1. **New Course Requests:**
   a. AGEC 613 International Agriculture Development Policy *(Tabled from June 2016)*
   b. BICH 656 RNA Biology
   c. CHEN 646 Thermodynamics of Oil and Gas and Water Systems
   d. CHEN 656 Advanced Process Chemical Optimization
   e. CHEN 676 Sustainable Design through Process Integration
   f. ICPE 681 Seminar
   g. MEEN 647 Fundamentals of Energy Storage
   h. MEEN 654 Tribology
   i. MEEN 670 Compressible Flow
   j. NURS 601 Foundations of Forensics Healthcare
   k. NURS 602 Victimology: Clinical Implications and Applications
   l. NURS 603 Justice Today, Prevention Tomorrow
   m. NURS 604 Advanced Trauma Assessments and Injury Pathology
   n. NURS 610 Forensic Sexual Assault Examiner Course
   o. NURS 611 Application of Clinical Pharmacology to Victims of Violence
   p. NURS 612 Human Trafficking
   q. NURS 613 Forensic Photography
   r. NURS 614 Policy and Ethics of Interpersonal Violence
   s. NURS 615 Forensic Mental Health
t. STAT 667 Advanced Spatial Statistics
   u. WFSC 626 Ecological Risk Assessment

2. **Course Change Requests:**
   a. ECEN 762 Advanced Ultrasound Imaging Techniques
   b. GENE 608 Critical Analysis of GENE Literature *(Tabled from May and June 2016 Meeting)*
   c. GENE 613 Quantitative Genetics I
   d. SPED 601 Assessment in School Settings *(Tabled from June 2016)*
e. SPED 630 Early Literacy for Students with Diverse Instructional Needs
   f. STAT 647 Spatial Statistics

3. **Special Consideration Requests:**
   a. CLBA – Proposal for Change in Course Prefix Designation
   b. CLGE – Fast Track Dual Degree Program for the B.S. in Geophysics and the non-thesis Master of Ocean Science and Technology (MOST)
   c. COALS – Request to include Zero Credit Hour in Existing Courses
   d. CLNU – Master of Science in Nursing in Forensic Nursing
e. CLEN – Request for a Waiver for GRE scores for Texas A&M Degree Holders in Engineering

4. **Informational Items:**
   a. TAMU College of Medicine–First Professionals – CLMD – New Courses July 2016
      i. New Courses
         1. EMED 810 Longitudinal Bedside Ultrasound
2. IMED 919  Adult Allergy and Immunology
3. MEID 810  Connecting and Communicating with Patient and Peers
4. MEID 811  Medicine in the Wild
5. MHUM 815  Essentials of Leadership
6. SURG 858  General Surgery
New Courses
Texas A&M University
Departmental Request for a New Course
Undergraduate □ Graduate □ Professional □ First Professional (MD, DVM, PharmD, DVM)
Submit original form and attach a course syllabus.

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

2. Request submitted by (Department or Program Name):
   Department of Agricultural Economics
   AGEC 613, International Agricultural Development Policy

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, the capstone for the certificate in International Agriculture and Natural Resource Management, may be taken with many majors. Its many real-world examples prepare students for environments of international development institutions and programs concerning water management, gender, climate change, agricultural extension, value chains, agricultural finance, and many other issues in developing countries, with emphasis on smallholder agriculture.

5. Prerequisite(s):
   One of the Following: AGEC 422, 430 or other equivalent Macroeconomic Course, 452, 604, 606

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)

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)
    AGEC  613  INTERN. AGRICULTURAL DEV POLIC

    | Lect. | Lab | Other | SCH | CIP and Fund Code | Admin. Unit | Acad. Year | FICE Code |
    |------|-----|-------|-----|-------------------|-------------|------------|-----------|
    | 3.00 | 0.00| 0.00  | 3.00| 010701            | 0010        | 15         | 16        |

   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

   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
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  
2. Request submitted by (Department or Program Name):  
   Department of Agricultural Economics
3. Course prefix, number and complete title of course:  
   AGEC 613, International Agricultural Development Policy

4. Catalog course description (not to exceed 50 words):
   This course, the capstone for the certificate in International Agriculture and Natural Resource Management, may be taken with many majors. Its many real-world examples prepare students for environments of international development institutions and programs concerning water management, gender, climate change, agricultural extension, value chains, agricultural finance, and many other issues in developing countries, with emphasis on smallholder agriculture.

5. Prerequisite(s):
   One of the Following: AGEC 422, 430 or other equivalent Macroeconomic Course, 452, 604, 606

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

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

   If yes, this course may be taken times.

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)

   Certificates in  
   Intern. Agriculture & Natural Resource Management

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

   Any masters 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.

   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)  
            | AGEC 613 | INTERN. AGRICULTURE DEVELOPMENT POLICY

   Lec.  | Lab  | Other  | SCHI | CIP and Fund Code  | Admin. Unit | Acad. Year | FICE Code  
   3.00  | 0.00  | 0.00  | 3.00 | 010701  | 0910  | 16  | 16  | 0  | 0  | 3  | 6  | 3  | 2

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

   Department Head or Program Chair (Type Name & Sign)  
   (If cross-listed course)
   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
Syllabus
AGEC 613
INTERNATIONAL AGRICULTURAL DEVELOPMENT POLICY

Course Content
Agricultural strategies and policies in developing countries are becoming ever more important as foundations of development efforts, especially in light of the effects of climate change on agriculture in poor regions of the world. This course is the capstone course for the certificate in International Agriculture and Natural Resource Management, and it may also be taken in association with a wide variety of majors.

With many real-world examples the course gives students an in-depth familiarity with key topics in public policy for agricultural development, most of which are encountered in one form or another in almost every developing country. These are policies that can be catalysts of or impediments to growth. The main issues covered are: value chains, the roles of public and private sectors, gender in agricultural development, the effects on agriculture of macroeconomic policy, food aid and food security issues, land tenure, water management, agricultural finance, agricultural research and extension policy, competitiveness analysis, and strategies for poverty alleviation.

Throughout, the emphasis is on conceptual frameworks that guide policy formation and understanding why given policies have been effective or have not worked. Case studies are analyzed and debated in class, and students carry out semester projects on topics of their choice. Mathematics is not required for this course.

Course Objectives
The course is designed to provide a working knowledge of major issues in international agricultural development, with emphasis on real world examples of agricultural sector policies from developing countries and the lessons to be drawn from them. An aim is to prepare students to function in the environment of international development institutions and in research and academic programs related to agricultural
development in these countries.

**Course Organization**
This course contains three main components: 1) Classroom presentations, readings, and discussions about the role of agriculture in economic development, the nature of agricultural development, development policies and policy instruments, and overarching issues for agricultural policy such as poverty reduction, gender concerns, and the role of government; 2) classroom presentations, readings and discussions and debates about sector-specific policy areas; and 3) semester-long student projects (papers) devoted to analysis of real-world experiences with particular issues. The papers also will involve finding and utilizing relevant literature, and they will be presented to the rest of the class for discussion.

Sample topics and countries for the papers will be handed out early in the course but students are encouraged to identify their own topics as well. The topics should be identified by the end of the sixth week of the course. Obviously only part of the course material will have been covered by then, so students are also encouraged to skip ahead in the principal text and read parts of the chapters, plus the supplementary readings, that will be covered in the latter part of the course in order to be better positioned to develop a paper topic.

For many issues there may not be a single best policy approach. Students will be encouraged to read relevant papers and defend different approaches in classroom discussions.

**Prerequisites**
One of the following AGEC courses: 422, 430 or equivalent macroeconomic course, 452, 604, or 606, or courses in other departments judged equivalent by the instructor.

**Instructor**
Dr. Roger D. Norton, AGSV 228 and 210G AGLS Bldg. Phone: 450-8318, email: roger.norton@ag.tamu.edu
**Texts**

**Course Modules**

1. Introduction: The role and importance of agriculture in economic development
2. Strategies and policy instruments
3. Agriculture and the rest of the economy: prices and macro linkages
4. Land use and land tenure for agriculture
5. Water management for agriculture
6. Agricultural and rural finance
7. Research and extension policies
8. Gender in agricultural development
9. Climate change and resilience of smallholder producers
10. Strategies for poverty alleviation
11. Value chains and agricultural competitiveness

**Grading**
Grades will be based on a mid-term exam, the class presentation of a project paper, the written paper, and class participation. Each of these four elements will be assigned points on a scale of zero to 100. Then the scores will be summed with the following weights in order to derive an overall point score:
Mid-term exam, in class part .15
Mid-term exam, take home part .15
Paper presentation .25
Written paper .30
Participation .15

Overall point scores will be translated into grades as follows:

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

In a graduate course like this one, a grade below a “B” should be considered unacceptable.

Lecture Notes
All class lectures will be accompanied by powerpoints that will be available on the course website for you to print off at your convenience.

Course Readings
All required and recommended readings may be accessed through the readings section of the course website, by clicking on the hyperlinked references. Some documents will be available on the internet and others will be available in PDF files for which you will need a password, which will be provided in class.

Class Papers
The class papers provide an opportunity to apply the conceptual tools learned in class and enrich your knowledge of real-world development issues by applying those tools. The topics can be slanted toward the conceptual issues and debates or more toward analyzing a country experience, or comparing two or more country experiences, in all cases developing recommendations. The topics may cover a diverse range of possibilities. For example:
--On the basis of discussions in the literature, summarize the pros and cons of international food aid and discuss its effects in country x (for example, Egypt, Honduras or other country for which published material on food aid is available).
--Develop a program and action plan to empower women in agriculture in a developing country, and discuss the issues associated with each thrust of the program and each action.
--Land reform has been a difficult and contentious issue in countries like South Africa and Colombia. Analyze the approach to land reform used in one of those countries, explain why it has not advanced more rapidly and present alternative arguments with supporting arguments.
--Discuss ways to get smallholder farmers more involved in high-value markets and the risks and rewards of doing so. How do these considerations vary by type of product?
--If you were to start from scratch, in a hypothetical setting with sufficient resources and support from political leaders, how would you structure agricultural research and extension services, and what would be their goals and ways of functioning?

Extensive readings will be available on the course website to help define a topic and compile the relevant literature. The course professor will be available to meet in his office outside of class hours to assist with the development of the papers.

**Important Dates**
- September 27: paper topic due
- October 11: paper outline due
- October 18: mid-term exam in class (take home part handed out)
- October 25: mid-term exam, take home part due
- November 8: draft of written papers due
- November 8, 15, 22: class presentations of papers
- December 6: written papers due

**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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit http://disability.tamu.edu.

Copyright Notice
Please note that all on-line materials, handouts and supplements used in this course are copyrighted. This includes all materials generated for this class, including but not limited to the syllabus, exams, in-class materials, review sheets, problem sets, and on-line lecture notes. Materials may be downloaded or photocopied for personal use only, and may not be given or sold to other individuals.

Scholastic Honesty
Students are expected to observe the norms of scholastic honesty at all times. It is important to note that plagiarism is failing to credit sources used in your work in an attempt to pass off someone else’s work as your own. This includes attempting to receive credit for work performed by someone else such as papers obtained in whole or in part from other individuals or sources. You are guilty of plagiarism if you copy someone else’s work and turn it in under your name even if that person gives you permission to do so. Failing to provide proper citations of material taken from other sources, or even being careless or sloppy in documenting those sources, constitutes plagiarism. Plagiarism is a serious academic sin for which the penalties are severe under student rules. You are responsible for understanding what plagiarism is and how to avoid it, including appropriate and ethical use of sources. Let me know if you have questions about how to use sources in your paper. If you have questions regarding plagiarism, please refer to the section on “Scholastic Dishonesty” in the Texas A&M University Student Rules.

Note on the Written Papers
Topics will be approved by the course professor. The papers should be 15-20 pages in length, typed and double-spaced, including figures, tables
and references. A detailed outline should be prepared and reviewed with the course professor before starting the writing of the paper.

Writing skills will be an important element of your professional career so pay attention to grammar and good, clear style. Please follow consistently a standard format for references. Formats are found in journal articles and in the Modern Language Association (MLA) guidelines: [http://library.tamu.edu/help/help-yourself/citing-sources/files/Using MLA format.pdf](http://library.tamu.edu/help/help-yourself/citing-sources/files/Using MLA format.pdf). For more general help with writing, you can work with an advisor at the University Writing Center (UWC, 1.214 Sterling C. Evans Library, 979-458-1455) or consult the UWC website for writing tips and help at [http://writingcenter.tamu.edu/resources/](http://writingcenter.tamu.edu/resources/).

The paper must concentrate on analysis, with as much country background material and notes from the literature as needed to frame the arguments. Avoid personal opinions and develop the logic and supporting evidence for each assertion and recommendation. Do not use the first person. Papers should not include phrases like “I believe,” “I think,” “I feel” and “I conclude.”

Sloppy writing and ungrammatical expressions will cause the paper’s grade to be marked down.

**Notes on the Class Presentations of Papers**
Presentation skills are also important for your professional development. The presentations should be planned for 15-20 minutes and 10-15 minutes should be allowed for discussion. The presentations will be graded 35% on the quality of the presentation and 65% on its content. Here are some of the criteria that will be used to grade the quality of the presentation:

- How clear and effective was the oral delivery?
- How effective was the powerpoint or other presentation method?
- How effective was the use of illustrative devices (charts, tables, graphs, other)?
- Was the presentation given in a professional manner?
• Did the presentation effectively bring out the main points of the paper?

Here are some of the criteria that will be used to grade the content of the presentations:

• Did the presentation give an adequate overview of the topic?
• Did the presentation bring out key contributions in the literature?
• Did the presentation make clear the relevance of the issue in the country case(s), if used?
• Are the conclusions adequately supported by analysis and/or empirical evidence?

Based on previous experience, here are some of the reasons that presentations are marked down:

• Running out of time.
• Presentation that is not well organized (sloppy).
• Inaccurate information.
• Inadequate or inaccurate answers to questions, indicating lack of expected expertise on the topic.
• Not taking the presentation seriously as indicated by unprofessional attitude, careless dress, or flippant behavior.
• Lack of confidence in making the presentation.
• Failure to provide specific, well supported conclusions.

Rev​ised, January 25, 2016
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 (DVM, M.D., J.D., Pharm.D., D.O.)
2. Request submitted by (Department or Program Name): Department of Biochemistry and Biophysics
   BICH 656 RNA Biology
3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   Emphasis on newly discovered RNA-mediated processes and regulation; range of topics in modern RNA biology
   include RNA silencing, RNA-guided epigenetic regulation, CRISPR/Cas immunity and genome editing, telomerase
   biogenesis, riboswitches, exosome and endosome as well as the application of RNA biology in medicine and
   biotechnology.

5. Prerequisite(s):
   BICH/GENE 301

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

8. 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. and Ph.D. in Life science majors including biochemistry, genetics, medical sciences, plant physiology among others

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 (https://www.tamu.edu/resources/export-controls/export-control-basics-for-distance-education).

11. Prefix  Course #  Title (excluding punctuation)

   BICH  656  RNA Biology

<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>2602020002</td>
<td>0420</td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>

   Level 6

12. Approved recommended by:

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

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

13. 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.
BICH656 RNA BIOLOGY, 3-credits. Fall, 2017

Lecture: Time: 3:30 – 5 pm. Tues and Thursday, Room: Bio 221A

Professor: Dr. Xiuren Zhang, Department of Biochemistry and Biophysics
Office: Norman Borlaug Center 112A; Institute of Plant Genomics & Biotechnology
(Building# 1513; Southern-western Conner to Parking lot 74)
Phone: 456-0596 E-mail: xiuren.zhang@tamu.edu

Dr. Jorge Cruz-Reyes, Department of Biochemistry and Biophysics
Office: BioBio building 321A
Phone: 458-3374 E-mail: cruzrey@tamu.edu

Office Hours: By appointment

Course description and objectives
RNA is an essential macromolecule in almost every biological system. In the central dogma of molecular genetics, RNA bridges the flow of genetic information from DNA to protein. However, recent years have seen an explosion in the discovery of RNA-mediated new processes and regulatory roles. This three-credit course in RNA biology, taught by two leading experts in the RNA field, is suitable for graduate students majoring in life sciences. The course emphasizes novel roles and mechanisms of newly discovered RNA species including non-coding RNAs. It covers a wide range of topics in modern RNA biology including RNA silencing, RNA-guided transcriptional regulation, CRISPR/Cas immunity and genome editing, telomerase biogenesis, riboswitches, exosome and editosome. This class also discusses breakthroughs of RNA biology in medicine and biotechnology. For graduate students, the course is a solid platform to understand newly emerging concepts in RNA biology.

Prerequisites: BICH/GENE 301/302. Other basic courses in molecular biology, genetics and/or biochemistry, such as BICH410 or BICH/GENE 431 are ideal but not completely necessary.

Textbook:
There is no textbook. A more complete lecture schedule and reading list are available online and you can download the papers from PubMed (http://www.ncbi.nlm.nih.gov/pubmed). Additional background reading that you may find of interest or useful are also supplied. Background introduction and some experimental results will be shown in lectures from some other papers that are not required reading.

Learning outcomes: This course provides in-depth analysis and discussion of fundamental concepts and methods in RNA biochemistry and molecular biology. Once successfully completed the course, the students will: (i) master basic knowledge and newly emerging in modern RNA biology; (ii) develop curiosity and the ability to think critically and understand standard biochemical and genetic methods applied in RNA biology; (iii) be able to evaluate the scientific literature critically; and finally, (iv) be able to formulate hypotheses, design experiments and to uncover new knowledge.

It is required that you read the core paper BEFORE each lecture. You will understand lectures better and be able to ask questions. After each lecture, you should reread the papers with more care.

Other Materials: Lecture PowerPoint slides and old exams are available from eCampus webpage. Professors will upload slides through eCampus during the semester. These ppt files are prerequisites for understanding lectures and students are expected to download these slides before class.

Scholastic Honesty: Every student is expected to know and follow The Aggie Code of Honor: An Aggie does not lie, cheat, or steal or tolerate those who do. The tolerance level for cheating in this class is zero. Any work handed in for a grade in lecture must be your own work. For more information about the Aggie Honor System and the consequences of academic misconduct see the website: http://www.tamu.edu/aggiehonor/. Violations will carry a penalty as severe as I can convince the Dean to make it.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit http://disability.tamu.edu.
Exams and Grading

There are four exams (two exams for each session) as described below. We note that BICH489 (undergraduate course) which is also taught by the instructors, covers the same topics as BICH659. However, BICH659 has two specific extra requirements for graduate students: (1) the exams will include a section requiring that graduate students propose experimental designs and approaches to test hypothesis-driven models discussed in class. The instructors may use actual ("real") or alternative ("fictitious") outcomes/data in the reviewed papers. The instructors will clarify whether real or fictitious data is used. All questions will be based on the experiments discussed in class. The students should be able to adapt experimental methods from any paper reviewed in class to provide their answers: and (2) one short review will be required. This short review will be based on a topic discussed in any topic of the course. Each graduate student will be free to choose the subject of the review.

For each exam, the total points will be 100. For the review, the total points will be 100. Thus, the total points for this class will be 500. The grades will be assigned based on the following criteria:

A  total 450 to 500
B  total 400 to 449
C  total 350 to 399
D  total 300 to 349
F  total 299 or below

Make-up Exams:
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 online at http://student-rules.tamu.edu/rule07

If you miss an exam for any reason, you must contact the instructor as soon as possible to agree on a date for the make up. Make-up exams are different from the original exams and do not benefit from curves applied to the originals.

Although the grading in the class will mainly be determined by four exams and a review, we do have some extra credits for this course:

Extra Credits:

1) Besides four class exams, you will have pop quizzes throughout semester. The pop quizzes are graded, but they are necessary for your familiarity with the contents and format of the exams. They also serve as attendance records. Each quiz will have 3 pts. It is expected that 10 quizzes (a total of 30 pts) will be given through the semester.

2) Attendance is required. The instructor will take roles throughout the semester. Each attendance will have 1 pts. It is expected that a number of 15 pts will be given for full attendance.

3) The course is expected to be vibrant and active involvement and discussion from students are strongly encouraged. Should the students demonstrate clever ideas and active participation in the class discussion, additional credits will be awarded (i.e. 1 pts/each time).
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Dr. Cruz-Reyes</th>
<th>Introduction to RNA biology. Function and structure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture 2-3</td>
<td>Dr. Cruz-Reyes</td>
<td>Discovery and characterization of CRISPR/Cas in biology</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Background</strong></td>
</tr>
<tr>
<td>Lecture 4-5</td>
<td>Dr. Cruz-Reyes</td>
<td>Genome editing. The impact in medicine.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Background</strong></td>
</tr>
<tr>
<td>Lecture 6-7</td>
<td>Dr. Cruz-Reyes</td>
<td>Telomerase biogenesis in yeast</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Background</strong></td>
</tr>
<tr>
<td>Lecture 8</td>
<td>Dr. Cruz-Reyes</td>
<td>The exosome. How to recognize specific substrates?</td>
</tr>
<tr>
<td>Lecture 9</td>
<td>Dr. Cruz-Reyes</td>
<td><strong>Background</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gateway Arch to the RNA Exosome.</td>
</tr>
</tbody>
</table>
| Lecture 10 | Dr. Cruz-Reyes | RNA helicases. How do helicases regulate gene expression?  
**Background:**  
| Lecture 11-12 | Dr. Cruz-Reyes | Riboswitches in the control of gene expression  
**Background:**  
| Lecture 15 | Dr. Cruz-Reyes | Exam  |
| Lecture 16 | Dr. Zhang | Overall view of RNA silencing  
Covers: small RNAs (miRNA, siRNA, piRNA, trans-acting siRNAs, Nat-siRNAs, viral-derived siRNAs) |
| Lecture 17-18 | Dr. Zhang | miRNA and siRNA processing  
**Core materials:**  
**Background:**  
Kwon, et al., Structure of Human DROSHA. 2016. Cell 164, 81-90,  
| Lecture 19-20 | Dr. Zhang | Functional mechanism of small RNAs  
**Core materials:**  
**Background:**  
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Dr.</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-22</td>
<td>Zhang</td>
<td>Decay of small RNAs</td>
</tr>
</tbody>
</table>
|         |      | **Core materials:**
|         |      | **Background:**
| 23-24   | Zhang | Target mimicry, competing endogenous RNAs, circular RNAs |
|         |      | **Core materials:**
|         |      | **Background:**
|         |      | Memczak, et al., Circular RNAs are a large class of animal RNAs with regulatory potency. Nature. 2013. 495: 333. |
|         |      | Zhang, et al., Complementary Sequence-Mediated Exon Circularization. Cell. 2014. 159, 134–147 |
| 25-26   | Zhang | Introduction of Chromatin package, transcription, epigenetic regulation. RNA-mediated DNA and histone methylation |
|         |      | **Core Materials:**
|         |      | Dual binding of chromomethylase domains to H3K9me2-containing nucleosomes directs DNA methylation in plants. 
|         |      | Mechanism of DNA methylation-directed histone methylation by KRYPTONITE. 
|         |      | **Background:**
| 27-28   | Zhang | Long non-coding RNAs and transcriptional regulation |
|         |      | A long noncoding RNA maintains active chromatin to coordinate homeotic gene expression. 
|         |      | **Background** 
| 29      |      | Exam 4 (in class) |

Dates and topics subject to change. The references with pubmed links are the core materials to be covered and entail students to read. Background references are optional for reading.
How do we submit the "Justification" for topic selection and updates in recurrent courses? Do we submit it as a separate word file?

Do we give you the final syllabus, course form and Justification?

The current course syllabus covers numerous key topics in modern RNA Biology. The selection of topics includes high impact breakthroughs in basic science, medicine and biotechnology. Each lecture will discuss one “core” publication and “recent” publication. RNA Biology is a fast-pace moving field. So, new exciting and paradigm-shifting discoveries are expected every year. This recurrent course will be updated yearly as follows: the recent publication discussed this year will become the core paper next year. Then, a new publication describing recent exciting discoveries will be incorporated in the course. In summary, this course will be updated year after year, so it is repeatable.
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, MD/PhD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Chemical Engineering - TAMUQ
3. Course prefix, number and complete title of course: CHEN 646 - Thermodynamics of Oil and Gas and Water Systems
4. Catalog course description (not to exceed 50 words):
Techniques to predict the thermodynamic properties of oil and gas and aqueous saline systems; characterization of petroleum fluids; effect of surface tension and confinement; gas hydrate formation, and thermodynamic models for aqueous electrolyte systems and their application to phase equilibrium calculations.

5. Preerequisite(s):
   CHEN 623 or approval of instructor.

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 (CLP)
9. 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., M.Eng., Ph.D. in Chemical Engineering
10. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.
11. □ 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)
    CHEN 646 Thermodynamics of Oil and Gas Water System

<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>EICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
<td>1407010006</td>
<td>0590</td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>

Approval recommended by: [Signature] 6-5-16
Department/Head of 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
Course title and number: CHEN 645 Thermodynamics of Oil and Gas and Water Systems
Term (e.g., Fall 200X): Fall 2016
Meeting times and location: TBD

Course Description and Prerequisites

Special Topics Thermodynamics of Oil and Gas and Water Systems (3-0) Credit 3. The course discusses techniques to predict the thermodynamic properties of oil and gas and aqueous saline systems. The topics include the characterization of petroleum fluids, the effect of surface tension and confinement, gas hydrate formation, and modern models for aqueous electrolyte systems and their application to phase equilibrium calculations. Prerequisite: CHEN 623 or approval of instructor.

Learning Outcomes or Course Objectives

Learning Outcomes: At the end of the course, students should have a working knowledge of selected thermodynamic models for oil and gas and electrolyte systems, methods to characterize petroleum fluids, gain an appreciation for the effect of surface tension and confinement on phase equilibrium, and understand gas hydrate formation and the role of inhibitors.

Course Objectives: This course focuses on two areas of application - oil and gas mixtures and aqueous saline solutions - with the goal of discussing and applying modern models to evaluate thermodynamic properties relevant to chemical process design.

Instructor Information

Name: Marcelo Castier
Telephone number: 974-44230534
Email address: marcelo.castier@qatar.tamu.edu
Office hours: TBD; also by appointment.
Office location: 219J, Texas A&M University at Qatar building, Education City, Doha

Textbook and/or Resource Material


Selected articles from technical journals.

Grading Policies

The final grades will be determined based on one mid-term examination, one final examination, two course projects, and the assigned homework. The following weights will be used:
Homework 15 %
Course projects 35 % (December, 5, 2016)
Mid-term Exam 25 % (October 12, 2016)
Final Exam 25 % (as selected by TAMUQ)
Total 100 %

All exams will be in class. Students are expected to adhere to the Aggie Honor Code at all times.

Grading scale:
100-90 A
89.9-80 B
79.9-70 C
69.9-60 D
59.9 and below F

Attendance Policy: Class attendance is mandatory. One point will be deducted from your overall course grade for each class absence without official excuse.

The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for any absence. Among the reasons absences are considered excused by the university are the following (see Student Rule 7 for details http://studentrules.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.

Homework Policy: Discussions with the instructor and teaching assistant of approaches to solving homework problems are encouraged. While students are welcome to also discuss problem solving strategies with each other, each student is expected to work independently in arriving at and documenting his or her final solution to submit. Homework will not be accepted after the deadline and the corresponding numerical grade will be 0 (zero), unless a University-approved excuse exists.

Course Projects Policy: Discussions with the instructor and teaching assistant of approaches to developing the course project are encouraged. While the project may be developed in small groups, grades will be individual to reflect the perceived level of involvement in project execution. Course projects will not be accepted after the deadline and the corresponding numerical grade will be 0 (zero), unless a University-approved excuse exists.

Make-up Policy: Students may request a make-up exam if a University-approved excuse exists.

Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Phase stability</td>
</tr>
<tr>
<td>3-4</td>
<td>Equations of state for oil and gas systems</td>
</tr>
<tr>
<td>5-6</td>
<td>Characterization of petroleum fluids</td>
</tr>
<tr>
<td>7-8</td>
<td>Effect of surface tension and confinement; Gas hydrates</td>
</tr>
<tr>
<td>9-10</td>
<td>Debye-Hückel theory of electrolyte solutions; Pitzer, NRTL and UNIQUAC models for electrolyte solutions</td>
</tr>
<tr>
<td>11-12</td>
<td>Equations of state for electrolyte solutions; Vapor-liquid equilibria in aqueous electrolyte systems</td>
</tr>
<tr>
<td>13-14</td>
<td>Solid-liquid and osmotic equilibria in aqueous electrolyte systems</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 the Department of Student Affairs in suite 318 of the Texas A&M University at Qatar building. 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."
Jennifer Veracruz

From: Ashley Stokes
Sent: Monday, June 20, 2016 11:37 AM
To: Jennifer Veracruz; Jayaraman, Arul
Cc: Noack, Kerry (kerry.noack@qatar.tamu.edu); Mather, Amanda Leigh (amanda.mather@qatar.tamu.edu)
Subject: RE: CHEN 646-Thermodynamics of Oil and Gas and Water Systems

Jennifer,

This course request has been approved by Sandra Williams.

Ashley Stokes | Graduate Program Specialist
Artie McFerrin Department of Chemical Engineering
Texas A&M University
250 J.E. Brown
3122 TAMU | College Station, TX 77843-3122
Office 979.845.3364 | Fax 979.845.6446
Stokes992@tamu.edu

From: Ashley Stokes
Sent: Monday, June 20, 2016 10:14 AM
To: Jennifer Veracruz; Jayaraman, Arul
Subject: RE: CHEN 646-Thermodynamics of Oil and Gas and Water Systems

Jennifer,

This is a course that came from Qatar. I'll have to see if they sent it over before I received it.

Ashley Stokes | Graduate Program Specialist
Artie McFerrin Department of Chemical Engineering
Texas A&M University
250 J.E. Brown
3122 TAMU | College Station, TX 77843-3122
Office 979.845.3364 | Fax 979.845.6446
Stokes992@tamu.edu

From: Jennifer Veracruz
Sent: Monday, June 20, 2016 9:23 AM
To: Jayaraman, Arul; Ashley Stokes
Subject: CHEN 646-Thermodynamics of Oil and Gas and Water Systems
Importance: High

Hello,

We received the New Course Request for CHEN 646-Thermodynamics of Oil and Gas and Water Systems. Has this been approved by Sandra Williams? If not please send this to her and let me know if there are any corrections. If this has been seen by her please let me know. If you have any questions please let me know.
Jennifer Veracruz | Administrative Assistant
Engineering Academic and Student Affairs (EASA)
Dwight Look College of Engineering | Texas A&M University
3127 TAMU | College Station, TX 77843-3127

ph: 979.845.7282 | fax: 979.847.8654 | jveracruz@tamu.edu
engineering.tamu.edu/easa

Engineers change the world.
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 (DO, MD, JD, PharmD, DPM)

2. Request submitted by (Department or Program Name):  
   - Arie McFerrin Department of Chemical Engineering

3. Course prefix, number and complete title of course:  
   - CHEN 656 Advanced Process Chemical Optimization I

4. Catalog course description (not to exceed 50 words):  
   Course covers state-of-the-art optimization based techniques for process synthesis, process design and process operability; emphasis is placed on mathematical modeling via mixed integer and continuous optimization formulations and there application to heat integration problems; will learn how to use a modeling/optimization software systems.

5. Prerequisite(s):  
   Graduate level classification; or approval of instructor  
   Cross-listed with:  
   Stacked with: CHEN 456
   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  
   - [x] 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)  
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in Geography)  
   MS, PhD in Chemical Engineering

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-export-control-basics-for-distance-education).

13. Prefix | Course # | Title (excluding punctuation)  
CHEN  | 656  | Adv Process Chem Opt I

<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>140701000</td>
<td>0590</td>
<td>17</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:  
Department Head or Program Chair (Type Name & Sign)  
Date: 6/20/16

Chair, College Review Committee  
Date: 6/21/16

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

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

Questions regarding this form should be directed to Sandra Williams at 845-8207 or sandra.williams@tamu.edu.  
Curricular Services – 07/14
CHEN 456/656

Advanced Process Chemical Optimization - Part I

Fall 2017
3 Lecture Hours (3 Credits)

Course Description and Prerequisite
Covers state-of-the-art optimization based techniques for process synthesis, process design and process operability; emphasis is placed on mathematical modelling via mixed integer and continuous optimization formulations and there application to heat integration problems; will learn how to use a modelling/optimization software systems.

Prerequisite
Graduate classification; or senior classification; or approval of instructor

Learning Objectives
By the end of the course the students should be able to:
1. Optimize non-linear systems:
   a. Unconstrained
   b. Constrained
2. Model with binary variables
3. Optimize mixed integer problems:
   a. Linear form
   b. Non-linear form
4. Synthesis, design and optimization
   a. Heat exchanger network problem
5. Design of utility systems.

Instructor: Professor Stratos Pistikopoulos FREng
Class Schedule: TBD
Class room: TBD
Office Hours: (By appointment)
Contact Information: Tel. 979.845.3401, Email: stratos@tamu.edu
Teaching Assistant: Nikolaos Diangelakis, office (3rd Floor ERB), Email: nicos@tamu.edu
Office hours: TBD
Course website: Can be accessed through http://ccampus.tamu.edu/
Grading Policies

<table>
<thead>
<tr>
<th>Component</th>
<th>% of Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>30</td>
</tr>
<tr>
<td>Final Examination</td>
<td>70</td>
</tr>
</tbody>
</table>

Grading (subject to general performance)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89.99</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79.99</td>
</tr>
<tr>
<td>D</td>
<td>60 – 69.99</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60</td>
</tr>
</tbody>
</table>

Attendance and make policies

Attendance is strongly recommended though not enforced. However, you are responsible for obtaining class notes, handouts, and instructions about assignments from another class member. The rules of excused absence can be found at [http://student-rules.tamu.edu/rule7.htm](http://student-rules.tamu.edu/rule7.htm). It is the student’s responsibility to provide satisfactory evidence of excused absence to the instructor.

Fall 2016 Tentative Calendar of Course Topics, Activities, and Assignments

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td><strong>Review of Nonlinear Algebra and Systems of Nonlinear Equations</strong></td>
<td></td>
</tr>
<tr>
<td>3 – 5</td>
<td><strong>Nonlinear Optimization</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic concepts in optimization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimal points</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feasible region</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Convexity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unconstrained optimization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constrained optimization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimality conditions – Active set strategies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQP and reduced gradient method</td>
<td></td>
</tr>
<tr>
<td>6 – 7</td>
<td><strong>Mixed Integer Linear Programming</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process Synthesis representation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modelling with binary variables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Branch-and-Bound Method</td>
<td></td>
</tr>
<tr>
<td>8 – 9</td>
<td><strong>Mixed Integer</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Generalized Benders Decomposition Method</td>
<td></td>
</tr>
<tr>
<td>Nonlinear Programming</td>
<td>Outer-Approximation Method</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>10 – 13</strong> Heat Exchanger Network Synthesis</td>
<td>Minimum utility cost</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MILP Transhipment Model</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Superstructure-based NLP Synthesis</td>
<td></td>
</tr>
<tr>
<td><strong>14 – 15</strong> Utility System Optimization</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reference List**


**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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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.*
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 (DVM, MD, DO, DDS, PhD, DVM)
2. Request submitted by (Department or Program Name): Arte McFerrin Department of Chemical Engineering
   CHEN 676, Sustainable Design through Process Integration
3. Course prefix, number and complete title of course: [Blank]
4. Catalog course description (not to exceed 50 words):
   Systematic and state-of-the-art techniques for the sustainable design of chemical processes; emphasis on holistic and systematic approaches using process integration for the conservation of natural resources and the enhancement of process performance; a variety of visualization, algebraic, and mathematical optimization approaches are presented.

5. Prerequisite(s):
   Graduate Classification or Approval of Instructor
   Cross-listed with: [Blank]  Stacked with: [Blank]
   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)
       No
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
       Yes (M.S., Ph.D. in CHEN)

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 (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEN</td>
<td>676</td>
<td>SUST DES PROC INTEG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>S/U</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>14070100006</td>
<td>0590</td>
<td>16-17</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by: [Signature]
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
CHEN 676
SUSTAINABLE DESIGN THROUGH PROCESS INTEGRATION
FALL 2017
(3 Credits)

Lecture hours: M 9:00 – 11:40 a.m.

Instructor: Mahmoud El-Halwagi, Professor and Holder of the McFerrin Professorship
Office: 229 Jack E. Brown Hall
Office hours: MW 12:00 – 2:00 p.m.

Phone: 845-3484
E-mail: El-Halwagi@tamu.edu

Web Page: Please check the VNET web site
This site will be used to communicate as needed. Students should check frequently.

Teaching Assistant


Prerequisites: Graduate Classification or approval of Instructor

Catalog Course Description: Systematic and state-of-the-art techniques for the sustainable design of chemical processes; emphasis on holistic and systematic approaches using process integration for the conservation of natural resources and the enhancement of process performance; a variety of visualization, algebraic, and mathematical optimization approaches are presented.

Course Outline:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to sustainability, sustainable design, and process integration</td>
</tr>
<tr>
<td>2</td>
<td>Benchmarking process performance through overall mass targeting</td>
</tr>
<tr>
<td>3</td>
<td>Direct-recycle networks: A graphical approach</td>
</tr>
<tr>
<td>4</td>
<td>Synthesis of mass-exchange networks: A graphical approach</td>
</tr>
<tr>
<td>5</td>
<td>Combining mass-integration strategies</td>
</tr>
<tr>
<td>6</td>
<td>Heat integration</td>
</tr>
<tr>
<td>7</td>
<td>Integration of combined heat and power systems</td>
</tr>
</tbody>
</table>
8 Algebraic approaches to process integration
9 Introduction to the formulation and solution of optimization problems
10 Optimization software
11 Mathematical programming approaches for mass integration
12 Synthesis of heat-exchange networks: an optimization approach
   Macroscopic systems, environmental impact assessment, and life cycle
   analysis
14 Putting it all together: launching sustainable-design initiatives
15 Final Exam

Grading Policy:
Homework (10%), research assignments (15%), term project (25%), midterm (20%), and
final exam (30%)

Grading:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100</td>
</tr>
<tr>
<td>B</td>
<td>80 - 89.99</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79.99</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69.99</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60</td>
</tr>
</tbody>
</table>

Attendance:
Class attendance is important for this course. A student with a documented excused
absence will be allowed to make up missed work in accordance with the Student Rules.
The rules of excused absence can be found at http://student-rules.tamu.edu/rule7.htm. It
is the student’s responsibility to provide to the instructor satisfactory evidence of excused
absence.

Email:
Class updates and frequent announcements regarding class meetings, homework, and
exams will be transmitted via email. You are responsible for checking your university
email account on a regular basis.

APA Statement:
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 discuss with Student
Affairs or the instructor.

Academic Integrity:
"An Aggie does not lie, cheat, or steal or tolerate those that do" is the lead statement of
the Aggie Honor Code. Please refer to the Honor Council Rules and Procedures on the
web at: http://www.tamu.edu/aggiehonor.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional

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

2. Request submitted by (Department or Program Name):
   Dwight Look College of Engineering
   ICPE 681 - Seminar

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

4. Catalog course description (not to exceed 50 words):
   Seminars and presentations on important developments and current research in energy; delivered by distinguished energy experts from academia, industry, and government.

5. Prerequisite(s):

<table>
<thead>
<tr>
<th>Graduate classification</th>
<th>Stacked with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-listed with:</td>
<td></td>
</tr>
</tbody>
</table>

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 ☐
   - Pass/Fail (MD) ☐

11. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      M.S. in energy
   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)
   ---|--------|-----------------
   ICPE | 681    | Research

<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>2.00</td>
<td>30.99999.04</td>
<td>16 17 0 0 3 6 3 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:
   Christodoulos A. Floudas

Department Head or Program Chair (Type Name & Sign) 05.04.16

Chair, College Review Committee Date 6/7/16

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

Dean of College Date 6/7/16

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services

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  ICPE 681 – Seminar
Term  Fall 2016
Meeting times and location  Selected Wednesdays, 4:15 – 5:15 p.m., CHE 111 (Exact dates TBD)

Course Description and Prerequisites
Seminars and presentations on important developments and current research in energy, delivered by distinguished energy experts from academia, industry, and government.
Prerequisite: Graduate Classification

Instructor Information
Name  Christodoulos A. Floudas
Telephone number  979-458-0253
Email address  floudas@tamu.edu
Office hours  By appointment
Office location  302D Williams Administration Building

Textbook and/or Resource Material
TBA, as appropriate.

Grading Policies
Grades will be assigned based on attendance. Attendance at all seminars will be mandatory. Students are responsible for providing satisfactory evidence to the instructor to substantiate any absence.

Course Calendar
Selected Wednesdays (Exact dates TBD)

Attendance
Attendance at all seminars will be mandatory. Students are responsible for providing satisfactory evidence to the instructor to substantiate any absence.
The attendance policy for this course will be administered in accordance with Student Rule #7 (http://student-rules.tamu.edu/rule07)

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, currently located in the Disability Services building at the Student Services at West Campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Academic Integrity
All students are expected to abide by the Aggie Honor Code.
Students should be aware of all Honor Council Rules and Procedures.
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 (DDS, MS, MD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Mechanical Engineering
3. Course prefix, number and complete title of course: MEEN 647: Fundamentals of Energy Storage

4. Catalog course description (not to exceed 50 words):
Fundamental concepts of energy storage; fundamentals of mechano-physicochemical mechanisms and interactions that underlie electrodes in an energy storage system (e.g., battery, supercapacitor); thermodynamics, kinetics and transport phenomena of species and charge, thermal and mechanical behavior; performance, degradation and safety of such systems based on the aforementioned fundamental mechanisms.

5. Prerequisite(s):

Graduate level

Cross-listed with: Stack 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 (CLMS)

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
      MS and PhD in Mechanical Engineering and other engineering programs

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-control-basics-for-distance-education).

13. Prefix Course # Title (excluding punctuation)

<table>
<thead>
<tr>
<th>MEEN</th>
<th>647</th>
<th>Fundamentals of Energy Storage</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>
</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

Effective Date

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

Curricular Services – 07/14
MEEN 647, FUNDAMENTALS OF ENERGY STORAGE
Fall 2016 (Schedule: TBD, Venue: TBD)
Version 1.1 (05/06/2016)

INSTRUCTOR
Dr. Partha P. Mukherjee

OFFICE
MEOB 316

PHONE: 979-862-6498

E-MAIL
p.mukherjee@tamu.edu (Grades cannot be discussed via e-mail or telephone.)

OFFICE HOURS
(tentative) Tuesday & Thursday: 2:30 PM - 4:00 PM or by appointment.*
*Note that I try to be really prompt in responding via email. If you have a quick question, send me an email.

GRADING POLICY

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework/Quiz</td>
<td>15%</td>
</tr>
<tr>
<td>Examination 1</td>
<td>15%</td>
</tr>
<tr>
<td>Final Examination</td>
<td>25%</td>
</tr>
<tr>
<td>Project</td>
<td>45%</td>
</tr>
</tbody>
</table>

90 ≤ A ≤ 100; 80 ≤ B < 90
70 ≤ C < 80; 60 ≤ D < 70
F < 60 (Lower bounds may or may not be adjusted to student advantage. Adjustment is not certain and may not occur.)

Your cumulative score will be calculated up to two decimal places. Scores falling in the “gray” areas will be assigned the grade corresponding to the score rounded off to one decimal.

RESOURCE
Lectures will be developed based on the energy storage module currently being developed by Mukherjee and multiple resources including research papers, chapters from relevant textbooks. The following can be referred to additionally.

5. You are free to use any analysis tools as part of this course.

PREREQUISITES
Strong analytical background; engineering mathematics (differential equations); discussion with and approval from the instructor.

LEARNING OUTCOMES
The focus of the course will be on learning the fundamental concepts of Energy Storage with a goal to develop ability for sound analysis. After finishing this course, the students should have the following ability.

1. Understand the fundamentals of mechano-physicochemical mechanisms and interactions that underlie in electrodes in an energy storage system (e.g., battery, supercapacitor);
2. Gain knowledge of thermodynamics, kinetics and transport phenomena of species and charge, thermal and mechanical behavior;
3. Analyze performance, degradation and safety of such systems based on the aforementioned fundamental mechanisms.

PROJECT
The project, based on analysis of electrochemical energy systems, is an integral part of this course. You can choose your own group members (group size limited to 3). Each course project will be designed based on discussion with the instructor. The formal written report and presentation will constitute a significant part of your grade.

Project Milestone (tentative schedule)

<table>
<thead>
<tr>
<th>Component</th>
<th>Points Breakdown</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team List (email to instructor)</td>
<td>-</td>
<td>2nd week</td>
</tr>
<tr>
<td>Topic Selection (title and brief description of the project objective)</td>
<td>5</td>
<td>3rd week</td>
</tr>
<tr>
<td>Progress Report (4-page report including the problem statement, objective, task list with tentative schedule per task and preliminary results)</td>
<td>10</td>
<td>7th week</td>
</tr>
<tr>
<td>Draft Report</td>
<td>15</td>
<td>11th week</td>
</tr>
<tr>
<td>Final Report and Group Presentation</td>
<td>70</td>
<td>Last day of class</td>
</tr>
<tr>
<td><strong>Total points</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>
All submitted work should be presented in a clear, professional manner and must follow given format; should include a restatement of the problem, appropriate diagrams with all variables defined, a detailed, step-by-step solution, and all final answers clearly identified.

EXAM 1: TBA (in-class)
FINAL EXAM: As per final-exam schedule or TBA

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 excuse 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/.

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."

__________________________
Signature of Student

Grades cannot be discussed via email or phone. All discussions will require to be held in the office of the instructor and in person. Your grades can be viewed through the eCampus website.

Take documentation for university-excused absences directly to the instructor. Absences without university documentation are unexcused unless worked out with the instructor prior to the absence whenever possible. Confirmation of student injury or illness serious enough for a student to be absent from class for a period less than three university business days requires a medical confirmation note from the student’s medical care provider. Stated below is verbatim from rule 7, however please see student rule 7 http://student-rules.tamu.edu/rule07 for details.

7.1.6 Injury or Illness that is too severe or contagious for the student to attend class.

7.1.6.1 Injury or illness of three or more days. For injury or illness that requires a student to be absent from classes for three or more business days (to include classes on Saturday), the student should obtain a medical confirmation note from his or her medical provider. The Student Health Center or an off-campus medical professional can provide a medical confirmation note only if medical professionals are involved in the medical care of the student. The medical confirmation note must contain the date and time of the illness and medical professional’s confirmation of needed absence.

7.1.6.2 Injury or illness less than three days. Faculty members may require confirmation of student injury or illness that is serious enough for a student to be absent from class for a period less than three business days (to include classes on Saturday). At the discretion of the faculty member and/or academic department standard, as outlined in the course syllabus, illness confirmation may be obtained by one or both of the following methods:

a. Texas A&M University Explanatory Statement for Absence from Class form available at http://attendance.tamu.edu,

b. Confirmation of visit to a health care professional affirming date and time of visit.

7.1.6.3 An absence for a non-acute medical service does not constitute an excused absence.

NOTE: In this class, students are required to follow both 7.1.6.2a and 7.1.6.2b to confirm injury or illness less than three days.
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 Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 9798451637. For additional information, visit http://disability.tamu.edu.

SYLLABUS for MEEN 647

(14-week schedule: each topic for approximately 1.5-2.5 weeks)

Table of Content (tentative)

1. Introduction
   a. Basics of electrochemical energy storage (battery, supercapacitor)
   b. Performance and operation basics (capacity, voltage, energy/power density)
   c. Current status and future perspective

2. Thermodynamics and Kinetics
   a. Electrochemical equation
   b. Nernst Equation, Faraday’s law
   c. Butler-Volmer equation, Tafel equation

3. Transport Phenomena
   a. Species and charge transport
   b. Transport in electrolyte (diffusion, migration)
   c. Thermal transport

4. Electrode
   a. Materials (voltage vs. capacity)
   b. Microstructure (porous electrode)
   c. Porous electrode theory

5. Electrochemical analysis and characterization
   a. Circuit analysis (resistor and capacitor)
   b. Impedance response
   c. Cyclic voltammetry

6. Performance analysis
   a. Simplified electrode (single particle) model
   b. Coupled species and charge transport model
   c. Thermal analysis (heat generation and transport)
   d. Mechanical analysis (diffusion induced stress)

7. Design consideration
   a. Electrode property (electrochemical/mechanical/thermal)
   b. Electrolyte property
   c. Thermal safety
   d. Degradation (mechanical and chemical effect)
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 (EDC, MS, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):
   Department of Mechanical Engineering
   MEEN 654; TRIBOLOGY
3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   History and significance of tribology, rough surfaces, hertzian contact, rough surfaces in contact, friction of surfaces in contact, surface failures / wear, boundary lubrication, fluid properties, thick film lubrication, thin film lubrication, micro- and nano-tribology

5. Prerequisite(s):
   Graduate classification
<table>
<thead>
<tr>
<th>Cross-listed with:</th>
<th>Stacked with: MEEN 454</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-listed courses require the signature of both department heads.</td>
<td></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)
      MS, PhD in MEEN

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></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MEEN</td>
<td>654</td>
<td>TRIBOLOGY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCHL</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>1419010006</td>
<td>1920</td>
<td>17 - 18</td>
<td>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

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
HONOR CODE:

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: 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."

Instructor Note: It is acceptable (and encouraged) to assist each other and work together on homework and laboratories, even to the point of showing fellow classmates derivations and steps to solve problems. However, it is a violation of the Honor Code if the student receiving aid does not fully understand the derivation or solution steps they are shown, and simply copies the homework from a fellow student.

ABSOLUTELY NO PHONES/COMPUTERS/LAPTOP AND NO TEXTING IN CLASS

COURSE DETAILS: MWF, 1:40 – 2:50
212 ENPH

INSTRUCTOR: Andreas A. Polycarpou
apolycarpou@tamu.edu, MEOB 100
Office hours: TBD

M. Wasim Akram
wasimak@tamu.edu, MEOB 217
Office hours: TBD

GRADING:

Class performance/attendance 5%
Group H/W Assignments 20%
Project 25%
Mid-term Exam 25%
Final Exam 25%

LETTER ASSIGNMENT SCHEME:
A: 90-100; B: 80 – 89; C: 70-79; D: 60-69; F: <60
HOMEWORK:
There will be about ten homework assignments as follows:
- Students will work in Homework Groups (3-4 students per group). Undergraduate and Graduate students will be kept on separate groups.
- In each homework, additional problems will be assigned for graduate students only.
- Each group member will individually outline solutions before group meetings. However, only one solution per group will be handed in for grading.
- Three times during the semester, the group members will be asked for an Individual Effort (or “citizenship” self assessment) rating, which will be used to assess final grade for each student.
- More details are proved separately “Working in Teams: Policies and Expectations.”
- Students certainly should discuss concepts, etc., but not copy.
- Typically, assignments will be distributed on Thursday to be handed in the following Thursday at the beginning of lecture.
- No late assignments will be accepted without permission (only University excused absences will be considered)

LAB DEMONSTRATION:
We will have few demonstrations of tribology test-rigs, and other essential instruments for tribology related measurements. They will take place in the classroom and in the tribology laboratory (ENPH 305). Note that, lab safety is very important. Safety is everyone’s responsibility, including yours. Safe behavior and awareness of safety issues are critically important. Failure to exercise safe working behavior could result in harm, including death, to you and / or your companions. Unsafe behavior, whether intentional and / or negligent, as determined by the instructional staff will result in a failing grade for the semester.

EXAMINATIONS:
The mid term exam will be 2 hours long given on Wednesday, October 12, 2016 (From 5.30 pm to 7.30pm). The final exam will be comprehensive and will be given on (as per timetable). Typically, both exams consist of both closed books and notes (part A) and open books and class notes (part B). Only official university approved excuses will be honored. A different set of questions will be set for graduate students which will require deeper understanding of the subject matters.

TEAM PROJECT
The project is an important component of the class, where students/teams can really excel. Teams can choose projects from a list or come up of their own project. Those that want to design, build, and test devices, will be given access to the tribology instructional laboratory in ENPH 305. Graduate students need to perform a project which is scientifically (experimentally or theoretically) detailed and related to Tribology.

LATE ASSIGN’TS: Unexcused late assignments (homework and project) will not be accepted. University excused rules will be applied for consideration.

eCampus:
This course will make use of the e-campus website, http://ecampus.tamu.edu/. All course handouts and material are available on e-campus. Student grades will be posted on the e-learning website.

PREREQUISITES:
Graduate Standing.

Class performance/attendance
In-class quiz and attendance will be taken regularly. University rules will be applied for the attendance policy. Details can be found on http://student-rules.tamu.edu/rule07
TEXTBOOK/LECTURE NOTES:

Lecture Notes: You can purchase them from a commercial establishment (more in class). These will be approximately 200 double sided non-bound pages. Based on the class interest, additional handouts may be given to you in class.


Suggested/Reserved Books:

Course Description:
History and significance of Tribology, Rough Surfaces, Hertzian Contact, Rough surfaces in contact, Friction of surfaces in contact, Surface failures/Wear, Boundary lubrication, Fluid Properties, Thick film lubrication, Thin film lubrication, Micro- and nano- Tribology

ADA:
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 Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 9798451637. For additional information, visit http://disability.tamu.edu.

Instructors’ Vita

Andreas A. Polycarpou

HND, BS, MS, PhD (1994) - Mechanical Engineering (Tribology and Vibrations)
1995-1997  Post-Doctoral Fellow: Faculty of Mechanical Engineering, Technion, Israel
1997-1999  Staff Scientist: Seagate Technology [Mechanical R&D] Bloomington, MN
1999-2012  Professor, University of Illinois at Urbana-Champaign, IL
2012 – present  Professor and Head of the department, Texas A&M University, College Station, TX

Research interests are in the areas of Microtribodynamics (friction/adhesion/dynamic interaction in miniature systems, e.g., MEMS and magnetic storage), Tribology of Compressors, Friction/ Vibration Interaction, System Dynamics, Surface Characterization and Instrumentation.

M. Wasim Akram

Education  BS, MS, PhD (2015) - Mechanical Engineering
Experience
2006 - 2008  Assistant Professor: Department of Mech., Bangladesh Univ of Engg, & Tech
2009 - 2010  Research Assistant: Department of Ocean & Mech Engg., Florida Atlantic Univ  
2014 - 2015  Research Engineer, United Technologies Research Center  
2015 – Present  Lecturer, Mechanical Engineering Department, Texas A&M University  
Research interests are in Green Tribology, Lubrication, Finite Element Method, Mechanical Design, Polymers, Material Characterization, and Thin Film  

**MEEN 654**  
**TRIBOLOGY**  
**Fall 2016**  
**SYLLABUS**  
**Rev: May 19, 2016**  

Course calendar and exam content subject to change. Exam dates will remain fixed.  

<table>
<thead>
<tr>
<th>Week</th>
<th>Book Chapter</th>
<th>Coverage</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Notes, 1</td>
<td>Introduction, History of Tribology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 1,2</td>
<td>Engineering Surfaces</td>
<td>HW 1 out</td>
</tr>
<tr>
<td>2</td>
<td>Notes, 2</td>
<td>Surface Topography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 2</td>
<td>Engineering Surface contact</td>
<td>HW1 Due, HW2 Out</td>
</tr>
<tr>
<td>3</td>
<td>Notes, 2</td>
<td>Measurement of surface profiles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 3</td>
<td>Contact Mechanics</td>
<td>HW2 Due, HW3 Out</td>
</tr>
<tr>
<td>4</td>
<td>Notes, 3</td>
<td>Real area of contact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 3</td>
<td>3-D contact analysis</td>
<td>Project proposal due</td>
</tr>
<tr>
<td>5</td>
<td>Notes, 3</td>
<td>Thermal contact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 4</td>
<td>Frictions of Solids</td>
<td>HW3 Due, HW4 Out</td>
</tr>
<tr>
<td>6</td>
<td>Notes, 4</td>
<td>Friction Models</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 4</td>
<td>Metallic and non-metallic friction</td>
<td>HW4 Due, HW 5 Out</td>
</tr>
<tr>
<td>7</td>
<td>Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid-term Exam (Oct 12, 2016)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Notes, 5</td>
<td>Experimental Tribology</td>
<td>Lab Demonstration</td>
</tr>
<tr>
<td></td>
<td>Notes, 5</td>
<td>Wear</td>
<td>HW5 Due, HW 6 Out</td>
</tr>
<tr>
<td>9</td>
<td>Notes, 5</td>
<td>Wear modes and maps</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 5</td>
<td>Erosion and Corrosive wear</td>
<td>HW 6 due, HW7 Out</td>
</tr>
<tr>
<td>10</td>
<td>Notes, 6</td>
<td>Hydrostatic bearing and Fluid Properties</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 7</td>
<td>Hydrodynamic bearings</td>
<td>HW 7 due, HW8 Out</td>
</tr>
<tr>
<td>11</td>
<td>Notes, 7</td>
<td>Pad bearings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 7</td>
<td>Plane journal bearings</td>
<td>HW 8 due, HW8 Out</td>
</tr>
<tr>
<td>12</td>
<td>Notes, 8</td>
<td>Elasto-hydrodynamic bearings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notes, 8</td>
<td>Bearing Design</td>
<td>HW 8 due, HW9 Out</td>
</tr>
<tr>
<td>13</td>
<td>Notes, 9</td>
<td>Boundary and solid lubrication</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>Applications of Tribology: Case study</td>
<td>HW 9 due, HW 10 Out</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>14 Notes</td>
<td>Project Deadline</td>
<td>Project Presentations</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Micro and Nano-Tribology</td>
<td>HW 10 due</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>EXAM 2 (2 Hours)</td>
<td>ENPH 212</td>
<td></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  (DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):
   Department of Mechanical Engineering
   MEEN 670: Compressible Flow

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

4. Catalog course description (not to exceed 50 words):
   Compressible flow (also known as gas dynamics and/or high-speed aerodynamics); gas flows at high enough Mach number 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 many other devices; supersonic flows; shock waves; expansion waves; shock tubes; supersonic wind tunnels; gas flows with friction; gas flows with heat transfer.

5. Prerequisite(s):
   Cross-listed with: MEEN 344
   Stacked 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
   ☑ P/F (CLMD)

9. How will this course be graded: ☑ Grade  ☐ S/U

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)

   MS and Ph.D in Mechanical Engineering

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)
    MEEN  670  Compressible Flow

<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>1419010006</td>
<td>1920</td>
<td>17 -</td>
<td>18 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:
Department Head or Program Chair (Type Name & Sign)  Date
Chairs, 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 – 07/14
TEXAS A&M UNIVERSITY
Department of Mechanical Engineering

MEEN 670 Compressible Flow

Instructor: Dr. Eric L. Petersen
Office: MEOB 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)

Lecture Times: MWF 12:40-13:30 Room: ENPH 205

Website: e-learning

Required Text: Gas Dynamics
by James E. A. John and Theo G. Keith

Grading: Midterm Exams (4 total) 85%
Homework 15%

The course grade is based mainly on four mid-term exams, with the extra graded homework (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%, D = 60-69%, E = <60%. 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: aggiehonord.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 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 Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 9798451637. For additional information, visit http://disability.tamu.edu.

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://student-rules.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.).

2
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 670, Typical

<table>
<thead>
<tr>
<th>Week</th>
<th>M</th>
<th>W</th>
<th>F</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/31</td>
<td>9/2</td>
<td>9/4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9/7</td>
<td>9/9</td>
<td>9/11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9/14</td>
<td>9/16</td>
<td>9/18</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>9/28</td>
<td>9/30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>10/5</td>
<td>10/7</td>
<td>10/9</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10/12</td>
<td>10/14</td>
<td>10/16</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>10/19</td>
<td>10/21</td>
<td>10/23</td>
<td>Exam 2: 10/19</td>
</tr>
<tr>
<td>9</td>
<td>10/26</td>
<td>10/28</td>
<td>10/30</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>11/2</td>
<td>11/4</td>
<td>11/6</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>11/16</td>
<td>11/18</td>
<td>11/20</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>11/23</td>
<td></td>
<td></td>
<td>reading day, 11/25</td>
</tr>
<tr>
<td>14</td>
<td>11/30</td>
<td>12/2</td>
<td>12/4</td>
<td>Exam 4: 12/9</td>
</tr>
<tr>
<td>15</td>
<td>12/7</td>
<td>12/9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

Form Instructions
1. Course request type: ☐ Undergraduate ☐ Graduate ☐ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): College of Nursing
3. Course prefix, number and complete title of course: NURS 601: Foundations of Forensic Healthcare
4. Catalog course description (not to exceed 50 words): Foundations of Forensic Healthcare (2-0). Credit 2. Legal, ethical, clinical, and advocacy responsibilities of responders and providers; forensic medical terminology; mechanisms of injury and death; identification of intentional and non-intentional wounds; scientific and medicolegal investigation of suspicious injury and death; introduction to written and photographic documentation of findings; judicial system overview.

5. Prerequisite(s): Graduate classification
   Cross-listed with: FORS 601
   Stacked with: N/A
   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)
       N/A
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
       N/A
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)
NURS 601 FOUNDATIONS OF FORENSIC HEALTH

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CHF and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HCE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>51.3899</td>
<td>CON</td>
<td>16</td>
<td>0</td>
</tr>
</tbody>
</table>

Approval recommended by:
Signed: [Signature]
Date: 05/14/16

Chair, College Review Committee
Signed: [Signature]
Date: 05/23/16

Dean of College
Signed: [Signature]
Date: 05/23/16

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
Texas A&M Health Science Center
College of Nursing

Course title and number  NURS 601  Foundations of Forensic Healthcare

Term
Meeting times and location  Online

Course Description and Prerequisites

Foundations of Forensic Healthcare (2-0). Credit 2. Legal, ethical, clinical, and advocacy responsibilities of responders and providers; forensic medical terminology; mechanisms of injury and death; identification of intentional and non-intentional wounds; scientific and medico-legal investigation of suspicious injury and death; introduction to written and photographic documentation of findings; judicial system overview. Prerequisite: Graduate classification.

MSN in Forensic Nursing Outcomes*

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:


International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing https://www.forensicnurses.org/resource/resmgr/Education/APN_Core_Curriculum_Document.pdf
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Outline the processes of scientific and medico-legal approaches in working with victims of accidents, injury, abuse, neglect and death.</td>
</tr>
<tr>
<td>2. Examine various types of violence, abuse, neglect, victimization, and exploitation occurring across the lifespan and the related injuries.</td>
</tr>
<tr>
<td>3. Summarize approaches used to facilitate the transition of a victim to a survivor and prevention of future victimization.</td>
</tr>
<tr>
<td>4. Examine ethical and cultural considerations when working with victims of violence.</td>
</tr>
<tr>
<td>5. Discuss the interdisciplinary collaboration between healthcare, social, political and judicial systems involved in serving the needs of individuals, families and communities as they respond to accident, injury, violence, trauma, crime or other victimization.</td>
</tr>
<tr>
<td>6. Correlate the impact of prevention strategies to the incidence of victimization.</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Virginia Ann Utterback, PhD, RN, CNE, SANE
Telephone number: 806-789-9714
Email address: utterback@nmhsc.edu
Office hours:

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:


Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

Grading Scale:

A = 90-100
B = 80-89  
C = 70-79  
D = 60-69  
F = < 60

Students must have a final course average of at least 80% to successfully pass the course.

**Faculty Expectations, Course Assumptions & Attendance Requirements**

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

**Due Dates/Times:**

**Projects/Special Learning Activities:** Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

**Individual Assignments:**

1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

**Discussion Boards:**

1. **Initial Posts** to the Discussion Board are due by Sunday at midnight CST. **Secondary Posts** (in response to colleagues' Initial Posts) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, late Secondary Posts (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late Initial Posts.
3. **Online Etiquette:** A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

**Other Pertinent Course Information**

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop Initial Posts and Secondary Posts. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module **PRIOR** to developing Initial or Secondary Posts. All Initial Posts **MUST** be evidenced-based, properly cited, and provide direct responses to prompts within the module. Initial Posts should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues’ posts. Use the Secondary Posting phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.
2. **Length of Initial Posts** should be maintained between 150 – 250 words and **MUST** include citations.
according to the grading rubric. Secondary Posts should be a minimum of 100 words and may require citations. (refer to the instructions). Please read a sampling of your colleagues’ Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.

3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
   * Share your experiences but use empirical resources in the analysis.
   * Ask questions to further the discussion, post additional resources such as articles, websites video clips, etc.
   * Suggest why you might see things differently. (cite/reference)
   * Ask a probing or clarifying question.
   * Share an insight from having read the colleague’s posting.
   * Offer and support with evidence from the literature an informed opinion. (cite/reference)
   * Validate an idea with your own experience.
   * Make a suggestion supported with evidence from the literature. (cite/reference)
   * Expand on the colleague’s posting.
   * Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific score based on criteria provided in the rubric.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Academic Integrity

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

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

Course Calendar

NURS 601—Foundations of Forensic Healthcare
<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week: 1</td>
<td>Introduction to Justice and Science; Forensic Medical Terminology</td>
<td>Chapters: 1, 2, 21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Board</td>
</tr>
<tr>
<td>2</td>
<td>Week: 2</td>
<td>Forensic Healthcare in Acute Care Settings</td>
<td>Learning resources located in module</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Board</td>
</tr>
<tr>
<td>3</td>
<td>Week: 3</td>
<td>Overview of the Judicial System; Role of Advocacy</td>
<td>Learning resources located in module</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assignment</td>
</tr>
<tr>
<td>4</td>
<td>Week: 4</td>
<td>Overview of Interpersonal Violence</td>
<td>Learning resources located in module</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Research Article Summary 1</td>
</tr>
<tr>
<td>5</td>
<td>Week: 5</td>
<td>Mechanisms of Intentional and Non-intentional Injury and Death</td>
<td>Learning resources located in module</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz</td>
</tr>
<tr>
<td>6</td>
<td>Week: 6 &amp; 7</td>
<td>Forensic Death Investigation</td>
<td>Chapters: 5, 6, 7, 16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assignment</td>
</tr>
<tr>
<td>7</td>
<td>Week: 8</td>
<td>Crime Scene Investigation</td>
<td>Chapters: 3, 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assignment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mid-Term Reflective Summary</td>
</tr>
<tr>
<td>8</td>
<td>Week: 9</td>
<td>Introduction to Written and Photographic Documentation</td>
<td>Learning resources located in module</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assignment</td>
</tr>
<tr>
<td>9</td>
<td>Week: 10</td>
<td>Investigative Forensic Anthropology/Entomology</td>
<td>Chapters: 6, 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz</td>
</tr>
<tr>
<td>10</td>
<td>Week: 11</td>
<td>Investigative Forensic Biology</td>
<td>Chapters: 8, 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz</td>
</tr>
<tr>
<td>11</td>
<td>Week: 12</td>
<td>Investigative Forensic Chemistry</td>
<td>Chapters: 10, 11, 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz</td>
</tr>
<tr>
<td>12</td>
<td>Week: 13</td>
<td>Behavioral Forensic Science</td>
<td>Chapter: 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Research Article Summary 2</td>
</tr>
<tr>
<td>13</td>
<td>Week: 14</td>
<td>Collaborative Response to Sexual Assault</td>
<td>Learning resources located in module</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Board</td>
</tr>
<tr>
<td></td>
<td>Week: 15</td>
<td>Final Course Project Presentations Course/Faculty Evaluations</td>
<td>PowerPoint or Pwazi Presentation posted to Discussion Board</td>
</tr>
</tbody>
</table>
Texas A&M University
Departmental Request for a New Course
Undergraduate □ Graduate ✓ Professional □ First Professional (DDS, MD, JD, Ph.D, DPA)

1. Course request type: 
   ✓ Graduate

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

3. Course prefix, number and complete title of course: NURS 602: Victimology: Clinical Implications and Applications

4. Catalog course description (not to exceed 50 words): Victimology: Clinical Implications and Applications (3-0). Credit 3. Comprehensive examination of human responses to victimization resulting in physical and psychological trauma; interpersonal violence as a public health issue; overview of intentional injury, neglect, abuse, and exploitation throughout the lifespan; process of seeking justice for victims; characteristics and motivational issues related to perpetrators of violence; transitioning patterns from role of victim to survivor including secondary effects of victimization; theoretical and evidence-based approaches to assessment; documentation of victims and perpetrators of violence.

5. Prerequisite(s): Graduate classification; FORS 601 or NURS 601
   Cross-listed with: FORS 602
   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 ✓

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)

      N/A

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

      N/A

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)
    NURS 602 VICTIMOLOGY: CLINICAL IMPLICAT

    | Lect. | Lab | Other | SCH | CHG | Admin. Unit | Academic Year | FICE Code |
    |-------|-----|-------|-----|-----|-------------|---------------|-----------|
    | 3.00  | 0.00| 0.00  | 0.00| 51.3899 | CON          | 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

Dean of College

Submitted to Coordinating Board by:

Chair, GC or UCC

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-3201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
Texas A&M Health Science Center
College of Nursing

Course title and number  NURS 602 Victimology: Clinical Implications & Applications
Term XXXX
Meeting times and location  Online

Course Description and Prerequisites

Victimology: Clinical Implications & Applications (1-0). Credits 1. Comprehensive examination of human responses to victimization resulting in physical and psychological trauma; interpersonal violence as a public health issue; overview of intentional injury, neglect, abuse, and exploitation throughout the lifespan; process of seeking justice for victims; characteristics and motivational issues related to perpetrators of violence; transitioning patterns from role of victim to survivor including secondary effects of victimization; theoretical and evidence-based approaches to assessment; documentation of victims and perpetrators of violence. Prerequisite: NURS 601 and graduate classification.

MSN in Forensic Nursing Outcomes*

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:


International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing https://www.forensicnurses.org/resource/resmgr/Education/APN_Core_Curriculum_Document.pdf
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Critique theories related to victimization and those who perpetrate violence through the life span.</td>
</tr>
<tr>
<td>2. Relate the issues and consequences of violence to the societal cost of victimization across the life span.</td>
</tr>
<tr>
<td>3. Synthesize the human response to physical, sexual, psychological, emotional, social, and financial effects of victimization.</td>
</tr>
<tr>
<td>4. Summarize interventions which aid in transitioning a victim of violence to survivor status while preventing re-victimization.</td>
</tr>
<tr>
<td>5. Outline a provider's response to a victim of physical, sexual, psychological, and emotional violence.</td>
</tr>
<tr>
<td>6. Utilize evidenced-based assessment and documentation approaches to victims of violence resulting in physical and psychological trauma.</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Nancy R. Downing, PhD, RN, SANE-A
Telephone number: 979-436-0157
Email address: downing@tamhsc.edu
Office hours:

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:


Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

Grading Scale:

A = 90-100
B = 80-89
Students must have a final course average of at least 80% to successfully pass the course.

Faculty Expectations, Course Assumptions & Attendance Requirements

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

Due Dates/Times:

Projects/Special Learning Activities: Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

Individual Assignments:
1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

Discussion Boards:
1. *Initial Posts* to the Discussion Board are due by Sunday at midnight CST. *Secondary Posts* (in response to colleagues’ *Initial Posts*) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, *晚期 Secondary Posts* (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late *Initial Posts*.
3. *Online Etiquette*: A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

Other Pertinent Course Information

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop *Initial Posts* and *Secondary Posts*. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. *All Initial Posts* MUST be evidenced-based, properly cited, and provide direct responses to prompts within the module. *Initial Posts* should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues’ posts. Use the *Secondary Posting* phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.
2. Length of *Initial Posts* should be maintained between 150 - 250 words and *MUST* include citations according to the grading rubric. *Secondary Posts* should be a minimum of 100 words and may require
citations. (refer to the instructions). Please read a sampling of your colleagues’ Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.

3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
   * Share own experiences but use empirical resources in the analysis.
   * Ask questions to further the discussion, post additional resources such as articles, websites video clips, etc.
   * Suggest why you might see things differently. (cite/reference)
   * Ask a probing or clarifying question.
   * Share an insight from having read the colleague’s posting.
   * Offer and support with evidence from the literature an informed opinion. (cite/reference)
   * Validate an idea with your own experience.
   * Make a suggestion supported with evidence from the literature. (cite/reference)
   * Expand on the colleague’s posting.
   * Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific grade based on criteria provided in the rubric.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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."

Course Calendar
NURS 602– Victimology: Clinical Implications & Applications
<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment Learning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week: 1</td>
<td>Introduction to Victimology, The Language of Victimology</td>
<td>Diagle &amp; Muflic Chapter 1 Video Presentation</td>
</tr>
<tr>
<td>2</td>
<td>Week: 2</td>
<td>Theories of Victimization</td>
<td>Diagle &amp; Muflic Chapter 2</td>
</tr>
<tr>
<td>3</td>
<td>Week: 3</td>
<td>The Costs of Victimization</td>
<td>Diagle &amp; Muflic Chapter 4</td>
</tr>
<tr>
<td>4</td>
<td>Weeks: 4</td>
<td>Perpetrators &amp; Predators</td>
<td>Assigned Readings Video Presentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>5</td>
<td>Week: 5</td>
<td>Homicide</td>
<td>Diagle &amp; Muflic Chapter 7</td>
</tr>
<tr>
<td>6</td>
<td>Week: 6</td>
<td>Sexual Assault</td>
<td>Diagle &amp; Muflic Chapter 8</td>
</tr>
<tr>
<td>7</td>
<td>Week: 7</td>
<td>Intimate Partner Violence</td>
<td>Diagle &amp; Muflic Chapter 9</td>
</tr>
<tr>
<td>8</td>
<td>Week: 8</td>
<td>Child Maltreatment</td>
<td>Diagle &amp; Muflic Chapter 10</td>
</tr>
<tr>
<td>9</td>
<td>Week: 9</td>
<td>Elder Maltreatment</td>
<td>Diagle &amp; Muflic Chapter 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>10</td>
<td>Weeks: 10, 11</td>
<td>Special Populations and Issues: Persons with Disabilities, Human Trafficking, Hate Crimes, Terrorism, Stalking</td>
<td>Diagle &amp; Muflic Chapters 11 &amp; 12</td>
</tr>
<tr>
<td>11</td>
<td>Week: 12</td>
<td>Responding to Victims</td>
<td>Assigned Readings Video Presentation</td>
</tr>
<tr>
<td>12</td>
<td>Week: 13</td>
<td>From Victim to Survivor to Thriver</td>
<td>Assigned Readings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td></td>
<td>Week: 14</td>
<td>Work on Final Paper</td>
<td>Work on Final Paper</td>
</tr>
<tr>
<td></td>
<td>Week: 15</td>
<td>Finals Week</td>
<td>Final Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Course/Faculty Evaluations</td>
<td>Final Paper Due</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.*  

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

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

3. Course prefix, number and complete title of course:  
   NURS 603: Justice Today, Prevention Tomorrow  

4. Course catalog course description (not to exceed 50 words):  
   Justice Today, Prevention Tomorrow (3-0). Credit 3. In-depth analysis of the role of  
   the trauma specialist within the criminal and civil court system; critical collaboration between representatives of the healthcare system,  
   investigative systems and the legal system in seeking justice for victims of violence; investigative processes involving trauma, injury and  
   death; methods of evidence collection and preservation in the trauma/emergency department and other settings; public health perspective of  
   interpersonal violence and prevention; social-ecological model of primary prevention; factors placing individuals at risk for violence;  
   batterer/anti-bullying intervention programs.  

5. Prerequisite(s):  
   Graduate classification; FORS 601 and FORS 602 or NURS 601 and NURS 602  
   Cross-listed with:  
   FORS 603  
   Stacked with:  
   N/A  
   Cross-listed courses require the signature of both department heads.  
   Stacked 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  
   - [x] 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., R.A. in history)  
   N/A  
   b. [ ] an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)  
   N/A  

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.  
   [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. Prefix Course # Title (excluding punctuation)  
   NURS 603  
   JUSTICE TODAY, PREVENTION TOMO  
   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  EICE Code  
   3.00  0.00  0.00  0.00  51.3899  CON  16 - 17 0 0 3 6 3 2  
   Approval recommended by:  
   [Signature]  
   Date  
   [Signature]  
   Date  
   [Signature]  
   Date  

   Department Head or Program Chair (Type Name & Sign)  
   Department Head or Program Chair (Type Name & Sign)  
   Dean of College  

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

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.  
Curricular Services – 07/14
Texas A&M Health Science Center
College of Nursing

Course title and number
NURS 603 Justice Today, Prevention Tomorrow

Term
Online

Course Description and Prerequisites

Justice Today, Prevention Tomorrow (3-0). Credit 3. In-depth analysis of the role of the trauma specialist within the criminal and civil court system; critical collaboration between representatives of the healthcare system, investigative systems and the legal system in seeking justice for victims of violence; investigative processes involving trauma, injury and death; methods of evidence collection and preservation in the trauma/emergency department and other settings; public health perspective of interpersonal violence and prevention; social-ecological model of primary prevention; factors placing individuals at risk for violence; batterer/anti-bullying intervention programs. Prerequisite: Graduate classification; NURS 601 and NURS 602.

MSN in Forensic Nursing Outcomes*

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:

International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing https://www.forensicnurses.org/resource/esspgv/Education/APN_Core_Curriculum_Document.pdf
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain the role of the criminal and civil courts systems in seeking justice for</td>
</tr>
<tr>
<td>victims of violence.</td>
</tr>
<tr>
<td>2. Delineate medico-legal investigative processes associated with crimes resulting</td>
</tr>
<tr>
<td>in victimization.</td>
</tr>
<tr>
<td>3. Specify methods and techniques of evidence collection and preservation for</td>
</tr>
<tr>
<td>clothing, body fluids, hair, photography.</td>
</tr>
<tr>
<td>4. Portray the attributes of expert witness testimony in a mock trial.</td>
</tr>
<tr>
<td>5. Apply the social-ecological model of primary prevention of violence at the</td>
</tr>
<tr>
<td>individual, relationship, community, and societal levels.</td>
</tr>
<tr>
<td>6. Explore factors placing people at risk for violence and factors protecting them</td>
</tr>
<tr>
<td>from violence.</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Daniel J. Sheridan, PhD, RN, FNE-A, FAAN
Telephone number: 979-436-0177
Email address: dsheridan@tamhsc.edu
Office hours: By appointment

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:

Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

Grading Scale:
A = 90-100
B = 80-89
Students must have a final course average of at least 80% to successfully pass the course.

**Faculty Expectations, Course Assumptions & Attendance Requirements**

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

**Due Dates/Times:**

**Projects/Special Learning Activities:** Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

**Individual Assignments:**

1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

**Discussion Boards:**

1. *Initial Posts* to the Discussion Board are due by Sunday at midnight CST. *Secondary Posts* (in response to colleagues’ *Initial Posts*) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, late *Secondary Posts* (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late *Initial Posts*.
3. *Online Etiquette:* A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

**Other Pertinent Course Information**

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop *Initial Posts* and *Secondary Posts*. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. All *Initial Posts* MUST be evidence-based, properly cited, and provide direct responses to prompts within the module. *Initial Posts* should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues’ posts. Use the *Secondary Posting* phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.
2. Length of *Initial Posts* should be maintained between 150 – 250 words and *MUST* include citations according to the grading rubric. *Secondary Posts* should be a minimum of 100 words and may require
citations. (refer to the instructions). Please read a sampling of your colleagues’ Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.

3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
   * Share own experiences but use empirical resources in the analysis.
   * Ask questions to further the discussion, post additional resources such as articles, websites video clips, etc.
   * Suggest why you might see things differently. (cite/reference)
   * Ask a probing or clarifying question.
   * Share an insight from having read the colleague’s posting.
   * Offer and support with evidence from the literature an informed opinion. (cite/reference)
   * Validate an idea with your own experience.
   * Make a suggestion supported with evidence from the literature. (cite/reference)
   * Expand on the colleague’s posting.
   * Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific score based on criteria provided in the rubric.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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."

Course Calendar
NURS 603 – Justice Today, Prevention Tomorrow

Semester/Year
<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Topic</th>
<th>Reading Assignment</th>
<th>Learning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week: 1</td>
<td>Introduction/ Course Overview</td>
<td>Selected Reading: James, Nordby, Bell Chapter 1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Week: 3</td>
<td>Overview of Criminal Justice Systems</td>
<td>Mitchell &amp; Anglin Chapter 28</td>
<td>Discussion Board – Response Post</td>
</tr>
<tr>
<td>4</td>
<td>Week: 4</td>
<td>Overview of Civil Justice Systems</td>
<td>Mitchell &amp; Anglin Chapter 28</td>
<td>Quiz</td>
</tr>
<tr>
<td>5</td>
<td>Week: 5</td>
<td>Testifying as a Fact or Expert Witness/Tips on Testifying</td>
<td>Selected Readings</td>
<td>Discussion Board</td>
</tr>
<tr>
<td>6</td>
<td>Week: 6</td>
<td>Overview of Investigative Services and Systems</td>
<td>Selected Readings</td>
<td>Journal Article Summary</td>
</tr>
<tr>
<td>7</td>
<td>Week: 7</td>
<td>Practice Breakdown vs. Abuse or Neglect</td>
<td>Selected Readings</td>
<td>Discussion Board</td>
</tr>
<tr>
<td>8</td>
<td>Week: 8</td>
<td>Principles of Evidence Collection and Preservation for All</td>
<td>Selected Readings</td>
<td>Mid-term Reflection</td>
</tr>
<tr>
<td>9</td>
<td>Week: 9</td>
<td>Public Health Perspectives of Interpersonal Violence</td>
<td>Selected Readings</td>
<td>Quiz</td>
</tr>
<tr>
<td>10</td>
<td>Week: 10</td>
<td>Placing the Victim/Client/Patient within a Social Ecological Mode</td>
<td>Selected Readings</td>
<td>Journal Article Summary</td>
</tr>
<tr>
<td>11</td>
<td>Week: 11</td>
<td>Assessing for Dangerousness Across the Lifespan</td>
<td>Mitchell &amp; Anglin Chapter 23</td>
<td>Quiz</td>
</tr>
<tr>
<td>12</td>
<td>Week: 12</td>
<td>Linking the ACE Study to a System Approach to Prevention</td>
<td>Selected Readings</td>
<td>Discussion Board – Initial Post</td>
</tr>
<tr>
<td>15</td>
<td>Week: 15</td>
<td>Final Project</td>
<td>Course/Faculty Evaluations</td>
<td>Final Project</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.*

**Form Instructions**

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

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

3. Course prefix, number and complete title of course:  
   NURS 604: Advanced Trauma Assessments and Injury Pathology

4. Catalog course description (not to exceed 50 words):  
   Advanced Trauma Assessments and Injury Pathology (3-1). Credit 3. In-depth review of injury pathology, advanced trauma assessments, and diagnosis of physical and psychological injuries across the lifespan; biomechanical and forensics of sharp, blunt, thermal, penetrating, and mixed injuries; methods to differentiate between intentional versus unintentional injuries; diseases and physical findings mimicking abuse; physiology of wound healing; biomechanics and pathophysiology of bruising; bruise resolution and similarities and differences with/from ecchymoses; pressure ulcer formation, healing, and treatment; cutaneous injury prevention.

5. Prerequisite(s):  
   Graduate classification; NURS 601, NURS 602, NURS 603  
   Cross-listed with:  
   FORS 604  
   Stacked with:  
   N/A

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:  
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)  
       - N/A
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)  
       - N/A

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

13. Prefix Course # Title (excluding punctuation)  
    | Lect. | Lab  | Other | SCH | CIP and Fund Code | Admin. Unit | Acad. Year | EICE Code |
    |-------|------|-------|-----|------------------|-------------|------------|-----------|
    | 3.00  | 1.00 | 0.00  | 0.00| 51.3899          | CON         | 16 - 17    | 0 0 3 6 3 2 |

    Approval recommended by:  
    * [Name]  
    * Date: 05-19-16  

    Department Head or Program Chair (Type Name & Sign)  
    * Date: 05-19-16  
    * Signature: [Signature]

    Department Head or Program Chair (Type Name & Sign)  
    * Date: 05-19-16  
    * Signature: [Signature]

    Chair, College Review Committee  
    * Date: 05-23-16  
    * Signature: [Signature]

    Dean of College  
    * Date: 05-23-16  
    * Signature: [Signature]

    Submitted to Coordinating Board by:  
    * Chair, GC or UCC  
    * Date: 05-23-16  
    * Effective Date: 05-23-16

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu,  
Curricular Services – 07/14
Texas A&M Health Science Center
College of Nursing

Course title and number  NURS 604 Advanced Trauma Assessments and Injury Pathology

Term
Meeting times and location  Online

Course Description and Prerequisites
Advanced Trauma Assessments and Injury Pathology (3-1). Credit 3. In-depth review of injury pathology, advanced trauma assessments, and diagnosis of physical and psychological injuries across the lifespan; biomechanical and forensics of sharp, blunt, thermal, penetrating, and mixed injuries; methods to differentiate between intentional versus unintentional injuries; diseases and physical findings mimicking abuse; physiology of wound healing; biomechanics and pathophysiology of bruising; bruise resolution and similarities and differences with/without ecchymoses; pressure ulcer formation, healing, and treatment; cutaneous injury prevention.
Prerequisite: NURS 601, NURS 601 and NURS 603.

MSN in Forensic Nursing Outcomes*

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:

American Association of Colleges of Nursing. (2011). The Essentials of the Master's Education in Nursing
http://www.aacn.nche.edu/education-resources/MastersEssentials11.pdf
International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare and contrast the biomechanics of sharp, blunt, thermal, penetrating and mixed injuries based on current research and evidenced-based practice.</td>
</tr>
<tr>
<td>Describe the physiology of wound healing and list factors contributing to and compounding bruising and bruise healing.</td>
</tr>
<tr>
<td>Review diseases and physical findings that mimic abuse/neglect and differentiate accidental from intentional injury.</td>
</tr>
<tr>
<td>Cite current research and best practices in injury pathology, physiology, and treatment around asphyxiation, strangulation and trauma to the brain and skull.</td>
</tr>
<tr>
<td>Review two redacted actual case histories and develop written forensic reports.</td>
</tr>
<tr>
<td>Critique the written forensic reports of others enrolled in the class.</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Daniel J. Sheridan, PhD, RN FNE-A, FAAN
Telephone number: 979 - 436 - 0177
Email address: dsheridan@tamhs.edu
Office hours: By appointment.

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:


Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

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

Students must have a final course average of at least 80% to successfully pass the course.

Faculty Expectations, Course Assumptions & Attendance Requirements

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

Due Dates/Times:

Projects/Special Learning Activities: Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

Individual Assignments:
1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

Discussion Boards:
1. Initial Posts to the Discussion Board are due by Sunday at midnight CST. Secondary Posts (in response to colleagues' Initial Posts) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, late Secondary Posts (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late Initial Posts.
3. Online Etiquette: A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

Other Pertinent Course Information

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop Initial Posts and Secondary Posts. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. All Initial Posts MUST be evidenced-based, properly cited, and provide direct responses to prompts within the module. Initial Posts should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues' posts. Use the Secondary Posting phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal
2. Length of Initial Posts should be maintained between 150 – 250 words and MUST include citations according to the grading rubric. Secondary Posts should be a minimum of 100 words and may require citations. (refer to the instructions). Please read a sampling of your colleagues’ Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.

3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
   * Share your own experiences but use empirical resources in the analysis.
   * Ask questions to further the discussion, post additional resources such as articles, websites, video clips, etc.
   * Suggest why you might see things differently. (cite/reference)
   * Ask a probing or clarifying question.
   * Share an insight and having read the colleague’s posting.
   * Offer and support with evidence from the literature an informed opinion. (cite/reference)
   * Validate an idea with your own experience.
   * Make a suggestion supported with evidence from the literature. (cite/reference)
   * Expand on the colleague’s posting.
   * Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific score based on criteria provided in the rubric.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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."

Course Calendar

NURS 604 – Advanced Trauma Assessments and Injury Pathology
<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment Learning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week: 1</td>
<td>Injury overview/mechanisms of injury</td>
<td>Sheridan &amp; Nash (2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nash &amp; Sheridan (2009)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Video – When Injuries Speak...</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Board</td>
</tr>
<tr>
<td>2</td>
<td>Week: 2</td>
<td>Forensic documentation</td>
<td>Online Sources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Board</td>
</tr>
<tr>
<td>3</td>
<td>Week: 3</td>
<td>Blunt force trauma I</td>
<td>Chapter 29 Mitchell &amp; Anglin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assignment</td>
</tr>
<tr>
<td>4</td>
<td>Week: 4</td>
<td>Blunt force trauma II</td>
<td>Chapters 4, 5 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz</td>
</tr>
<tr>
<td>5</td>
<td>Week: 5</td>
<td>Wounds caused by pointed/sharp edges weapons</td>
<td>Chapter 7 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Research Journal Article</td>
</tr>
<tr>
<td>6</td>
<td>Week: 6</td>
<td>Asphyxiation &amp; Strangulation</td>
<td>Chapter 8 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chapter 16 Mitchell &amp; Anglin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Board</td>
</tr>
<tr>
<td>7</td>
<td>Week 7</td>
<td>Skull &amp; brain trauma</td>
<td>Chapter 6 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chapter 14 Mitchell &amp; Anglin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz</td>
</tr>
<tr>
<td>8</td>
<td>Week: 8</td>
<td>Physical/psychological trauma of children</td>
<td>Chapter 12 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chapter 33 Mitchell &amp; Anglin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discussion Board</td>
</tr>
<tr>
<td>9</td>
<td>Week: 9</td>
<td>Sexual assault of children</td>
<td>Chapter 18 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chapter 19 Mitchell &amp; Anglin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assignment</td>
</tr>
<tr>
<td>10</td>
<td>Week: 10</td>
<td>Sexual assault of adults</td>
<td>Chapter 18 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chapter 19 Mitchell &amp; Anglin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quiz</td>
</tr>
<tr>
<td>11</td>
<td>Week: 11</td>
<td>Elder/vulnerable person abuse/neglect</td>
<td>Chapter 21 DiMaio &amp; DiMaio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chapter 35 Mitchell &amp; Anglin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assignment</td>
</tr>
<tr>
<td>12</td>
<td>Week: 12</td>
<td>Redacted case review and Forensic Report 1</td>
<td>Case Study Materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Forensic Report #1</td>
</tr>
<tr>
<td>13</td>
<td>Week: 13</td>
<td>Redacted case review and Forensic Report 2</td>
<td>Case study materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Forensic Report #2</td>
</tr>
<tr>
<td>14</td>
<td>Week: 14</td>
<td>Peer critique of selected classmates write up</td>
<td>Discussion Board</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Reflective Summary Course/Faculty Evaluations</td>
<td>Final Reflective Summary</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. *

Form Instructions:
1. Course request type:  
   - Undergraduate  
   - Graduate  
   - First Professional (DDS, MD, JD, PharmD, DVM)  
2. Request submitted by (Department or Program Name):  
   - College of Nursing  
3. Course prefix, number and complete title of course:  
   - NURS 610: Forensic Sexual Assault Examiner Course  
4. Catalog course description (not to exceed 50 words):  
   - Forensic Sexual Assault Examiner Course (3-0). 3 credit. Roles and responsibilities; legal definitions; expert witness testimony; nurse advocacy; motivations of perpetrators to offend; obtaining historical account of sexual assault using interview techniques; appropriate methods of documentation; METALAB; head-to-toe assessment; injury documentation; anatomy of female and male sexual organs; evidence collection kit; treatment of STDs; pregnancy prophylactic treatment; role of advocates and advocacy centers; communication skills; vicarious victimization; civil and criminal trial procedures.  

5. Prerequisite(s):  
   - Graduate classification:  
     - Cross-listed with:  
       - FORS 610  
     - Stacked with:  
       - N/A  
   - 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:  
    - required for students enrolled in the following degree program(s) (e.g., B.A. in history)  
      - N/A  
    - an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)  
      - N/A  

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)  
   - NURS  
   - 610  
   - FORENSIC SEXUAL ASSAULT EXAMINER  

<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>Effective Code</th>
<th>Level</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>51.3899</td>
<td>CON</td>
<td>16</td>
<td>17</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Approval recommended by:  

[Signature]  
05-19-16  
Chair, College Review Committee  
Date  

[Signature]  
5/23/16  
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
Texas A&M Health Science Center  
College of Nursing  

Course title and number  NURS 610 Forensic Sexual Assault Examiner  

Term  
Meeting times and location  Online  

Course Description and Prerequisites  

Forensic Sexual Assault Examiner (3-0). Credits 3. Roles and responsibilities; legal definitions; expert witness testimony; nurse advocacy; motivations of perpetrators to offend; obtaining historical account of sexual assault using interview techniques; appropriate methods of documentation; EMTALA; head-to-toe assessment; injury documentation; anatomy of female and male sexual organ; evidence collection kit; treatment of STDs; pregnancy prophylactic treatment; role of advocates and advocacy centers; communication skills; vicarious victimization; civil and criminal trial procedures. Prerequisites: NURS 601 or current enrollment in NURS 601.

MSN in Forensic Nursing Outcomes*  

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:  

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.  
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.  
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.  
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.  
5. Use patient care and communication technologies to enhance patient care.  
6. Intervene at the system level to develop and implement policies that influence health care.  
7. Collaborate with other healthcare professionals to manage and coordinate care.  
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.  
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.  
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.  
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.  
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:  

http://www.aacn.nche.edu/education-resources/MastersEssentials11.pdf  

International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing.  
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analyze the roles and responsibilities of the SANE in respect to the provision of services.</td>
</tr>
<tr>
<td>2. Appraise approaches used to obtain comprehensive histories of reported sexual assaults.</td>
</tr>
<tr>
<td>3. Analyze the components of comprehensive head-to-toe physical assessments to identify body surface injury for the victim and perpetrator.</td>
</tr>
<tr>
<td>4. Analyze the components of a genital examination assessing for genital injury.</td>
</tr>
<tr>
<td>5. Delineate standard practices for the collection, preservation, storage and chain of custody of evidence.</td>
</tr>
<tr>
<td>6. Explain the use of photography and written documentation in supporting a sexual assault examination and prosecution.</td>
</tr>
<tr>
<td>7. Describe the role and responsibilities as expert witness in legal proceedings.</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Nancy R. Downing, PhD, RN, SANE-A
Telephone number: 979-436-0157
Email address: downing@tamhsc.edu
Office hours: 

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:


Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

**Grading Scale:**

- **A** = 90-100
- **B** = 80-89
- **C** = 70-79
- **D** = 60-69
- **F** = < 60

**Students must have a final course average of at least 80% to successfully pass the course.**

**Faculty Expectations, Course Assumptions & Attendance Requirements**

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

**Due Dates/Times:**

**Projects/Special Learning Activities:** Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

**Individual Assignments:**

1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

**Discussion Boards:**

1. **Initial Posts** to the Discussion Board are due by Sunday at midnight CST. **Secondary Posts** (in response to colleagues' Initial Posts) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, late Secondary Posts (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late Initial Posts.
3. **Online Etiquette:** A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

**Other Pertinent Course Information**

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop Initial Posts and Secondary Posts. Please use these guidelines for DB participation:

1. **Always complete the required or assigned learning activities within a module before developing a DB post.** This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. **All Initial Posts MUST** be evidenced-based, properly cited, and provide direct responses to prompts.
within the module. *Initial Posts* should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues' posts. Use the *Secondary Posting* phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.

2. Length of *Initial Posts* should be maintained between 150 – 250 words and *MUST* include citations according to the grading rubric. *Secondary Posts* should be a minimum of 100 words and may require citations. (refer to the instructions). Please read a sampling of your colleagues' *Initial Posts* to the Discussion Board and respond to the number of postings required as stated in the instructions.

3. Suggestions for replying to colleagues in during the *Secondary Posting* phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
   * Share your own experiences but use empirical resources in the analysis.
   * Ask questions to further the discussion, post additional resources such as articles, websites, video clips, etc.
   * Suggest why you might see things differently. (cite/reference)
   * Ask a probing or clarifying question.
   * Share an insight from having read the colleague’s posting.
   * Offer and support with evidence from the literature an informed opinion. (cite/reference)
   * Validate an idea with your own experience.
   * Make a suggestion supported with evidence from the literature. (cite/reference)
   * Expand on the colleague’s posting.
   * Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific score based on criteria provided in the rubric.

**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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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."

**Course Calendar**
<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment Learning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week: 1</td>
<td>A Trauma-Informed Approach</td>
<td>Assigned Reading</td>
</tr>
<tr>
<td>2</td>
<td>Weeks: 2&amp;3</td>
<td>Building a Sexual Assault Response Team (SART)</td>
<td>SANE-SART Modules</td>
</tr>
<tr>
<td>3</td>
<td>Weeks: 4&amp;5</td>
<td>Overview of Procedures for Responding to Sexual Assault</td>
<td>SANE-SART Modules</td>
</tr>
<tr>
<td>4</td>
<td>Weeks: 6&amp;7</td>
<td>Sexual Assault Evidentiary Exam Procedures (or module associated with other professional discipline)</td>
<td>SANE-SART Modules</td>
</tr>
<tr>
<td>5</td>
<td>Week: 8</td>
<td>SART Member Case Examples</td>
<td>SANE-SART Modules</td>
</tr>
<tr>
<td>6</td>
<td>Week: 9</td>
<td>SART Meetings</td>
<td>SANE-SART Modules</td>
</tr>
<tr>
<td>7</td>
<td>Week: 10</td>
<td>Underserved Populations</td>
<td>SANE-SART Modules</td>
</tr>
<tr>
<td>8</td>
<td>Week: 11</td>
<td>Technology to Assist Evidence Collection</td>
<td>Assigned Readings Video Presentations</td>
</tr>
<tr>
<td>11</td>
<td>Week: 12</td>
<td>Evidence-Based Practice in Responding to Sexual Assault</td>
<td>Assigned Readings</td>
</tr>
<tr>
<td>12</td>
<td>Week: 13</td>
<td>Planning to Practice in Your Community</td>
<td>Online Discussion</td>
</tr>
<tr>
<td>12</td>
<td>Week: 14</td>
<td>Work on Final Projects</td>
<td>Work on Final Project</td>
</tr>
<tr>
<td>12</td>
<td>Week: 15</td>
<td>Finals Week Course/Faculty Evaluations</td>
<td>Final Exam Final Project Due</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. *

Form Instructions
1. Course request type:
   □ Undergraduate  □ Graduate  □ First Professional (MD, DVM, PharmD, DPH)

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

3. Course prefix, number and complete title of course:
   NURS 611: Application of Clinical Pharmacology to Victims of Violence

4. Catalog course description (not to exceed 50 words):
   Application of Clinical Pharmacology to Victims of Violence (1-0). Credit 1. Drug-
   facilitated sexual assault; pharmacological treatment of STDs and pregnancy prophylaxis;
   pharmacological treatment for individuals with existing drug addiction; patient safety and
   compliance; methods to assess for current drug abuse; types of date-rape drugs and their
   actions.
   Prerequisites: Graduate classification.

5. Prerequisite(s): None
   Cross-listed with: FORS 611
   Stacked with: N/A
   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)
       □ N/A
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
       □ N/A

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-control/export-controls-basics-for-distance-education).

13. Prefix   Course #   Title (excluding punctuation):
    NURS 611   APPLICATION OF CLINICAL PHARMA

<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>EFC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>513899</td>
<td>CON</td>
<td>16 -</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval recommended by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurt Drake</td>
</tr>
<tr>
<td>Date 05-19-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department Head or Program Chair (Type Name &amp; Sign)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair, College Review Committee</td>
<td></td>
</tr>
<tr>
<td>Iranians</td>
<td></td>
</tr>
<tr>
<td>Date 12-21-14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department Head or Program Chair (Type Name &amp; Sign) (if cross-listed course)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean of College</td>
<td>5/23/16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Submitted to Coordinating Board by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair, GC or UCC</td>
</tr>
<tr>
<td>Date 07-14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate Director, Curricular Services</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandra Williams @tamu.edu</td>
<td></td>
</tr>
</tbody>
</table>

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services - 07/14
Texas A&M Health Science Center
College of Nursing

Course title and number NURS 611 Application of Clinical Pharmacology to Victims of Violence

Term XXXX
Meeting times and location Online

Application of Clinical Pharmacology to Victims of Violence (1-0). Credit 1. Drug-facilitated sexual assault; pharmacological treatment of STDs and pregnancy prophylaxis; pharmacological treatment for individuals with existing drug addiction; patient safety and compliance; methods to assess for current drug abuse; types of date-rape drugs and their actions. Prerequisites: Graduate classification.

MSN in Forensic Nursing Outcomes*

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

*MSN in Forensic Nursing Outcomes derived from:


International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Define characterizations and motivations of drug-facilitated sexual assault including typical date-rape drugs used to render a victim powerless.</td>
</tr>
<tr>
<td>2. Explain the actions, side effects, interactions, adverse effects (alone and when mixed with street drugs) for the following chemical agents: (1) γ-Hydroxybutyric acid (GHB), (2) flunitrazepam (Rohypnol), (3) benzodiazepines, (4) ketamine, (5) ethanol, and (6) MDMA (Ecstasy) and modalities to test for the presence of these drugs in the human body.</td>
</tr>
<tr>
<td>3. Evaluate recommended pharmacological treatment for STDs and pregnancy prophylaxis through the actions, side effects, interactions, adverse effects (alone and when mixed with other drugs).</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Virginia Ann Utterback, PhD, RN, CNE, SANE
Telephone number: 806-789-9714
Email address: utterback@tamhsc.edu
Office hours: Arranged at student request

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:

Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

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

Students must have a final course average of at least 80% to successfully pass the course.

Faculty Expectations, Course Assumptions & Attendance Requirements

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

Due Dates/Times:

Projects/Special Learning Activities: Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

Individual Assignments:
1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

Discussion Boards:
1. Initial Posts to the Discussion Board are due by Sunday at midnight CST. Secondary Posts (in response to colleagues' Initial Posts) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, late Secondary Posts (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late Initial Posts.
3. Online Etiquette: A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion area as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

Other Pertinent Course Information

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop Initial Posts and Secondary Posts. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. All Initial Posts MUST be evidenced-based, properly cited, and provide direct responses to prompts within the module. Initial Posts should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues' posts. Use the Secondary Posting phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.
2. Length of Initial Posts should be maintained between 150 – 250 words and MUST include citations according to the grading rubric. Secondary Posts should be a minimum of 100 words and may require citations. (refer to the instructions). Please read a sampling of your colleagues’ Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.

3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
   * Share own experiences but use empirical resources in the analysis.
   * Ask questions to further the discussion, post additional resources such as articles, websites, video clips, etc.
   * Suggest why you might see things differently. (cite/reference)
   * Ask a probing or clarifying question.
   * Share an insight form having read the colleague’s posting.
   * Offer and support with evidence from the literature an informed opinion. (cite/reference)
   * Validate an idea with your own experience.
   * Make a suggestion supported with evidence from the literature. (cite/reference)
   * Expand on the colleague’s posting.
   * Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific score based on criteria provided in the rubric.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Academic Integrity

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

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

Course Calendar
### NURS 611 — Application of Clinical Pharmacology to Victims of Violence

**Semester/Year**

<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment Learning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week: 1</td>
<td>Introduction to Clinical Pharmacology</td>
<td>Reading Assignment Discussion Board</td>
</tr>
<tr>
<td>2</td>
<td>Week: 2</td>
<td>Pharmacodynamics of Drugs Used to Induce Powerlessness</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td>3</td>
<td>Week: 3</td>
<td>Pharmacokinetics of Drugs Used to Induce Powerlessness</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td>4</td>
<td>Week: 4</td>
<td>Motivations Behind Drug-Facilitated Assault</td>
<td>Reading Assignment Discussion Board</td>
</tr>
<tr>
<td>5</td>
<td>Week: 5</td>
<td>Focused Study: GHB, Rohypnol, Benzodiazepines</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td>6</td>
<td>Week: 6</td>
<td>Focused Study: Ketamine, Ethanol, Ecstasy</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td>7</td>
<td>Week: 7</td>
<td>Pharmacological Treatment and Existing Drug Addiction</td>
<td>Reading Assignment Discussion Board</td>
</tr>
<tr>
<td>8</td>
<td>Week: 8</td>
<td>Prepare for Mid-term Exam</td>
<td>Mid-term Exam</td>
</tr>
<tr>
<td>9</td>
<td>Week: 9</td>
<td>Methods to Assess for Current Drug Abuse</td>
<td>Reading Assignment Discussion Board</td>
</tr>
<tr>
<td>10</td>
<td>Week: 10</td>
<td>Indications and Drugs Used for Pregnancy Prophylaxis Post Sexual Assault</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td>11</td>
<td>Week: 11</td>
<td>Pathophysiology of Selected STDs</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td>12</td>
<td>Week: 12</td>
<td>Overview of STD Identification and Treatment</td>
<td>Reading Assignment Discussion Board</td>
</tr>
<tr>
<td>13</td>
<td>Week: 13</td>
<td>Specific Drugs Used to Treat STDs</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td>14</td>
<td>Week: 14</td>
<td>Drug-to-drug Interactions</td>
<td>Reading Assignment Quiz</td>
</tr>
<tr>
<td></td>
<td>Week: 15</td>
<td>Final Course Exam</td>
<td>Final Course Exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Course/Faculty Evaluations</td>
<td></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.*

Form Instructions

1. Course request type:
   - ☑ Undergraduate
   - ☑ Graduate
   - ☑ First Professional (MIS, MD, JD, PharmD, DVM)

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

3. Course prefix, number and complete title of course:
   NURS 612: Human Trafficking

4. Catalog course description (not to exceed 50 words):
   Human Trafficking (1-0). Credit 1. Forms of trafficking; Trafficking Victims Protection Act; involuntary servitude, peonage, debt bondage; recruitment and transportation; bio-psycho-social impact; human trafficking and the internet; identification and investigation of trafficked individuals; trafficking across U. S. borders.

5. Prerequisite(s):
   Graduate classification
   Cross-listed with: FORS 612
   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.
   - ☑ No

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. 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/resources/export-control-basics-for-distance-education).

13. Prefix
    - NURS
    - 612
    - HUMAN TRAFFICKING

   Course #
   Title (excluding punctuation)
   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  HICE Code
   1.00  0.00  0.00  0.00  51.3899  CON  16  17  0  0  3  6  3  2

   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

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845.3201 or sandra.williams@tamu.edu
Curricular Services – 07/14
Texas A&M Health Science Center
College of Nursing

Course title and number
NURS 612 Human Trafficking

Term

Meeting times and location
Online

Human Trafficking (1-0). Credit 1. Forms of trafficking; Trafficking Victims Protection Act; involuntary servitude, peonage, debt bondage; recruitment and transportation; bio-psycho-social impact; human trafficking and the internet; identification and investigation of trafficked individuals; trafficking across U. S. borders. Prerequisites: Graduate classification.

MSN in Forensic Nursing Outcomes

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:

American Association of Colleges of Nursing. (2011). The Essentials of the Master's Education in Nursing
http://www.aacn.nche.edu/education-resources/MastersEssentials11.pdf
International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Differentiate various forms of trafficking and associated recruitment practices designed to attract vulnerable individuals and populations.</td>
</tr>
<tr>
<td>2. Explore biological, psychological, spiritual, and sociological impacts of human bondage impacting the challenge of identifying trafficked individuals.</td>
</tr>
<tr>
<td>3. Summarize global anti-trafficking laws intended to combat trafficking through prevention, protection of victims and prosecution of offenders.</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Virginia Ann Utterback, PhD, RN, CNE, SANE
Telephone number: 806-789-9714
Email address: utterback@tamhsc.edu
Office hours:

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:

Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

Grading Scale:

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = < 60
Students must have a final course average of at least 80% to successfully pass the course.

Faculty Expectations, Course Assumptions & Attendance Requirements

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

Due Dates/Times:

Projects/Special Learning Activities: Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

Individual Assignments:
1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

Discussion Boards:
1. Initial Posts to the Discussion Board are due by Sunday at midnight CST. Secondary Posts (in response to colleagues' Initial Posts) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, late Secondary Posts (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late Initial Posts.
3. Online Etiquette: A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

Other Pertinent Course Information

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop Initial Posts and Secondary Posts. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. All Initial Posts MUST be evidenced-based, properly cited, and provide direct responses to prompts within the module. Initial Posts should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues' posts. Use the Secondary Posting phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.
2. Length of Initial Posts should be maintained between 150 - 250 words and MUST include citations according to the grading rubric. Secondary Posts should be a minimum of 100 words and may require citations. (refer to the instructions). Please read a sampling of your colleagues' Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.
3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   *Always be respectful of others, but scholarly disagreements are fine.
*Provide an alternative perspective with a discussion of your point of view.
*Share own experiences but use empirical resources in the analysis.
*Ask questions to further the discussion, post additional resources such as articles, websites video clips, etc.
*Suggest why you might see things differently. (cite/reference)
*Ask a probing or clarifying question.
*Share an insight form having read the colleague’s posting.
*Offer and support with evidence from the literature an informed opinion. (cite/reference)
*Validate an idea with your own experience.
*Make a suggestion supported with evidence from the literature. (cite/reference)
*Expand on the colleague’s posting.
*Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific score based on criteria provided in the rubric.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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."

Course Calendar
NURS 612 – Human Trafficking
<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment Learning Activity</th>
</tr>
</thead>
</table>
| 1      | Week: 1   | Introduction of Human Trafficking – *Not in Our City* | Palmiotto Chapter 14  
*Assignment* |
| 2      | Week: 2   | Historical Perspectives | Palmiotto Chapter 1  
*Discussion Board* |
| 3      | Week: 3   | Sociological Perspectives | Palmiotto Chapter 3  
*Discussion Board* |
| 4      | Week: 4   | Psychological Perspectives | Palmiotto Chapter 4  
*Discussion Board* |
| 5      | Week: 5   | Forms of Trafficking and Types of Bondage | Palmiotto Chapter 9  
*Assignment* |
| 6      | Week: 6   | Recruitment Practices and Cultural Influences | Palmiotto Chapter 8  
*Discussion Board* |
| 7      | Week: 7   | Role of the Internet in Human Trafficking | Palmiotto Chapter 5  
*Discussion Board*  
*Mid-term Guided Self Reflection* |
| 8      | Week: 8   | Child Victim Recruitment into Sex Trafficking | Palmiotto Chapter 6  
*Assignment* |
| 9      | Week: 9   | Human Trafficking and Street Gangs | Palmiotto Chapter 10  
*Assignment* |
| 10     | Week: 10  | Illegal Immigrants and Forced Labor | Palmiotto Chapter 11  
*Assignment* |
| 11     | Week: 11  | Investigation into Human Trafficking | Palmiotto Chapter 7  
*Assignment* |
| 12     | Week: 12  | Laws and Law Enforcement Awareness | Palmiotto Chapters 13, 16  
*Discussion Board* |
| 13     | Week: 13  | Transportation Across Borders; Federal Law | Palmiotto Chapters 2, 12  
*Assignment* |
| 14     | Week: 14  | Providing Effective Services to Victims | Palmiotto Chapter 15  
*Discussion Board*  
*Final Guided Self-Reflection* |
|        | Week: 15  | Final Course Project  
Course/Faculty Evaluations | *PowerPoint or Prezi Presentation to Discussion Board* |
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): College of Nursing
3. Course prefix, number and complete title of course: NURS 613: Forensic Photography
4. Catalog course description (not to exceed 50 words): Forensic Photography (1-0). 1 credit. Fundamentals of photographic documentation of injuries sustained during a crime; camera and equipment selection; camera skills; forensic photography techniques; supporting documentation; data management; victim rights.

5. Prerequisite(s): Graduate classification
Cross-listed with: FORS 613 Stacked with: N/A

| 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) N/A
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography) N/A
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)
NURS  613  FORENSIC PHOTOGRAPHY

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CRP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>Course Code</th>
<th>EICF Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>51.3899</td>
<td>CON</td>
<td>16</td>
<td>17</td>
<td>0</td>
</tr>
</tbody>
</table>

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

[Signature]
Department Head or Program Chair (Type Name & Sign) Date
(If cross-listed course)

Submitted to Coordinating Board by: [Signature]
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
Texas A&M Health Science Center
College of Nursing

Course title and number  NURS 613 Forensic Photography

Term
Meeting times and location  Online

Course Description and Prerequisites

Forensic Photography (1-0). Credit 1. Fundamentals of photographic documentation of injuries sustained during a crime; camera and equipment selection; camera skills; forensic photography techniques; supporting documentation; data management; victim rights. Prerequisite: Graduate classification.

MSN in Forensic Nursing Outcomes

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical sciences, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:

American Association of Colleges of Nursing (2011). The Essentials of the Master's Education in Nursing
http://www.aacn.nche.edu/education-resources/MastersEssentials11.pdf

International Association of Forensic Nurses Care Competencies for Advanced Practice Forensic Nursing
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify necessary equipment for photographic documentation of injuries</td>
</tr>
<tr>
<td>2. Demonstrate correct forensic photography techniques and data management</td>
</tr>
<tr>
<td>3. Practice photographic skills while maintaining integrity and respect, and advocating for victims</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Daniel J. Sheridan, PhD, RN, FNE-A, FAAN
Telephone number: 979-436-0177
Email address: dsheridan@jumhsc.edu
Office hours:

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:


Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>40</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30</td>
</tr>
<tr>
<td>Final Project</td>
<td>30</td>
</tr>
</tbody>
</table>

Grading Scale:

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = < 60

Students must have a final course average of at least 80% to successfully pass the course.

Faculty Expectations, Course Assumptions & Attendance Requirements
Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

Due Dates/Times:

Projects/Special Learning Activities: Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

Individual Assignments:
1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

Discussion Boards:
1. Discussion boards in this course will be used only for clarification of assignments, troubleshooting and sharing information and assignments. They will not be graded.
2. Online Etiquette: A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

Other Pertinent Course Information

You must have regular access to a camera in order to take this course.

Required camera features and equipment:
- Digital SLR
- 10 or higher megapixel image sensors
- Manual exposure settings
- A macro lens or macro capability for close-up photographs
- Electronic flash that can be manually turned off
- Tripod

You will also purchase a kit that will include items required to complete assignments.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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."

Course Calendar
## NURS 613 -- Forensic Photography

**Semester/Year**

<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week 1</td>
<td>Introduction to Forensic Photography</td>
<td>Robinson Chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>Week 2</td>
<td>Basic Camera Skills</td>
<td>London &amp; Stone, Chapters 1 &amp; 2</td>
</tr>
<tr>
<td>3</td>
<td>Week 3</td>
<td>Composition</td>
<td>Robinson Chapter 2 Assignment</td>
</tr>
<tr>
<td>4</td>
<td>Week 4 &amp; 5</td>
<td>Exposure and Resolution</td>
<td>London &amp; Stone Chapter 3 Robinson Chapter 3</td>
</tr>
<tr>
<td>5</td>
<td>Week 6</td>
<td>Depth of Field</td>
<td>Robinson Chapter 4 Assignment</td>
</tr>
<tr>
<td>6</td>
<td>Week 7</td>
<td>Using a Flash</td>
<td>Robinson Chapter 5</td>
</tr>
<tr>
<td>7</td>
<td>Week 8</td>
<td>Photographing Victims</td>
<td>Robinson Chapter 6</td>
</tr>
<tr>
<td>8</td>
<td>Week 9</td>
<td>Filters, Alternate Light Source and Fluorescence</td>
<td>Robinson Chapter 7 Assignment</td>
</tr>
<tr>
<td>9</td>
<td>Week 10</td>
<td>Management of Digital Data</td>
<td>Robinson Chapter 11</td>
</tr>
<tr>
<td>10</td>
<td>Week 11</td>
<td>Legal Considerations</td>
<td>Robinson Chapter 12</td>
</tr>
<tr>
<td>11</td>
<td>Week 12</td>
<td>Putting it All Together</td>
<td>Assignment Quiz</td>
</tr>
<tr>
<td></td>
<td>Week 13</td>
<td>Final Projects</td>
<td>Work on Final Project</td>
</tr>
<tr>
<td></td>
<td>Week 14</td>
<td>Present Final Projects</td>
<td>Post Final Projects on Discussion Board</td>
</tr>
<tr>
<td></td>
<td>Week 15</td>
<td>Finals Week Course/Faculty Evaluations</td>
<td>Final Projects Due</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. *

Form Instructions
1. Course request type:  
   □ Undergraduate  □ Graduated  □ First Professional (DNS, MD, JD, Ph.D, DVM)
2. Request submitted by (Department or Program Name):  College of Nursing
3. Course prefix, number and complete title of course:  NURS 614: Policy and Ethics of Interpersonal Violence

4. Catalog course description (not to exceed 50 words):  Policy and Ethics of Interpersonal Violence (1-0). 1 credit. Overview of policies and ethical considerations that inform forensic healthcare practice and procedures; identification, discussion, and analysis of federal, state, and local policies; regulation of professional practice; scopes and standards of practice; policy and legislation regarding victim populations; ethical standards for health professionals working with victims.

5. Prerequisite(s):  
   Graduate classification  
   Cross-listed with:  FORS 614  
   Stacked with:  N/A
   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  
   □ Pass/Fail (P/F)

10. This course will be:
    a. □ required for students enrolled in the following degree program(s) (e.g., B.A. in History)
       □ N/A
    b. □ an elective for students enrolled in the following degree program(s) (e.g., M.S. in Geography)
       □ N/A

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-control/export-control-basics-for-distance-education).

13. PreBA  
    Course #  
    Title (excluding parenthetical)  
    NURS 614  
    POLICY AND ETHICS OF INTERPERSONAL

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>51.3899</td>
</tr>
</tbody>
</table>

Approval recommended by:  

Department Head or Program Chair (Type Name & Sign)  Date: 05-19-16  
Chair, College Review Committee  Date

Department Head or Program Chair (Type Name & Sign)  Date: 5/23/16  
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
Texas A&M Health Science Center
College of Nursing

Course title and number  NURS 614 Policy and Ethics of Interpersonal Violence

Term
Meeting times and location  Online

Course Description and Prerequisites

Policy and Ethics of Interpersonal Violence (1-0). Credits 1. Overview of policies and ethical considerations that inform forensic healthcare practice and procedures; identification, discussion, and analysis of federal, state, and local policies; regulation of professional practice; scopes and standards of practice; policy and legislation regarding victim populations; ethical standards for health professionals working with victims. Prerequisite: Graduate classification.

MSN in Forensic Nursing Outcomes*

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:

American Association of Colleges of Nursing. (2011). The Essentials of the Master's Education in Nursing
http://www.aacn.nche.edu/education-resources/MastersEssentials11.pdf

International Association of Forensic Nurses Core Competencies for Advanced Practice Forensic Nursing
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summarize the policy-making process at the federal, state, and local levels pertaining to care of victims</td>
</tr>
<tr>
<td>2. Apply policy and ethics guidelines important to professionals working with victims of violence</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Daniel J. Sheridan, PhD, RN, FNE-A, FAAN
Telephone number: 979-436-0177
Email address: dsheridan@tamhsc.edu
Office hours: 

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:


Grading Policies

Ungraded Activities

Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>15</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Reflective Summary</td>
<td>10</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
</tr>
</tbody>
</table>

Grading Scale:

A = 90-100
B = 80- 89
C = 70-79
D = 60-69
F = < 60

Students must have a final course average of at least 80% to successfully pass the course.
Faculty Expectations, Course Assumptions & Attendance Requirements

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

Due Dates/Times:

Projects/Special Learning Activities: Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

Individual Assignments:
1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

Discussion Boards:
1. Initial Posts to the Discussion Board are due by Sunday at midnight CST. Secondary Posts (in response to colleagues' Initial Posts) are due by Tuesday midnight CST.
2. Due to the nature of discussion postings, late Secondary Posts (posted after Tuesday midnight CST) will not be graded and will result in point deduction. Discussion Board grades will be reduced by 10 points per day for late Initial Posts.
3. Online Etiquette: A collaborative and friendly learning environment is the expectation of an online discussion. Please use professional language only. Proofread your responses carefully before posting to ensure they are not offensive to others. Use discussions to develop your skills in collaboration and teamwork. Treat the discussion areas as a creative environment where you and your colleagues can ask questions, express informed opinions, revise/reverse opinions, and take positions just as you would in a more traditional classroom setting.

Other Pertinent Course Information

Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop Initial Posts and Secondary Posts. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. All Initial Posts MUST be evidenced-based, properly cited, and provide direct responses to prompts within the module. Initial Posts should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues' posts. Use the Secondary Posting phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.
2. Length of Initial Posts should be maintained between 150 – 250 words and MUST include citations according to the grading rubric. Secondary Posts should be a minimum of 100 words and may require citations. (Refer to the instructions). Please read a sampling of your colleagues' Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.
3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
*Share own experiences but use empirical resources in the analysis.
*Ask questions to further the discussion, post additional resources such as articles, websites video clips, etc.
*Suggest why you might see things differently. (cite/reference)
*Ask a probing or clarifying question.
*Share an insight form having read the colleague’s posting.
*Offer and support with evidence from the literature an informed opinion.(cite/reference)
*Validate an idea with your own experience.
*Make a suggestion supported with evidence from the literature. (cite/reference)
*Expand on the colleague’s posting.
*Ask for evidence that supports a posting.

4. Please refer to the Discussion Board Grading Rubric found within the module. The faculty will assign a specific score based on criteria provided in the rubric.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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."

Course Calendar

NURS 614- Policy and Ethics of Interpersonal Violence
<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment Learning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week: 1</td>
<td>Introduction to Policy</td>
<td>Porche Chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>Week: 2</td>
<td>Federalism and State Law</td>
<td>Porche Chapter 2</td>
</tr>
<tr>
<td>3</td>
<td>Week 3</td>
<td>Policy Making</td>
<td>Porche Chapter 7</td>
</tr>
<tr>
<td>4</td>
<td>Week: 4</td>
<td>Policy &amp; Ethics</td>
<td>Porche Chapter 11 Discussion</td>
</tr>
<tr>
<td>5</td>
<td>Week: 5</td>
<td>Professional Codes of Ethics</td>
<td>Assigned Readings</td>
</tr>
<tr>
<td>6</td>
<td>Week: 6</td>
<td>Crime Victim Rights</td>
<td>Assigned Readings</td>
</tr>
<tr>
<td>7</td>
<td>Week: 7&amp;8</td>
<td>Violence Against Women &amp; Law</td>
<td>Robinson Chapter 6</td>
</tr>
<tr>
<td>8</td>
<td>Week: 9</td>
<td>Child Abuse &amp; Neglect &amp; Law</td>
<td>Robinson Chapter 7</td>
</tr>
<tr>
<td>9</td>
<td>Week: 10</td>
<td>Elder Abuse &amp; Neglect &amp; Law</td>
<td>Robinson Chapter 11 Discussion</td>
</tr>
<tr>
<td>10</td>
<td>Week: 11</td>
<td>Scopes &amp; Standards of Practice</td>
<td>Forensic Nursing Scope &amp; Standards of Practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assigned Readings</td>
</tr>
<tr>
<td>11</td>
<td>Week: 12</td>
<td>Unintended Consequences of Laws &amp; Policy &amp; Future Directions</td>
<td>Assigned Readings</td>
</tr>
<tr>
<td></td>
<td>Week: 13</td>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td></td>
<td>Week: 14</td>
<td></td>
<td>Final Exam</td>
</tr>
<tr>
<td></td>
<td>Week: 15</td>
<td>Finals Week</td>
<td>Work on Final Paper</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Course/Faculty Evaluations</td>
<td>Final Paper Due</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.

Form Instructions
1. Course request type:  ☑ Undergraduate  ☑ Graduate  ☑ First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):  College of Nursing
3. Course prefix, number and complete title of course:  NURS 615; Forensic Mental Health
4. Catalog course description (not to exceed 50 words):  Forensic Mental Health (1-0). Credit 1. Examination of mental health issues relevant to forensic healthcare; forensic mental health roles; determination of diminished capacity and competence to stand trial; mental health risk factors and outcomes associated with both crime perpetration and victimization; addiction and crime; ethical issues associated with crime and mental health.

5. Prerequisite(s):  Graduate classification
Cross-listed with:  FORS 615  Stacked with:  N/A
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)
      N/A
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      N/A
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://vps.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).
13. Prefix  Course #  Title (excluding punctuation)
NURS  615  FORENSIC MENTAL HEALTH

<table>
<thead>
<tr>
<th>Lec.</th>
<th>Lab</th>
<th>Other</th>
<th>SCL</th>
<th>CIP and Unit Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>51.3899</td>
<td>CON</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
Chair, College Review Committee  Date
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 – 07/14
Texas A&M Health Science Center
College of Nursing

Course title and number  NURS 615 Forensic Mental Health

Term
Meeting times and location  Online

Course Description and Prerequisites
Forensic Mental Health (1-0). Credit 1. Examination of mental health issues relevant to forensic healthcare; forensic mental health roles; determination of diminished capacity and competence to stand trial; mental health risk factors and outcomes associated with both crime perpetration and victimization; addiction and crime; ethical issues associated with crime and mental health. Prerequisites: Graduate classification.

MSN in Forensic Nursing Outcomes*

At the completion of the MSN in Forensic Nursing, graduates of the College of Nursing will be prepared to:

1. Integrate scientific findings from nursing, biophysical science, forensic science, genetics, public health, quality improvement and organizational sciences for the continual improvement of nursing care across diverse settings.
2. Utilize organizational and systems leadership in developing working relationships and making ethical and critical decisions to promote quality, safe care.
3. Apply principles, methods and tools of quality improvement within an organization to promote quality care.
4. Work as a change agent to apply and disseminate research outcomes within the practice setting.
5. Use patient care and communication technologies to enhance patient care.
6. Intervene at the system level to develop and implement policies that influence health care.
7. Collaborate with other healthcare professionals to manage and coordinate care.
8. Integrate organizational, client centered and culturally centered approaches to plan, deliver and evaluate health care for individuals, families, and populations.
9. Influence healthcare outcomes by integrating advanced knowledge into direct and indirect care.
10. Respond to victims and perpetrators of trauma, injury, accidents, neglect, abuse, exploitation, and all forms of violence within complex systems using evidence-based protocols.
11. Design interdisciplinary education and crime prevention strategies to address community needs at the primary, secondary and tertiary prevention levels.
12. Provide nurse advocacy for victims of violence through unbiased, thorough documentation of assessments, and proper evidence collection and preservation in a manner useful in civil and criminal court proceedings.

* MSN in Forensic Nursing Outcomes derived from:
Learning Outcomes or Course Objectives

By the completion of this course, the student will be able to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Examine roles and competencies of forensic health professionals</td>
</tr>
<tr>
<td>2. Identify mental health risk factors, including addiction, for crime perpetration and victimization</td>
</tr>
<tr>
<td>3. Apply knowledge of mental health issues to forensic healthcare practice</td>
</tr>
</tbody>
</table>

Instructor Information

Name: Virginia Ann Utterback, PhD, RN, CNE
Telephone number: 806-789-9714
Email address: utterback@tamhsoc.edu
Office hours:

Textbook and/or Resource Material

REQUIRED LEARNING MATERIALS:


Grading Policies

Ungraded Activities
Reading Assignments

Graded Activities (percentage of course grade)

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Percentage of Final Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Boards</td>
<td>25</td>
</tr>
<tr>
<td>Assignments</td>
<td>25</td>
</tr>
<tr>
<td>Journal Article Summaries</td>
<td>20</td>
</tr>
<tr>
<td>Final Paper</td>
<td>30</td>
</tr>
</tbody>
</table>

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

Students must have a final course average of at least 80% to successfully pass the course.

Faculty Expectations, Course Assumptions & Attendance Requirements

Students are expected to follow specific instructions for all learning activities provided within each module. Each module will open on Wednesday 0001 CST and must be completed by the following Tuesday at midnight CST. Each module is self-contained and will have information and resources/references necessary to successfully complete learning activities.

Faculty will consider crisis situations on a case-by-case basis. If an illness or emergency is experienced that prevents the student from accessing the online course and completing assignments in a timely manner, the student should notify the faculty member as soon as possible so that options can be discussed.

Due Dates/Times:

Projects/Special Learning Activities: Please refer to the related learning module for specific instructions for completing a project or special learning activity including due dates and grading rubrics.

Individual Assignments:
1. All assignments are due on Tuesday midnight CST and are uploaded via the assignments link in eCampus.
2. Late assignments will be reduced by 10 points per day unless otherwise determined by the course faculty.

Discussion Boards:
Discussion board (DB) participation is an opportunity to contribute evidence-based content to the group discussion, while providing an opportunity for personal sharing. Please use the following guidelines (in combination with the grading rubric) to develop Initial Posts and Secondary Posts. Please use these guidelines for DB participation:

1. Always complete the required or assigned learning activities within a module before developing a DB post. This includes reading assignments, videos, PowerPoint presentations, visits to websites and any other learning activities provided in the module PRIOR to developing Initial or Secondary Posts. All Initial Posts MUST be evidenced-based, properly cited, and provide direct responses to prompts within the module. Initial Posts should demonstrate an understanding of the assigned content within a module and uniquely contribute to the class discussion. Please do not directly repeat information previously submitted in other colleagues' posts. Use the Secondary Posting phase as an opportunity to deepen the discussion. This type of posting provides students an opportunity to share personal experiences, informed opinions and other contributory sources of information to the class discussion.
2. Length of Initial Posts should be maintained between 150 – 250 words and MUST include citations according to the grading rubric. Secondary Posts should be a minimum of 100 words and may require citations. (refer to the instructions). Please read a sampling of your colleagues' Initial Posts to the Discussion Board and respond to the number of postings required as stated in the instructions.
3. Suggestions for replying to colleagues in during the Secondary Posting phase of the DB include:
   * Always be respectful of others, but scholarly disagreements are fine.
   * Provide an alternative perspective with a discussion of your point of view.
   * Share own experiences but use empirical resources in the analysis.
   * Ask questions to further the discussion, post additional resources such as articles, websites video clips, etc.
   * Suggest why you might see things differently. (cite/reference)
   * Ask a probing or clarifying question.
   * Share an insight form having read the colleague's posting.
# Course Calendar

**NURS 615—Forensic Mental Health**

<table>
<thead>
<tr>
<th>Module</th>
<th>Week/Date</th>
<th>Content</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week 1</td>
<td>Introduction to Forensic Mental Health</td>
<td>Belenko &amp; Spohn Chapter 1 Assignment</td>
</tr>
<tr>
<td>2</td>
<td>Week 2</td>
<td>Theories of Drug Use and Abuse</td>
<td>Belenko &amp; Spohn Chapter 3 Discussion Board</td>
</tr>
<tr>
<td>3</td>
<td>Week 3</td>
<td>Abuse, Addiction &amp; Crime</td>
<td>Belenko &amp; Spohn Chapter 2, 4 Assignment</td>
</tr>
<tr>
<td>4</td>
<td>Week 4</td>
<td>Roles in Forensic Mental Health</td>
<td>Journal Article Journal Article Summary</td>
</tr>
<tr>
<td>5</td>
<td>Week 5</td>
<td>Mental Health &amp; Crime: Victimization</td>
<td>Journal Article Journal Article Summary</td>
</tr>
<tr>
<td>6</td>
<td>Week 6</td>
<td>Mental Health &amp; Crime: Perpetration</td>
<td>Belenko &amp; Spohn Chapter Assignment</td>
</tr>
<tr>
<td>7</td>
<td>Week 7 &amp; 8</td>
<td>Mental Health Diagnoses Associated with Perpetration of Crime</td>
<td>Simon &amp; Golds Case Study Assignment Discussion Board</td>
</tr>
<tr>
<td>8</td>
<td>Week 9</td>
<td>Mental Health Ethics</td>
<td>Belenko &amp; Spohn Chapter 5 Discussion Board</td>
</tr>
<tr>
<td>9</td>
<td>Week 10</td>
<td>Determination of Diminished Capacity</td>
<td>Simon &amp; Golds Assignment</td>
</tr>
<tr>
<td>10</td>
<td>Week 11</td>
<td>Competent to Stand Trial: Laws and Procedures</td>
<td>Belenko &amp; Spohn Chapters 7, 8 Assignment</td>
</tr>
<tr>
<td>11</td>
<td>Week 12</td>
<td>Mental Health and Juvenile Justice</td>
<td>Journal Article Journal Article Summary</td>
</tr>
<tr>
<td>12</td>
<td>Week 13</td>
<td>Psychological Profiling in Criminal Investigative Analysis</td>
<td>Simon &amp; Golds Discussion Board</td>
</tr>
<tr>
<td>13</td>
<td>Week 14</td>
<td>Current Issues in Forensic Mental Health</td>
<td>Belenko &amp; Spohn Chapter 10 Discussion Board</td>
</tr>
<tr>
<td></td>
<td>Week 15</td>
<td>Final Course Paper Course/Faculty Evaluations</td>
<td>Final Course Paper Due</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.

---

### 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 Statistics

3. **Course prefix, number and complete title of course:**
   - STAT 667 Advanced Spatial Statistics

---

4. **Catalog course description (not to exceed 50 words):**
   - Spatial statistics from an advanced perspective; Gaussian processes; Gaussian Markov random fields; positive definite functions; nonstationary and multivariate processes; hierarchical spatial models; measurement error; change of support; computational approaches for large spatial datasets; spatio-temporal statistics

---

5. **Prerequisite(s):**
   - STAT 612, STAT 613, STAT 632

   **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 (CL/MD)

---

10. **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)

   **Ph.D. in Statistics**

---

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

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

---

12. **Prefix ** | ** Course # ** | ** Title (excluding punctuation)**
    - STAT | 667 | Advanced Spatial Statistics

   **Lect.** | **Lab** | **Other** | **SCH** | **CIP and Fund Code** | **Admin. Unit** | **Acad. Year** | **FICE Code**
   - 3.00 | 0.00 | 0.00 | 3.00 | 27.0501.00 | 2748 | 16 | - | 17 | 0 | 0 | 3 | 6 | 3 | 2

   **Approval recommended by:**

   Michael Longnecker | 6-9-16 | Chair, College Review Committee | 6-10-16

---

**Submitted to Coordinating Board by:**

- Chair, GC or UCC

---

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

Curricular Services – 07/14
Statistics 667: Advanced Spatial Statistics

Instructor: Matthias Katzfuss (katzfuss@tamu.edu)

Spring 2016

- Class hours and location: Tue/Thur, 2:20 – 3:35pm in 448 BLOC
- Office hours: Tue/Thur, 3:35 – 4:30pm in Blocker 467B
- Prerequisites: STAT 612, 613, and 632 (or similar).
  - STAT 605 and 648 would also be useful, but not required.
  - Note that STAT 647 is not a required prerequisite.
- Course description: This course will cover research topics in spatial statistics from an advanced perspective. Students will learn to use and develop techniques for the analysis of modern spatial datasets, including satellite remote-sensing data. Schedule:
  - Week 1: Gaussian processes
  - Week 2: positive definite functions
  - Week 3: Gaussian Markov random fields
  - Week 4: nonstationary processes
  - Week 5: multivariate processes
  - Week 6: hierarchical spatial models
  - Week 7: measurement error; midterm exam
  - Week 8: change of support
  - Weeks 9 – 11: computational approaches for large datasets
  - Weeks 11–14: Spatio-temporal statistics
  - One week after last class: Project reports due
- Homework will be assigned on a bi-weekly schedule. Each assignment is due one week after it is assigned.
- Final project: Instead of a final exam, there will be a project, the details of which will be determined at the beginning of the semester. The project reports should be organized and typed following the format of a research article.
• Grading policy: You will receive a percent-correct score (0-100%) on the homeworks, midterm exam, and final project. These percentages are weighted:

\[20\% \text{ homework} + 40\% \text{ midterm} + 40\% \text{ final project}\]

The result of this weighting is the percent performance (PP). This is converted to letter grades as follows:

- \(90\% \leq \text{PP} \leq 100\% \rightarrow A\)
- \(80\% \leq \text{PP} < 90\% \rightarrow B\)
- \(70\% \leq \text{PP} < 80\% \rightarrow C\)
- \(60\% \leq \text{PP} < 70\% \rightarrow D\)
- \(0\% \leq \text{PP} < 60\% \rightarrow F\)

• Software: I will use R in the classroom, but you can use software of your choosing for homework and final project.

• Attendance 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 online at http://student-rules.tamu.edu/rule07. Students will be given 5 working days to make up any missed assignments if absence is covered by a university approved absence.

Copyright Notice: All materials generated for this class, which include but are not limited to the syllabus, exams, lecture slides, review sheets, and additional problem sets, are copyrighted. You do not have the right to copy or distribute the material without explicit permission.

Statement on 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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

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 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.”

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 (DVM, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name):  Department of Wildlife and Fisheries Sciences
3. Course prefix, number and complete title of course:  WFSC 626 Ecological Risk Assessment

4. Catalog course description (not to exceed 50 words):
   Approaches used to identify, evaluate, and manage ecological risks of chemicals on aquatic and terrestrial environments; emphasis on methods useful to assess effects of contaminants on ecosystems; testing techniques, site assessment and monitoring procedures, regulatory requirements and field and laboratory techniques.

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

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://ypm.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

13. Prefix  Course #  Title (excluding punctuation)
    WFSC  626  ECOLOGICAL RISK ASSESSMENT

<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></td>
<td>3.00</td>
<td>0303010005</td>
<td>2951</td>
<td>17</td>
<td>-18</td>
</tr>
</tbody>
</table>

Approval recommended by:  
Michael Massar  
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 843-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
WFSC 626: Ecological Risk Assessment
Fall, Odd Years
Course Syllabus

Instructor: Miguel A. Mora, 316 Nagle Hall, (979) 845-5775, mmora@tamu.edu
Delivery: Web-based - Lectures are available weekly as Power Point presentations via E-Campus

Virtual office hours for all
To answer any question you have as promptly as possible and minimize repetition please post questions related to technical problems (software or hardware) in the FAQ forum, I would answer them as soon as possible. Content related questions should be posted in the discussion board forum. I can also be contacted by email or telephone.

Course Description
Course materials will be available to each student via E-Campus. All assignments should be submitted online and are due by Sunday evening of the week or as indicated in the course schedule or in the E-campus webpage.

This course focuses on aquatic and terrestrial approaches used to identify, evaluate, and manage ecological risks of chemicals. Course content emphasizes methods useful to assess aquatic, terrestrial, and avian impact. This course also emphasizes testing techniques, site assessment and monitoring procedures, regulatory requirements, and field and laboratory techniques.

This course includes lectures, discussions, projects, and presentations. You are expected to help define focus topics, critically evaluate primary literature, engage in informed discussion, and work individually on a project of personal interest.

It is recommended that the students have previous knowledge of ecology, general statistics, and basic organic chemistry.

E-Campus
Lectures, assignments, reading materials, and any other materials relevant to this course, will be available on E-Campus. This medium will also be used to send emails, post important notices, have group discussions and submit assignments. E-Campus can be accessed directly through the following link: https://ecampus.tamu.edu or from www.howdy.tamu.edu.

Course Requirements
This course requires significant amounts of independent work. Therefore, you are responsible for completing assignments on time, completing the readings, and making inquiries as needed to complete the course successfully. Additional readings, internet work, and assignments will be posted on-line at the beginning of each week or when appropriate. All assignments will have specific due dates which will appear in the course outline or in the home page on E-Campus. The student is expected to complete all work on time.

Learning Outcomes
• Become familiar with the concepts common to EPA’s Environmental Risk Assessment approaches.
• Apply the fundamental principles of environmental risk assessment that are essential to understanding the environmental issues of today.
• Outline the basic steps of the risk assessment process.
• Apply these scientific principles to investigate environmental problems, quantitatively predict, and model chemical exposure and effect, in order to assess risk.
• Explain the complexity of these issues and evaluate the variability and uncertainty in environmental risk assessments.
• Gather data and findings to create a specific risk assessment for the semester project.
Course Material

Recommended Course Textbook

http://www.epa.gov/raf/publications/pdfs/ECOTXTBXX.PDF

Also recommended for those interested in Ecotoxicology:

Required Additional Readings
Various readings will be assigned throughout the course (see course schedule).

Explanation of Course Components and Activities

Weekly Assignments
There will be weekly assignments that will cover specific aspects of the risk assessment and management methodologies. Assignments will be posted on Mondays and one page single space written summary will be due the following Sunday.

Exams
There will be two (2) exams (one mid-term and one final). Exams will contain essay and problem solving questions based on materials covered in lectures, assigned readings and case studies. Exams are open book and you should feel free to use any course materials while taking the exam. Although the final exam is not cumulative, some concepts used throughout the course will be incorporated into final exam questions.

Individual Project
Each Student will perform an ERA on a contaminated site from which there are no published or already available ERAs. Grading will be based on the following:

a) A project proposal/outline  
b) A report, 8-10 pages, not including literature cited  
c) A set of slides (15-20) in Power Point for a presentation of the report

Writing Expectations
All written submissions should be prepared according to the following guidelines:

- Times New Roman (12 pt font)  
- Double-spaced, except weekly assignments (one page single-spaced)  
- Page margins Top, Bottom, Left Side and Right Side = 1 inch  
- Follow APA guidelines  
- File can be either PDF or MS Word  
- file name: Example: More.M_case study 1

NOTE: All exams, assignments, papers, etc. should be submitted to the appropriate link on E-Campus. Assignments should not be emailed or submitted by any other method, unless E-Campus is not available. Ensure your document is in its final form before you upload it as it cannot be altered afterwards.

Course Evaluation

Your grade in this class will be a result of your performance in the four areas listed below. The grading scale will be based on the standard format: 90% to 100% = A; 80% to 89% = B; 76% to 79% = C; 60 to 69% = D; 59% or lower = F.

The total number of points for this class (250) will be assigned according to the following:
Midterm exam 50 points (20%)
Final exam 50 points (20%)
Class Assignments 50 points (20%)
Term Paper and ppt pts 100 points (40%) [Outline (5pt), Term Paper (70pt), PPT (25pt)]

**Policies**

**Netiquette**
Both the instructor and the student will use language that is scholarly and professional. Express yourself clearly, accurately, and in an intellectual manner. In discussion forums, remember to think, discuss, and debate from a multitude of perspectives. Discussion forums are designed for you to ask questions and gain further knowledge. Please reason intelligently with the instructor and other students. Also, be conscious of the language you use when you speak about race, ethnicity, and gender. Lack of good manners or respect are not acceptable in a university setting—basic academic rules of good behavior and proper "Netiquette" must persist. Students are strongly encouraged to view all online content on a routine and timely basis. For information concerning excused absences, and other university rules and procedures, please refer to TAMU Student Rules: [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 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 Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu).

**Aggie Honor Code Statement**

"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 anyone member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: [http://aggiehonor.tamu.edu/](http://aggiehonor.tamu.edu/).

Additionally, students are bound by the rules of Academic Misconduct; being unaware of these rules is not an acceptable defense for not following them. Make yourself familiar with them and ask questions if you are unsure of something: [http://aggiehonor.tamu.edu/RulesAndProcedures/](http://aggiehonor.tamu.edu/RulesAndProcedures/).

On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge must be printed and signed by the student:

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."
<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Lecture Topics</th>
<th>Readings</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to ERA and Ecotoxicology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Wk 1 | Sept. 1,3 | - Introduction to ERA  
- Overview of the ecological risk assessment process | Chapter 13 (Newman); Chapter 3 (Suter) | |
| Wk 2 | Sept. 8,10 | - Basic concepts, chemical properties  
- Organic contaminants | Chapter 2 (Newman) | • 1st review paper |
| Wk 3 | Sept. 15,17 | - Organic contaminants  
- Inorganics, Nanomaterials | Chapter 2 (Newman) | • 2nd review paper |
| Wk 4 | Sept. 22,24 | - Bioaccumulation and trophic transfer | Chapter 5 (Newman) | • 3rd review paper |
| **Problem Formulation** | | | |
| Wk 5 | Sept. 29, Oct 1 | - The ERA process overview: Prob. formulation  
- Agents and Sources | Chapters 10, 11, 12  
Chapter 13 (Suter) | • 4th review paper |
| Wk 6 | Oct. 6,8 | - Assessment Endpoints  
- Conceptual Models | Chapter 16 (Suter)  
Chapter 17 (Suter) | • Midterm exam (Oct 7)  
• Term paper outline due (Oct 6) |
| Wk 7 | Oct. 13,15 | - Analysis Plans  
- Example ERA | Chapter 18 (Suter) | • Term Paper outline returned with comments (Oct 15)  
• 5th review paper |
| **Analysis of Exposure** | | | |
| Wk 8 | Oct. 20,22 | - Source Identification and Characterization  
- Environmental Sampling | Chapters 19, 20 (Suter) | • 6th review paper |
| Wk 9 | Oct. 27,29 | - Source Identification and characterization  
- Uptake, distribution and elimination of chemicals  
- Example ERA | Chapter 22 (Suter) | • 7th review paper |
| **Analysis of Effects** | | | |
| Wk 10 | Nov. 3,5 | - Acute and chronic effects  
- ERA examples | Chapters 23, 24 (Suter) | • 8th review paper |
| Wk 11 | Nov. 10,12 | - Organism level extrapolation models  
- Ecosystem effects modeling | Chapters 25, 26, 27, 28 (Suter) | • 9th review paper |
| **Risk Characterization** | | | |
| Wk 12 | Nov. 17,19 | - Criteria and Benchmarks  
- Integrating Exposure and Exposure-Response | Chapter 29 (Suter)  
Chapter 30 (Suter) | • Work on ERA project report |
| Wk 13 | Nov 24 | - Fox River case study  
- Example ERA: | | • THANKSGIVING WEEK |
| **Risk Management** | | | |
| Wk 14 | Dec. 1,3 | - Decision Making & Ecological Risk  
- Reporting and communicating ecological risks | Chapter 36 (Suter) | • ERA project report  
and prs due (Dec 3, 12 PM, Noon) |
| Wk 15 | Dec. 8 | - Last Class | | Final Exam Due: Dec 11, 12 PM Noon |
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, DVM)
2. Request submitted by (Department or Program Name): Department of Electrical and Computer Engineering
3. Course prefix, number and complete title of course: ECEN 762 Ultrasound Imaging
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  □ No
   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:
   ECEN 762 Ultrasound Imaging- Please see attached.
9. Complete proposed course title and proposed catalog course description (not to exceed 30 words):
   ECEN 762 Advanced Ultrasound Imaging Techniques- Please see attached.

10. As currently in course inventory:

   Prefix  Course #  Title (excluding punctuation)
   ECEN  762  Ultrasound Imaging

   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  FICE Code  Level
   3.00  0.00  0.00  0.30  1410010068  0936  0 0 3 6 3 2 6

   Change to:

   Prefix  Course #  Title (excluding punctuation)
   ECEN  762  Adv Ultrasound Imaging Techn

   Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  FICE Code  Level
   3.00  0.00  0.00  3.00  1410010068  0936  17 - 18 0 0 3 6 3 2 6

   Approval recommended by:
   M. Begovic
   7/1/16

   Department Head or Program Chair (Type Name & Sign)  Date
   Chair, College Review Committee  Date
   Dean of College  Date
   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
ECEN 762 Ultrasound Imaging - Covers mathematical analysis of wave propagation, scattering of ultrasound in biological tissues, electronic transducer arrays for the beam forming, models of the received signals and signal processing methods for medical ultrasound imaging of tissues. Research papers related to fundamental ultrasound imaging concepts are discussed throughout the course. Prerequisite: Approval of instructor.

ECEN 762 Advanced Ultrasound Imaging Techniques - Fundamental concepts at the basis of ultrasound imaging, including: mathematical analysis of wave propagation, scattering of ultrasound in biological tissues, electronic transducer arrays for the beam forming, models of the received signals and signal and image processing methods for medical ultrasound imaging of tissues; focus on the fundamental understanding of advanced ultrasound imaging methods and techniques and their applications; State-of-the-art ultrasound imaging techniques that will be covered include: ultrasound contrast agents and harmonic imaging, 3D and 4D imaging, micro-ultrasound imaging, intravascular ultrasound, elasticity imaging, photoacoustic imaging, advanced Doppler imaging methods, 2D arrays, C-MUT and HIFU technologies. Performance will be assessed by means of one midterm exam, one final exam and one final project.
Texas A&M University

Regional Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments

Form Instructions
1. Course request type: □ Undergraduate □ Gradute □ First Professional (DSVS, MS, JD, PhD)
2. Request submitted by (Department or Program Name): Department of Electrical and Computer Engineering
3. Course prefix, number and complete title of course: ECEN 762 Advanced Ultrasound Imaging Techniques

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 Controls Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education).

Complete current course title and current catalog course description:

ECEN 762 Ultrasound Imaging: Ultrasound is a non-invasive medical imaging modality that has a wide range of clinical applications, both as a primary modality and as an adjunct to other diagnostic procedures. Its utility in medicine is in large part due to some unique characteristics, such as real-time imaging capabilities, low cost, nonionizing radiation and portability. The purpose of this course is to present methods for characterizing and analyzing ultrasound imaging systems. Our goal is to present, with enough mathematical rigor, an integrated

Complete proposed course title and proposed catalog course description (not to exceed 50 words): ECEN 762 Advanced Ultrasound Imaging Techniques. This course will cover the fundamental concepts at the basis of ultrasound imaging and will include a mathematical analysis of wave propagation, scattering of ultrasound in biological tissues, electronic transducer arrays for the beam forming, models of the received signals and signal and image processing methods for medical ultrasound imaging of tissues. We will then focus on the fundamental understanding of advanced ultrasound imaging methods and techniques and their applications. State-of-the-art

8. 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>ECEN</td>
<td>762</td>
<td>Ultrasound Imaging</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab 0.00</td>
<td>Other 0.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SCH 1410010006</td>
</tr>
<tr>
<td>Admin. Unit</td>
<td>0 0 3</td>
<td>FICE Code 6</td>
</tr>
<tr>
<td>Level</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>ECEN</td>
<td>762</td>
<td>Advanced Ultrasound Imaging</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab 0.00</td>
<td>Other 3.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SCH 1410010006</td>
</tr>
<tr>
<td>Admin. Unit</td>
<td>0 1 17</td>
<td>FICE Code 3</td>
</tr>
<tr>
<td>Level</td>
<td></td>
<td></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, College Review Committee ___________________________ Date ___________________________

Dean of College ___________________________ Date ___________________________

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 — 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, OD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Electrical and Computer Engineering
3. Course prefix, number and complete title of course: ECEN 762 Advanced Ultrasound Imaging Techniques
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):
ECEN 762 Advanced Ultrasound Imaging Techniques—Fundamental concepts at the basis of ultrasound imaging, including: mathematical analysis of wave propagation, scattering of ultrasound in biological tissues, electronic transducer arrays for the beam forming, models of the received signals and signal and image processing methods for medical ultrasound imaging of tissues; focus on the fundamental understanding of advanced ultrasound imaging methods and techniques and their applications; State-of-the-art ultrasound imaging techniques that will be covered

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>ECEN</td>
<td>762</td>
<td>Ultrasound Imaging</td>
</tr>
<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>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECEN</td>
<td>762</td>
<td>Adv Ultrasound Imaging Techn</td>
</tr>
<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>
</tbody>
</table>

Approval recommended by:

M. Bogovic
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 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 – 08/14
Course title and number  ECEN 762 Advanced Ultrasound Imaging Techniques
Semester  Fall 2016
Meeting times and location  Lectures: TBA

Course Description and Prerequisites

This course will cover a review of the fundamental concepts at the basis of ultrasound imaging. These include: mathematical analysis of wave propagation, scattering of ultrasound in biological tissues, electronic transducer arrays for the beam forming, models of the received signals and signal and image processing methods for medical ultrasound imaging of tissues. We will then focus on the fundamental understanding of advanced ultrasound imaging methods and techniques and their applications. State-of-the-art ultrasound imaging techniques that will be covered include: ultrasound contrast agents and harmonic imaging, 3D and 4D imaging, micro-ultrasound imaging, intravascular ultrasound, elasticity imaging, photoacoustic imaging, advanced Doppler imaging methods, 2D arrays, C-MUT and HIFU technologies. Performance will be assessed by means of one midterm exam, one final exam and one final project.

Learning Outcomes and Course Objectives

It is the intent of this course that students will:

1. understand the underlying principles at the basis of fundamental ultrasound imaging techniques;
2. become familiar with the image formation process leading to an ultrasound image;
3. understand fundamental image quality factors of ultrasound images;
4. understand and be able to solve problems, which relate to linear array and phased array instruments, pulse-echo and Doppler instrumentation;
5. be able to recognize artifacts in ultrasound images as they relate to fundamental physical concepts;
6. understand methods for characterizing and analyzing ultrasound imaging systems;
7. have knowledge of selected state-of-the art ultrasound techniques - their advantages, limitations, potentials and current and future developments;
8. have an appreciation for the capabilities and advantages of ultrasound imaging in a multiplicity of applications.

Instructor Information

Name:  Dr. Raffaella Righetti
Email address:  righetti@ece.tamu.edu
Office hours:  TBA
Office location:  309D WERC
Course Material:  TBA
Textbook and/or Resource Material

Instructor Notes.
Selected journal articles (provided by the instructor).

Grading Policies

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35%</td>
</tr>
<tr>
<td>Final Project</td>
<td>30%</td>
</tr>
<tr>
<td>Attendance</td>
<td>5%</td>
</tr>
</tbody>
</table>

- Grading Scale: A=90-100, B=80-89, C=70-79, D=60-69, F=below 60.
- If questions regarding grading arise, please raise them with the instructor within 48 hours (weekends excluded) of when the graded assignment is returned. Inquiries made later than 48 hours may not be considered.
- There is a 15% per day late penalty for late assignments and projects if no legitimate excuse is available. Missed tests and labs receive a grade of 0 if no legitimate excuse is available.
- Legitimately late assignments/projects and missed tests/labs require an official document (e.g., doctor's note) to justify the absence and will not be penalized.
- In course assignments, please hand in your own work and remember: "An aggie does not lie, cheat, or steal or tolerate those who do."
- The university views class attendance as an individual student responsibility. Students are expected to attend class and to complete all assignments. For additional information, please visit: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07)

Recommendations for Studying

1) Read and review the lecture notes and assigned papers
2) Actively interact with other students and teacher

Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Unit</th>
<th>Topic</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fundamentals of Ultrasound Imaging</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>1.1 The Wave Equation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2 Acoustic Impedance, Power Density, Reflection of Waves at Interfaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.3 Tissue Scattering, Speckle, Attenuation of Sound Waves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.4 Fundamentals of Ultrasound Fields</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.5 Fundamentals of Ultrasound Transducers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.6 Fundamentals of Pulse-Echo Instrumentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.7 Fundamentals of Doppler Imaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.8 Ultrasound Imaging Artifacts</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Advanced Ultrasound Imaging Modalities</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>2.1 Ultrasound Contrast Agents &amp; Harmonic Imaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2 Microscanning &amp; Acoustic Microscopy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.3 Intravascular Ultrasound imaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.4 3D and 4D Imaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5 Elasticity Imaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.6 Photoacoustic Imaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.7 Advanced Doppler Imaging Methods</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Recent Developments in Ultrasound Instrumentation</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3.1 2D Arrays</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.2 C-MUT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.3 HiFU</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 42

Lecture Schedule – 2 meetings/week, 150 minutes total/week.
Other pertinent course information

You are responsible for checking your email (announcements and other information will be sent to the mailing list in howdy) and piazza for up to date information.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1937. For additional information, visit http://disability.tamu.edu.

Academic Integrity

For additional information please visit: http://student-rules.tamu.edu/aggiecode

"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.

Online Advising

Current students should also visit the advising course on eLearning to find out about scholarship, internship and research opportunities.

Login through: http://elearning.tamu.edu/ and navigate to:
Advising for Electrical Engineering Majors or
Advising for Computer Engineering Majors (EE – Track)
April 19, 2016

MEMORANDUM

TO: Dr. K.L. Butler-Purry  
    Dean of Office of Graduate Studies

THROUGH: Dr. P. Enjeti  
    Associate Dean, College of Engineering

FROM: Dr. J. Silva-Martinez  
    Professor & Graduate Coordinator

SUBJECT: Change in Title for  
    ECEN 762 Advanced Ultrasound Imaging Techniques

Dr. R. Righetti has requested to change the title for ECEN 762 to attract a wider band of students.

I appreciate your cooperation in this matter.

CC: Attachments

/tc
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 (DVM, MD, JD, PharmD, DPA)
2. Request submitted by (Department or Program Name):  
   Department of Biochemistry and Biophysics
3. Course prefix, number and complete title of course:  
   GENE 608 Critical Analysis of GENE Literature

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 (GPMB)

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 Controls/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 GENE 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):
   *Critical Analysis of Genetic Literature*  
   Introduction to Major Genetic Model Systems (MS)

10. 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>GENE 608</td>
<td>CRIT ANALYSIS GENE LIT</td>
<td></td>
</tr>
<tr>
<td>Lec.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>01</td>
<td>00</td>
<td>00</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>GENE 608</td>
<td>Critical Analysis of GENE Literature</td>
<td></td>
</tr>
<tr>
<td>Lec.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>02</td>
<td>00</td>
<td>00</td>
</tr>
</tbody>
</table>

Approval recommended by:

Dorothy E. Shippen  
Department Head or Program Chair  
2/16 16

Chair, College Review Committee  
Dean of College  
3/28/16

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 845-8301 or sandy.williams@tamu.edu.  
Curricular Services – 08/14
GENE 608-600
Critical Analysis of Genetic Literature
Introduction to Major Genetic Model Systems (MSs)

Course coordinator: Hubert Amrein (amrein@tamhsc.edu)

Instructors: Michael Polymenis, Marty Dickman, Rene Garcia, Hubert Amrein, Bruce Riley, David Threadgill

Time & Location: Tuesdays 5:00-7:00pm  ILSB 3145

Course Description: Gene 608 is designed to introduce first and second year 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.

NOTE: Title of papers to be discussed are subject to change

Credits: This is a 2 hrs credit course

Learning Outcomes:
Goal 1: Acquire basic knowledge of each MS: Students should know
  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

Goal 2: Critical reading and discussion of papers: Students should be able to:
  Succinctly state the goals of the study
  Understand rationale behind experiments
  Identify strengths and weaknesses of the paper

Grading:
Grades for lectures on each of the six model systems (0 - 100 points), composed of participation (40%) and written assay/paper presentation (60%), will be given by each instructor. Points from all instructors will be averaged to provide the final numerical grade, and letter grade will be calculated according to scale: A=90-100, B= 80-89, C=70-79 etc).

Attendance:
  - Attendance of 14 of 15 classes is essential in order to maintain grade, as participation during class will provide 40% of the grade.
    Unexcused absence of part or a whole additional class results in reduction of 5 points in numerical final grade and corresponding reduction in final letter grade.
Missing more than 4 classes will result in failing grade (if three or more absences are unexcused) or incomplete grade (if 2 or fewer absences are unexcused. Examples of excused absences are severe illness or family emergency. For further information, see student rule 7: http://student-rules.tamu.edu/rule07

There are several "How to Read a Scientific Article" resources online. Students are encouraged to consult these websites. Here are two good ones:

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

Class schedule:

<table>
<thead>
<tr>
<th>Lecture/model</th>
<th>Date</th>
<th>Lecturer</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview Intra of Lecturers</td>
<td>8-30</td>
<td>PM RB TO</td>
<td>Introduction of lecturers and model systems</td>
</tr>
<tr>
<td>1 Yeast</td>
<td>9-6</td>
<td>PM</td>
<td>Human-yeast gene replacements</td>
</tr>
<tr>
<td>2 Yeast</td>
<td>9-13</td>
<td>PM</td>
<td>Genetic screens with conditional alleles, classic and modern</td>
</tr>
<tr>
<td>3 Arabidopsis</td>
<td>9-20</td>
<td>MD</td>
<td>Introduction to Arabidopsis</td>
</tr>
<tr>
<td>4 Arabidopsis</td>
<td>9-27</td>
<td>MD</td>
<td>Paper discussion: Harnessing the power of Arabidopsis genetics</td>
</tr>
<tr>
<td>5 Caenorhabditis</td>
<td>10-4</td>
<td>GR</td>
<td>See below</td>
</tr>
<tr>
<td>6 Caenorhabditis</td>
<td>10-11</td>
<td>GR</td>
<td>See below</td>
</tr>
<tr>
<td>7 Caenorhabditis</td>
<td>10-18</td>
<td>GR</td>
<td>See below</td>
</tr>
<tr>
<td>8 Drosophila</td>
<td>10-25</td>
<td>AH</td>
<td>Classical Genetics</td>
</tr>
<tr>
<td>9 Drosophila</td>
<td>11-1</td>
<td>AH</td>
<td>Modern Malec Genetics</td>
</tr>
<tr>
<td>10 Drosophila</td>
<td>11-8</td>
<td>AH</td>
<td>Paper discussion</td>
</tr>
<tr>
<td>11 Zebrafish</td>
<td>11-15</td>
<td>RB</td>
<td>Introduction to zebrafish</td>
</tr>
<tr>
<td>12 Zebrafish</td>
<td>11-22</td>
<td>RB</td>
<td>Combining zebrafish tools to resolve core issues in early vertebrate development.</td>
</tr>
<tr>
<td>13 Mouse</td>
<td>11-29</td>
<td>TO</td>
<td>Introduction to Mouse</td>
</tr>
<tr>
<td>14 Mouse</td>
<td>12-6</td>
<td>TO</td>
<td>Paper discussion</td>
</tr>
</tbody>
</table>

Lecturers
PM: Polymenis, Michael, PhD  OM: Dickman, Marty, PhD
GR: Garcia, Rene, PhD        AH: Amrein, Hubert, PhD
RB: Riley, Bruce, PhD        TO: Threadgill, David, PhD

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, located in the Disability Services building at the Student Services at White Creek complex on west campus, or call 845-1637. For additional information visit 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 (Marty Dickman)

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:
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, Gai4-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 Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions:
1. Course request type:
   □ Undergraduate
   □ Graduate
   □ First Professional (MD, DVM, PharmD, DPA)
2. Request submitted by (Department or Program Name): Department of Biochemistry and Biophysics
3. Course prefix, number and complete title of course:
   GENE 613 Quantitative Genetics I
   Attach a brief supporting statement for changes made to items 4a through d, and 10 below.
4. Change requested
   a. Prerequisite(s): From: GENE 612; STAT 652
   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.
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
   □ WF (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 Controls Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-controls-basic-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 30 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>GENE</td>
<td>613</td>
<td>Quantitative Genetics I</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>03</td>
<td>00</td>
<td>00</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>GENE</td>
<td>613</td>
<td>Quantitative Genetics I</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>03</td>
<td>00</td>
<td>00</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 – 08/14
GENE 613
Quantitative Genetics I
Texas A&M University
Spring 2017

Instructor: David G. Riley  432E Kleberg
Associate Professor  845-2667
Department of Animal Science  david-riley@tamu.edu

Office hours:  Monday & Friday: 10:00 to noon and 1:00 – 3:00 p.m.

These are not the only times available, but times other than these should be confirmed by speaking with me.

Time:  9:35 to 10:50 a.m.

Place:  400 KLCT

Objective:  The combination of genetic and statistical principles so that populations of sexually reproducing organisms can be manipulated for genetic improvement and/or to study evolutionary change.

Learning Outcomes:
After completion of the course, students will be able to:
1. Describe single-locus models of inheritance in diploid organisms
2. Algebraically describe the influence of genetic drift, migration, selection, and population size on the population mean of characters.
3. Employ methods of statistical association to estimate genetic merit.
4. Quantify response to selection for characters.
5. Detail the role of linkage disequilibrium in inheritance.

Prerequisite:  STAT 651

Attendance:  Any required work that is missed due to a university-excused absence (Student Rule 7 http://student-rules.tamu.edu/rule07) may be made up with instructor agreement on a reasonable timeline. Other absences may be excused at instructor discretion with prior notification and proper documentation.

Text:
1. Class note packets will be supplied.

Grade:
Exams (3)  60%  A = 89.5 to 100  D = 59.5 to 69.4
Homework (7 or 8)  40%  B = 79.5 to 89.4  F = 59.4 and below
                  C = 69.5 to 79.4
Homework assignments turned in one to six days late will receive an automatic 30% grade reduction; assignments turned in seven days late will automatically receive a grade of zero. Homework assignments are primarily computational in nature. All homework assignments are due by 5:00 PM on their respective dates. Students with excused absences will be allowed to make up missed assignments within a reasonable time line determined by the instructor and the student.

At least the first exam will have an in-class portion, as well as a take home, open notes portion. The last two exams will likely be given as take home exams. Take-home exams will be due by 5:00 pm on the following day after given. The exams have both computational and theory/discussion aspects.

The tentative schedule for graded assignments will be:

- Jan 19: Homework 1 – due Jan 26
- Jan 26: Homework 2 – due Feb 2
- Feb 2: Homework 3 – due Feb 9
- Feb 16: Exam I
- Feb 23: Homework 4 – due Mar 1
- Mar 1: Homework 5 – Due Mar 8
- Mar 14-18: SPRING BREAK
- Mar 22: Homework 6 – due Mar 29
- Apr 5: Exam II
- Apr 12: Homework 7 – due Apr 19
- Apr 19: Homework 8—due Apr 26
- Apr 28: Last lecture
- May 5: Exam III (12:30 to 2:30 p.m.)

Course content:

**Statistical concepts**
- Continuous and discrete distributions
- Probability
- Means, variances, covariances
- Regression and correlation as measures of association

**Fundamental as a basis**
- Allele and genotype frequencies
- Hardy Weinberg Equilibrium
- Additive and nonadditive gene action
- Forces that change allele frequency
- Selection for and against recessive alleles

**Quantitative phenotypes and genotypes**
- Genetic model for phenotype
- Variation and variances
- Breeding value and heritability
- Producing ability and repeatability
Gene combination value and heterosis

Linkage disequilibrium
- Genetic distance and recombination rate
- Detection of QTL
- Types of resource populations

Inbreeding and relationship as covariances among individuals
- Relationship coefficient
- Inbreeding coefficient
- Numerator relationship matrix
- Inbreeding depression
- Heterosis

Estimation of genetic merit
- Mass selection
- Progeny testing
- Selection Index
- Best Linear Unbiased Prediction (BLUP)

Selection response
- Factors that impact annual selection response
- Correlated selection response—additive genetic correlation
- Pleiotropy
- Genotype assisted selection

Quantitative considerations and recent genetic applications-
- Whole genome association
- Issues related to multiple testing and multicollinearity
- False discovery rate
- Data permutations and probability of results
- Copy number variants
- Genomic prediction of genetic merit
- Estimation of relatedness using marker arrays

ADA 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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Plagiarism: The handouts used in this course are copyrighted. By "handouts", I mean all materials generated for this class, which 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 I expressly grant permission. As commonly defined, plagiarism consists of claiming the ideas, words,
writings, etc, of another person as your own work. This means you are committing plagiarism if you copy 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 any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty." Definitions of academic misconduct are also available online at http://www.tamu.edu/aggiehonor.

Aggies do not lie, cheat or steal, or tolerate those who do.
BIOGRAPHICAL SUMMARY

David Greg Riley

Professional Experience:

Associate Professor, Texas A&M University, 2009-present.
Research Geneticist, USDA, ARS, Subtropical Agricultural Research Station, Brooksville, FL 2000-2009

Research Interests:

Applied breeding and genetics in beef cattle. Some specific project areas include:

Identification of quantitative trait loci (QTL) for growth, disposition, feed efficiency, reproductive efficiency and carcass traits based on full sib $F_2$ families and half-sib families.

Investigation of reciprocal differences in $Bos indicus$-$Bos taurus$ crosses for calf size and growth traits with particular interest on epigenetic influences.

Study of genotype-environment interactions on production efficiency and body composition in live animals and beef carcasses.

Heterosis expression in livestock.

Incorporation of molecular information into prediction of genetic merit.

Education:

<table>
<thead>
<tr>
<th>Degree</th>
<th>Institution</th>
<th>Year</th>
<th>Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D.</td>
<td>Texas A&amp;M University</td>
<td>2000</td>
<td>Genetics</td>
</tr>
<tr>
<td>M.S.</td>
<td></td>
<td>1997</td>
<td>Animal Breeding</td>
</tr>
<tr>
<td>B.S.</td>
<td></td>
<td>1984</td>
<td>Agricultural Economics</td>
</tr>
</tbody>
</table>
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, Pharm.D, DVM)
2. Request submitted by (Department or Program Name): Department of Educational Psychology
3. Course prefix, number and complete title of course: SPED 601: Assessment in School Settings

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.

   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:

   Assessment in School Settings: Formal and informal assessment; state assessment and alternatives; techniques used with students with disabilities; using data to make educational decisions.

9. Complete proposed course title and proposed catalog course description:

   Assessment and Evaluation: Understanding basic statistics terminology, formulas, and types of research models; creating reliable and valid measures of knowledge and skills; interpreting assessment data for decision-making evaluation of technical aspect of assessment tools and interventions.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

    Assessment and Evaluation: Understanding basic statistics terminology, formulas, and types of research models; creating reliable and valid measures of knowledge and skills; interpreting assessment data for decision-making evaluation of technical aspect of assessment tools and interventions.

   a. As currently in course inventory:

      Prefix Course # Title (excluding punctuation) Lect. Lab Other SCH CIP and Fund Code Admin. Unit FICE Code Level
      SPED 601 Assessment in School Settings 3.00 0.00 0.00 3.00 1310010004 0920 0 0 3 6 3 2 6

   b. Change to:

      Prefix Course # Title (excluding punctuation) Lect. Lab Other SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code Level
      SPED 601 Assessment and Evaluation 3.00 0.00 0.00 3.00 1310010004 0920 17 - 18 0 0 3 6 3 2 10

   Approval recommended by: Victor Wilson, 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
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 Level (M.D., D.D.S., D.V.M., etc.)
2. Request submitted by (Department or Program Name): Department of Educational Psychology
3. Course prefix, number and complete title of course: SPED 630: Early Literacy for Students with Diverse Instructional Needs

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.

   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 course title and current catalog course description:
   Early Literacy for Students with Diverse Instructional Needs: Theory, strategies, and techniques for consultation at the individual and system level; leadership systems, and interactions; problem solving, evaluation and use of researcher interventions, and evaluation of intervention outcomes; techniques for disseminating information

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   Reading: Research-based strategies to teach beginning reading and writing to pre-K through 4th grade students with disabilities and other diverse instructional needs; emphasis on current issues, assessment, prevention, and intervention.

10. As currently in course inventory:

   a. Prefix: SPED 630  Title: Early Lit Stud Div Instr

<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>1310010004</td>
<td>0920</td>
<td>0 3 6 3 2</td>
<td>6</td>
</tr>
</tbody>
</table>

   b. Change to:

   Prefix: SPED 630  Title: Reading

<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>1310010004</td>
<td>0920</td>
<td>17 - 18</td>
<td>0 3 6 3 2</td>
</tr>
</tbody>
</table>

   Approval recommended by: George Cunningham, M.D.
   Department Head or Program Chair (Type Name & Sign) Date 05/20/11
   Chair, College Review Committee
   Date

   Mark Zoran, Ph.D.
   Department Head or Program Chair (Type Name & Sign) Date 05/20/11
   (if cross-listed course)
   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 – 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
2. Request submitted by (Department or Program Name): Department of Statistics
3. Course prefix, number and complete title of course: STAT 647 Spatial Statistics
   Attach a brief supporting statement for changes made to items 4a thru 4d, and 10 below.
4. Change requested
   a. Prerequisite(s): From: STAT 601 or STAT 611 or equivalent To: STAT 630 or STAT 611 or equivalent
   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. Attach a course syllabus.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b.
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>
</tr>
</thead>
<tbody>
<tr>
<td>STAT</td>
<td>647</td>
<td>Spatial Statistics</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>27.0501.00</td>
<td>2740</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>
</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>FICE 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>
</tr>
</tbody>
</table>

Approval recommended by:
Michael Longenecker  6-2-16
Department Head or Program Chair (Type Name & Sign) Date
Chair, College Review Committee  6-6-16
Dean of College  6-6-16

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

Associate Director, Curricular Services  Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 08/14
Special Consideration Items
SPECIAL CONSIDERATION
MEMORANDUM

TO: Undergraduate Curriculum Committee
FROM: Dr. Richard Metters, Department Head
       Department of Information and Operations Management
THROUGH: Dr. Martha Louder, Associate Dean – Undergraduate Programs
         Mays Business School
THROUGH: Dr. Bala Shetty, Interim Associate Dean for Graduate Programs
         Mays Business School
DATE: April 27, 2016
SUBJECT: Proposal for Change in Course Prefix Designation

The Department of Information and Operations Management in Mays Business School
would like to create a new course prefix for all Management Information System courses at
both the graduate and undergraduate levels.

The current course prefix for Management Information System classes is ISYS. Due to the
similarity of this prefix to the acronym of a current militant group, the stigma surrounding
the prefix has caused us to reevaluate its use. To avoid the potentially offensive nature of
this similarity, we would like to change the course prefix of all Management Information
System courses from ISYS to ISTM.

The following table includes the current course listings and the proposed changes. The
changes will affect the course prefix only. There will be no changes to the course numbers,
titles, or descriptions.
<table>
<thead>
<tr>
<th>Current Course Listing</th>
<th>Proposed Course Listing (2017-2018)</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISYS 209</td>
<td>ISTM 209</td>
<td>Business Information Systems Concepts</td>
</tr>
<tr>
<td>ISYS 210</td>
<td>ISTM 210</td>
<td>Fundamentals of Information Systems</td>
</tr>
<tr>
<td>ISYS 250</td>
<td>ISTM 250</td>
<td>Business Programming Logic and Design</td>
</tr>
<tr>
<td>ISYS 281</td>
<td>ISTM 281</td>
<td>Professional Development Information Systems Seminar</td>
</tr>
<tr>
<td>ISYS 310</td>
<td>ISTM 310</td>
<td>Network Communications and Infrastructure</td>
</tr>
<tr>
<td>ISYS 315</td>
<td>ISTM 315</td>
<td>Database Programming</td>
</tr>
<tr>
<td>ISYS 320</td>
<td>ISTM 320</td>
<td>Business Systems Analysis and Design</td>
</tr>
<tr>
<td>ISYS 325</td>
<td>ISTM 325</td>
<td>Business Object Oriented Programming with Java</td>
</tr>
<tr>
<td>ISYS 370</td>
<td>ISTM 370</td>
<td>Introduction to the Energy Industry</td>
</tr>
<tr>
<td>ISYS 410</td>
<td>ISTM 410</td>
<td>Management of Information Systems</td>
</tr>
<tr>
<td>ISYS 415</td>
<td>ISTM 415</td>
<td>Information Systems Capstone Project</td>
</tr>
<tr>
<td>ISYS 420</td>
<td>ISTM 420</td>
<td>Web-Enabled Applications</td>
</tr>
<tr>
<td>ISYS 425</td>
<td>ISTM 425</td>
<td>Complex Business Application Design</td>
</tr>
<tr>
<td>ISYS 450</td>
<td>ISTM 450</td>
<td>Business Intelligence and Data Mining</td>
</tr>
<tr>
<td>ISYS 455</td>
<td>ISTM 455</td>
<td>Business Information Security and Risk Management</td>
</tr>
<tr>
<td>ISYS 460</td>
<td>ISTM 460</td>
<td>E-Services</td>
</tr>
<tr>
<td>ISYS 481</td>
<td>ISTM 481</td>
<td>Information Systems Seminar</td>
</tr>
<tr>
<td>ISYS 484</td>
<td>ISTM 484</td>
<td>Management Information Systems Internship</td>
</tr>
<tr>
<td>ISYS 485</td>
<td>ISTM 485</td>
<td>Directed Studies</td>
</tr>
<tr>
<td>ISYS 489</td>
<td>ISTM 489</td>
<td>Special Topics in...</td>
</tr>
<tr>
<td>ISYS 601</td>
<td>ISTM 601</td>
<td>Fundamentals of Business Programming</td>
</tr>
<tr>
<td>ISYS 610</td>
<td>ISTM 610</td>
<td>Business Data Communications</td>
</tr>
<tr>
<td>ISYS 612</td>
<td>ISTM 612</td>
<td>Management Information Systems</td>
</tr>
<tr>
<td>ISYS 615</td>
<td>ISTM 615</td>
<td>Business Database Systems</td>
</tr>
<tr>
<td>ISYS 620</td>
<td>ISTM 620</td>
<td>Systems Analysis &amp; Design</td>
</tr>
<tr>
<td>ISYS 622</td>
<td>ISTM 622</td>
<td>Advanced Data Management</td>
</tr>
<tr>
<td>ISYS 624</td>
<td>ISTM 624</td>
<td>Advanced Systems Analysis and Design</td>
</tr>
<tr>
<td>ISYS 630</td>
<td>ISTM 630</td>
<td>MIS Project Management and Impeimentation</td>
</tr>
<tr>
<td>ISYS 631</td>
<td>ISTM 631</td>
<td>Information Systems Design and Development Project</td>
</tr>
<tr>
<td>ISYS 635</td>
<td>ISTM 635</td>
<td>Business Information Security</td>
</tr>
<tr>
<td>ISYS 637</td>
<td>ISTM 637</td>
<td>Data Warehousing</td>
</tr>
<tr>
<td>ISYS 640</td>
<td>ISTM 640</td>
<td>Information Systems Sourcing</td>
</tr>
<tr>
<td>ISYS 643</td>
<td>ISTM 643</td>
<td>Corporate Information Planning</td>
</tr>
<tr>
<td>ISYS 645</td>
<td>ISTM 645</td>
<td>IT Security Controls</td>
</tr>
<tr>
<td>ISYS 646</td>
<td>ISTM 646</td>
<td>E-Services</td>
</tr>
<tr>
<td>ISYS 650</td>
<td>ISTM 650</td>
<td>Business Data Mining</td>
</tr>
<tr>
<td>ISYS 652</td>
<td>ISTM 652</td>
<td>Customer Relationship Management and Technologies</td>
</tr>
<tr>
<td>ISYS 654</td>
<td>ISTM 654</td>
<td>E-Commerce Technologies</td>
</tr>
<tr>
<td>ISYS 655</td>
<td>ISTM 655</td>
<td>Security Management and Compliance</td>
</tr>
<tr>
<td>ISYS 656</td>
<td>ISTM 656</td>
<td>Global Information Systems</td>
</tr>
<tr>
<td>ISYS 670</td>
<td>ISTM 670</td>
<td>IT Consulting</td>
</tr>
<tr>
<td>ISYS 684</td>
<td>ISTM 684</td>
<td>Professional Internship</td>
</tr>
<tr>
<td>ISYS 685</td>
<td>ISTM 685</td>
<td>Directed Studies</td>
</tr>
<tr>
<td>ISYS 686</td>
<td>ISTM 686</td>
<td>Theory and Research in Management Information Systems</td>
</tr>
<tr>
<td>ISYS 689</td>
<td>ISTM 689</td>
<td>Special Topics in...</td>
</tr>
</tbody>
</table>
MEMORANDUM

To: Dr. Chris Houser, Associate Dean, Undergraduate and Faculty Affairs, College of Geosciences

To: Dr. Eric Riggs, Associate Dean, Graduate Affairs and Diversity, College of Geosciences

From: Dr. Debbie Thomas, Department Head, Oceanography
       Dr. Michael Pope, Department Head, Geology and Geophysics

RE: Joint degree program between Oceanography and Geophysics

I have attached a proposal for a Fast Track Dual Degree Program for the B.S. in Geophysics and the non-thesis Master of Ocean Science and Technology (MOST). The proposal has been approved by both Geology and Geophysics and Oceanography.

Please let me know if any additional information is needed.
Fast Track Dual Degree Program for Geophysics (B.S.) and Master of Ocean Science and Technology (MOST)

Purpose:

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 Department of Geology and Geophysics Geophysics Program and the Oceanography non-thesis Master of Ocean Science and Technology (MOST) 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 MOST 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.
Degree Evaluation

Combination programs must be at least 150 hours and no more than 30 hours may double count. For example, UG program of 120 hours and GR program of 48 hours totals 168 hours; 18 hours can double count to meet the required number of hours for both programs.

Undergraduate Required Areas: 120 hours

Major Coursework:
- GEOL 104 Physical Geology (4)
- GEOL 106 Historical Geology (4)
- GEOL 203 Mineralogy (4)
- GEOP 341 Introduction to Global Geophysics (3)
- GEOL 302 Introduction to Petrology (4)
- GEOL 309 Intro to Geol Field (3)
- GEOP Methods of Geophysical Exploration (4)
- GEOL 311 Principles of Geological Writing (1)
- GEOL 312 Structure and Tectonics (4)
- GEOP 413 Near Surface Geophysics (3)
- GEOP 421 Petroleum Sedimentalgy I (4)
- GEOP 470 Computational Geophysics (3)

Concentration Coursework:
- Computer Science (4) [All electives are chosen in consultation with and on approval of the departmental advisor]
- Technical Electives (7) [Any science, math or engineering course that augments that degree with approval of the advisor]
- OCNG 604 Ocean Observing Systems (3) Fundamental OCNG graduate course (3)
- OCNG 608 Physical Oceanography (3)
- OCNG 603-Communicating Ocean Science (3)
- OCNG 657 Data Methods and Graphical Representation in Oceanography (3)
- OCNG 661 Advanced Oceanographic Data Analysis and Communication (3)
- Fundamental OCNG graduate course (6)
  Select 2 from:
  - OCNG 620 Biological Oceanography
  - OCNG 630 Geological Oceanography
  - OCNG 640 Chemical Oceanography
- Advanced specialized OCNG graduate course (15) [any OCNG 600-689]

Communication: Minimum 6hrs
- ENGL 104 Comp and Rhetoric (3)
- COMM 203 or COMM 205 (3)

Mathematics: Minimum 6hrs
- MATH 151 Engineering Math I (4)
- MATH 152 Engineering Math II (4)
- MATH 251 Engineering Math III (3)
MATH 308 Differential Equations (3)
MATH 311 Topics in Applied Mathematics I (3)
MATH 412 Theory of Partial Differential Equations (3)

**Life and Physical Sciences:** Minimum 9hrs
CHEM 107 Fundamental Chemistry I (3)
CHEM 117 Fundamental Chemistry Lab I (1)
PHYS 218 Mechanics (4)
PHYS 208 Electricity and Optics (4)
PHYS 221 Optics and Thermal Physics (3)

**Language, Philosophy and Culture:** Minimum 3hrs
3 hours Lang, Phil, Cul [KLPC attribute]

**Creative Arts:** Minimum 3hrs
3 hours Creative arts elective [KCRA attribute]

**Social and Behavioral Science:** Minimum 3hrs
3 hours Social and Behavioral Sciences elective

**Citizenship:** This is a university area and will be added automatically
6 hours in History [KHIS attribute]
6 hours in Political Science (POL 206 and 207)

**Work Not Applied:** This is a university area and will be added automatically

**University Writing Req.:** 2 courses min. (List the departments approved writing or communication courses – or you may use the university approved: Must have two courses with the UWRT or UCRT attributed)

**Int’l & Cult Diversity:** This is a university area and will be added automatically

**Foreign Language:** For programs that do not require a foreign language area this is the university approved foreign language area

**Residence Requirement** – 36hrs of 300-400 level coursework must be completed at TAMU. 12 hrs must be in major field.: List the range for the 12hr major field of study (example: COMM 300-499)

**GPR – Major:** Specific courses required: Provide a list or range of courses for this area: example – MUSC 100-499; ARTS 149; ENGL 227)

\(^1\) I kept the same requirement as in the current Geophysics B.S. degree to maintain consistency.
February 2, 2016

MEMORANDUM

TO: Graduate Curriculum Committee

FROM: College of Agriculture and Life Sciences
       Department of Nutrition and Food Science

SUBJECT: Request to Include Zero Credit Hour in Existing Courses

The College of Agriculture and Life Sciences, Department of Nutrition and Food Science, requests the following existing courses to be changed to include a zero credit hour option effective 201631. No other changes are being made to the courses.

<table>
<thead>
<tr>
<th>Department Name</th>
<th>Course Number/Title</th>
<th>Existing Credit Hours</th>
<th>Proposed Credit Hours</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition and Food Science</td>
<td>FSTC 685 Directed Studies</td>
<td>1-4</td>
<td>0-4</td>
<td>Zero credit option will be used to track graduate student participation in directed studies</td>
</tr>
<tr>
<td>Nutrition and Food Science</td>
<td>FSTC 691 Research</td>
<td>1-23</td>
<td>0-23</td>
<td>Zero credit option will be used to track graduate student participation in graduate research</td>
</tr>
<tr>
<td>Nutrition and Food Science</td>
<td>NUTR 685 Directed Studies</td>
<td>1-4</td>
<td>0-4</td>
<td>Zero credit option will be used to track graduate student participation in directed studies</td>
</tr>
<tr>
<td>Nutrition and Food Science</td>
<td>NUTR 691 Research</td>
<td>1-23</td>
<td>0-23</td>
<td>Zero credit option will be used to track graduate student participation in graduate research</td>
</tr>
<tr>
<td>Nutrition and Food Science</td>
<td>NUTR 684 Professional Internship</td>
<td>1-16</td>
<td>0-16</td>
<td>Zero credit option will be used to track graduate student participation in professional internships</td>
</tr>
<tr>
<td>Nutrition and Food Science</td>
<td>FSTC 684 Professional Internship</td>
<td>1-16</td>
<td>0-16</td>
<td>Zero credit option will be used to track graduate student participation in professional internships</td>
</tr>
</tbody>
</table>
Texas A&M University
New Certificate, Bachelors, Masters, or Doctoral Program
Undergraduate • Graduate • Professional
• Proposal Checklist •

Program request type: □ Undergraduate  ☒ Graduate  □ First Professional (ex., DVM, JD, MD, etc.)
Requested by the Department or Unit of:  College of Nursing

Program Type, Level, Designation, Title, Description, Hours

Program Type: □ Certificate Program  ☒ Degree Program
Program Level: □ UG Certificate  □ Grad Certificate  □ Bachelor  □ Master  □ Doctoral  □ Professional
Degree Designation (i.e., BS, BA, MA, MS, Magr, Med, PhD, EdD, etc.) MSN
Title of proposed program: Master of Science in Nursing in Forensic Nursing
Proposed CIP Code (if known): 51.3899

Brief program description (provide a catalog description for undergraduate and graduate certificates):
The online MSN in Forensic Nursing program of study is for baccalaureate prepared registered nurses interested in working with individuals, families, and communities impacted from all forms of violence. Students enrolled in this 36-semester credit hour (39-semester credit hours with an optional 3.0 semester credit hour thesis) will complete the following forensic specialty courses: two core 3.0 lecture hour forensic courses (6 hours), one 2.0 hour lecture/clinical forensic course (2 hours) and choose one 1.0 hour lecture (1 hour) forensic health care elective. Through the completion of a 4.0 credit hour advanced clinical practicum and the 2.0 hour forensic core clinical course, students will complete 170 clinical practice hours. Content specific overarching concepts taught in the MSN in Forensic Nursing program of study include victimology, justice, survivorship and prevention.

Minimum program semester credit hours (SCH) Certificates - 12 hours* Bachelors - 120 hours Masters - 30 hours
Proposed program hours: _______ _______ 36
*12 hours minimum to appear on transcript

Certificate Programs □ Embedded
Students take coursework that will result in a degree and certificate being earned at the same time.
□ Standalone
Non-degree seeking students take coursework to earn a certificate only (no degrees are awarded).

Off-Campus or Distance Delivery
% of Program a student can take off-campus or through Distance Education
□ 25%
□ 50%
□ 80%
☒ 100%
Program Start Date SACSCOC Approval** When Provost needs to inform SACSCOC
Spring 2017 Notification Only 6 months before first day of program

**Notification letter arranged through the Vice Provost for Academic Affairs and sent by TAMU President.

Program Delivery Mode

□ On-campus
□ Broadcast / TTVN
□ Specific off-campus location***
☒ Distance Education / Internet ☒ In-State  □ Out-of-State  Start Date
□ Out-of-Country
Will this program be offered with another institution?  □ Yes  ☒ No
If yes, contact the Vice Provost for Academic Affairs for additional reporting requirements.

***Is this an approved SACSCOC location?  ☒ Yes  □ No  If no, a program prospectus must be sent to SACSCOC. Approved locations as of March 2012: TAMU-Galveston, TAMU-Qatar, University Center-The Woodlands, CityCentre-Houston, Dubai and Saudi Arabia.

Program Funding

Page 1  Revised 04.11.2014
Texas A&M University
New Certificate, Bachelors, Masters, or Doctoral Program
Undergraduate • Graduate • Professional
• Proposal Checklist •

Has program funding been finalized at the department or college level?  ☑ Yes  ☐ No
   If no, explain or attach budget: _____

Will new costs for the first five years of the program be under $2 million?  ☑ Yes  ☐ No
   If new costs exceed $2 million, coordinating board approval is required.
**Submitted by (Contact Person):**

<table>
<thead>
<tr>
<th>Name</th>
<th><a href="mailto:gosselin@tamhs.edu">gosselin@tamhs.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Dean for Graduate Studies</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
</tr>
</tbody>
</table>

**Certification Statement**

By signing below, the Dean of the College certifies the proposed program complies with coordinating board standards. If the program is delivered through Distance Education, the Dean of the College certifies that they are following the *Principles of Good Practice for Academic Degree and Certificate Programs and Credit Courses Offered Electronically.*

Use additional signature lines if program is between three or more departments or colleges.

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, Department Head or Interdisciplinary Program Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-19-16</td>
<td>Debra Matthews</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Typed or Printed Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-19-16</td>
<td>Debra Matthews</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Chair, College Review Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/19/16</td>
<td>Dean of College</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Chair, University Curriculum Committee or Graduate Council</th>
</tr>
</thead>
</table>

Additional Approvals Required: Faculty Senate and President.
New Bachelor's and Master's Degree
Cover Page/Signature Page

Directions: An institution shall use this form to propose a new bachelor's or master's degree program. In completing the form, the institution should refer to the document Standards for Bachelor's and Master's Programs, which prescribes specific requirements for new degree programs. Note: This form requires signatures of (1) the Chief Executive Officer, certifying adequacy of funding for the new program; (2) a member of the Board of Regents (or designee), certifying Board approval, and (3) if applicable, a member of the Board of Regents or (designee), certifying that criteria have been met for staff-level approval. NOTE: Preliminary authority is required for all engineering programs. An institution that does not have preliminary authority for a proposed engineering program shall submit a separate request for preliminary authority prior to submitting the degree program request form. That request shall address criteria set in Coordinating Board rules Section 5.24 (a).

Information: Contact the Division of Academic Affairs and Research at 512/427-6200 for more information.

Administrative Information

1. **Institution:** Texas A&M Health Sciences Center

2. **Program Name** – Show how the program would appear on the Coordinating Board's program inventory (e.g., Bachelor of Business Administration degree with a major in Accounting): **Master of Science in Nursing in Forensic Nursing**

3. **Proposed CIP Code:** 51.3899

4. **Number of Required Semester Credit Hours (SCHs)** (If the number of SCHs exceeds 120 for a Bachelor's program, the institution must request a waiver documenting the compelling academic reason for requiring more SCHs): 36 (non-thesis option) or 39 (thesis option)

5. **Brief Program Description** – Describe the program and the educational objectives:

The College of Nursing proposes a Master of Science in Nursing in Forensic Nursing (MSN-FN) degree program to prepare advanced level nurses with specialized training to care for victimized patients. The program will be offered through distance delivery with both full-time and part-time options to accommodate practicing nurses. The foundation of the program is built upon the Essentials of Masters Education in Nursing developed by the American Association of Colleges of Nursing (2011) with specialty courses in forensic nursing drawing from the International Association of Forensic Nurses educational guidelines (2015). The program is comprised of 36 to 39 credit hours, an optional thesis course (3 credit hours) and 170 clinical practice hours.

The proposed MSN-FN Program is designed to prepare registered nurses through graduate education and clinical experiences to deliver health care to victimized patients of all ages. The content provides preparation to apply research-informed principles and practices for patient assessment, treatment and advocacy within the context of diverse health, judicial and community systems. The graduate will be
eligible for the Sexual Assault Nurse Examiner (SANE) qualification. In combination with prescribed clinical experiences, graduates may also be eligible for the Advanced Forensic Nursing Certification offered through the American Nurses Credentialing Center (ANCC) and International Association of Forensic Nurses (IAFN). The scope of the proposed program falls within a specialty area in nursing, and accordingly, the proposed CIP code of 51.3899 has been selected to reflect the area of forensic nursing. An evaluation of intuitions with comparable scope of the proposed MSN-FO programs identified the use of the 51.3899 CIP code at Oakland University in Rochester, MI.

6. Administrative Unit – Identify where the program would fit within the organizational structure of the university (e.g., The Department of Electrical Engineering within the College of Engineering): The College of Nursing (please note that the College of Nursing is not currently organized by academic departments).

7. Proposed Implementation Date – Report the date that students would enter the program (MM/DD/YY): 01/09/16

8. Contact Person – Provide contact information for the person who can answer specific questions about the program:

   Name: Kevin P. Gosselin

   Title: Assistant Dean for Graduate Studies

   E-mail: gosselin@tamhsc.edu

   Phone: 979-436-0153
Signature Page

1. **Adequacy of Funding** – The chief executive officer shall sign the following statement:

   *I certify that the institution has adequate funds to cover the costs of the new program. Furthermore, the new program will not reduce the effectiveness or quality of existing programs at the institution.*

   

   Chief Executive Officer          Date

2. **Board of Regents or Designee Approval** – A member of the Board of Regents or designee shall sign the following statement:

   *On behalf of the Board of Regents, I approve the program.*

   

   Board of Regents (Designee)          Date of Approval

3. **Board of Regents Certification of Criteria for Commissioner of Assistant Commissioner Approval** – For a program to be approved by the Commissioner or the Assistant Commissioner for Academic Affairs and Research, the Board of Regents or designee must certify that the new program meets the eight criteria under TAC Section 5.50 (b): The criteria stipulate that the program shall:

   (1) be within the institution’s current Table of Programs;
   (2) have a curriculum, faculty, resources, support services, and other components of a degree program that are comparable to those of high quality programs in the same or similar disciplines at other institutions;
   (3) have sufficient clinical or in-service sites, if applicable, to support the program;
   (4) be consistent with the standards of the Commission of Colleges of the Southern Association of Colleges and Schools and, if applicable, with the standards or discipline-specific accrediting agencies and licensing agencies;
   (5) attract students on a long-term basis and produce graduates who would have opportunities for employment; or the program is appropriate for the development of a well-rounded array of basic baccalaureate degree programs at the institution;
   (6) not unnecessarily duplicate existing programs at other institutions;
   (7) not be dependent on future Special Item funding
   (8) have new five-year costs that would not exceed $2 million.

   *On behalf of the Board of Regents, I certify that the new program meets the criteria specified under TAC Section 5.50 (b).*

   

   Board of Regents (Designee)          Date
Certification Form for New Bachelor’s and Master’s Programs
Texas Higher Education Coordinating Board

Directions: An institution shall use this form to request a new bachelor’s or master’s degree program that meets all criteria for automatic approval in Coordinating Board Rules, Chapter 5, Subchapter C, Section 5.44: (a) The program has institutional and governing board approval; (b) the program complies with the Standards for Bachelor’s and Master’s Programs; (c) adequate funds are available to cover the costs of the new program; (d) new costs during the first five years of the program will not exceed $2 million; (e) the program is a non-engineering program (i.e., not classified under CIP code 14); and (f) the program will be offered by a university or health-related institution.

If a new bachelor’s or master’s program does not meet the criteria above, an institution must submit a request using the Form for Requesting a New Bachelor's and Master's Degree Program.

Information: Contact the Division of Academic Affairs and Research at 512/427-6200 for more information.

Administrative Information

1. Institution: Texas A&M Health Sciences Center

2. Program Name: Show how the program would appear on the Coordinating Board’s program inventory (e.g., Bachelor of Business Administration degree with a major in Accounting; Bachelor of Arts in Interdisciplinary Studies with 4-8 ESL Generalist Certification).

Master of Science in Nursing in Forensic Nursing

3. Proposed CIP Code:

51.3899

4. Number of Required Semester Credit Hours (SCHs) (If the number of SCHs exceeds 120 for a bachelor’s program, the institution must request a waiver documenting the compelling academic reason for requiring more SCHs):

36 (non-thesis option) or 39 (thesis option)

5. Administrative Unit: Identify where the program would fit within the organizational structure of the university (e.g., The Department of Electrical Engineering within the College of Engineering).

The College of Nursing (please note that the College of Nursing is not currently organized by academic departments).

6. Delivery Mode: Identify how and where the program would be delivered, e.g. on-campus face-to-face, online, off-campus, interactive videoconferencing, hybrid, etc.

Online
7. **Implementation Date:** Report the first semester and year that students would enter the program.

01/09/16

8. **Contact Person:** Provide contact information for the person who can answer specific questions about the program.

   Name: Kevin P. Gosselin
   Title: Assistant Dean for Graduate Studies
   E-mail: gosselin@tamhsc.edu
   Phone: 979-436-0153

**Signature Page**

I hereby certify that all of the following criteria have been met in accordance with the procedures outlined in Coordinating Board Rules, Chapter 5, Subchapter C, Section 5.44:

(a) The program has institutional approval.

(b) The program complies with the *Standards for Bachelor's and Master's Programs*.

(c) Adequate funds are available to cover the costs of the new program.

(d) New costs during the first five years of the program will not exceed $2 million.

(e) The program is a non-engineering program (i.e., not classified under CIP code 14).

(f) The program will be offered by a university or health-related institution.

I understand that the Coordinating Board will update the program inventory for the institution if no objections to the proposed program are received during the 30-day public comment period.

_____________________________  ______________________________
Chief Executive Officer          Date

_____________________________
I hereby certify that the Board of Regents has approved this program.

Date of Board of Regents approval: ____________________________
Board of Regents (or Designee)  Date
Texas A&M University

Master of Science in Nursing
with a major in Forensic Nursing
(CIP 51.3899)

Program Review Outline

BACKGROUND & PROGRAM DESCRIPTION

Administrative Unit: College of Nursing

The College of Nursing proposes a Master of Science in Nursing in Forensic Nursing (MSN-FN) degree program to prepare advanced level nurses with specialized training to care for victimized patients. The program will be offered through distance delivery with both full-time and part-time options to accommodate practicing nurses. The foundation of the program is built upon the Essentials of Masters Education in Nursing developed by the American Association of Colleges of Nursing (2011) with specialty courses in forensic nursing drawing from the International Association of Forensic Nurses educational guidelines (2015). The program is comprised of 36 to 39 credit hours, an optional thesis course (3 credit hours) and 170 clinical practice hours.

The proposed MSN-FN Program is designed to prepare registered nurses through graduate education and clinical experiences to deliver health care to victimized patients of all ages. The content provides preparation to apply research-informed principles and practices for patient assessment, treatment and advocacy within the context of diverse health, judicial and community systems. The graduate will be eligible for the Sexual Assault Nurse Examiner (SANE) qualification. In combination with prescribed clinical experiences, graduates may also be eligible for the Advanced Forensic Nursing Certification offered through the American Nurses Credentialing Center (ANCC) and International Association of Forensic Nurses (IAFN). The scope of the proposed program falls within a specialty area in nursing, and accordingly, the proposed CIP code of 51.3899 has been selected to reflect the area of forensic nursing. An evaluation of intuitions with comparable scope of the proposed MSN-FO programs identified the use of the 51.3899 CIP code at Oakland University in Rochester, MI.

The proposed implementation date is Spring, 2017.

Texas A&M University certifies that the proposed new degree program meets the criteria under the 19 Texas Administrative Code, Section 5.45 in regards to need, quality, financial and faculty resources, standards and costs. New costs during the first five years will not exceed $2 million.

I. NEED

A. Employment Opportunities

In Texas there are 287 hospitals listed on the trauma center registry of which 84 are considered critical access facilities, thus are expected to provide to sexually victimized patients registered nurses trained in forensic evidence collection. Nationally, in 2010 there were approximately 500
SANE Programs listed on the International Association of Forensic Nurses (IAFN) website. In 2016, the IAFN website lists 701 Sexual Assault Nurse Examiner (SANE) programs nationally of which 94 are located in Texas. This number is expected to continue to increase as hospitals continue to embrace using nurses to provide specialized care to victimized patients in a cost effective manner. Every hospital or healthcare system-based forensic program needs a trained coordinator, usually a nurse with advanced academic preparation and clinical skills. A recent random internet search of employment sites lists 121 vacancies nationwide for trained Sexual Assault Nurse Examiners of which 31 were for hospitals in Texas. A growing number of hospital-based SANE programs are expanding their services to include forensic nursing exams of other victimized patient groups such as: elder abuse/neglect, intimate partner violence; family violence; child abuse/neglect; and abuse/neglect of vulnerable persons with disabilities. Agencies across the country who provide services comparable to the Texas Department of Family and Protective Services are looking to hire forensically trained nurses to be part of their protective services investigation teams.

The College of Nursing conducted online surveys of the following groups to assess interest in our proposed 12-credit hour, online Graduate Certificate in Forensic Healthcare and our proposes online 36-hour (39-hour with thesis option) MSN in Forensic Nursing:

1. Currently enrolled A&M CON Undergraduate Students
2. Currently enrolled A&M CON RN to BSN Students
3. Currently enrolled A&M CON MSN Students
4. IAFN Texas Chapter Members
5. 623 Registered Nurses from a Sample Provided by the Texas Board of Nursing
6. 900 NAPSA members of NAPSA of which 54% of the 287 respondents were from Texas
7. IAFN general membership
8. 93 registered nurses within the St. Joseph’s Medical Center in Bryan TX.

Interest was high for our proposed Graduate Certificate in Forensic Healthcare and for our proposed MSN in Forensic Nursing. The following is a summary of those interested in just the MSN in Forensic Nursing. Of the 108 respondents currently enrolled in our BSN programs, 45% (n=49) stated they were interested in obtaining a MSN in Forensic Nursing and of that number 51% said within the next 1 to 3 years. Of the 284 registered nurses practicing in Texas who responded to our surveys, 69% (n=199) said they were interested in obtaining a MSN in Forensic Nursing and of that number 63% said within the next 1 to 3 years.

When registered nurse members of the International Association of Forensic Nurses were surveyed, 164 (49%) of the 337 respondents stated they were interested in obtaining a MSN in Forensic Nursing with a similar number within the next 1 to 3 years. In summary, there is great interest within Texas and nationally for specialized academic education in forensic healthcare and in a MSN in Forensic Nursing.

B. Projected Enrollment

It is projected that 20 students per academic year will enroll in the program. The following table summarizes enrollment, attrition, and graduation projections for the first five years of the program.

C. Existing State Programs

Currently, no other MSN in Forensic Nursing programs exist in the state of Texas.
II. QUALITY & RESOURCES

A. Faculty

The proposed MSN in Forensic Nursing program courses (NURS 600 level) will be taught by three dedicated faculty, Dr. Daniel Sheridan, Dr. Nancy Downing, and Dr. Virginia Utterback (1.9 FTE total). A total of 16 faculty members, 14 of which are terminally degreed, are assigned to teach in the MSN-FN program. The following table provides a comprehensive list of program faculty, qualifications, courses assigned within the program and percentage of time allocated to programmatic instruction.

B. Program Administration

The MSN-FP program will be administered by the College of Nursing with key personnel to include the program director (Dr. Daniel Sheridan), Associate Dean for Academic Affairs (Dr. Debra Mathews) and Assistant Dean for Graduate Studies (Dr. Kevin Gosselin).

C. Other Personnel

D. Supplies, Materials

Supplies and materials include expenses related to general office administration, recruitment and course development.

E. Library

Students enrolled in the TAMHSC CON MSN-FNP program will have full access to all resource and services of the Texas A&M University (TAMU) Medical Sciences Library, as well as to the general education resources that are provided by the General University Library to support undergraduate and graduate level education programs. The TAMU Medical Sciences Library, which delivers discipline-specific library services and resources to the TAMHSC, provides a rich complement of electronic and print materials, in addition to regular and timely assistance and instruction in their use, and library spaces for individual study and group collaboration. The Medical Sciences Library (MSL) has five physical sites: the central administration of the Medical Sciences Library and the University Libraries located in College Station, with specialized on-site collections and services provided at campuses in Bryan, Kingsville, Temple, and Round Rock.

F. Equipment, Facilities

The proposed MSN in Forensic Nursing will be taught primarily online, thus there will be no need to access traditional classrooms, build or modify additional facilities, or purchase specialized equipment located on any A&M campus. There is one course in the MSN program of study that will require students to be temporarily on campus to use our existing simulation center facilities and simulated patients. However, this is the same course in which our current MSN in Education and our MSN Family Nurse Practitioners are enrolled.

G. Accreditation
The current graduate nursing programs are fully accredited by the Commission on Collegiate Nursing Education (CCNE), the American Association of Colleges of Nursing's (AACN) accrediting arm and the Texas Board of Nurses (TBON). The proposed graduate program has been developed in accordance with AACN standards, *The Essentials of Master's Education in Nursing* (2011). CCNE will be notified of the addition of a graduate program once approval is obtained. All standards will be maintained.

Students completing the proposed MSN in Forensic Nursing would be eligible to submit a portfolio to the International Association of Forensic Nurses (IAFN) to become credentialed as Advanced Forensic Nursing (AFN-BC) via the American Nurses Credentialing Center. The earned portfolio credential signifies that the recipient has achieved the highest standard of advanced forensic nursing. Certification through portfolio is an alternative assessment method for recognizing individual registered nurses in their specialty area; nurses document their skills, knowledge, abilities, and career accomplishments. Certification through portfolio requires equivalent rigor to meet accrediting bodies' criteria to determine proficiency through a peer-review process that is informed by nurse experts.

### III. NEW 5 YEAR COSTS & FUNDING SOURCES

<table>
<thead>
<tr>
<th>NEW FIVE-YEAR COSTS</th>
<th>SOURCES OF FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>Formula Income</td>
</tr>
<tr>
<td>$1,094,201</td>
<td>$727,051</td>
</tr>
<tr>
<td>Program Administration</td>
<td>Statutory Tuition</td>
</tr>
<tr>
<td>$788,906</td>
<td>$132,000</td>
</tr>
<tr>
<td>Graduate Assistants</td>
<td>Reallocation</td>
</tr>
<tr>
<td>$0</td>
<td>$500,000</td>
</tr>
<tr>
<td>Supplies &amp; Materials</td>
<td>Designated Tuition</td>
</tr>
<tr>
<td>$14,928</td>
<td>$274,560</td>
</tr>
<tr>
<td>Library &amp; IT Resources</td>
<td>Other Funding:</td>
</tr>
<tr>
<td>$8,470</td>
<td></td>
</tr>
<tr>
<td>Equipment, Facilities</td>
<td>Course Fees</td>
</tr>
<tr>
<td>$0</td>
<td>$39,800</td>
</tr>
<tr>
<td>Other</td>
<td>Graduate Tuition Above Statutory Tuition</td>
</tr>
<tr>
<td>$83,246</td>
<td>(Board Authorized Tuition)</td>
</tr>
<tr>
<td></td>
<td>$264,000</td>
</tr>
<tr>
<td>Estimated 5-Year Costs</td>
<td>Special Item Funding¹</td>
</tr>
<tr>
<td>$1,989,751</td>
<td>$288,780</td>
</tr>
<tr>
<td>Estimated 5-Year Revenues</td>
<td>$2,226,191</td>
</tr>
</tbody>
</table>

¹. Special item funding provided to TAMHSC College of Nursing for the development of forensic nursing FY16 & FY17.
Submitted by: Michael K. Young, President/CEO
Texas A&M University

Subject: Approval of a New Master of Science in Nursing Degree Program with a major in Forensic Nursing and Authorization to Request Approval from the Texas Higher Education Coordinating Board

Proposed Board Action:

Approve the establishment of a new degree program at Texas A&M University leading to a Master of Science in Nursing in Forensic Nursing, authorize the submission of this degree program to the Texas Higher Education Coordinating Board (THECB) for approval and certify that all applicable THECB criteria have been met.

Background Information:

The College of Nursing proposes a Master of Science in Nursing in Forensic Nursing (MSN-FN) degree program to prepare advanced level nurses with specialized training to care for victimized patients. The program will be offered through distance delivery with both full-time and part-time options to accommodate practicing nurses. The foundation of the program is built upon the Essentials of Masters Education in Nursing developed by the American Association of Colleges of Nursing (2011) with specialty courses in forensic nursing drawing from the International Association of Forensic Nurses educational guidelines (2015). The program is comprised of 36 to 39 credit hours, an optional thesis course (3 credit hours) and 170 clinical practice hours.

The proposed MSN-FN Program is designed to prepare registered nurses through graduate education and clinical experiences to deliver health care to victimized patients of all ages. The content provides preparation to apply research-informed principles and practices for patient assessment, treatment and advocacy within the context of diverse health, judicial and community systems. The graduate will be eligible for the Sexual Assault Nurse Examiner (SANE) qualification. In combination with prescribed clinical experiences, graduates may also be eligible for the Advanced Forensic Nursing Certification offered through the American Nurses Credentialing Center (ANCC) and International Association of Forensic Nurses (IAFN). The scope of the proposed program falls within a specialty area in nursing, and accordingly, the proposed CIP code of 51.3899 has been selected to reflect the area of forensic nursing. An evaluation of intuitions with comparable scope of the proposed MSN-FO programs identified the use of the 51.3899 CIP code at Oakland University in Rochester, MI.

A&M System Funding or Other Financial Implications:

Start-up funds will need to be funded by the Texas A&M University Health Science Center (TAMHSC). By the fifth year of the program, it will be self-sufficient with the revenue from state formula funding for health-related institutions and student tuition and fees.
Agenda Item No.

TEXAS A&M UNIVERSITY
Office of the President
May 19, 2016

Members, Board of Regents
The Texas A&M University System

Subject: Approval of a New Master of Science in Nursing Degree Program with a major in Forensic Nursing, and Authorization to Request Approval from the Texas Higher Education Coordinating Board

I recommend adoption of the following minute order:

“The Board of Regents of The Texas A&M University System approves the establishment of a new degree program at Texas A&M University leading to a Master of Science in Nursing degree major in Forensic Nursing.

The Board also authorizes submission of Texas A&M University’s new degree program request to the Texas Higher Education Coordinating Board for approval and hereby certifies that all applicable criteria of the Coordinating Board have been met.”

Respectfully submitted,

(CEO’s SIGNATURE)

CEO’s Name, Title

(One or two spaces)
Approval
(Three spaces)

Recommended: Approved for Legal Sufficiency:

John Sharp Ray Bonilla
Chancellor General Counsel

Billy Hamilton
Executive Vice Chancellor and
Chief Financial Officer

James R. Hallmark, Ph.D.
Vice Chancellor for Academic Affairs
Proposal for Bachelor’s and Master’s Degrees
Program Information

Background Information

The College of Nursing proposes a Master of Science in Nursing in Forensic Nursing (MSN-FN) degree program to prepare advanced level nurses with specialized training to care for victimized patients. The program will be offered through distance delivery with both full-time and part-time options to accommodate practicing nurses. The foundation of the program is built upon the Essentials of Masters Education in Nursing developed by the American Association of Colleges of Nursing (2011) with specialty courses in forensic nursing drawing from the International Association of Forensic Nurses educational guidelines (2015). The program is comprised of 36 to 39 credit hours, an optional thesis course (3 credit hours) and 170 clinical practice hours.

The proposed MSN-FN Program is designed to prepare registered nurses through graduate education and clinical experiences to deliver health care to victimized patients of all ages. The content provides preparation to apply research-informed principles and practices for patient assessment, treatment and advocacy within the context of diverse health, judicial and community systems. The graduate will be eligible for the Sexual Assault Nurse Examiner (SANE) qualification. In combination with prescribed clinical experiences, graduates may also be eligible for the Advanced Forensic Nursing Certification offered through the American Nurses Credentialing Center (ANCC) and International Association of Forensic Nurses (IAFN). The scope of the proposed program falls within a specialty area in nursing, and accordingly, the proposed CIP code of 51.3899 has been selected to reflect the area of forensic nursing. An evaluation of intuitions with comparable scope of the proposed MSN-FO programs identified the use of the 51.3899 CIP code at Oakland University in Rochester, MI.

I. Need

NEEDS ASSESSMENT

A. Job Market Need

In Texas there are 287 hospitals listed on the trauma center registry of which 84 are considered critical access facilities, thus are expected to provide to sexually victimized patients registered nurses trained in forensic evidence collection. Nationally, in 2010 there were approximately 500 SANE Programs listed on the International Association of Forensic Nurses (IAFN) website. In 2016, the IAFN website lists 701 Sexual Assault Nurse Examiner (SANE) programs nationally of which 94 are located in Texas. This number is expected to continue to increase as hospitals continue to embrace using nurses to provide specialized care to victimized patients in a cost effective manner. Every hospital or healthcare system-based forensic program needs a trained coordinator, usually a nurse with advanced academic preparation and clinical skills. A recent random internet search of employment sites lists 121 vacancies nationwide for trained Sexual Assault Nurse Examiners of which 31 were for hospitals in Texas. A growing number of hospital-based SANE programs are expanding their services to include forensic nursing exams of other victimized patient groups such as: elder abuse/neglect, intimate partner violence; family violence; child abuse/neglect; and abuse/neglect of vulnerable persons with disabilities. Agencies across the country who provide services comparable to the Texas Department of Family and Protective Services are looking to hire forensically trained nurses to be part of their protective services investigation teams.
B. **Student Demand**

The College of Nursing conducted online surveys of the following groups to assess interest in our proposed 12-credit hour, online Graduate Certificate In Forensic Healthcare and our proposes online 36-hour (39-hour with thesis option) MSN in Forensic Nursing:

1. *Currently enrolled A&M CON Undergraduate Students*
2. *Currently enrolled A&M CON RN to BSN Students*
3. *Currently enrolled A&M CON MSN Students*
4. *IAFN Texas Chapter Members*
5. *623 Registered Nurses from a Sample Provided by the Texas Board of Nursing*
6. *900 NAPSA members of NAPSA of which 54% of the 287 respondents were from Texas*
7. *IAFN general membership and*
8. *93 registered nurses within the St. Joseph's Medical Center in Bryan TX.*

Interest was high for our proposed Graduate Certificate in Forensic Healthcare and for our proposed MSN in Forensic Nursing. The following is a summary of those interested in just the MSN in Forensic Nursing. Of the 108 respondents currently enrolled in our BSN programs, 45% (n=49) stated they were interested in obtaining a MSN in Forensic Nursing and of that number 51% said within the next 1 to 3 years. Of the 284 registered nurses practicing in Texas who responded to our surveys, 69% (n=199) said they were interested in obtaining a MSN in Forensic Nursing and of that number 63% said within the next 1 to 3 years.

When registered nurse members of the International Association of Forensic Nurses were surveyed, 164 (49%) of the 337 respondents stated they were interested in obtaining a MSN in Forensic Nursing with a similar number within the next 1 to 3 years. In summary, there is great interest within Texas and nationally for specialized academic education in forensic healthcare and in a MSN in Forensic Nursing as demonstrated in the data below:

<table>
<thead>
<tr>
<th>Survey Populations</th>
<th>Total N</th>
<th>Responses</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TAMHSC CON</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate students</td>
<td>354</td>
<td>97</td>
<td>27%</td>
</tr>
<tr>
<td><strong>Interested in Continuing Formal Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>43/97</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>29/97</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>6/97</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78/97</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td><strong>Interested in Forensic Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Certificate</td>
<td>55/72</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>MSN Forensic Nursing</td>
<td>38/72</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>RN-BSN Students</td>
<td>101</td>
<td>16</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Interested in Continuing Formal Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>10/16</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>2/16</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>
New Program Request Form for Bachelor's and Master's Degrees
Page 3

<table>
<thead>
<tr>
<th>Total</th>
<th>12/16</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested in Forensic Education</td>
<td>11/16</td>
<td>69%</td>
</tr>
<tr>
<td>Graduate Certificate</td>
<td>6/11</td>
<td>55%</td>
</tr>
<tr>
<td>MSN Forensic Nursing</td>
<td>11/11</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MSN</th>
<th>33/83</th>
<th>39%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested in Post Masters Continuing Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 3 years</td>
<td>17/33</td>
<td>51%</td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>4/33</td>
<td>13%</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>1/33</td>
<td>3%</td>
</tr>
<tr>
<td>Sub total</td>
<td>22/33</td>
<td>67%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>11/33</td>
<td>34%</td>
</tr>
</tbody>
</table>

| Interested in Forensic Education | 24/33 | 73% |
| Graduate Certificate | 19/33 | 58% |
| DNP Forensic Nursing | 11/33 | 52% |
| PhD Forensic Nursing | 3/33 | 14% |

| TBON old email list | 623 | 193 | 31% |

| Interested in Continuing Education | | |
| 1 to 3 years | 129/193 | 67% |
| 3 to 5 years | 11/193 | 6% |
| 5 to 10 years | 5/193 | 3% |
| Total | 145/193 | 75% |

| Interested in Forensic Education | 128/193 | 66% |
| Graduate Certificate | 76/128 | 59% |
| MSN Forensic Nursing | 93/128 | 73% |

| IAFN Texas Chapter | 291 | 120 | 41% |

| Interested in Continuing Education | | |
| 1 to 3 years | 68/120 | 57% |
| 3 to 5 years | 4/120 | 3% |
| 5 to 10 years | 1/120 | 1% |
| Total | 73/120 | 61% |

| Interested in Forensic Education | 98/120 | 82% |
| Graduate Certificate | 52/98 | 53% |
| MSN Forensic Nursing | 62/98 | 63% |
New Program Request Form for
Bachelor's and Master's Degrees
Page 4

NAPSA

<table>
<thead>
<tr>
<th></th>
<th>900</th>
<th>287 (54% TX)</th>
<th>32%</th>
</tr>
</thead>
</table>

Interested in Continuing Education

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 years</td>
<td>20/287</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>5/287</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>1/287</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26/287</td>
<td>9%</td>
<td></td>
</tr>
</tbody>
</table>

Interested in Forensic Education

Graduate Certificate

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>181/287</td>
<td>63%</td>
<td></td>
</tr>
</tbody>
</table>

IAFN General Membership

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,000</td>
<td>337</td>
<td>11%</td>
</tr>
</tbody>
</table>

Interested in Continuing Education

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 years</td>
<td>184/337</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>18/337</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>4/337</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>206/337</td>
<td>61%</td>
<td></td>
</tr>
</tbody>
</table>

Interested in Forensic Education

Graduate Certificate

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150/337</td>
<td>45%</td>
<td></td>
</tr>
</tbody>
</table>

MSN Forensic Nursing

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>164/337</td>
<td>49%</td>
<td></td>
</tr>
</tbody>
</table>

St. Joseph's Medical Center

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>600</td>
<td>93</td>
<td>16%</td>
</tr>
</tbody>
</table>

Interested in Continuing Education

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 years</td>
<td>47/93</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>8/93</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>1/93</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>56/93</td>
<td>60%</td>
<td></td>
</tr>
</tbody>
</table>

Interested in Forensic Education

Graduate Certificate

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35/58</td>
<td>60%</td>
<td></td>
</tr>
</tbody>
</table>

MSN Forensic Nursing

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40/58</td>
<td>69%</td>
<td></td>
</tr>
</tbody>
</table>

C. Enrollment Projections

Use this table to show the estimated cumulative headcount and full-time student equivalent (FTSE) enrollment for the first five years of the program. *(Include majors only and consider attrition and graduation.)*

Estimated Cumulative Headcount and Full-Time Student Equivalent (FTSE)
Enrollment for the First Five Years of the Proposed Program

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Returning from Previous Yr</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>New Students</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>
II. Quality

A. Degree Requirements – Use this table to show the degree requirements of the program. (Modify the table as needed; if necessary, replicate the table for more than one option.)

For master's degree:

<table>
<thead>
<tr>
<th>Category</th>
<th>Non-thesis SCH</th>
<th>Thesis SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Required Courses (of all students)</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>b. Prescribed Elective</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c. Elective Courses</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>d. Thesis/Dissertation</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>e. Other (specify)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(e.g. internships/clinical practicum, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL SCH REQUIREMENTS</strong></td>
<td><strong>36</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

B. Curriculum

Use these tables to identify the required courses and prescribed electives of the program. Note with an asterisk (*) courses that would be added if the program is approved. (Add and delete rows as needed. If applicable, replicate the tables for different tracks/options.)

<table>
<thead>
<tr>
<th>Prefix and Number</th>
<th>Required Courses</th>
<th>SCH</th>
<th>Semester Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 512</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>NURS 516</td>
<td>Advanced Pharmacology</td>
<td>3</td>
<td>Summer</td>
</tr>
<tr>
<td>NURS 551</td>
<td>Quality Improvement and Health Informatics</td>
<td>3</td>
<td>Summer</td>
</tr>
<tr>
<td>NURS 552</td>
<td>Scholarship Integration and Application</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>NURS 553</td>
<td>Advanced Health Assessment</td>
<td>3</td>
<td>Spring</td>
</tr>
</tbody>
</table>
New Program Request Form for Bachelor's and Master's Degrees
Page 6

<table>
<thead>
<tr>
<th>Prefix and Number</th>
<th>Prescribed Elective Courses</th>
<th>SCH</th>
<th>Semester Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 611*</td>
<td>Application of Clinical Pharmacology to Victims of Violence</td>
<td>1</td>
<td>Summer</td>
</tr>
<tr>
<td>NURS 612*</td>
<td>Human Trafficking</td>
<td>1</td>
<td>Fall</td>
</tr>
<tr>
<td>NURS 613*</td>
<td>Forensic Photography</td>
<td>1</td>
<td>Summer</td>
</tr>
<tr>
<td>NURS 614*</td>
<td>Policy and Ethics of Interpersonal Violence</td>
<td>1</td>
<td>Fall</td>
</tr>
<tr>
<td>NURS 615*</td>
<td>Forensic Mental Health and Capacity of the Vulnerable Adult</td>
<td>1</td>
<td>Fall</td>
</tr>
</tbody>
</table>

C. Faculty

1. Use these tables to provide information about Core and Support faculty. Add an asterisk (*) before the name of the individual who will have direct administrative responsibilities for the program. (Add and delete rows as needed.)

<table>
<thead>
<tr>
<th>Name of Core Faculty and Faculty Rank</th>
<th>Highest Degree and Awarding Institution</th>
<th>Courses Assigned in Program</th>
<th>% Time Assigned to Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Sheridan, Daniel Professor</td>
<td>PhD in Nursing Oregon Health Sciences University</td>
<td>NURS 601, NURS 602, NURS 603, NURS 604, NURS 611, NURS 612, NURS 613, NURS 614, NURS 615</td>
<td>75%</td>
</tr>
<tr>
<td>Downing, Nancy Associate Professor</td>
<td>PhD in Nursing University of Iowa</td>
<td>NURS 512, NURS 601, NURS 602, NURS 603, NURS 604, NURS 611, NURS 612, NURS 613, NURS 614, NURS 615</td>
<td>65%</td>
</tr>
<tr>
<td>Utterback, Virginia Associate</td>
<td>PhD in Curriculum and Instruction</td>
<td>NURS 601, NURS 602, NURS 603, NURS 604, NURS 611, NURS 612</td>
<td>50%</td>
</tr>
<tr>
<td>Professor</td>
<td>Highest Degree and Awarding Institution</td>
<td>Courses Assigned in Program</td>
<td>% Time Assigned To Program</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Gary, Jodie, Assistant Professor</td>
<td>PhD in Nursing University of Texas at Tyler</td>
<td>NURS 552</td>
<td>6%</td>
</tr>
<tr>
<td>Hoffman, Matt Instructor</td>
<td>Doctor of Nursing Practice University of Iowa</td>
<td>NURS 512, NURS 516</td>
<td>5%</td>
</tr>
<tr>
<td>Jones-Schubart, Kara Clinical Assistant Professor</td>
<td>Doctor of Nursing Practice George Washington University</td>
<td>NURS 554</td>
<td>16%</td>
</tr>
<tr>
<td>Kosarek, Jane Clinical Assistant Professor</td>
<td>MSN in Nursing, MBA Texas Woman's University and University of Dallas</td>
<td>NURS 551</td>
<td>5%</td>
</tr>
<tr>
<td>*Matthews, Debra Assistant Professor</td>
<td>PhD in Nursing Washington State University</td>
<td>NURS 508</td>
<td>13%</td>
</tr>
<tr>
<td>Montalvo-Liendo, Nora Assistant Professor</td>
<td>PhD in Nursing University of Texas Health Science Center San Antonio</td>
<td>NURS 556; NURS 553; NURS 554</td>
<td>16%</td>
</tr>
<tr>
<td>Page, Robin Clinical Assistant Professor</td>
<td>PhD in Nursing University of Texas at Austin</td>
<td>NURS 556, NURS 554</td>
<td>7%</td>
</tr>
<tr>
<td>Pittman, Alison Clinical Assistant Professor</td>
<td>MSN in Nursing University of Texas at Austin</td>
<td>NURS 551</td>
<td>5%</td>
</tr>
<tr>
<td>Pullium, Cherrie Clinical Assistant Professor</td>
<td>Master of Science in Nursing Texas Christian University</td>
<td>NURS 553</td>
<td>5%</td>
</tr>
<tr>
<td>Ruiz, Roberta Professor</td>
<td>PhD in Nursing University of Texas Health Science Center at San Antonio</td>
<td>NURS 552, NURS 553, NURS 554</td>
<td>10%</td>
</tr>
<tr>
<td>Weston, Cynthia Assistant Professor</td>
<td>Doctor of Nursing Practice University of Texas Health Science Center at San Antonio</td>
<td>NURS 516</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Support Faculty and Faculty Rank</th>
<th>Highest Degree and Awarding Institution</th>
<th>Courses Assigned in Program</th>
<th>% Time Assigned To Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Gosselin, Kevin Associate Professor</td>
<td>PhD in Educational Psychology Texas Tech University</td>
<td>NURS 552</td>
<td>7%</td>
</tr>
</tbody>
</table>
2. What impact will the new program have on current programs in regards to faculty resources?
   
a. How will the new program possibly impact other departments?  
The CON is not organized by academic departments.
   
b. How will the program impact current teaching assignments in the department?  
The CON currently offers a Master of Science in Nursing in Education and a Master of Science in Nursing – Family Nurse Practitioner programs. These programs would share core courses with the MSN-Forensic program. These courses may require the creation of additional sections, and corresponding faculty lines, to meet increased projected enrollment. The proposed MSN in Forensic Nursing program courses (NURS 600 level) will be taught by three dedicated faculty (1.9 FTE total).

D. Students

As part of our marketing strategy, we have prioritized offering online forensic continuing education to nurses in rural Texas, many of whom are bilingual/bi-cultural Hispanic. This has generated high interest in these nurses enrolling in our proposed online Graduate Certificate in Forensic Healthcare and our proposed online MSN in Forensic Nursing. In addition, we will market our proposed programs through advertisements in publications produced by National Association of Hispanic Nurses and through the National Black Nurses Association.

E. Library

Students enrolled in the TAMHSC CON MSN-FNP program will have full access to all resource and services of the Texas A&M University (TAMU) Medical Sciences Library, as well as to the general education resources that are provided by the General University Library to support undergraduate and graduate level education programs. The TAMU Medical Sciences Library, which delivers discipline-specific library services and resources to the TAMHSC, provides a rich complement of electronic and print materials, in addition to regular and timely assistance and instruction in their use, and library spaces for individual study and group collaboration. The Medical Sciences Library (MSL) has five physical sites: the central administration of the Medical Sciences Library and the University Libraries located in College Station, with specialized on-site collections and services provided at campuses in Bryan, Kingsville, Temple, and Round Rock.

The entire TAMHSC, as part of Texas A&M University, has access to a full complement of information resources and library services from the Texas A&M University Libraries (TAMUL), with MSL serving as the anchor and primary library. As of the 2014/2015 reporting cycle (09/01/2014 through 08/31/2015), the TAMUL--which includes the MSL--provides access to over 5.4 million volumes. This total volume count is made up of 3.8 million print resources, 1.6 million electronic books and a total of 4.2 million unique titles. The TAMUL provides access to 135,000 serials titles. Of this total, 127,000 are available in electronic format, roughly 94% of the Libraries’ serials collection. In addition, the TAMUL provides access to 2,300 databases. The large inventory of electronic serials and databases enables users to access information resources 24/7.

The TAMU University Libraries is projected to be ranked, for the 2014/2015 cycle, 13th among the Association of Research Libraries’ (ARL) 115 research libraries and 6th among ARL’s U.S. Public University Libraries. Further, among ARL U.S. Public University Libraries, the TAMUL ranks first in both information resource and ongoing information resource
expenditures. A full 57% of total funds expended by the libraries go toward information resources, compared to the University’s Vision 2020 Peers’ average of 40%.

With a primary emphasis on electronic resources, the MSL reported to ARL in 2015 more than 122,000 electronic searches, 251,000 successful full-text electronic journal requests and 30,000 successful full-text electronic book requests. In addition to these resources, the MSL partners with numerous state and regional consortia to bring a wider range of resources to our users. These collaborations include the Texas Digital Library (TDL), the South Central Academic Medical Libraries (SCAMeL) Consortium and the TAMHSC Alliance of Libraries. Since the majority of the TAMHSC faculty, students, and staff use the library virtually, over 86% of MSL’s collections budget was spent on electronic resources in FY2014-2015. In that same period MSL spent 89.7% of its collections budget for resources to support HSC professional programs and biomedical research. MSL subscribes to many resources of particular importance to nursing and education: thousands of electronic journals and books; EBSCO CINAHL Plus with Full Text, the premiere nursing bibliographic database; multiple versions of MEDLINE; the Cochrane Library of Systematic Reviews; Nursing Reference Center evidence-based nursing resource; the Joanna Briggs Institute Evidence Based Practice database; ERIC, the education database; PSYChInfo; and Sociological Abstracts, just to name a few. All required and recommended textbooks are available either electronically or in print. Faculty and staff can suggest the purchase of a resource on the MSL web site, through email, or by phone call; MSL librarians evaluate the request and purchase any item in scope, sending notification to the requestor.

The University Libraries had expanded its resources in support of a relatively new university program in forensic science. It relies on a fairly diverse span of literature, but the FORENSICnetBASE ebook database (http://www.crcnetbase.com/page/forensic_ebooks) has proven well-suited to this program and is our predominant collection-grower (outside of serials) for forensics at the moment. We anticipate this will be an important foundational resource for the forensic nursing program. The Medical Sciences Library has also contracted with e-book vendors to include bibliographic records for in scope resources into the library online catalog. Students and faculty have full access to these resources and purchase them directly for our collections through use of them online. This eliminates any delay in access to needed resources.

To meet the needs of the distributed Health Science Center campuses, the Medical Sciences Library provides 24-hour access to online resources, plus access to services beyond the hours when physical facilities are open and staffed. All electronic resources are available whenever and wherever the resources are needed by means of a proxy server and authentication service. MSL offers a free and extremely well-regarded document delivery and interlibrary loan service to faculty, students and staff, Get It For Me, which provides prompt electronic access to virtually any needed resource not owned or held electronically by the Library.

The designated MSL librarian liaison to the CON is located at the TAMHSC Round Rock Campus. Having completed two master’s degrees and a fellowship at the Centers for Disease Control and Prevention (CDC), she has twenty years of health sciences library experience, and works closely with the faculty, staff, and students. A tenured associate professor, she teaches students and faculty evidence-based methods of literature searching and critical appraisal of journal articles, she gives basic library orientations to incoming CON classes and to faculty, and she consults with individuals and small groups in person and online, traveling to the Bryan campus as needed for classroom instruction and student/faculty meetings. She is available to collaborate with the faculty in further developing the library curriculum and the collection to meet the demands of the FNP program. The CON is further supported by an on-site faculty librarian, who also works closely with the faculty, students,
and staff to provide literature searching assistance and to plan and implement key services. A full-time staff person is located in the MSL site at the Bryan campus, and is available to help students and faculty with their assignment and research needs. MSL is currently working with the TAMHSC and CON to determine priorities, manage any significant start-up costs to support a new program, and ensure that essential resources are provided.

E. Facilities and Equipment

The proposed MSN in Forensic Nursing will be taught primarily online, thus there will be no need to access traditional classrooms, build or modify additional facilities, or purchase specialized equipment located on any A&M campus. There is one course in the MSN program of study that will require students to be temporarily on campus to use our existing simulation center facilities and simulated patients. However, this is the same course in which our current MSN in Education and our MSN Family Nurse Practitioners are enrolled.

The online courses will use video demonstrations of a variety of forensic science equipment. The videos will be created using existing meeting room and audio-visual space in the CON. The specialized equipment has already been purchased through funding appropriated to the CON from the Texas legislatures. See below:

**Equipment Purchased by the CON for Forensic Training and Research**

The following equipment has been purchased with the legislative monies for teaching purposes:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Cost/Price</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>HandScope Xenon HSX-5000</td>
<td>$9,995.00/2</td>
<td>2</td>
</tr>
<tr>
<td>Illumacam Forensic Light and Imaging system</td>
<td>$4,950.00/2</td>
<td>2</td>
</tr>
<tr>
<td>Canon EOS Rebel T5 DSLR Camera with Deluxe Accessory Kit</td>
<td>$1,199.85</td>
<td>2</td>
</tr>
<tr>
<td>Canon XA20 Professional Camcorder + Green’s Camera Bundle</td>
<td>$2,149.00</td>
<td>n/a</td>
</tr>
<tr>
<td>Professional camcorder video camera microphone kit</td>
<td>$99.00</td>
<td>n/a</td>
</tr>
</tbody>
</table>

F. IT Resources

IT resources will be needed outside of those currently allocated for Master’s programs include replacement costs for existing computers and printers.

G. Supplies and Materials

Supplies and materials include expenses related to general office administration, recruitment and course development.

H. Accreditation
The current graduate nursing programs are fully accredited by the Commission on Collegiate Nursing Education (CCNE), the American Association of Colleges of Nursing's (AACN) accrediting arm and the Texas Board of Nurses (TBON). The proposed graduate program has been developed in accordance with AACN standards, *The Essentials of Master's Education in Nursing* (2011). CCNE will be notified of the addition of a graduate program once approval is obtained. All standards will be maintained.

Students completing the proposed MSN in Forensic Nursing would be eligible to submit a portfolio to the International Association of Forensic Nurses (IAFN) to become credentialed as Advanced Forensic Nursing (AFN-BC) via the American Nurses Credentialing Center. The earned portfolio credential signifies that the recipient has achieved the highest standard of advanced forensic nursing. Certification through portfolio is an alternative assessment method for recognizing individual registered nurses in their specialty area; nurses document their skills, knowledge, abilities, and career accomplishments. Certification through portfolio requires equivalent rigor to meet accrediting bodies' criteria to determine proficiency through a peer-review process that is informed by nurse experts.

I. Evaluation

TAMU and the Health Science Center have ongoing institution-wide strategic planning and institutional effectiveness assessment processes that incorporate systematic review of the institutional goals and desired outcomes, as well as continuous efforts to improve institutional quality in support of its mission. Institutional data such as enrollment statistics, financial expenditures, student performance, etc. are collected during the fall and early spring of each academic year as a part of this assessment process. In addition, relevant data are gathered on a quarterly basis specifically identified in the institution's strategic plan as assessment measures and performance targets for any given objective. Annually, all data are used in a variety of planning activities (e.g., budget development and capital planning) and an annual institution-wide programmatic review.

Strategic Plan: Goal 1 of the Health Science Center strategic plan (aligning with TAMU Strategic Plan), focuses on excellence in academics with the first objective (1.1) specifically calling for efforts to "promote an optimal student learning environment." Identified strategies to achieve this objective include providing necessary infrastructure to effectively support innovative instruction and expanding the College of Nursing with graduate programs. The infrastructure changes outlined here reflect institutional efforts undertaken to address identified needs to increase the capacity of existing programs while ensuring continued quality.

Additional systematic assessments will be developed and implemented in order to monitor services and operations present with the Master's program. For example, the Office of Information Technology conducts an annual customer satisfaction survey, completed by faculty and staff from across the Health Science Center, to evaluate IT support services. These data are examined both holistically as well as geographically in order to assure IT services and support are sufficient and comparable regardless of location and to assure our IT infrastructure is contributing to, rather than hindering, the delivery of a quality online educational experience.

Programmatic review for the College of Nursing is a dynamic, ongoing assessment. Professional standards (AACN Essentials of Master's Education in Nursing [2011] and American Nurses Association [ANA]) Forensic Nursing: Scope and Standards of Practice [2009]) guide faculty members in conducting course and program assessment, in making revision recommendations and in planning student experiences. Faculty members bring
suggested changes to the curriculum and evaluation committees. Recommendations from these committees are taken to the entire faculty for votes on implementation. All faculty members will have the same opportunity to participate on committees, especially the curriculum and evaluation committees.

The Total Program Evaluation Plan (TPEP) provides a systematic, comprehensive and continuous approach based on CCNE Standards for Accreditation of Baccalaureate and Graduate Nursing Programs (2013) for assessing all program components and related outcome indicators. The TPEP provides a timeline for data collection, data synthesis, decision-making, implementation and required actions. An evaluation of all MSN in Forensic Nursing processes will occur to assess outcomes attainment based on CCNE Standards.

Data collected from end-of-program summative projects/presentations, examinations, simulations, as well as survey results from students, alumni, and potential employers will be used to evaluate the mission, goals, and expected program outcomes. Reviews and revisions are influenced by these results and the HSC-College of Nursing Advisory Board; and information-sharing at the Texas Organization for Baccalaureate and Graduate Education (TOBGE), the Texas Association of Deans and Directors of Professional Nursing Schools (TADDPNP), and AACN meetings.

III. Costs and Funding

Five-Year Costs and Funding Sources

<table>
<thead>
<tr>
<th>Five-Year Costs</th>
<th>Five-Year Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel$^1$</td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>$1,094,201</td>
</tr>
<tr>
<td>Administration</td>
<td>$512,753</td>
</tr>
<tr>
<td>Graduate Assistants</td>
<td>$0</td>
</tr>
<tr>
<td>Clerical/Staff</td>
<td>$276,153</td>
</tr>
<tr>
<td>Other Personnel</td>
<td>$0</td>
</tr>
<tr>
<td>Facilities</td>
<td>$0</td>
</tr>
<tr>
<td>Equipment</td>
<td>$0</td>
</tr>
<tr>
<td>IT Resources</td>
<td>$8,470</td>
</tr>
<tr>
<td>Supplies and Materials</td>
<td>$14,928</td>
</tr>
<tr>
<td>Library$^2$</td>
<td>$0</td>
</tr>
<tr>
<td>Other$^3$</td>
<td>$83,246</td>
</tr>
<tr>
<td>Total Costs</td>
<td>$1,989,751</td>
</tr>
</tbody>
</table>

1. Personnel cost included benefits, staff and replacement of the percentage of effort for existing faculty reallocated to courses in the MSN Forensic program.

2. Library costs will not increase with additional students due to a flat rate.

---

1 Please use the "Program Funding Estimation Tool" found on the CB website to correctly estimate state funding.
3. Other costs totaling $83,246 include $14,150 for travel, $5,400 for telecommunications, $11,196 for faculty development, and $52,500 for recruitment expenses.

4. Formula funding for year three is calculated with a Spring start date in an odd year (FY2019). The base period for FY18-19 is the FTSE for Summer 2016, Fall 2016, and Spring 2017. Due to a Spring 2017 start date, the formula funding is included at S FTSE for 3rd year (FY19).

5. Special item funding provided to TAMHSC College of Nursing for the development of forensic nursing FY16 & FY17.
<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Cost Sub-Category</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Salaries</td>
<td>(New)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Reallocated)</td>
<td>$121,630</td>
<td>$207,187</td>
<td>$247,636</td>
<td>$255,054</td>
<td>$262,694</td>
<td>$1,094,201</td>
</tr>
<tr>
<td>Program Administration</td>
<td>(New)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Reassignments)</td>
<td>$96,581</td>
<td>$99,477</td>
<td>$102,461</td>
<td>$105,534</td>
<td>$108,700</td>
<td>$512,753</td>
</tr>
<tr>
<td>Graduate Assistants</td>
<td>(New)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Reallocated)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical/Staff</td>
<td>(New)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Reallocated)</td>
<td>$52,015</td>
<td>$53,575</td>
<td>$55,183</td>
<td>$56,838</td>
<td>$58,542</td>
<td>$276,153</td>
</tr>
<tr>
<td>Supplies &amp; Materials</td>
<td></td>
<td>$2,368</td>
<td>$2,960</td>
<td>$3,200</td>
<td>$3,200</td>
<td>$3,200</td>
<td>$14,928</td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$8,470</td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Identify)</td>
<td></td>
<td>$16,186</td>
<td>$16,630</td>
<td>$16,810</td>
<td>$16,810</td>
<td>$16,810</td>
<td>$83,246</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td>$288,780</td>
<td>$379,829</td>
<td>$428,120</td>
<td>$440,256</td>
<td>$452,766</td>
<td>$1,989,751</td>
</tr>
</tbody>
</table>
**ANTICIPATED SOURCES OF FUNDING**

*Note: Use this chart to indicate the dollar amounts anticipated from various sources to cover any and all new costs to the institution as a result of the proposed doctoral program. Use the Non-Formula Sources of Funding form to specify as completely as possible each non-general revenue source.*

<table>
<thead>
<tr>
<th>Funding Category</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Formula Income*</td>
<td></td>
<td></td>
<td>$55,927</td>
<td>$335,562</td>
<td>$335,562</td>
<td>$727,051</td>
</tr>
<tr>
<td>II. Other State Funding</td>
<td></td>
<td>$288,780</td>
<td></td>
<td></td>
<td></td>
<td>$288,780</td>
</tr>
<tr>
<td>III. Reallocation of Existing Resources</td>
<td></td>
<td>$250,000</td>
<td>$250,000</td>
<td></td>
<td></td>
<td>$500,000</td>
</tr>
<tr>
<td>IV. Federal Funding (In-hand only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. Other Funding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statutory Tuition</td>
<td>$12,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$132,000</td>
</tr>
<tr>
<td>Designated Tuition</td>
<td>$24,960</td>
<td>$62,400</td>
<td>$62,400</td>
<td>$62,400</td>
<td>$62,400</td>
<td>$274,560</td>
</tr>
<tr>
<td>Graduate Tuition</td>
<td>$24,000</td>
<td>$60,000</td>
<td>$60,000</td>
<td>$60,000</td>
<td>$60,000</td>
<td>$264,000</td>
</tr>
<tr>
<td>Course fees</td>
<td>$4,600</td>
<td>$8,800</td>
<td>$8,800</td>
<td>$8,800</td>
<td>$8,800</td>
<td>$39,800</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>$354,340</td>
<td>$411,200</td>
<td>$467,127</td>
<td>$496,762</td>
<td>$496,762</td>
<td>$2,226,191</td>
</tr>
</tbody>
</table>

*Please use the Formula Funding Calculation Tool on the Coordinating Board web site to estimate income from the State. See also the Guidelines for Institutions Submitting Proposals for New Doctoral Programs document found on the Coordinating Board web site for additional information.*
**NON-FORMULA SOURCES OF FUNDING**

*Note:* Use this form to specify as completely as possible each of the non-formula funding sources for the dollar amounts listed on the Anticipated Sources of Funding form.

<table>
<thead>
<tr>
<th>Funding Category</th>
<th>Non-Formula Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Other State Funding*</td>
<td>#1 Special item funding provided to TAMHSC College of Nursing for the development of forensic nursing FY16 &amp; FY17</td>
</tr>
<tr>
<td></td>
<td>#2</td>
</tr>
<tr>
<td>III. Reallocation of Existing Resources*</td>
<td>#1 TAMHSC will provide startup funding for new program during years two and three.</td>
</tr>
<tr>
<td></td>
<td>#2</td>
</tr>
<tr>
<td>IV. Federal Funding*</td>
<td>#1</td>
</tr>
<tr>
<td></td>
<td>#2</td>
</tr>
</tbody>
</table>
| V. Other Funding | #1 Statutory Tuition $50.00 per SCH  
Designated Tuition $104.00 per SCH  
Graduate Tuition $100 per SCH  
Course Fees Range from $40 to $150 per course  
Please indicate the $ amount per SCH for each item.  
#2 Other |
Explanations: ANTICIPATED SOURCES OF FUNDING: EXPLANATORY NOTES AND EXAMPLES

I. Formula Income
   A. The first two years of any new program should not draw upon formula income to pay for the program.
   B. For each of Years 3 through 5, enter the smaller of:
      1. the new formula income you estimate the program would generate, based on projected enrollments and formula funding rates; or
      2. half of the estimated program cost for that year.
   C. Because enrollments are uncertain and programs need institutional support during their start-up phase, it is the Coordinating Board's policy to require institutions to demonstrate that they can provide:
      1. sufficient funds to support all the costs of the proposed program for the first two years (when no new formula funding will be generated); and
      2. half of the costs of the new program during years three through five.
   D. When estimating new formula income, institutions should take into account the fact that students switching programs do not generate additional formula funding to the institution. For example, if a new master's program has ten students, but five of them switched into the program from existing master's programs at the institution, only five of the students will generate new formula income to help defray the costs of the program.

II. Other State Funding
   This category could include special item funding appropriated by the legislature, or other sources of funding from the state that do not include formula-generated funds (e.g., HEAF, PUF, etc.).

III. Reallocation of Existing Resources:
   If faculty in existing, previously budgeted positions is to be partially or wholly reallocated to the new program, you should explain in the text of your proposal how the institution will fulfill the current teaching obligations of those faculty and include any faculty replacement costs as program costs in the budget.

IV. Federal Funding
   Only federal monies from grants or other sources currently in hand may be included. Do not include federal funding sought but not secured. If anticipated federal funding is obtained, at that time it can be substituted for funds designated in other funding categories. Make note within the text of the proposal of any anticipated federal funding.

V. Other Funding
   This category could include Auxiliary Enterprises, special endowment income, or other extramural funding.
May 23, 2016

MEMORANDUM

TO: Karan L. Watson
    Provost and Executive Vice President

THROUGH: Karen L. Butler-Purry
    Associate Provost, Office of Graduate and Professional Studies

SUBJECT: Request for a Waiver for GRE scores for Texas A&M Degree Holders in Engineering

Recruitment and retention of domestic graduate students remains a challenge for the College of Engineering. I respectfully request that the GRE score requirement for Texas A&M engineering graduates be waived as an admission requirement to the graduate school. Such an accommodation will definitely help the college recruit and retain Texas A&M students to our graduate program.

I thank you in advance for your consideration.

M. Katherine Banks, Ph.D., P.E.
Vice Chancellor and Dean of Engineering
Director, Texas A&M Engineering Experiment Station
Harold J. Haynes Dean’s Chair Professor

c: Engineering Associate Deans
Informational Items
New Courses

EMED 810. Longitudinal Bedside Ultrasound. Credit 1 to 15. Bedside ultrasound described as the new stethoscope and a core clinical skill in numerous specialties; augment understanding of anatomy, physiology and pathology by learning introductory bedside ultrasound skills in a longitudinal fashion during the third and fourth years of medical school. Prerequisite: Admission to medical school.

IMED 919. Adult Allergy and Immunology. Credit 1 to 15. A two- or four-week elective in allergy and immunology; managing common adult and pediatric allergy and immunology ambulatory illness; introduction to uncommon allergic diseases and broader aspects of adult and pediatric care as it relates to the care of patient with chronic allergic conditions; encourages development of skills in carefully evaluating patients with allergic or immunological problems; introduction to an ambulatory health care system dealing with patients who have chronic illnesses and require chronic management. Prerequisite: Admission to medical school.

MEID 810. Connecting and Communicating with Patients and Peers. Credit 1 to 15. Exposure to verbal and nonverbal communication techniques that facilitate greater connection with patients and their families; includes establishing a relationship, gathering information through patient-interviews, transmitting information effectively, negotiating treatment, explaining mistakes, negotiating and resolving conflict and closing sessions without making patients feel rushed or dismissed; underpinnings of an effective doctor-patient relationship, namely a genuine understanding of patient experience which encompasses end-of-life concerns, concerns about aging and body image and fears about medical procedures and chronic illness; building effective communication with colleagues. Prerequisite: Admission to medical school.

MEID 811. Medicine in the Wild. Credit 1 to 15. Learn and practice wilderness medicine on an extended wilderness expedition in the Gila Wilderness of New Mexico; includes National Outdoor Leadership School (NOLS) core curriculum and Wilderness Medicine Institute (WMI) wilderness medicine curriculum. Prerequisite: Admission to medical school.

MHUM 815. Essentials of Leadership. Credit 1 to 15. Four-week elective; familiarization with the basics of leadership and its application in the field of medicine; focus on improving interpersonal communication/teamwork, understanding the business of medicine and expanding knowledge of systems-based care and advocacy. Prerequisite: Admission to medical school.

SURG 658. General Surgery. Credit 1 to 15. Integration into the service as a member of the surgical team; participation in all aspects of patient management as both inpatient and outpatient; completion of at least 40 hours per week on the service; participation in night call required; housing not provided. Prerequisite: Admission to medical school.
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 □ Graduate ☑ First Professional (D.O., M.D., J.D., PharmD, D.V.M.)

2. Request submitted by (Department or Program Name): Select or Type Department/Program Name

3. Course prefix, number and complete title of course: EMED 810 Longitudinal Bedside Ultrasound

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

   Bedside ultrasound has been described as the "new stethoscope" and has become a core clinical skill in numerous specialties. Students will augment their understanding of anatomy, physiology, and pathology by learning introductory bedside ultrasound skills in a longitudinal fashion during their third and fourth years of medical school.

5. Prerequisite(s):

   Admission to medical school.

   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)

   MD

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: EMED 810

   Course #: Title (excluding punctuation)
   Longitudinal Bedside Ultrasound

   Lect. Lab Other SCH CIP and Fund Code Admin Unit Acad Year FIC Code
   0.00 0.00 24.00 15.00 51201 0014 1935 15-18 0 0 3 6 3 2

   Approval recommended by:

   Chair, College Review Committee

   Dean of College

   Submitted to Coordinating Board by:

   Chair, GC or JCC

   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: EMED 810-00R  Longitudinal Bedside Ultrasound Elective
Term: AY 2016-2017
Meeting times and location: TX A&M HSC, Round Rock campus

Course Description and Prerequisites

Bedside ultrasound has been described as the “new stethoscope” and has become a core clinical skill in numerous specialties. Students will augment their understanding of anatomy, physiology, and pathology by learning introductory bedside ultrasound skills in a longitudinal fashion during their third and fourth years of medical school.

Prerequisite: Admission to medical school. Entering third year medical students must complete specified number of online modules and ultrasound simulator modules during their third year. Remaining modules, simulator training, and live scanning will occur during students’ fourth year.

This elective is only open through a lottery to a limited number of incoming third year students at the Round Rock campus.

Instructor Information

Elective Director
Name: Roque Ruggero, MD, FAAEM
Telephone number: 512-573-3969
Email address: argenroque@gmail.com
Office hours: By appointment
Office location: Round Rock Campus

Coordinator
Name: Katy Thaler
Telephone number: 512-341-4994
Email address: thaler@medicine.tamhsc.edu
Office hours: 8 am-5 pm
Office location: Round Rock Campus

Key Faculty: Dr. Steven Jennings, MD, RDMS and other A&M faculty as opportunities present

Learning Outcomes & Objectives

Students will develop medical student level competency in basic focused bedside ultrasound use to enhance their understanding of human anatomy, physiology, and pathology and prepare them for residency level bedside ultrasound instruction. Upon completion of this longitudinal bedside ultrasound elective, students will be able to describe the basic physics of ultrasound, understand instrumentation of the ultrasound machine (“knobology”) and probe selection, and perform basic scanning techniques for specific bedside ultrasound exams and basic approach to 3 procedures (ultrasound guided peripheral IV insertion, ultrasound guided central line placement, and soft tissue foreign body removal; only ultrasound guided peripheral IV placement will be required). Students will be able to describe appropriate indications and limitations of bedside ultrasound and describe when formal ultrasound evaluation within the department of radiology is indicated.

After the initial introductory instruction on bedside ultrasound use, the longitudinal course content does not have to be delivered in a serial fashion; rather, students will be encouraged to complete bedside ultrasound content that complements each different clerkship rotation, eg eFAST during general surgery rotation. In this regard, this elective will help augment their learning in specific third year clerkships.
## Course Objective:

**Describe the differences between focused bedside ultrasound exams vs. formal diagnostic ultrasound imaging through department of radiology.**

MK2, MK4, PC3, PC5, PC14, ICS4, PROF3, PROF6, PBL11, PBL15

T, E

Tracking of module and ultrasound simulator progress and scores.

Bedside observation by attending during live scans.

<table>
<thead>
<tr>
<th>COM Competency Based Learning Objectives (CBLO):</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK2, MK4, PC3, PC5, PC14, ICS4, PROF3, PROF6, PBL11, PBL15</td>
<td>T, E</td>
<td>Tracking of module and ultrasound simulator progress and scores. Bedside observation by attending during live scans.</td>
</tr>
</tbody>
</table>

## Course Objective:

**Understand the limitations of focused bedside ultrasound exams vs. formal diagnostic ultrasound imaging through department of radiology.**

MK2, MK4, PC3, PC5, PC14, ICS4, PROF3, PROF6, PBL11, PBL15

T, E

Tracking of module and ultrasound simulator progress and scores.

Bedside observation by attending during live scans.

<table>
<thead>
<tr>
<th>COM Competency Based Learning Objectives (CBLO):</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK2, MK4, PC3, PC5, PC14, ICS4, PROF3, PROF6, PBL11, PBL15</td>
<td>T, E</td>
<td>Tracking of module and ultrasound simulator progress and scores. Bedside observation by attending during live scans.</td>
</tr>
</tbody>
</table>

## Course Objective:

**Understand and communicate to patients the limitations of bedside ultrasound.**

PROF3, PBL15, ICS2, ICS3

T, E

Observation by attending of interactions with patients.

Clinical evaluation by attending after each shift.

<table>
<thead>
<tr>
<th>COM Competency Based Learning Objectives (CBLO):</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF3, PBL15, ICS2, ICS3</td>
<td>T, E</td>
<td>Observation by attending of interactions with patients. Clinical evaluation by attending after each shift.</td>
</tr>
</tbody>
</table>

## Course Objective:

**Demonstrate awareness and sensitivity to patient privacy during acquisition of bedside ultrasound images.**

PROF2, PROF4, PROF5, PROF12, CC2

T, E

Observation by attending of interactions with patients.

<table>
<thead>
<tr>
<th>COM Competency Based Learning Objectives (CBLO):</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF2, PROF4, PROF5, PROF12, CC2</td>
<td>T, E</td>
<td>Observation by attending of interactions with patients.</td>
</tr>
<tr>
<td>Task</td>
<td>Demonstrators</td>
<td>Evaluation Method</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Demonstrate competence in basic use of ultrasound machine including knobology, proper probe selection, and how to optimize image acquisition for given studies.</td>
<td>MK1, MK2, MK4, PC2, PROF1, PBLI3, PBLI4</td>
<td>Tracking of module and ultrasound simulator progress and scores. Bedside observation by attending during live scans.</td>
</tr>
<tr>
<td>Demonstrate knowledge of relevant anatomy for bedside ultrasound.</td>
<td>T, E</td>
<td>T, E</td>
</tr>
<tr>
<td>Describe types of ultrasound artifacts and their role in image acquisition.</td>
<td>MK1, MK4, PC4, PC5PBLI1</td>
<td>T, E</td>
</tr>
<tr>
<td>Demonstrate ability to perform ultrasound guided peripheral IV insertion with phantom models in the CLRC.</td>
<td>PBLI, PC5, PC6, PC7, PC9</td>
<td>T, E</td>
</tr>
</tbody>
</table>

Date Created/Revised: 5/26/2015  rev 4/26/2016 By: R. Ruggero, MD
### Aorta/IVC Module
1. Define the method of sonographic aortic evaluation and to identify abdominal aortic aneurysms in the emergency department.
2. Define the method of ultrasound evaluation of the IVC size and respirophasic variation and how it correlates to volume status and CVP.
3. Define the method of sonographic aortic evaluation and to identify AAA.

| Tracking of module and ultrasound simulator progress and scores. Bedside observation by attending during live scans. |
|---|---|---|
| MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15 | T, E | MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15 | T, E |

### Cardiology
1. Define the basic principles and artifacts of point-of-care cardiac ultrasound imaging and how to optimize image acquisition.
2. Define the ultrasound findings used to identify a pericardial effusion and determine its size.
3. Define the basic findings, which indicate right heart strain and methods for determining if effects of a pulmonary embolism are likely being seen.

| Tracking of module and ultrasound simulator progress and scores. Bedside observation by attending during live scans. |
|---|---|---|
| MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15 | T, E | MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15 | T, E |

### eFAST
1. Describe and demonstrate ability to acquire the 4 standard FAST exam views (RUQ, LUQ, suprapubic and subxiphoid) in addition to the two additional chest views for detection of pneumothoraces.

| Tracking of module and ultrasound simulator progress and scores. Bedside observation by attending during live scans. |
|---|---|---|
| MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15 | T, E | MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15 | T, E |

### Intestinal Biliary
1. Define the approach, method, and interpretation of focused biliary ultrasound for detection of cholelithiasis and complicating pathology.
2. Define the method of evaluating and interpreting ultrasound imaging

<table>
<thead>
<tr>
<th>Tracking of module and ultrasound simulator progress and scores. Bedside</th>
<th>---</th>
<th>---</th>
<th>---</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15</td>
<td>T, E</td>
<td>MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBL11, PBL12, PNLI3, PBL14, PBL15</td>
<td>T, E</td>
</tr>
<tr>
<td>Section</td>
<td>Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Female Pelvis AP | 1. Correlate traditional illustrative anatomy of the female pelvis with sonographic anatomy to identify and interpret ultrasound-derived imagery.  
2. Identify and characterize the macroscopic and regional anatomical components of the female pelvis via ultrasound.  
3. Define the unique sonographic characteristics of the female pelvis. |
| Pulmonary | 1. Define the basic principles of transducer selection and setting optimization required for lung ultrasound use to evaluate patients.  
2. Define the basic principles of ultrasound image findings and technique to rule out the presence of a pneumothorax.  
3. Define the basic principles of ultrasound image findings used to diagnose pneumonia. |
| Rapid Ultrasound in Shock | 1. Define the methodical approach for using ultrasound to evaluate sources of undifferentiated shock.  
2. Recognize how to screen for acute heart strain and lower extremity venous thrombus using ultrasound to assist in decision-making regarding the use of medical thrombolysis.  
3. Identify and interpret IVC size and collapsibility as a method to assess patient volume status. |
Intro to MSK Anatomy and Physiology
1. Correlate traditional illustrative anatomy of the musculoskeletal system with sonographic anatomy to identify and interpret ultrasound-derived imagery.
2. Identify and characterize the macroscopic and regional anatomical components of the musculoskeletal system via ultrasound.
3. Define the unique sonographic characteristics of the musculoskeletal system.

| MK1, MK4, PC1, PC2, PC3, PC4, PC6, PC7, PC14, ICS2, PROF4, PROF5, PBLI1, PBLI2, PNLI3, PBLI4, PBLI5 | T, E |

Tracking of module and ultrasound simulator progress and scores. Bedside observation by attending during live scans.

Textbook and/or Resource Material
Each student will be assigned a unique username and password to access the SonoSim online modules and use the SonoSim simulator. Progress and exams will be monitored through online tracking system by elective coordinator and director.

Additional online resources include the following:
http://www.emergencyultrasoundteaching.com/narrated_lectures.html
http://www.sonoguide.com/introduction.html
https://vimeo.com/aeus/videos

Grading Policies
This longitudinal bedside ultrasound elective will be Pass/Fail.

In order to pass this elective, the following will be required from students:
1. completion of 13 online modules - score 100% on the interspersed questions and 75% or greater on the mastery exam for each module (opportunity for retakes)
2. completion of ultrasound simulator training
3. for each specific module, demonstration of ability to obtain pertinent views for each focused exam on live subjects (student volunteers, standardized patients, and/or patients on clinical rotations) under direct observation by faculty
4. Documentation in One45 of additional ultrasound studies performed on humans (at least 3 per module topic)
5. demonstration of ability to use ultrasound in specific procedures, ie ultrasound guided peripheral IV insertion using phantom model or on actual patients under faculty supervision

This course is pass/fail.

Attendance and Make-up Policies
This longitudinal elective allows students to complete the 13 online modules, the required ultrasound simulator cases (located on the third floor), and scheduled live scanning with faculty to confirm basic medical student level competency in the various ultrasound procedures over two years. During the last 6 months of the final year, dates for faculty review with students will be fixed so students are encouraged to complete these reviews early for greater flexibility with dates.

Below is a suggestion of modules that may complement specific clerkships after all student’s first complete

Date Created/Revised: 5/26/2015 rev 4/26/2016 By: R. Ruggero, MD
Fundamentals of Ultrasound module.

Suggested modules to complete during third year:

- Fundamentals of Ultrasound 3 hours
- Aorta/IVC Module 3 hours- IM, FM, GS, EM
- Cardiology 4 hours – IM, Peds, EM, CC
- eFAST 3 hours – GS, EM, CC
- Intestinal Biliary 3 hours- IM, GS, EM
- Female Pelvis AP 2.5 hours – FM, OB.Gyn, EM
- Early OB Gyn 3 hours- FM, OB/Gyn, EM
- Late OB Gyn 3 hours - FM, OB/Gyn, EM

Suggested modules to complete during fourth year:

Intro to MSK Anatomy and Physiology 2 hours– FM, Peds, EM
Advanced Cardiology I 3 hours- IM, FM, EM, CC
Pulmonary 4 hours - IM, FM, EM, CC
Rapid Ultrasound in Shock 4 hours – GS, EM, CC
Renal Module 4 hours - IM, FM, GS, EM, CC

Students will schedule independent time to complete the associated ultrasound simulations using the SonoSim simulator.

During third year, students will have opportunity to meet every 6 weeks with the course director from 1 pm-5 pm for live ultrasound scanning on standardized patients. Additionally, students will be expected to perform ultrasound exams when an ultrasound machine is available during their clinical rotations.

During fourth year of medical school, students will meet in groups of 6 with course director in a clinical setting such as the emergency department and review all pertinent bedside ultrasound exams by scanning live patients (a grading rubric will be used for confirmation of introductory based competence for each ultrasound exam).

Students will schedule time with assigned faculty to demonstrate basic medical student level competency scanning live patients with information learned from the online modules and through use of the ultrasound simulator in the CLRC. Students and faculty will mutually agree on time/dates. However, during last 6 months, only specific scheduled dates/times as per faculty availability will be offered.

http://student-rules.tamu.edu/rule07

Course Topics, Calendar of Activities, Major Assignment Dates

Expectation is that minimum of 6 modules and related ultrasound simulator cases are completed by the end of the third academic year (M3). The remaining modules must be completed by the end of their fourth academic year (M4). Dates will be arranged with clerkship director for live scanning of student models, SP models, or patient volunteers. All dates are subject to change. Clinical experience embedded throughout 4th Year electives per student

Other Pertinent Course Information

Materials can be accessed on Blackboard. Ultrasound simulator is available for student use on the third floor 24 hours/day, 7 days/week with badge access. A bedside ultrasound machine is available for student practice in the CLRC Monday- Friday during business hours when not otherwise reserved by faculty.
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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. 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.”

College of Medicine

Professionalism and Integrity Statement (Academic Honesty and Plagiarism)

All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component’s Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an “F”/Unsatisfactory in the course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf.

According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one’s own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website; http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions.

E-mail Access and FERPA

The College of Medicine is communicating all official information to students through the students’ TAMHSC e-mail accounts. Please check the account frequently during the semester for updates. This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU’s Office of the Registrar at 979-845-1031.

The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.
Mistreatment of Students

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at http://medicine.tamhsc.edu/current/student-mistreatment-form.html. For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

Exposure and Occupational Hazard

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf

Note: More information is available on the aforementioned topics to all students on the College of Medicine website.
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 (DVM, MD, JD, PharmD, D.Y.A)
2. Request submitted by (Department or Program Name):
   Select or Type Department/Program Name
   IMED 919 - Adult Allergy and Immunology
3. Course prefix, number and complete title of course:

4. Catalog course description (not to exceed 50 words):
   A two or four week Elective in allergy & immunology that will provide experience in - managing common adult and pediatric allergy and immunology ambulatory illness. It will introduce student to uncommon allergic diseases and illustrate broader aspects of adult and pediatric care, as it relates to the care of patient with chronic allergic conditions.
   The elective will encourage student to develop skills in carefully evaluating patient with allergic or immunological problems, and introduce them to an ambulatory health care system dealing with patients who have chronic illnesses and require chronic management.

5. Prerequisite(s):
   Admission to medical school.
   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 __1__ to __15__
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. MD

13. Prefix  Course #  Title (excluding punctuation)
   IMED  919  Adult Allergy and Immunology

   Lecl.  Lab  Other  SCH  COP Fund Code  Admin. Unit  Acad. Year  FICE Code
   0.00  0.00  24.00  15.00  512010014  1935  15  16  0  0  3  6  3  2

   Approval recommended by:
   Regina Bentley, EdD, RN, ON
   Department Head or Program Chair
   Date
   Diane Chico, PhD
   Chair, College Review Committee
   Date
   Ruth Bush, MD, JD MPH
   Dean of College
   Date
   Paul E. Ogden, MD, (HSC COO)
   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@ College of Medicine Curricular Services 07/14

   RECVED CURRICULAR SERVICES APR 22 2016
Course title and number: IMED919-OOR Adult Allergy & Immunology Outpatient Clinic
Term (e.g., Fall 200X): Year Round
Meeting times and location: It is student's responsibility to contact the preceptor one week prior to the scheduled start date to confirm when and where to report on first day.

Course Description and Prerequisites

https://medicine.tamhsc.edu/elective/2015-16/imed/rr/imed860-00r.html
This is a two or four week Elective in allergy & immunology that will provide experience in -- managing common adult and pediatric allergy and immunology ambulatory illness. It will introduce student to uncommon allergic diseases and illustrate broader aspects of adult and pediatric care, as it relates to the care of patient with chronic allergic conditions. The elective will encourage student to develop skills in carefully evaluating patient with allergic or immunological problems and introduce them to an ambulatory health care system dealing with patients who have chronic illnesses and require chronic management.

Prerequisites: Admission to medical school

Instructor Information

Elective Director
Name: Thomas F. Smith, MD
Telephone number: 512-732-2774
Email地址: hilltopdad-allergydoc@yahoo.com
Office hours: By Appointment
Office location: 11770 Jollyville Road

Coordinator
Name: Natalie Washburn
Telephone number: 512-341-4960
Email地址: Washburn@medicine.tamhsc.edu
Office hours: M-F 8-5
Office location: 3950 N. AW Grimes, 3rd Floor
Round Rock, TX 78665

Learning Outcomes & Objectives

Objectives:
1. Take a detailed allergy history, construct a thorough differential diagnosis, and develop an appropriate management plan.
2. Recognize the subtle manifestations of a disease that he/she might be expected to encounter in the general practice of Pediatrics or Family Medicine.
3. Recognize indications for seeking an appropriate specialty or sub-specialty consultation.
4. Secure appropriate sources of information dealing with pediatric allergy disease.
5. Understand and appreciate recent developments in allergy and clinical immunology.

COM Competency Based Learning Objectives: http://medicine.tamhsc.edu/academic-affairs/curriculum/objectives/

Principles and Guidelines for Curriculum Development:

Date Created/Revised: By: ___
**Course Objective:**

Taught (T) and/or Evaluated (E): Evaluation:
- Take a detailed allergy history, construct a thorough differential diagnosis, and develop an appropriate management plan.
  - PC1, PC2, PC4, PCS, ICS1
  - Taught AND Evaluated
  - Multisource Assessment (360 eval)

- Recognize the subtle manifestations of a disease that he/she might be expected to encounter in the general practice of Pediatrics or Family Medicine.
  - PC1, PC2, PCS, ICS1, ICS3
  - Taught AND Evaluated
  - Multisource Assessment (360 eval)

- Recognize indications for seeking an appropriate specialty or subspecialty consultation.
  - PCS, PROF3, PROF6
  - Taught AND Evaluated
  - Multisource Assessment (360 eval)

- Secure appropriate sources of information dealing with pediatric allergy disease.
  - PBL14, PBL15, PBL16
  - Taught AND Evaluated
  - Multisource Assessment (360 eval)

- Understand and appreciate recent developments in allergy and clinical immunology.
  - MKS, SBP5, PBL15, PBL16, PBL14
  - Taught AND Evaluated
  - Multisource Assessment (360 eval)

---

**Textbook and/or Resource Material**

1. Textbook- Allergic Diseases from Infancy to Adulthood by Bierman and Peariman, W. B. Saunders (will be available to check out from HSC COM RR office).
2. Audiovisual presentations dealing with pediatric allergy concepts.
Course materials are available online 24/7 in TAMU online library.

**Grading Policies**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>% of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Evaluation</td>
<td>100%</td>
</tr>
</tbody>
</table>

**GRADING SCALE**

<table>
<thead>
<tr>
<th>Grade</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
<td>70-100</td>
</tr>
<tr>
<td>Fail</td>
<td>69 and below</td>
</tr>
</tbody>
</table>

**Attendance and Make-up Policies**

TAMHSC – Student 7 rule: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07). COM student handbook states:

Students who miss more than 20% of a 4th year elective for any reason (2 weekdays during a two-week rotation or 4 weekdays for 4 week rotation) will require a remediation plan. To request an absence all students must use the online Phase IV Absence Form at: [http://medicine.tamhsc.edu/current/absence-forms/m4-absence.html](http://medicine.tamhsc.edu/current/absence-forms/m4-absence.html). For further information please refer to page 21 in the student handbook: [http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf](http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf).

---

**Course Topics, Calendar of Activities, Major Assignment Dates**

**Students will follow the schedule of the attending.**

**Week** | **Topic** | **Required Reading**
--- | --- | ---

---

Date Created/Revised: _____ By:
Other Pertinent Course Information

The development and maintenance of a professional attitude is an ongoing responsibility of each student. Professional behavior is expected at all times. All students will be expected to dress in an appropriate manner, convey a professional appearance or image, and are encouraged to be neat and clean. For further information please see Student Code of Conduct requirements here: http://medicine.tamhsc.edu/dean/policies/student-policies/student-code-conduct.html

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Any student with a disability who needs accommodation should inform the instructor at the beginning of the course.

Academic Integrity

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

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

College of Medicine

Professionalism and integrity Statement (Academic Honesty and Plagiarism)

All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component's Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an "F"/Unsatisfactory in the course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf.

According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one's own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website; http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions.

E-mail Access and FERPA

The College of Medicine is communicating all official information to students through the students' TAMHSC e-mail accounts. Please check the account frequently during the semester for updates. This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering

Date Created/Revised: _____ By: _____
for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU's Office of the Registrar at 979-845-1031.

The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.

Mistreatment of Students

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at http://medicine.tamhsc.edu/current/student-mistreatment-form.html. For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

Exposure and Occupational Hazard

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf

Note: More information is available on the aforementioned topics to all students on the College of Medicine website.
May 5, 2015

Danielle Dickey
Director of Curriculum Support
Office of Academic Affairs
College of Medicine
Texas A&M Health Science Center
8447 State Highway 47
Bryan, TX 77807

Re: Proposal of Additional Internal Medicine 411 Year Elective Course on Round Rock Campus

Dear Curriculum Committee:

As Vice Dean for the College of Medicine at the Texas A&M Health Science Center, Round Rock Campus, it is with great enthusiasm that I offer my full support of the course being proposed.

Course Title: Adult Allergy & Immunology
Course Director: Thomas Smith, MD
Affiliation: Greater Austin Allergy, Asthma & Immunology, PLLC

The elective enables the Round Rock campus to accommodate a higher number of students as compared to last academic year.

I will support it going forward, and I recommend its approval at an upcoming Curriculum Committee meeting.

Please contact me with any questions or comments regarding this course at any time throughout the academic year.

Sincerely,

Jim Donovan, M.D.
Vice Dean, Round Rock Campus
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
   MEID 810 - Connecting and Communicating with Patients and Peers

3. Course prefix, number and complete title of course:
   MEID 810 - Connecting and Communicating with Patients and Peers

4. Catalog course description (not to exceed 50 words):
   Students will be exposed to verbal and nonverbal communication techniques that facilitate greater connection with patients and their families. Specific areas of skill building include: establishing a relationship, gathering information through patient-interviews, transmitting information effectively, negotiating treatment, explaining mistakes, negotiating and resolving conflict, and closing sessions without making patients feel rushed or dismissed. The course will also teach the underpinnings of an effective doctor-patient relationship, namely a genuine understanding of patient experience which encompasses end-of-life concerns, concerns about aging and body image, and fears about medical procedures and chronic illness. A final component of the course will involve building effective communication with colleagues.

5. Prerequisite(s):
   Admission to medical school.

6. Cross-listed with:
6. Cross-listed courses require the signature of both department heads.
   □ Yes □ No
   If yes, from ___ to ___

7. Is this a variable credit 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
   □ Yes □ No
   P/F (CLAMD)

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)

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://eis.tamu.edu/essential-exit-controls/export-control-basics-for-distance-education).

13. Prefix Course # Title (excluding punctuation)
   MEID 810 Connecting and Communicating

   Lec. Lab Other SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
   0.00 0.00 240.00 15.00 5112010014 1935 15 - 16 0 0 3 6 3 2

   Approval recommended by:
   Regina Bentley, EdD, RN, CN
   Department Head or Program Chair (Type Name & Sign) Date
   Diane Chico, PhD Chair, College Review Committee Date
   Paul E. Ogden, MD (HSC COO)
   Department Head or Program Chair (Type Name & Sign) Date
   Ruth Bush, MD JD MPH Dean of College Date

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

   Received
   April 22, 2016
   CURRICULAR SERVICES

Questions regarding this form should be directed to Sandra Williams at 845-8291 or sandra.williams@tamu.edu.
Curricular Services - 07/14
Course title and number: MEID 810-00R Connecting and Communicating with Patients and Peers
Term (e.g., Fall 200X): Year Round
Meeting times and location: It is student’s responsibility to contact the preceptor one week prior to the scheduled start date to confirm when and where to report on first day.

Course Description and Prerequisites

https://medicine.tamhsc.edu/elective/2015-16/imed/rr/imed860-00r.html
This elective is for individuals who wish to strengthen their clinical communication skills and deepen their empathy. Students will be exposed to verbal and nonverbal communication techniques that facilitate greater connection with patients and their families. Specific areas of skill-building include establishing a relationship, gathering information through patient-interviews, transmitting information effectively, negotiating treatment, explaining mistakes, negotiating and resolving conflict, and closing sessions without making patients feel rushed or dismissed. The course will also tackle the underpinnings of an effective doctor-patient relationship, namely a genuine understanding of patient experience which encompasses end-of-life concerns, concerns about aging and body image, and fears about medical procedures and chronic illness. A final component of the course will involve building effective communication with colleagues, particularly in the area of coordination of patient care and public presentation of knowledge. All areas of the course will involve an interactive component, consisting of role plays, engaged discussion, practice with standardized patients, and group collaboration.

Prerequisites: Admission to medical school

Instructor Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Elective Directors</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Jessica Grogan</td>
<td>Natalie Washburn</td>
</tr>
<tr>
<td>Telephone number</td>
<td>512-993-1616</td>
<td>512-341-4960</td>
</tr>
<tr>
<td>Email address</td>
<td><a href="mailto:Jessicaagrogan2@gmail.com">Jessicaagrogan2@gmail.com</a></td>
<td><a href="mailto:Washburn@medicine.tamhsc.edu">Washburn@medicine.tamhsc.edu</a></td>
</tr>
<tr>
<td>Office hours</td>
<td>By Appointment</td>
<td>M-F / 8-5</td>
</tr>
<tr>
<td>Office location</td>
<td>707 West 10th St. Austin, TX 78701</td>
<td>3950 N. AW Grimes, 3rd Floor Round Rock, TX 78665</td>
</tr>
<tr>
<td>Name</td>
<td>Robert Milman, MD</td>
<td></td>
</tr>
<tr>
<td>Telephone number</td>
<td>512-659-8021</td>
<td></td>
</tr>
<tr>
<td>Email address</td>
<td><a href="mailto:rmilman@austin.rr.com">rmilman@austin.rr.com</a></td>
<td></td>
</tr>
</tbody>
</table>

Learning Outcomes & Objectives

Objectives:
• Students will work together and with professors and medical actors to practice effective communication skills.
• Students will have reading assignments that serve as a basis for reflection and discussion about important topics related to ethics, empathy, effective communication, conflict negotiation, and patient-centered medicine.

Date Created/Revised: _____ By: _____
• Students will discuss the importance of cultural context and will consider the potential for bias.

<table>
<thead>
<tr>
<th>Course Objective:</th>
<th>COM Competency Based Learning Objectives (CBLO):</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate effective communication strategies via role play and work with standardized patients.</td>
<td>ICS1, ICS2, ICS3, ICS4, PROF1, PROF2, PROF6, PROF12</td>
<td>Taught AND Evaluated</td>
<td>Clinical Performance Rating/Checklist</td>
</tr>
<tr>
<td>Reflect on important topics related to ethics, empathy, effective communication, conflict negotiation, and patient-centered medicine.</td>
<td>PROF4, PROF11, PROF4</td>
<td>Taught AND Evaluated</td>
<td>Narrative Assessment</td>
</tr>
<tr>
<td>Recognize the importance of cultural context and the potential for bias.</td>
<td>CC1, CC2, PROF3</td>
<td>Taught AND Evaluated</td>
<td>Clinical Performance Rating/Checklist</td>
</tr>
</tbody>
</table>

Textbook and/or Resource Material


### Grading Policies

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>% of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Evaluation</td>
<td>100%</td>
</tr>
<tr>
<td>Participation (including presentation of peer reviewed article on health communication)</td>
<td>50%</td>
</tr>
<tr>
<td>Reflection Papers</td>
<td>25%</td>
</tr>
<tr>
<td>Final Conversation / Interview with Standardized Patient</td>
<td>25%</td>
</tr>
</tbody>
</table>

**GRADING SCALE**

- Pass: 70-100
- Fail: 69 and below

### Attendance and Make-up Policies

TAMHSC – Student 7 rule: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07). COM student handbook states: Students who miss more than 20% of a 4th year elective for any reason (2 weekdays during a two-week rotation or 4 weekdays for a 4 week rotation) will require a remediation plan. To request an absence all students must use the online Phase IV Absence Form at: [http://medicine.tamhsc.edu/current/absence-forms/m4-absence.html](http://medicine.tamhsc.edu/current/absence-forms/m4-absence.html). For further information please refer to page 21 in the student handbook: [http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf](http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf)

Date Created/Revised: ______ By: ______
Course Topics, Calendar of Activities, Major Assignment Dates

Students will follow the schedule set by faculty at the beginning of the course. Multiple (3 or more) class meetings to be determined at the beginning of the elective (based on student and faculty schedules).

** Students will follow the schedule of the attending.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Role Play and work with Standardized Patients</td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td>Ethics, empathy, effective communication, conflict negotiation, and patient-centered medicine. importance of cultural context and the potential for bias</td>
<td></td>
</tr>
</tbody>
</table>

Other Pertinent Course Information

The development and maintenance of a professional attitude is an ongoing responsibility of each student. Professional behavior is expected at all times. All students will be expected to dress in an appropriate manner, convey a professional appearance or image, and are encouraged to be neat and clean. For further information please see Student Code of Conduct requirements here: [http://medicine.tamhsc.edu/dean/policies/student-policies/student-code-conduct.html](http://medicine.tamhsc.edu/dean/policies/student-policies/student-code-conduct.html)

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

Any student with a disability who needs accommodation should inform the instructor at the beginning of the course.

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.”

College of Medicine

Professionalism and integrity Statement (Academic Honesty and Plagiarism)

All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component’s Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an “F”/Unsatisfactory in the

Date Created/Revised: _____ By: _____
course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at [http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf](http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf).

According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one's own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website; [http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions](http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions).

### E-mail Access and FERPA

The College of Medicine is communicating all official information to students through the students’ TAMHSC e-mail accounts. Please check the account frequently during the semester for updates. This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU’s Office of the Registrar at 979-845-1031.

The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.

### Mistreatment of Students

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at [http://medicine.tamhsc.edu/current/student-mistreatment-form.html](http://medicine.tamhsc.edu/current/student-mistreatment-form.html). For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

### Exposure and Occupational Hazard

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: [http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf](http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf)

**Note:** More information is available on the aforementioned topics to all students on the College of Medicine website.
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 (E.D.S., M.D., J.D., PharmD, D.V.M.)

2. Request submitted by (Department or Program Name): Select or Type Department/Program Name
MEID 811 - Medicine in the Wild

3. Course prefix, number and complete title of course: MEID 811 - Medicine in the Wild

4. Catalog course description (not to exceed 50 words):
This elective offers a unique opportunity to learn and practice wilderness medicine on an extended wilderness expedition in the Gila Wilderness of New Mexico; includes National Outdoor Leadership School (NOLS) core curriculum and Wilderness Medicine Institute (WMI) wilderness medicine curriculum taught by NOLS/WMI faculty and a senior emergency medicine resident from the Harvard Affiliated Emergency Medicine Residency.

5. Prerequisite(s): Admission to medical school.

6. Is this a variable credit course? ☑ Yes ☐ No If yes, from __1__ to __15__

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 (CLAD)

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. MD

13. Prefix Course # Title (excluding punctuation)

<table>
<thead>
<tr>
<th>MEID</th>
<th>811</th>
<th>Medicine in the Wild</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>0.00</td>
<td>0.00</td>
<td>240.00</td>
</tr>
<tr>
<td>SCII</td>
<td>CIP and Fund Code</td>
<td>Admin. Unit</td>
</tr>
<tr>
<td>15.00</td>
<td>5112010014</td>
<td>1935</td>
</tr>
<tr>
<td>Acad. Year</td>
<td>FICE Code</td>
<td></td>
</tr>
<tr>
<td>15 - 16</td>
<td>00 3 6 3 2</td>
<td></td>
</tr>
</tbody>
</table>

Approval recommended by:

Regina Bentley, EdD, RN, CN
Department Head or Program Chair (Type Name & Sign) Date

Diane Chiolo, PhD
Chair, College Review Committee Date

Paul E. Ogden, MD, (HSC COO)
Department Head or Program Chair (Type Name & Sign) Date

Ruth Bush, MD JD MPH
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 – 37/14

RECEIVED CURRICULAR SERVICES APR 22 2016
Course title and number  MEID 811 – 00R Medicine in the Wild  
Term (e.g., Fall 200X)  TBD  
Meeting times and location  TBD  

**Course Description and Prerequisites**

Learn and practice wilderness medicine on an extended wilderness expedition in the Gila Wilderness of New Mexico; includes National Outdoor Leadership School (NOLS) core curriculum and Wilderness Medicine Institute (WMI) wilderness medicine curriculum.

Link to the NOLS website: [http://www.nols.edu/wmi/courses/medicineinthewild.shtml](http://www.nols.edu/wmi/courses/medicineinthewild.shtml)

Prerequisites: Admission to medical school

Cost for this course: $4,675 [possible scholarship: NOLS Scholarship funds are limited and are awarded on a first come, first served basis. The typical award ranges between $500 and $2,000. Contact the Admissions Office well in advance for scholarship information and application form (pdf)]

Requirements:
1. Students are responsible for the cost of the course including travel expenses (scholarships are available through NOLS).
2. Students must submit a form completed by their physician confirming that they are medically fit to participate.
3. Students must have their own medical insurance coverage.
4. Students will be required to fill out a waiver of liability form provided by NOLS.
5. Students should confirm with coordinator that additional liability coverage through A&M has been completed.

**Instructor Information**

<table>
<thead>
<tr>
<th>Elective Director</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>Edward J. Sherwood, MD, FACP</td>
</tr>
<tr>
<td><strong>Telephone number</strong></td>
<td>512-705-9759</td>
</tr>
<tr>
<td><strong>Email address</strong></td>
<td><a href="mailto:sherwood@medicine.tamhsc.edu">sherwood@medicine.tamhsc.edu</a></td>
</tr>
<tr>
<td><strong>Office hours</strong></td>
<td>By appointment</td>
</tr>
<tr>
<td><strong>Office location</strong></td>
<td>RR HSC 4th Fl.</td>
</tr>
</tbody>
</table>

**Learning Outcomes & Objectives**

The Medicine in the Wild course has four primary objectives:
1. Proficiency in wilderness medicine.
2. Understanding peer leadership and teamwork skills.
3. Competency in wilderness travel and living skills.

The quest for proficiency in wilderness medicine begins with the six-day classroom session. This portion builds upon the skills of medical students and residents by challenging them to make medical and evacuation decisions in remote environments. The foundational skills learned in the classroom portion of the training will be used during the field section to problem-solve increasingly complex scenarios. Specific topics that will be covered include remote CPR, spinal assessment, litter packaging and long-term patient care, improvised splinting, North American snakebites and insect stings, environmental emergencies, abdominal complaints, and backcountry medical and drug kits.

During the classroom portion you will begin developing communication and teamwork skills. You will work with other students in teams of two to six, or more, in order to care for simulated patients in scenarios ranging from the straightforward to the complex multiple casualty incident. When the course shifts into the backcountry, you will apply these communication and leadership skills to the rigors of expeditioning.

The nearly three-week wilderness section provides an unrivaled opportunity for you to learn the NOLS core curriculum for backcountry travel. You’ll study risk management and judgment, leadership and teamwork, outdoor skills, and environmental ethics. Prior wilderness travel experience is not necessary, and even students familiar with backcountry travel will find themselves challenged on this expedition. Once you’ve become comfortable with the daily tasks of camping, your group will again explore the ramifications of dealing with medical challenges in a remote location.

Throughout the month, you will work toward becoming a sound medical educator. Learning theory and teaching styles will be explored, and you will be called upon to present topics throughout the program. Emphasis will be placed on effective educational models that can be readily transferred from the wilderness into the medical world.

You will be required to read and reflect on a text as a portion of you course. Prior to going into the field, you will choose a book from a list of literary texts which examine the role of humans within the natural world and prepare a short, written response. You will contribute your knowledge of this book and your personal experience to lead an active discussion of the role of the physician in advocating for individual and global health.

Expeditions, unlike traditional classrooms, are influenced by weather, terrain, and the characteristics of the individuals involved. Accordingly, our courses are not fully scripted. Given the variables that affect all courses, the depth of topic coverage will vary from course to course.

No other medical school elective offers the opportunity to develop these skills in such a remote and demanding environment!
### Course Objectives

<table>
<thead>
<tr>
<th>Course Objective</th>
<th>COM Competency Based Learning Objectives (CBLO):</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student will be able to describe and evaluate common environmental emergencies</td>
<td>MK1, MK2</td>
<td>T,E</td>
<td>Observation by NOLS/WMI faculty of group participation and individual performance.</td>
</tr>
<tr>
<td>The students will demonstrate basic orthopedic reduction techniques and splint applications</td>
<td>PC9, MK4</td>
<td>T,E</td>
<td>Observation by NOLS/WMI faculty of group participation and individual performance.</td>
</tr>
<tr>
<td>Define mass casualty incident</td>
<td>PC6</td>
<td>T,E</td>
<td>Observation by NOLS/WMI faculty of group participation and individual performance.</td>
</tr>
<tr>
<td>Assess medical rescue, treatment and transport capacity</td>
<td>PC6, PC7</td>
<td>T,E</td>
<td>Observation by NOLS/WMI faculty of group participation and individual performance.</td>
</tr>
<tr>
<td>Assess medical rescue, treatment and transport capacity</td>
<td>PC6, PC7</td>
<td>T,E</td>
<td>Observation by NOLS/WMI faculty of group participation and individual performance.</td>
</tr>
<tr>
<td>Provide emergent field care for common wilderness medicine situations</td>
<td>PC3, PC6, PC7</td>
<td>T,E</td>
<td>Observation by NOLS/WMI faculty of group participation and individual performance.</td>
</tr>
</tbody>
</table>
Participate as a safe and effective team member

| ICS1, ICS2M ICS3, PROF2, PROF6, PROF10 | T,E | Observation by NOLS/WMI faculty of group participation and individual performance. |

Lead a small team in the provision of urgent care under hazardous conditions without incurring additional casualties

| ICS1, ICS2, ICS3, PROF2, PROF4, PROF6, PROF7, PROF8, PROF10, PROF11, PROF12, PBL12, CC2 | T,E | Observation by NOLS/WMI faculty of group participation and individual performance. |

**Textbook and/or Resource Material**

This elective will focus on wilderness medicine and be comprised of team building and leadership exercises, small group activities, and outdoor experiences/workshops. Participants will work to improve their skills as medical educators. All teaching materials will be provided by NOLS/WMI.

**Grading Policies**

The final course grade of pass or fail will be based upon successful completion of the NOLS/WMI Medicine in the Wild Course. Successful completion of the course provides certification as a WMI Wilderness First Responder.

**Attendance and Make-up Policies**

Students are required to attend all sessions. Make-up of any sessions missed due to illness or injury is not possible. More information is available at: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

**Course Topics, Calendar of Activities, Major Assignment Dates**

**Day 1: Course Check-In**
Shuttle from Tucson, Arizona airport to wilderness medicine teaching site. The course begins with dinner at 6:00 p.m.

**Days 2-7: Six-Day Classroom Session**
WMI faculty will train participants to respond to medical emergencies in remote settings through the Wilderness Upgrade for Medical Professionals course. Course days run from 8:00 a.m. to 5:00 p.m. with two evening sessions. Classroom lectures (50%) are integrated with practical skills sessions, case studies, and scenarios (50%). The scenarios and practice sessions take place both inside and outside and include an evening mock rescue. Additionally, the senior resident from the HAEMR will offer a day of advanced, hands-on clinics. Following successful completion of this section, you will earn a wilderness First Responder certification. For this section, please bring comfortable, casual clothes appropriate for both indoors and outdoors.

**Day 8: Issue Equipment and Ration Food at NOLS Southwest**
You will spend the day issuing gear and packing rations necessary for the wilderness expedition. Fundamental wilderness travel and living classes will begin.

**Day 9: Travel to Gila Wilderness**
You will travel from NOLS Southwest to the Gila Wilderness (near Silver City, New Mexico) to begin the expedition in this historic wilderness area.

Date Created/Revised: 5/21/2015 By: Sherwood; revised 7/22/15 by Dr. Ruggero
Days 10-17: First Ration Period, Wilderness Expedition
At this point your expedition may be divided into two independent groups. During the first ration period the expedition will focus on camping and travel skills in a backcountry setting. Once these skills have been mastered, the WMI staff will integrate the wilderness medicine curriculum into the continued exploration of the Gila through scenarios, clinics, and case study reviews. The HAEMR resident will continue to lead relevant discussions and offer wilderness medicine modules in addition to mentoring students. You will be introduced to the NOLS communication and leadership curriculum as it applies to working within teams in stressful situations.

Day 18: Re-Supply
The course will receive a re-supply of food and equipment for the last week of the backcountry expedition.

Days 19-24: Second Ration Period, Wilderness Expedition
The final section in the Gila Wilderness will combine technical skills with a continued emphasis on care of medical patients in remote environments. Evening discussions will focus on topics relevant both to upcoming residency and the opportunities available to practicing physicians within the field of wilderness and expeditionary medicine. You will be expected to present short topics to your peers as a part of the focus on providing effective medical education.

Days 25-26: Visit With HAEMR Physician
Your course will rendezvous with the visiting faculty member from the HAEMR program. In addition to more wilderness medicine classes and open forums, you will present the results of your final environmental and global health project. You will explore the prehistoric Gila Cliff Dwellings, and this will be the opportunity for course faculty to complete your medical school evaluations.

Day 27: Return to NOLS Southwest
After an early morning shuttle back to NOLS Southwest you will de-issue course equipment, shower, and celebrate with a barbeque before a shuttle takes you to an airport hotel in Tucson. Official course end is at 6:00 p.m.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Any student with a disability who needs accommodation should inform the instructor at the beginning of the course.

Academic Integrity
“An Aggie does not lie, cheat, or steal, or tolerate those who do.” For additional information please visit: http://aggiehonor.tamu.edu

College of Medicine
Professionalism and integrity Statement (Academic Honesty and Plagiarism)
All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component’s Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an “F”/Unsatisfactory in the course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at [http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf](http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf).

According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one’s own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website; [http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions](http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions).

**E-mail Access and FERPA**

The College of Medicine is communicating all official information to students through the students’ TAMHSC e-mail accounts. Please check the account frequently during the semester for updates. This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU’s Office of the Registrar at 979-845-1031.

The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.

**Mistreatment of Students**

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at [http://medicine.tamhsc.edu/current/student-mistreatment-form.html](http://medicine.tamhsc.edu/current/student-mistreatment-form.html). For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

**Exposure and Occupational Hazard**

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: [http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf](http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf)

**Note:** More information is available on the aforementioned topics to all students on the College of Medicine website.
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
MHUM 815 Essentials of Leadership
3. Course prefix, number and complete title of course:
4. Catalog course description (not to exceed 50 words):
   This four-week elective will serve to familiarize the student with the basics of leadership and its application in the field of medicine. The focus of this course is to improve interpersonal communication/teamwork, understanding of the business of medicine, and expanding upon the student's knowledge of systems-based care and advocacy.

5. Prerequisite(s):
   Admission to medical school.
   Cross-listed with:
   Stacked with:
   Cross-listed courses require the signature of both department heads.
   If yes, from ___ to ___
   If yes, this course may be taken ___ times.
6. Is this a variable credit course? ✓ Yes □ No
7. Is this a repeatable course? □ Yes ✓ No
   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)

MD

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)
    MHUM 815 Essentials of Leadership

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>Other</th>
<th>SCII</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>240.00</td>
<td>15.00</td>
<td>5112010014</td>
<td>1935</td>
<td>15-16</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:

[Signature]

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

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

[Signature]

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 – 07/14
Course title and number: MHUM 815-00R Essentials of Leadership
Term (e.g., Fall 200X): Year Round
Meeting times and location: It is student's responsibility to contact the preceptor one week prior to the scheduled start date to find out when and where to report on first day.

Course Description and Prerequisites

https://medicine.tamhsc.edu/elective/2015-16/mhum/all/index.html

This four-week elective will serve to familiarize the student with the basics of leadership and its application in the field of medicine. The focus of this course is to improve interpersonal communication/teamwork, understanding of the business of medicine, and expanding upon the student's knowledge of systems-based care and advocacy.

Instructor Information

Elective Director
Name: Lianne Marks, MD, PhD
Telephone number: 512-341-4996
Email address: marks@medicine.tamhsc.edu
Office hours: By Appointment
Office location: 3950 N. AW Grimes, N404G
Round Rock, TX 78665

Coordinator
Name: Natalie Washburn
Telephone number: 512-341-4960
Email address: Washburn@medicine.tamhsc.edu
Office hours: M-F / 8-5
Office location: 3950 N. AW Grimes, 3rd Floor
Round Rock, TX 78665

Learning Outcomes & Objectives

Course materials are as listed in the syllabus.

Prerequisites: Admission to medical school

COM Competency Based Learning Objectives: http://medicine.tamhsc.edu/academic-affairs/curriculum/objectives/

<table>
<thead>
<tr>
<th>Course Objective:</th>
<th>COM Competency Based Learning Objectives (CBLO):</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improve transitions of patient care, including but not limited to transfer notes, sign-outs, discharge summaries, and discharge planning and counseling.</td>
<td>PC4, PC11, ICS3, ICS4, ICS5, PROF3, PROF6, SBP1, SBP2, SBP3, SBP6, PBL1</td>
<td>Taught AND Evaluated</td>
<td>Portfolio-Based Assessment</td>
</tr>
<tr>
<td>2. Understand advanced interviewing techniques including motivational interviewing and educating patients using teach-back techniques through independent study. Additionally, they will explore how to deliver bad news, and discuss adverse events.</td>
<td>ICS1, ICS2, ICS3, ICS4</td>
<td>Taught AND Evaluated</td>
<td>Portfolio-Based Assessment</td>
</tr>
<tr>
<td>3. Learn about the ethics and laws of patient care including: Informed consent Withdrawal or withholding care Advanced directives and end of life/hospice care/DNR orders Assessing a patient’s decision-making ability Training in constructing appropriate choices to provide high value care</td>
<td>PC11, PC15, PROF1, PROF2, PROF3, PROF4, SBP3</td>
<td>Taught AND Evaluated</td>
<td>Portfolio-Based Assessment</td>
</tr>
<tr>
<td>4. Understand basic principles of leadership and the business of medicine including: Types of leadership Health insurance (disability, professional liability) Health information technology Employment agreements (how to negotiate and understand the legal implications) Practice options (purchasing a practice, joining a practice or employed medicine academic vs. nonacademic) Billing and coding, understanding of RVU’s and claim management and collection</td>
<td>PROF7, SBP1, SBP4, SBP5</td>
<td>Taught AND Evaluated</td>
<td>Portfolio-Based Assessment</td>
</tr>
<tr>
<td>5. Reflect on patient care performance, medical errors and know when to seek help. This includes training in the basics of risk management and how to reduce medical errors, as well as understanding the basics of clinical research and literature appraisal and how this applies to patient care.</td>
<td>PROF6, SBP1, SBP2, PBLI1, PBLI2, PBLI3, PBLI4, PBLI5, PBLI6</td>
<td>Taught AND Evaluated</td>
<td>Portfolio-Based Assessment</td>
</tr>
<tr>
<td>6. Recognize burnout in self and others and focus on self-reflection and techniques to improve work-life balance.</td>
<td>PROF3, PROF11, PROF12, PBLI2</td>
<td>Taught AND Evaluated</td>
<td>Portfolio-Based Assessment</td>
</tr>
</tbody>
</table>
7. Learn the basics of teamwork and interpersonal communication including how to give effective feedback to other team members including medical students and conflict management and negotiation. The concept of emotional intelligence and the roles of members of the healthcare team will be delineated.

<table>
<thead>
<tr>
<th>Course Codes</th>
<th>Taught AND Evaluated</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICS1, ICS3, ICS4, PROF2, PROF6, PROF7, PROF8, PROF10, PROF11, PROF12</td>
<td></td>
<td>Portfolio-Based</td>
</tr>
</tbody>
</table>

8. Achieve personal growth through learning techniques of stress management, self-awareness and personal financial/time management: basic accounting terms, concepts, and financial reports, budgeting, having a plan and measuring performance, credit use and abuse/debt management, personal investment basics

<table>
<thead>
<tr>
<th>Course Codes</th>
<th>Taught AND Evaluated</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF7, PROF10, PROF12</td>
<td></td>
<td>Portfolio-Based</td>
</tr>
</tbody>
</table>

9. Improve understanding of professionalism, including instruction on advocacy techniques.

<table>
<thead>
<tr>
<th>Course Codes</th>
<th>Taught AND Evaluated</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROF2, PROF6, PROF7, PROF12</td>
<td></td>
<td>Portfolio-Based</td>
</tr>
</tbody>
</table>

10. Learn terminology and important concepts relevant to patient safety and performance improvement as well as the beginning ability to interpret cost-effectiveness research. The students should learn the basics of systems-based care and techniques to improve healthcare quality and safety.

<table>
<thead>
<tr>
<th>Course Codes</th>
<th>Taught AND Evaluated</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBP1, SBP2, SBP3, SBP4, SBP5, SBP7, PBLI5, PBLI6</td>
<td></td>
<td>Portfolio-Based</td>
</tr>
</tbody>
</table>

11. Develop a better understanding of reform and financing of healthcare.

<table>
<thead>
<tr>
<th>Course Codes</th>
<th>Taught AND Evaluated</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBP3, SBP4, SBP5, SBP7</td>
<td></td>
<td>Portfolio-Based</td>
</tr>
</tbody>
</table>

Textbook and/or Resource Material

Title: The Healthcare Handbook
Author: Askin E, Moore N.
Edition/Copyright: 2nd edition 2014
Publisher: Academic Publishing Services, Washington University School of Medicine
ISBN-10: 0615650937

All assignments and materials are as listed in this syllabus.
Grading Policies

Final course grade will be based on the following:

<table>
<thead>
<tr>
<th>Linked Objective</th>
<th>Recommended due date</th>
<th>% of grade</th>
<th>Work Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Day 7</td>
<td>5</td>
<td>Turn in sample patient handoffs in the following formats (utilize information from previous patients if possible): SBARQ, I PASS THE BATON, THE FIVE Ps</td>
</tr>
<tr>
<td>3</td>
<td>Day 7</td>
<td>15</td>
<td>Certificate of completion for ACP High Value Care cases</td>
</tr>
<tr>
<td>5</td>
<td>Day 7</td>
<td>15</td>
<td>Certificate showing completion of IHI online modules (quality and patient safety) modules</td>
</tr>
<tr>
<td>Project</td>
<td>Day 7</td>
<td>2.5</td>
<td>Lock in project number, and send this information to the course director</td>
</tr>
<tr>
<td>9</td>
<td>Day 14</td>
<td>5</td>
<td>Certificate of completion for STFM (Society for Teachers of Family Medicine) Online Advocacy Course</td>
</tr>
<tr>
<td>10</td>
<td>Day 21</td>
<td>15</td>
<td>Certificate for completion of IHI online modules: Person and Family Centered Care, Triple Aim for Populations, Leadership</td>
</tr>
<tr>
<td>11</td>
<td>Day 21</td>
<td>10</td>
<td>Certificate for completion of the online STFM Leading Change Course</td>
</tr>
<tr>
<td></td>
<td>Day 28</td>
<td>2.5</td>
<td>Turn in error documentation</td>
</tr>
<tr>
<td>Project</td>
<td>Day 28</td>
<td>20</td>
<td>Turn in proof of project completion</td>
</tr>
</tbody>
</table>

GRADING SCALE

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory</td>
<td>70-100</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>69 and below</td>
</tr>
</tbody>
</table>

Should the course director determine remediation is required, the remediation plan will be at the discretion of the course director and on a case by case basis depending on the issues involved. Remediation plans could entail some (or all) of the following examples: Additional clinical shifts, research papers, presentations, article reviews, exams, directed reading, web-based modules, etc. If the student performance results in a failure of the elective, it will be recommended that the elective be taken again in its entirety.

Attendance and Make-up Policies

TAMHSC – Student 7 rule: [link] http://student-rules.tamu.edu/rule07. COM student handbook states: Students who miss more than 20% of a 4th year elective for any reason (2 weekdays during a two-week rotation or 4 weekdays for 4 week rotation) will require a remediation plan. To request an absence all students must use the online Phase IV Absence Form at: [link] http://medicine.tamhsc.edu/current/absence-forms/m4-absence.html For further information please refer to page 21 in the student handbook: [link] http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf

Course Topics, Calendar of Activities, Major Assignment Dates

Leadership Elective Summary

<table>
<thead>
<tr>
<th>OVERALL GOAL</th>
<th>Introductory Leadership Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Achieve improvement and competence as a student member and future leader of the healthcare team.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Transitions of Care, Advanced Interviewing Techniques, *Submission of a Case Report</td>
</tr>
<tr>
<td>3-4</td>
<td>Ethical and Legal Considerations of the Patient-Physician Relationship/High Value Care, Training in the Business of Medicine</td>
</tr>
</tbody>
</table>

Date Created/Revised: 2/24/16 By: LM
### Tools for Self-Reflection and Improvement of Patient Care through Understanding Information/Medical Errors/Risk Mitigation, Enhancement and Continual Modification of the Personal Development Plan with Incorporation of Literature Appraisal

5-6

Basic Teamwork and Communication/Negotiation Skills and Receiving Feedback, Advanced Teamwork and Communication/Negotiation Skills and Giving Feedback

7

Basic Leadership Training
Time/Pressure and Personal Financial Management, Team and Organizational Performance Awareness
Training in Advocacy

8-9

Basic Systems-Based Care and Change Management, Performance Improvement Project*, Advanced Performance Improvement Training* and Healthcare Reform/Financing and Change Management

10-11

*optional-depending on final project selection. One project will be required for course completion.

### Primary Objective 1:
The student should learn how to understand risks inherent in transfers of care and effective strategies to mitigate risk, as well as training in transitions of care:

Writing transfer notes and discharge summaries
Writing and verbalizing sign-outs
Discharge planning and counseling

<table>
<thead>
<tr>
<th>Articles &amp; Self Study</th>
<th>Teaching Tools &amp; Activities</th>
<th>Projects &amp; Assignments</th>
</tr>
</thead>
</table>
| [:20] Read the case and commentaries:  
  - **Responsibility for Patients after the Handoff** by Robert Macauley. [http://virtualmentor.ama-assn.org/2012/05/ecas2-1205.html](http://virtualmentor.ama-assn.org/2012/05/ecas2-1205.html)  
| [:30] Turn in sample patient handoffs to the course director in the following formats (utilize information from previous patients if possible): SBARQ, I PASS THE BATON, THE FIVE-Ps. |


### Primary Objective 2:
Understand advanced interviewing techniques including motivational interviewing and teaching patients using teach-back techniques.
Explore how to deliver bad news, and discuss adverse events.
The student will have the option to develop the ability to transfer patient care knowledge to others through production of a case report/presentation.
<table>
<thead>
<tr>
<th>Articles &amp; Self Study</th>
<th>Project &amp; Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2:00) Complete ACP High Value Care cases: <a href="https://hvc.acponline.org/cases/app/">https://hvc.acponline.org/cases/app/</a> : 1. Avoid unnecessary testing, 2. Use emergency and hospital level care judiciously, 3. Improve outcomes with health promotion and disease prevention, 4. Prescribe medications safely and cost effectively, 5. Overcome barriers to high value care.</td>
<td>Turn in certificate of completion for ACP High Value Care cases.</td>
</tr>
</tbody>
</table>

**Primary Objective #3:**

The student will learn about the ethics and laws of patient care including:

- Informed consent
- Withdrawal or withholding care
- Advanced directives and end of life/hospice care/DNR orders

Assess a patient’s decision-making ability.

Training in constructing appropriate choices to provide high value care.

**Primary Objective 4:**

Knowledge of the basics of leadership and the business of medicine:

- Types of leadership
- Health insurance (disability, professional liability)
- Health information technology
Employment agreements (how to negotiate and understand the legal implications)
Practice options (purchasing a practice, joining a practice or employed medicine academic vs. nonacademic)
Billing and coding, understanding of RVU’s and claim management and collection
Credentialing

<table>
<thead>
<tr>
<th>Articles &amp; Self Study</th>
<th>(7:00) Review the following website to get a basic understanding of the different styles of leadership: <a href="https://www.legacee.com/types-of-leadership-styles/">https://www.legacee.com/types-of-leadership-styles/</a></th>
<th>(2:00) Read ACP document, Physician Employment Contracts, <a href="http://www.acponline.org/running_practice/practice_management/human_resources/employment_contracts.pdf">http://www.acponline.org/running_practice/practice_management/human_resources/employment_contracts.pdf</a></th>
</tr>
</thead>
</table>

|----------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|

Primary Objective 5:
This section of independent study will lead to better understanding errors, reflecting on patient care performance, and knowing when to seek help.
This includes training in the basics of risk management and how to reduce medical errors, as well as understanding the basics of clinical research and literature appraisal and how this applies to patient care.

|-----------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|


| Projects & Assignments | Turn in certificate showing completion of IHI online (quality and patient safety) modules. Optional project: Write an 8-10 page (12 pt, double spaced, optional bibliography) essay discussing examples where a literature appraisal impacted or could impact patient care (actual or hypothetical examples). Optional project: lead a journal club discussion on an article. | |

**IHI QUALITY AND PATIENT SAFETY MODULES**

<table>
<thead>
<tr>
<th>Duration (hours)</th>
<th>Patient Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.50</td>
<td>PS 100: Introduction to Patient Safety</td>
</tr>
<tr>
<td>1.00</td>
<td>PS 101: Fundamentals of Patient Safety</td>
</tr>
<tr>
<td>1.00</td>
<td>PS 102: Human Factors and Safety</td>
</tr>
</tbody>
</table>

Date Created/Revised: 2/24/16 By: LM
<table>
<thead>
<tr>
<th>Unit</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>PS 103: Teamwork and Communication</td>
</tr>
<tr>
<td>1.50</td>
<td>PS 104: Root Cause and Systems Analysis</td>
</tr>
<tr>
<td>2.00</td>
<td>PS 105: Communicating with Patients after Adverse Events</td>
</tr>
<tr>
<td>2.00</td>
<td>PS 106: Introduction to the Culture of Safety</td>
</tr>
<tr>
<td></td>
<td>PS 201: Partnering to Heal: Teaming Up Against Healthcare-Associated Infections</td>
</tr>
<tr>
<td>1.50</td>
<td>PS 202: Preventing Pressure Ulcers (professional catalog only)</td>
</tr>
<tr>
<td>11.50</td>
<td>Total</td>
</tr>
</tbody>
</table>

**Improvement Capability**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25</td>
<td>QI 101: Fundamentals of Improvement</td>
</tr>
<tr>
<td>1.50</td>
<td>QI 102: The Model for Improvement: Your Engine for Change</td>
</tr>
<tr>
<td>1.00</td>
<td>QI 103: Measuring for Improvement</td>
</tr>
<tr>
<td>1.00</td>
<td>QI 104: The Life Cycle of a Quality Improvement Project</td>
</tr>
<tr>
<td>1.50</td>
<td>QI 105: The Human Side of Quality Improvement</td>
</tr>
<tr>
<td>2.00</td>
<td>QI 106: Mastering PDSA Cycles and Run Charts</td>
</tr>
<tr>
<td>1.00</td>
<td>QI 202: Quality Improvement in Action: Stories from the Field</td>
</tr>
<tr>
<td>9.25</td>
<td>Total</td>
</tr>
</tbody>
</table>

**Quality, Cost, and Value**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75</td>
<td>QCV 100: An Introduction to Quality, Cost, and Value in Health Care</td>
</tr>
<tr>
<td>1.75</td>
<td>QCV 101: Achieving Breakthrough Quality, Access, and Affordability</td>
</tr>
<tr>
<td>2.50</td>
<td>Total</td>
</tr>
</tbody>
</table>

**Primary Objective 6:**

Through independent learning, the student will discover how to recognize burnout in self and others and focus on self-reflection and techniques to improve work-life balance.

**Articles & Self Study**

- [:30] Read Reflection in Medicine, [http://www.cfp.ca/content/59/1/105.full.pdf+html](http://www.cfp.ca/content/59/1/105.full.pdf+html)
- Read Medical Student Stress and Burnout from the TMA: [http://www.texmed.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=26900&libID=24536](http://www.texmed.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=26900&libID=24536)

**Projects & Assignments**

Optional Project: Work on curricular development in the leadership elective (needs approval by course director). An example of this would be to address objective 6 and create a plan for students to complete material (articles/self-study +/- a project) designed to improve their mental health and/or mindfulness and/or work (school)/life balance. The plan must be able to contribute to a future curriculum in a meaningful way.
Primary Objective 7:
Learn the basics of teamwork and interpersonal communication including how to give effective feedback to other team members including medical students and conflict management and negotiation.
Understand the concept of emotional intelligence and the roles of members of the healthcare team.

Articles & Self Study
[40:00] Read How to Build Highly Effective Teams:
http://managementhelp.org/groups/team-building.htm#build
Read about conflict resolution:
Review emotional intelligence concepts:
http://www.mindtools.com/pages/article/newLDR_45.htm
Review the Toolkit for Communicating Clearly and:

(3:00) Watch AMA video: The Ingredients of Leadership.
http://commpart.vo.llnwd.net/o28/AMA/LeadershipSummary/index.html
Read: The Seven Habits of Highly Effective People.
Covey, S. Simon & Schuster, New York, 1990. Available at no cost:
http://www.depts.ttu.edu/upwardbound/books/the-7-habits-of-highly-effective-people.pdf
Read: Challenges of Professional Boundaries, created by the TMA:
http://www.texmed.org/WorkArea/DownloadAsset.aspx?id=32033

Teaching Tools & Activities
[40:00] Complete sample win-win form on negotiation (can use a hypothetical situation involving patient care):
http://www.mindtools.com/CommSkll/NegotiationSkills.htm
[10:00] Review the document below on giving and receiving feedback:
https://www.learning.ox.ac.uk/media/global/wwwadminoxacuk/localsites/oxfordlearninginstitute/documents/overview/rsv/Guidelines_for_giving_and_receiving_feedback.pdf

Projects & Assignments
Optional Project: Form a health literacy team using the following toolkit:

Primary Objective 8:
The medical student will be provided tools to achieve personal growth through learning techniques of stress management, self-awareness and personal financial/time management:
- basic accounting terms, concepts, and financial reports
- budgeting, having a plan and measuring performance
- credit use and abuse/debt management
- personal investment basics

Articles & Self Study
Watch AMA video: Building & Managing Your Financial Profile.
http://media01.commpartners.com/AMA/financial_profile/index.html

Read Time Management for Physicians,

Teaching Tools & Activities
[20:00] Students should be familiar with basic terms as defined here:
http://www.rasmussen.edu/degrees/business/blog/basic-accounting-terms-acronyms-and-abbreviations-students-should/
Learn the tools to create a personal financial plan:
https://www.missouristate.edu/assets/reallife/Creating_a_Personal_Financial_Plan.pdf
AMA RESOURCES: http://www.ama-assn.org/ama/pub/ama-wire/ama-wire/post/residents-should-begin-saving-retirement,
AMA Med-School-Residency document, Read pages 57-77:
Understand your loan repayment plan/options:

Primary Objective 9:
The student will get training on how to represent themselves and their views to the world in a professional manner, including instruction on advocacy techniques.

### Articles & Self Study

- **(2:00) Read Chapters 1-2 of *Leadership for Health Professionals*:**
  - [Link](http://samples.jbpub.com/9781284026887/9781449691325_CH01.pdf)
  - [Link](http://samples.jbpub.com/9781284026887/9781449691325_CH02.pdf)

- Read about more advanced organizational management as it relates to healthcare:
  - [Link](http://www.jblearning.com/samples/0763746177/46177_ch03.pdf)

- **Familiarize yourself with advocacy terminology:**
  - [Link](http://www.ama-assn.org/ama/pub/advocacy/topics.page)
  - Click on and review each of the advocacy topics listed on the AMA page.

- **Read the following article:**
  - [Public Roles of US Physicians](http://medprof.bjmu.edu.cn/xsqy/xshqy_2.pdf)

- **Read Tips for the First Interview:**
  - [Link](http://www.acponline.org/residents_fellows/career_counseling/tips.htm)

### Teaching Tools & Activities

- **(4:60) Complete online STFM (Society for Teachers of Family Medicine) [Online Advocacy Course](https://www.stfm.org/Advocacy/AdvocacyCourses) and turn in certificate.**

### Projects & Assignments

- Turn in certificate of completion for STFM (Society for Teachers of Family Medicine) [Online Advocacy Course].

- Optional project: Attend an advocacy event and turn in a one page single spaced summary of what was accomplished and what you learned.

---

**Primary Objective 10:**

Through independent study, the student will learn terminology and important concepts relevant to patient safety and performance improvement as well as the beginning ability to interpret cost-effectiveness research.

The students should learn the basics of systems-based care and techniques to improve health care quality and safety.

### Articles & Self Study

- **(8:40) Read *The Healthcare Handbook*, Askin and Moore**
  - [Link](http://muskie.usm.maine.edu/Publications/PHHP/Federal-Health-Care-Reform-Overview2013.pdf)

- **(3:30) Read article: A System to Describe and Reduce Medical Errors in Primary Care,**
  - [Advancing Medical Education by Teaching Health Policy](http://www.nejm.org/doi/pdf/10.1056/NEJMp1009202)

### Teaching Tools & Activities

- **(7:30) Complete IHI online modules: Person and Family Centered Care, Triple Aim for Populations, Leadership:***
  - [Link](http://www.ihi.org/education/ihiopenschool/courses/Pages/default.aspx)

### Projects & Assignments

- Turn in certificate for completion of IHI online modules: Person and Family Centered Care, Triple Aim for Populations, Leadership. Optional project: Participate as a team member in a performance improvement project.

---

**IHI MODULES: PERSON AND FAMILY CENTERED CARE**

<table>
<thead>
<tr>
<th>Duration (hours)</th>
<th>Person- and Family-Centered Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>PFC 101: Dignity and Respect</td>
</tr>
<tr>
<td>0.50</td>
<td>PFC 102: A Guide to Shadowing: Seeing Care Through the Eyes of Patients and Families</td>
</tr>
<tr>
<td>2.00</td>
<td>PFC 103: Having the Conversation: Basic Skills for Conversations about End-of-Life Care</td>
</tr>
<tr>
<td>4.50</td>
<td>Total</td>
</tr>
</tbody>
</table>
### Triple Aim for Populations

1.50 TA 101: Introduction to Population Health

### Leadership

1.50 L 101: Becoming a Leader in Health Care

### Primary Objective 11:
Develop a better understanding of reform and financing of healthcare.

<table>
<thead>
<tr>
<th>Articles &amp; Self Study</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Projects &amp; Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete online STFM (Society for Teachers of Family Medicine) Leading Change Course: <a href="http://www.stfm.org/OnlineEd/LeadingChangeCurriculum">http://www.stfm.org/OnlineEd/LeadingChangeCurriculum</a></td>
</tr>
</tbody>
</table>

### Summary of assignments to be turned in electronically:

<table>
<thead>
<tr>
<th>Linked Objective</th>
<th>Due Date (send electronically to course director)</th>
<th>% of grade</th>
<th>Work Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Day 7</td>
<td>5</td>
<td>Turn in sample patient handoffs in the following formats (utilize information from previous patients if possible): SBARQ, I PASS THE BATON, THE FIVE Ps</td>
</tr>
<tr>
<td>3</td>
<td>Day 7</td>
<td>15</td>
<td>Certificate of completion for ACP High Value Care cases</td>
</tr>
<tr>
<td>5</td>
<td>Day 7</td>
<td>15</td>
<td>Certificate showing completion of IHI online modules (quality and patient safety) modules</td>
</tr>
<tr>
<td></td>
<td>Day 7</td>
<td>2.5</td>
<td>Lock in project number, and send this information to the course director</td>
</tr>
<tr>
<td>7</td>
<td>Day 14</td>
<td>5</td>
<td>Turn in win-win form on negotiation, <a href="http://www.mindtools.com/CommSkll/NegotiationSkills.htm">http://www.mindtools.com/CommSkll/NegotiationSkills.htm</a></td>
</tr>
<tr>
<td>9</td>
<td>Day 14</td>
<td>5</td>
<td>Certificate of completion for STFM (Society for Teachers of Family Medicine) <a href="http://www.mindtools.com/CommSkll/NegotiationSkills.htm">Online Advocacy Course</a></td>
</tr>
<tr>
<td>10</td>
<td>Day 14</td>
<td>5</td>
<td>Update/complete your CV and turn it into course director</td>
</tr>
<tr>
<td>11</td>
<td>Day 21</td>
<td>15</td>
<td>Certificate for completion of IHI online modules: Person and Family Centered Care, Triple Aim for Populations, Leadership</td>
</tr>
<tr>
<td>11</td>
<td>Day 28</td>
<td>10</td>
<td>Certificate for completion of the online STFM Leading Change Course</td>
</tr>
<tr>
<td></td>
<td>Day 28</td>
<td>2.5</td>
<td>Turn in error documentation</td>
</tr>
</tbody>
</table>

### Project listing, must select one project to complete:

**Project #1:** Submit a case presentation to a journal and/or conference. Proof of acceptance and/or presentation of a case report is required for completion.
**Project #2:** Present a patient case at Grand Rounds or another hospital/clinic forum. Turn in information as to the date/time that this was completed, and a

Date Created/Revised: 2/24/16 By: LM
Project #3: Write an 8-10 page essay (12 pt font, double spaced, bibliography optional) discussing examples where a literature appraisal impacted or could impact patient care (actual or hypothetical example).

Project #4: Lead a journal club discussion on an article. Turn in information as to the date/time that this was completed (needs to be over the 4 weeks of the elective), and a brief summary of information presented (or PowerPoint if applicable).

Project #5: Work on curricular development in the leadership elective, this project requires preapproval by the course director. An example of this would be to address objective 6 and create a plan for students to complete material (articles/self-study +/- a project) designed to improve their mental health and/or mindfulness and/or work (school)/life balance. The plan must be able to contribute to a future curriculum in a meaningful way.

Project #6: Form a health literacy team using the following toolkit: http://www.nchealthliteracy.org/toolkit/toolkit1.pdf. Turn in the goal for your team, the members and their job titles, and the agenda from the first 2 meetings.

Project #7: Attend an advocacy event and turn in a one page single spaced summary of what was accomplished and what you learned.

Other Pertinent Course Information

The development and maintenance of a professional attitude is an ongoing responsibility of each student. Professional behavior is expected at all times. All students will be expected to dress in an appropriate manner, convey a professional appearance or image, and are encouraged to be neat and clean. For further information please see Student Code of Conduct requirements here: http://medicine.tamhsc.edu/dean/policies/student-policies/student-code-conduct.html

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Any student with a disability who needs accommodation should inform the instructor at the beginning of the course.

Academic Integrity

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

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

College of Medicine

Professionalism and integrity Statement (Academic Honesty and Plagiarism)

All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component’s Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an “F”/Unsatisfactory in the course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf.

According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one's own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website; http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions.

E-mail Access and FERPA

The College of Medicine is communicating all official information to students through the students' TAMHSC e-mail accounts. Please check the account frequently during the semester for updates.
This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU's Office of the Registrar at 979-845-1031.

The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.

Mistreatment of Students

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at http://medicine.tamhsc.edu/current/student-mistreatment-form.html. For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

Exposure and Occupational Hazard

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf

Note: More information is available on the aforementioned topics to all students on the College of Medicine website.
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
SURG 858 General Surgery
3. Course prefix, number and complete title of course:
4. Catalog course description (not to exceed 50 words):

Students will be integrated into the service as a member of the surgical team. Participation in all aspects of patient management, both inpatient and outpatient. The student will be expected to complete at least 40 hours per week on the service. Participation in night call is required because many cases come in after hours. Housing is not provided for this elective.

5. Prerequisite(s):
Admission to medical school.
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 ___ 1 ___ to ___ 15 ___
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)

MD

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>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>0.00</td>
<td>0.00</td>
<td>240.00</td>
<td>15.00</td>
<td>512-01 0014</td>
<td>1935</td>
<td>15-16</td>
<td>0 0 3 6 3 2</td>
</tr>
</tbody>
</table>

Approval recommended by:
Regina Bentley, EdD, RN, CN
Department Head or Program Chair (Type Name & Sign)

Diane Chico, PhD
Chair, College Review Committee

Paul E. Ogden, MD, (HSC COO)
Department Head or Program Chair (Type Name & Sign) (if cross-listed course)

Date

Ruth Bush, MD JD MPH
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 – 07/14
SURG 858 00R - General Surgery

It is the student’s responsibility to contact the preceptor one week prior to the scheduled start date to find out when and where to report on first day.

Course Description and Prerequisites

Students will be integrated into the service as a member of the surgical team, participating in all aspects of patient management, both inpatient and outpatient. The student will be expected to complete at least 40 hours per week on the service. Participation in night call is required because many cases come in after hours. Housing is not provided for this elective.

Prerequisites: Admission to medical school

Instructor Information

<table>
<thead>
<tr>
<th>Elective Director</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Vineet Choudhry, MD</td>
</tr>
<tr>
<td>Telephone number</td>
<td>512. 491.6542</td>
</tr>
<tr>
<td>Email address</td>
<td><a href="mailto:vchoudhry@northstarsurgery.com">vchoudhry@northstarsurgery.com</a></td>
</tr>
<tr>
<td>Office hours</td>
<td>By appointment</td>
</tr>
<tr>
<td>Office location</td>
<td>12319 N. Mopac Ste 350 Austin, TX 78758</td>
</tr>
</tbody>
</table>

Learning Outcomes & Objectives

Students are assigned to general surgical team as an acting intern under the direct supervision of faculty and will perform minor surgical procedures under faculty’s supervision. Students will be responsible for the direct care of assigned patients, take call with assigned faculty and attend general surgery educational conferences. Course materials are available online 24/7.
## Course Objective:

### (Example shown)

<table>
<thead>
<tr>
<th>Course Objective:</th>
<th>COM Competency Based Learning Objectives</th>
<th>Taught (T) and/or Evaluated (E):</th>
<th>Evaluation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform an initial history and physical exam and plan initial workup of general surgical patients seen as an elective or emergency consultation.</td>
<td>PC1, PC2, PC3, PC4, PC7, PC13</td>
<td>T&amp;E</td>
<td>Observation</td>
</tr>
<tr>
<td>Scrub in surgery, recognize anatomic structures, and know what procedure is indicated.</td>
<td>MK1, MK2, MK3, MK4, MK5</td>
<td>T&amp;E</td>
<td>Observation</td>
</tr>
<tr>
<td>Become familiar with general surgical emergency situations, both inpatient and outpatient.</td>
<td>PC8, PC12</td>
<td>T&amp;E</td>
<td>Observation</td>
</tr>
<tr>
<td>Perform 1 or 2 minor surgical procedures under the supervision of the staff (such as I&amp;D and/or removal of benign skin lesion).</td>
<td>PC9</td>
<td>T&amp;E</td>
<td>Observation</td>
</tr>
<tr>
<td>Be able to write daily and postoperative orders on general surgical patients.</td>
<td>ISC1, ISC2, ISC5</td>
<td>T&amp;E</td>
<td>Observation</td>
</tr>
<tr>
<td>Provide postoperative care of elective and emergency general surgical patients with attending supervision.</td>
<td>PC10, PC12, PC13</td>
<td>T&amp;E</td>
<td>Observation</td>
</tr>
</tbody>
</table>

## Textbook and/or Resource Material

The following books and case study materials will be used in this course.

Standard textbooks of General Surgery as utilized in the year Surgery clerkship. (Available at Medical Science Library)

## Grading Policies

The final course grade will be based on the clinical evaluation. Remediation will be determined on a case by case basis.
Clinical Evaluation  |  100%
|  100%

GRADING SCALE

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
<td>70-100</td>
</tr>
<tr>
<td>Fail</td>
<td>69 and below</td>
</tr>
</tbody>
</table>

Attendance and Make-up Policies

TAMHSC – COM student handbook states: Students who miss more than 20% of a 4th year elective for any reason (2 weekdays during a two-week rotation or 4 weekdays for 4 week rotation) will require a remediation plan. However because elective schedules often vary considerably from a standard academic schedule, and students are often requesting extended time off during the interview season, each elective director is encouraged to consider your own attendance and remediation policy.

Other Pertinent Course Information

Student Expectations:
- Students are expected to have a positive attitude and desire to learn.
- Be on time and dressed appropriately (scrubs for OR days, business casual for clinic days)
- Have patients seen and notes written before morning rounds
- Schedule for the week is based on your assigned surgeon’s schedule.
- You should know more about your patient than anyone else.
- Know patient’s disease pathophysiology, surgery, indication for surgery, and anatomy before going to the OR.
- Participation in the OR is a privilege. If you do not know about your patient or the procedure then you may be asked to leave the OR until you do.
- If you feel that you are being mistreated or have concerns regarding your educational experience then speak to your attending immediately.

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, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

Any student with a disability who needs accommodation should inform the instructor at the beginning of the course.

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.”
All College of Medicine students are required to comply with the student code of conduct and the academic integrity and honesty standards published in each component’s Student Handbook. Disciplinary action will be taken in accordance with the policies of each component. Students found guilty of Academic Dishonesty will receive an “F”/Unsatisfactory in the course. For a full list of actions qualifying as academic dishonesty, please review the College of Medicine Student Handbook at http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf.

According to the Aggie Honor System Office, plagiarism is defined as the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Intentionally, knowingly, or carelessly presenting the work of another as one’s own (i.e., without crediting the author or creator). Plagiarism and other academic misconduct definitions can be viewed on the Aggie Honor System Office website; http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx#definitions.

E-mail Access and FERPA

The College of Medicine is communicating all official information to students through the students’ TAMHSC e-mail accounts. Please check the account frequently during the semester for updates. This course is supported with web-based and/or e-mail activities. In order to take advantage of these additional resources and participate fully in the course, you have been assigned an e-mail address by the Texas A&M Health Science Center. This e-mail address is for internal use only, so that faculty may communicate with you and the entire class. By registering for this course, you are agreeing to allow your classmates to have access to this e-mail address. Should you have any questions, please contact the TAMU’s Office of the Registrar at 979-845-1031.

The Family Educational Rights and Privacy Act of 1974 (FERPA), which the HSC complies fully, is intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office of the Department of Education in Washington, D.C., concerning alleged failures by the HSC to comply with the act.

Mistreatment of Students

The College of Medicine is committed to providing a positive learning environment in which students can meet their academic goals based on mutual respect in the teacher/learner relationship. Both parties must be sensitive to the needs of others and differences in gender, race, sexual orientation, religion, age or disability. As outlined in the Student Handbook under the section titled Standards of Conduct in the Teacher-Learner Relationship, belittlement, intimidation and humiliation are unacceptable for effective learning and undermine self-esteem. Breaches involving student mistreatment may result in a faculty or staff member being sanctioned or the loss of faculty and/or staff appointment. These policies address student mistreatment involving College of Medicine employees, residents, affiliate staff, or patients. Mistreatment may be reported through the College of Medicine telephone hotline, 1(855)-397-9835 or through an online form at http://medicine.tamhsc.edu/current/student-mistreatment-form.html. For a full list of reporting avenues, please refer to the Student Handbook under the Mistreatment Policy.

Exposure and Occupational Hazard

The Needle Stick Policy and Bloodborne Pathogen Exposure information for Medical Students may be accessed in the Student Handbook at: http://medicine.tamhsc.edu/student-affairs/docs/handbook.pdf

**Note:** More information is available on the aforementioned topics to all students on the College of Medicine website.