.00
Area Language, Philosophy & Culture (3,000 credits) - Not Met

<table>
<thead>
<tr>
<th>No</th>
<th>Subject Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required Courses</th>
<th>Term Subject Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lang, Phil, Culture Rqmt</td>
<td>3hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select any course with the Language, Philosophy and Culture attribute (KLPC).

Total Credits and GPA 0.000 .00

Area Creative Arts (3,000 credits) - Not Met

<table>
<thead>
<tr>
<th>No</th>
<th>Subject Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required Courses</th>
<th>Term Subject Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Creative Arts Requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select three hours from any course with the Creative Arts attribute (KCRA).

Total Credits and GPA 0.000 .00

Area Social and Behavioral Science (3,000 credits) - Not Met

<table>
<thead>
<tr>
<th>No</th>
<th>Subject Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required Courses</th>
<th>Term Subject Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MARS 210</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits and GPA 0.000 .00

Area Citizenship (12,000 credits) - Not Met

<table>
<thead>
<tr>
<th>No</th>
<th>Subject Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required Courses</th>
<th>Term Subject Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>American History Rqmt</td>
<td>6hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select 6 hours from any course with the [KHS] attribute.

No AND

<table>
<thead>
<tr>
<th>No</th>
<th>Subject Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required Courses</th>
<th>Term Subject Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Political Science Rqmt</td>
<td>6hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Take POLS 206 and POLS 207.

Total Credits and GPA 0.000 .00

Area General Electives (5,000 credits) - Not Met

<table>
<thead>
<tr>
<th>No</th>
<th>Subject Attribute</th>
<th>Low</th>
<th>High</th>
<th>Required Courses</th>
<th>Term Subject Course</th>
<th>Title</th>
<th>Attribute</th>
<th>Credits</th>
<th>Grade</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Electives</td>
<td>5hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 hours of coursework required. See advisor for acceptable courses.

Total Credits and GPA 0.000 .00

unofficial evaluation
unofficial evaluation

unofficial evaluation

unofficial evaluation

unofficial evaluation

unofficial evaluation

unofficial evaluation
<table>
<thead>
<tr>
<th>Met</th>
<th>Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Grade Source Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A. Residence - Major 12hrs</td>
</tr>
<tr>
<td>No</td>
<td>AND</td>
</tr>
<tr>
<td></td>
<td>B. Residence 24hrs</td>
</tr>
</tbody>
</table>

unofficial evaluation

Total Credits and GPA 0.000 .00

Back to Display Options
Profile Track

Master of Marine Resources Management (Non-Thesis Option) (Five Year Program)

Time Limits: All requirements for the degree must be completed within seven consecutive years.

Degree Plan: A Graduate Degree Plan of at least 36 hrs must be completed with a minimum GPR of 3.000 and no grade lower than C.

Course Limitations: Courses exceeding limits below will not be considered for meeting degree requirements.

1. Only approved courses on the degree plan will be considered for this program.
2. No more than 12 hrs or one-third of the total hours on the degree plan, whichever is greater, may be used. Transfer course work must be completed at an accredited institution with a grade of B or better.
3. No more than 12 hrs in a non-degree seeking (GE) classification may be used.
4. No more than 23 percent of the total degree plan hours may be used in any combination of the following categories:
   a. No more than 4 hrs of 694 (Professional Internship) may be used.
   b. No more than 9 hrs of 685 (Directed Studies) may be used.
   c. No more than 3 hrs of 690 (Theory of Research) may be used.
   d. No more than 3 hrs of 695 (Frontiers in Research) may be used.
5. No more than 2 hrs of 681 (Seminar) may be used.
6. No more than 9 hrs of advanced undergraduate courses (300-499) may be used.
7. No correspondence study may be used.
8. No credit hours of extension course work may be used.
9. No credit hours of FREN 601 or GERM 603 may be used.
10. No credit hours of 691 (Research) may be used.

Advisory Committee: The Advisory Committee consists of at least three members of the Graduate Faculty, one of which must be from outside the student's major department.

Residence Requirement: During one semester or 2 consecutive 5-week summer terms, 9 hrs of resident credit must be completed.

Final Examination: A final comprehensive examination is not required.

Program: MMR (Galv) Syr program
Campus: Galveston
College: Galveston Campus
Degree: Master of Marine Res. Mgmt.
Level: Graduate
Majors: Marine Resources Management
Departments: Marine Science

Catalog Term: Fall 2015 - Galveston
Evaluation Term: Fall 2015 - Galveston
Expected Graduation Date: 12
Results as of: Sep 29, 2015
Minors:
Concentrations:

<table>
<thead>
<tr>
<th>Met</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0.000</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Required: Yes
Program GPA: No
Overall GPA: Yes
Other Course Information: Transfer: 0.000

This is NOT an official evaluation.

Area: Courses for Degree Plan GPA - Not Met
Description: A minimum degree plan GPA of 3.000 is required. Courses with grades of D, F or U are not acceptable for degree plan credit and must be repeated for a grade of C or better or Satisfactory (S).

Met: Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Grade Source
No A. No Approved Degree Plan

unofficial evaluation

Area: Courses Not Applied - Met

Total Credits and GPA: 0.000 .00
Description See Graduate Committee Chair or Graduate Advisor for acceptable changes to degree plan coursework.

<table>
<thead>
<tr>
<th>Area:</th>
<th>Unofficial Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Graded Degree Plan Courses - Not Met</td>
</tr>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Grade Source Credits Courses</td>
</tr>
<tr>
<td>No</td>
<td>Additional Unused Courses</td>
</tr>
<tr>
<td></td>
<td>Total Credits and GPA 0.000 0.00</td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area:</th>
<th>Unofficial Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>S/U Degree Plan Courses - Met</td>
</tr>
<tr>
<td>Met</td>
<td>Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Grade Source Credits Courses</td>
</tr>
<tr>
<td>No</td>
<td>No Approved Degree Plan</td>
</tr>
<tr>
<td></td>
<td>Total Credits and GPA 0.000 0.00</td>
</tr>
</tbody>
</table>

unofficial evaluation

Back to Display Options
Information for Degree Evaluation

This is NOT an official evaluation.

Program Evaluation

Master of Marine Resources Management Five Year Program - Thesis Option

Time Limits: All requirements for the degree must be completed within seven consecutive years.

Degree Plan: A Graduate Degree Plan of at least 35 hrs must be completed with a minimum GPA of 3.000 and no grade lower than C. At least one hour of 691 (Research) must be included.

Course Limitations: Courses exceeding limits below will not be considered for meeting degree requirements.

1. Only approved courses on the degree plan will be considered for this program.
2. No more than 12 hrs or one-third of the total hours on the degree plan, whichever is greater, may be used. Transfer course work must be completed at an accredited institution with a grade of B or better.
3. No more than 12 hrs taken in a non-degree seeking (GS) classification may be used.
4. No more than 12 hrs may be used in any combination of the following categories:
   a. Not more than 8 hrs of 691 (Research) may be used.
   b. Not more than 8 hrs of 685 (Directed Studies) may be used.
   c. Not more than 3 hrs of 690 (Theory of Research) may be used.
   d. Not more than 3 hrs of 695 (Frontiers in Research) may be used.
5. No more than 2 hrs of 681 (Seminar) may be used.
6. No more than 9 hrs of advanced undergraduate courses (300-499) may be used.
7. No correspondence study may be used.
8. No credit hours of extension course work may be used.
9. No credit hours of FREN 601 or GERM 603 may be used.

Advisory Committee: The Advisory Committee consists of at least three members of the Graduate Faculty, one of which must be from outside the student's major department.

Residence Requirement: During one semester or 2 consecutive 5-week summer terms, 9 hrs of resident credit must be completed.

Research Proposal: A thesis proposal approved by the Advisory Committee, Department Head and the Office of Graduate Studies is required.

Thesis Defense: The thesis defense may be written and/or oral. The defense may be waived for students with a 3.500 degree plan GPA and permission of the Advisory Committee, Department Head and the Office of Graduate Studies. The request to hold and announce the defense must be submitted to the Office of Graduate Studies a minimum of 10 working days in advance of the scheduled date.

To be eligible to hold the defense, the student:

1. must have a graduate GPA of at least 3.000 (listed as "Program GPA" below),
2. must have a Degree Plan GPA of at least 3.000 with no grade lower than a C in any course on the degree plan,
3. must have an approved research proposal,
4. must have completed or be registered for all remaining degree plan course work,
5. must be registered in the university,
6. must have the thesis in final form and ready for distribution to all committee members.

Thesis: The final version of the thesis must be cleared by the Office of Graduate Studies no later than one year after the defense or within the seven year time limit, whichever is first.

---

Program: MMR [Galv] 5yr program
Catalog Term: Fall 2015 - Galveston
Program GPA: Yes
Other Course Information
Transfer: 0.000

<table>
<thead>
<tr>
<th>Area</th>
<th>Courses for Degree Plan GPR - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>A minimum degree plan GPA of 3.000 is required. Courses with grades of D, F or U are not acceptable for degree plan credit and must be repeated for a grade of C.</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Met Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Program GPA:</td>
<td>No</td>
</tr>
<tr>
<td>Overall GPA:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

This is NOT an official evaluation.
<table>
<thead>
<tr>
<th>Area: Courses Not Applied - Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: See Graduate Committee Chair or Graduate Advisor for acceptable changes to degree plan coursework.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A. No Approved Degree Plan</td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area: Graded Degree Plan Courses - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: A grade of C or better is required in all courses listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A. No Approved Degree Plan</td>
</tr>
</tbody>
</table>

unofficial evaluation

<table>
<thead>
<tr>
<th>Area: S/U Degree Plan Courses - Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: A grade of S is required in all courses listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Met</th>
<th>Condition Rule Subject Attribute Low High Required Required Term Subject Course Title Attribute Credits Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>A. No Approved Degree Plan</td>
</tr>
</tbody>
</table>

unofficial evaluation

Back to Display Options

Print
Special Consideration

Items
Date: October 14, 2015

To: Mark Zoran
Chair
Graduate Council

Through Ryan Crocker
Dean
Bush School of Government and Public Service

Arnold Vedlitz
Executive Associate Dean
Bush School of Government and Public Service

From: Leonard Bright
Graduate Instruction Committee Chair
Assistant Dean of Graduate Education
Bush School of Government and Public Service

Gregory Gause
Department Head
Department of International Affairs

Subject: Teach Out Plan for International Affairs China Certificate

The Bush School seeks to close its China Certificate to future student enrollment. The department has taken the appropriate steps to ensure that this closure does not negatively affect faculty, staff or current students who are completing the program. The Bush School’s Graduate Instruction Committee and the College of Liberal Arts have issued their support of this action.
Teach-out Plan

CHINA CERTIFICATE
Bush School of Government
Texas A&M University

Adapted from the Southern Association of Colleges and Schools Commission on Colleges Substantive Change for Accredited Institutions of the Commission of Colleges.

1. Date of program closure: August 1, 2016.

2. An explanation of how affected parties (students, faculty, staff) will be informed of the impending closure: No staff or faculty are affected by the closure. Those involved in the program will be notified regularly by email as the process of closure proceeds. Students will be notified by email at regular intervals in the process.

3. An explanation of how students will be helped to complete their programs of study with minimal disruption or additional expense: Currently, there are only two active students enrolled at the University who are pursuing the certificate. One of those students will complete his requirements in the spring semester 2015.

4. Signed copies of teach-out agreements with other institutions, if any: Attached is a note from the College of Liberal Arts attesting to their agreement to the closure.

5. How faculty and staff will be redeployed or helped to find new employment: There will be no need to redeploy faculty or staff, and no one will lose his or her job as a result of the closure.

6. If closing an institution, arrangement for the storing of student records, disposition of final financial resources and other assets: No institution will be closed.

7. Please provide the following additional information:
   a. How many students are currently enrolled in the program? Two students are currently enrolled.

   b. Projected graduation date for the last student(s) in the program? One of these students will complete the MIA and the China Certificate in the spring semester 2016. The other student, in a doctoral program, has not responded to communications.

NOTE: If students will not be moved to another program, you will need to extend the program closure date in order to continue to award degrees to current students under the existing program.
MEMORANDUM

TO: F. Gregory Gause, III, Head, International Affairs Department
   Bush School of Government and Public Service

FROM: Leroy G. Dorsey, Associate Dean, Academic Initiatives and Graduate Instruction
      College of Liberal Arts

SUBJECT: China Certificate Program Closure

This memo is a response to the request made by the Bush School of Government & Public Service to close the China Certificate program. The College of Liberal Arts and its GIC have been duly informed of this move and there is no objection.
October 20, 2015

MEMORANDUM

TO: Dr. Mark Zoran  
Chair, Graduate Council

THROUGH: Dr. Robert Burghardt  
Associate Dean for Research and Graduate Studies

FROM: Dr. Jane Welsh  
Assistant Dean for Graduate Studies and Graduate Instruction Committee Chair

SUBJECT: Low-Producing Program Closure and Teach-Out Plan – MS Laboratory Animal Medicine

Through various correspondence, the Texas Higher Education Coordinating Board and the Office of the Provost and Executive Vice President for Texas A&M University have set a final closure date of August 31, 2016 for the Master of Science in Laboratory Animal Medicine degree program. There is currently one student enrolled in the program with an expected graduation date of August 12, 2016; therefore, the program is currently being phased out and no new students have been admitted to the program after August 2014.

As an interdepartmental degree within the College of Veterinary Medicine & Biomedical Sciences, the Dean’s Office for the College has prepared and forwarded the required teach out plan and additional documentation required to officially close this degree program. Please accept this notification and the attachments to effectively close the MS in Laboratory Animal Medicine on August 31, 2016.

Attachments
Laboratory Animal Medicine MS (Teach Out Plan)
Texas Higher Education Coordinating Board College of Veterinary Medicine Degree Program Inventory Notification Form for Change to an Existing Degree Program
Laboratory Animal Medicine MS  
College of Veterinary Medicine and Biomedical Sciences  
Texas A&M University

1. **Date of closure (date when new students will no longer be admitted)**  
The Master of Science in Laboratory Animal Medicine (LAMD) degree program discontinued admission of new students in July 2014, once Texas A&M University administrators confirmed closure of the LAMD degree effective August 31, 2016.

2. **An explanation of how affected parties (students, faculty, staff) will be informed of the impending closure.**  
Faculty members and the one student currently enrolled in the LAMD program have received notification that the program will discontinue effective August 31, 2016.

3. **An explanation of how all affected students will be helped to complete their programs of study with minimal disruption.**  
The one student currently enrolled in the LAMD degree program has completed all didactic courses required for graduation and is aware of the remaining required research activities associated with the degree. The student’s faculty mentor and advisory committee are guiding the student’s progress to timely degree completion.

4. **Signed copies of teach-out agreements with other institutions, if any**  
No other institutions are involved.

5. **How faculty and staff will be redeployed or helped to find new employment.**  
No faculty members will be affected and staff will be retained. All faculty and staff persons in the LAMD MS program have on-going commitments to continue their teaching and service as part of other active degree programs in the College of Veterinary Medicine & Biomedical Sciences and the Comparative Medicine Program of Texas A&M University.

6. **If closing an institution, arrangement for the storing of student records, disposition of final financial resources and other assets**  
N/A

7. **Please provide the following additional information:**  
a. How many students are currently enrolled in the program? 1  
b. Projected graduation date for the last student(s) in the program?  
   August 12, 2016
### CURRENT DEGREE INVENTORY

THECB Degree Program Inventory – Texas A&M University-College Station - 103632

<table>
<thead>
<tr>
<th>Institutional Administrative Structure</th>
<th>CIP Code</th>
<th>Assoc</th>
<th>Baccalaureate</th>
<th>Degree Level Master's</th>
<th>Doctoral</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLLEGE OF VETERINARY MEDICINE AND BIOMEDICAL SCIENCES 17 2888</td>
<td></td>
<td></td>
<td></td>
<td>MS (32 SCH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCIENCE AND TECHNOLOGY JOURNALISM</td>
<td>09.0908.00</td>
<td></td>
<td></td>
<td>Start date: 09/01/1985</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOMEDICAL SCIENCES</td>
<td>25.0102.00</td>
<td>BS (120 SCH)</td>
<td>MS (32 SCH)</td>
<td>Start date: 09/01/2006</td>
<td>PHD (96 SCH)</td>
<td>Start date: 09/01/2006</td>
</tr>
<tr>
<td>VETERINARY MEDICINE</td>
<td>51.2401.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DVM (176 SCH)</td>
</tr>
<tr>
<td>LABORATCRY ANIMAL MEDICINE</td>
<td>51.2509.00</td>
<td></td>
<td>MS 2 (32 SCH)</td>
<td>Start date: 01/14/1963</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT OF VETERINARY INTEGRATIVE BIOSCIENC 2873</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETERINARY PUBLIC HEALTH - EPIDEMIOLOGY</td>
<td>51.2510.00</td>
<td></td>
<td>MS (36 SCH)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT OF VETERINARY PATHOBIOLGY 2907</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PhD</td>
</tr>
<tr>
<td>VETERINARY PATHOBIOLGY</td>
<td>51.2505.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start date: 09/01/2012</td>
</tr>
<tr>
<td>Institutional Administrative Structure</td>
<td>CIP Code</td>
<td>Assoc</td>
<td>Baccalaureate</td>
<td>Degree Level Master's</td>
<td>Doctoral</td>
<td>Professional</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----------</td>
<td>-------</td>
<td>---------------</td>
<td>------------------------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>COLLEGE OF VETERINARY MEDICINE AND BIOMEDICAL SCIENCES 17 2888</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCIENCE AND TECHNOLOGY JOURNALISM</td>
<td>09.0908.00</td>
<td></td>
<td></td>
<td>MS (32 SCH) Start date: 09/01/1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOMEDICAL SCIENCES</td>
<td>26.0102.00</td>
<td>BS (120 SCH)</td>
<td>MS (32 SCH) Start date: 09/01/2008</td>
<td>PHD (96 SCH) Start date: 09/01/2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETERINARY MEDICINE</td>
<td>51.2401.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DVM (176 SCH)</td>
</tr>
<tr>
<td>LABORATORY-ANIMAL MEDICINE</td>
<td>51.2609.00</td>
<td></td>
<td>MS-2 (32 SCH) Start date: 04/14/1983</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT OF VETERINARY INTEGRATIVE BIOSCIENCE 2873</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETERINARY PUBLIC HEALTH - EPIDEMIOLOGY</td>
<td>51.2510.00</td>
<td></td>
<td></td>
<td>MS (36 SCH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT OF VETERINARY PATHOBIOLOGY 2907</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETERINARY PATHOBIOLOGY</td>
<td>51.2505.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PhD Start date: 09/01/2012</td>
</tr>
<tr>
<td>Institutional Administrative Structure</td>
<td>CIP Code</td>
<td>Assoc</td>
<td>Baccalaureate</td>
<td>Degree Level Master's</td>
<td>Doctoral</td>
<td>Professional</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>----------</td>
<td>-------</td>
<td>---------------</td>
<td>-----------------------</td>
<td>----------</td>
<td>---------------</td>
</tr>
<tr>
<td>COLLEGE OF VETERINARY MEDICINE AND BIOMEDICAL SCIENCES 17 2888</td>
<td>00 0908 00</td>
<td></td>
<td></td>
<td>MS (32 SCH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCIENCE AND TECHNOLOGY JOURNALISM</td>
<td></td>
<td></td>
<td></td>
<td>Start date: 09/01/1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOMEDICAL SCIENCES</td>
<td>26.0102.00</td>
<td></td>
<td>BS (120 SCH)</td>
<td>MS (32 SCH)</td>
<td>PHD (98 SCH)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start date: 09/01/2008</td>
<td>Start date: 09/01/2006</td>
<td></td>
</tr>
<tr>
<td>VETERINARY MEDICINE</td>
<td>51.2401.00</td>
<td></td>
<td></td>
<td></td>
<td>DVM (176 SCH)</td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT OF VETERINARY INTEGRATIVE BIOSCIENCE 2873</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETERINARY PUBLIC HEALTH - EPIDEMIOLOGY</td>
<td>51.2510.00</td>
<td></td>
<td></td>
<td></td>
<td>MS (36 SCH)</td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT OF VETERINARY PATHOBIOLOGY 2907</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VETERINARY PATHOBIOLOGY</td>
<td>51.2505.00</td>
<td></td>
<td></td>
<td></td>
<td>PhD</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start date: 09/01/2012</td>
<td></td>
</tr>
</tbody>
</table>
Notification Form for Change to An Existing Degree Program
Texas Higher Education Coordinating Board

Directions: An institution shall use this form to notify the Board of a change to an existing degree program that does not require a new degree program request.

Information: Contact the Division of Workforce, Academic Affairs and Research at 512/427-6200 for more information.

Administrative Information

1. Institution: Texas A&M University

2. Description of Degree Program Change: Closure of MS in Laboratory Medicine

3. Degree Program Inventory Change: (attach annotated degree inventory if needed)
   See attached.

4. Implementation Date: 10/20/2015

5. Phase Out Date (if applicable): 08/31/2016

6. Contact Person: Provide contact information for the person who can answer specific questions about the program.
   
   Name: Robert C. Burghardt, PhD
   
   Title: Associate Dean, College of Veterinary Medicine & Biomedical Sciences
   
   E-mail: RBurghardt@cvm.tamu.edu
   
   Phone: (979) 845-5092
Signature Page

Institutional Approval:

__________________________  ____________________
Chief Executive Officer or Chief Academic Officer Name  Date
Title

Texas A&M University System Approval:

__________________________  ____________________
James R. Hallmark  Date
Vice Chancellor for Academic Affairs
Texas A&M University System
July 17, 2015

To: Dr. Karen Butler-Purry, Associate Provost for Graduate and Professional Studies

Through: Dr. Mark Zoran, Chair of Graduate Council

Through: Dr. Antonietta Quigg, Associate Vice President for Research and Graduate Studies

From: Dr. Joan P. Mileski, Department Head, Maritime Administration

The Department of Maritime Administration respectfully requests waiving of the one-semester residency requirement for students in the Maritime Administration and Logistics (MAAL) program.

The MAAL program prepares professionals for leadership positions in the public and private sectors. Designed for working professionals in maritime fields, the program seeks to provide an avenue for a professional degree at a part-time pace; thus allowing employment to be continued. The residency requirement creates restrictions for our target audience; limiting the number of applicants. Waiver of this requirement will broaden access to this audience.

Thank you for your consideration.
MEMORANDUM

September 29, 2015

TO: Mark Zoran, PhD  
   Chair, Graduate Council

FROM: Jay Maddock, PhD  
       Dean, School of Public Health

RE: Closure of Austin Off-Campus Distance Education MPH Programs

The School of Public Health is initiating closure of two Austin-site distance education Master of Public Health programs. Attached you will find the following documents as agenda items for the Graduate Council:

- Teach-out plan for discontinuation of the Austin-site MPH in Environmental Health;
- Teach-out plan for discontinuation of the Austin-site MPH in Health Policy and Management.

Please note that this action only closes the Austin off-campus site offerings, and does not eliminate the MPH degrees. Both the MPH in Environmental Health (CIP 51.2202.00) and the MPH in Health Policy and Management (51.2211.00) will continue to be offered at the main campus in College Station and will remain on the school’s program inventory with the Texas Higher Education Coordinating Board.

<table>
<thead>
<tr>
<th>Department Head, Environmental &amp; Occupational Health</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Bendon, PhD</td>
<td></td>
<td>10/2/15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department Head, Health Policy &amp; Management</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike Morrissey, PhD</td>
<td></td>
<td>10/1/15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPH Curriculum Committee Chair</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranjana Mehta, PhD</td>
<td></td>
<td>10/15/15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPH Senior Associate Dean for Academic Affairs</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antonio Rene, PhD, MPH</td>
<td></td>
<td>10/11/15</td>
</tr>
</tbody>
</table>

Attachments

Cc: Vernon Tesh, PhD  
    Antonio A. Rene, PhD, MPH  
    Amanda Allen  
    Lois Rockwell

271 Administration Building  
1266 TAMU  
College Station, TX 77843-1266  
Tel. 979.436.8421  
aarene@sph.tamhsc.edu  
www.mywebsite.tamu.edu
Teach-out Plan

Master of Public Health (MPH) degree in Environmental Health
Off-campus Distance Education Program in Austin, Texas
School of Public Health
Texas A&M University

Adapted from the Southern Association of Colleges and Schools Commission on Colleges
Substantive Change for Accredited Institutions of the Commission of Colleges.

1. Date of program closure.
After August 2013, the school was no longer admitting students for the Environmental Health MPH program in Austin. The last student is expected to graduate in May 2017. The program is projected to close August 2017.

2. An explanation of how affected parties (students, faculty, staff) will be informed of the impending closure.
The Austin MPH was designed as a lock-step cohort curriculum with the understanding that the decision to offer successive cohorts would be reevaluated as needed. In Fall 2014, it was determined that no more educational programs would be offered at the Austin site, and that the cohort started in Fall 2013 would be the last. Department faculty and staff were informed at that time.

3. An explanation of how students will be helped to complete their programs of study with minimal disruption or additional expense.
According to the degree plan developed for students in the final cohort, all but one will graduate in the spring of 2016. The Austin site will remain opened until the final student completes the degree May 2017.

4. Signed copies of teach-out agreements with other institutions, if any.
Not Applicable

5. How faculty and staff will be redeployed or helped to find new employment
Since the School of Public Health faculty and staff involved in the Austin site are at the main campus in College Station and the MPH in Environmental Health will continue to be offered in College Station, the discontinuation of the Austin site will not result in the loss of faculty nor staff.

6. If closing an institution, arrangement for the storing of student records, disposition of final financial resources and other assets
Not Applicable

7. Please provide the following additional information:
a. How many students are currently enrolled in the program? Ten
b. Projected graduation date for the last student(s) in the program? May 2017
Teach-out Plan

Master of Public Health (MPH) degree in Health Policy and Management
Off-campus Distance Education Program in Austin, Texas
School of Public Health
Texas A&M University

Adapted from the Southern Association of Colleges and Schools Commission on Colleges
Substantive Change for Accredited Institutions of the Commission of Colleges.

1. Date of program closure.
After August 2013, the school was no longer admitting students for the Health Policy and
Management MPH program in Austin. The last student is expected to graduate in August 2016.
The program is projected to close January 1, 2017.

2. An explanation of how affected parties (students, faculty, staff) will be informed of the
impending closure.
The Austin MPH was designed as a lock-step cohort curriculum with the understanding that the
decision to offer successive cohorts would be reevaluated as needed. In Fall 2014, it was
determined that no more educational programs would be offered at the Austin site, and that the
cohort started in Fall 2013 would be the last. Department faculty and staff were informed at that
time.

3. An explanation of how students will be helped to complete their programs of study with
minimal disruption or additional expense.
According to the degree plan developed for students in the final cohort, all students graduate in
the summer of 2016. No students' completion will be disrupted by the closure.

4. Signed copies of teach-out agreements with other institutions, if any.
Not Applicable

5. How faculty and staff will be redeployed or helped to find new employment
Since the School of Public Health faculty and staff involved in the Austin site are at the main
campus in College Station and the MPH in Health Policy and Management will continue to be
offered in College Station, the discontinuation of the Austin site will not result in the loss of
faculty nor staff.

6. If closing an institution, arrangement for the storing of student records, disposition of
final financial resources and other assets
Not Applicable

7. Please provide the following additional information:
   a. How many students are currently enrolled in the program? Nine
   b. Projected graduation date for the last student(s) in the program? August 2016
Informational Items