Graduate Council Report

December 1, 2011

New Course Requests:

ARCH 669. Foundations of Research in Architecture. (3-0). Credit 3. Introduction to the research process and its application to problems in architecture; survey of current literature on research design methods relevant to diverse architectural problems; qualitative and quantitative research strategies and techniques; communicating research results. Prerequisite(s): Graduate classification; concurrent enrollment in ARCH 681 and 690.

EDCI 632. Program Evaluation in Curriculum and Instruction. (3-0). Credit 3. Program evaluation, investigating its purposes and procedures, with attention to settings, personnel, and performance; review of standards, principal theories, and models; study of histories, political contexts, ethics, and the nature of evidence. Prerequisite(s): Graduate classification.

GEOL 653. Geobiological Research. (1-6). Credit 3. Team based research in modern or historical geobiology; definition of questions and hypothesis testing; analytical techniques; project lifecycle; reporting of results. Prerequisite(s): Approval of instructor.

HORT 626. International Floriculture Marketing. (2-2). Credit 3. Importance, cost, and opportunities in marketing floral products, fresh cut flowers, flowering potted plants, foliage plants, and bedding/garden plants; topics include: world production areas, economic value, species grown, marketing channels, retail environments, current/future consumers, postharvest handling, promotion/advertising, perceived/added value, marketing trends and employment opportunities. Prerequisite(s): Graduate classification. Stacked with HORT 426.

MARB 604. Behavioral Ecology of Marine Mammals and Seabirds of New Zealand. (3-3). Credit 4. Ecology and behavior of marine birds and mammals of the South Island, New Zealand; literature comparisons of marine vertebrates; emphasis is on animals in nature; laboratory experience of the animals from boats, shore, readings, videos, interpretation, and peer-review scientific papers and books. Prerequisite(s): Graduate standing and permission from instructor. Stacked with MARB 404.

SCSC 629. Laboratory Quality Systems. (3-0). Credit 3. Quality systems and method development used within a laboratory; ensuring the integrity of procedures used in lab processes, chain of custody, information management, and international laboratory standards; regulatory requirements for laboratory operation; bio-security precautions; laboratory management. Cross-listed with VTM 629.

SCSC 634. Regulatory Science: Principles & Practices in Food Systems. (3-0). Credit 3. Regulatory tools, standards and approaches in production, processing, and distribution of agricultural goods; development and implementation of regulations; interdependence of federal and state agencies, use of risk analysis.

SCSC 635. Comparative Global Standards in Food Systems. (3-0). Credit 3. Laws, regulations and standards governing the production, distribution, processing, and marketing of food across regions of the world; international standard setting bodies and risk assessment committees; regulatory equivalency and harmonization; product approval procedures; cost/benefits of global standards and trade agreements.
SCSC 636. Regulatory Science Methodology in Food Systems. (3-0). Credit 3. Risk management methodology including investigation of food and feed firms, conducting internal compliance audits; sample collection, chain of custody, trace-back and trace-forward, recalls, label review, data interpretation, risk ranking, resource prioritization, incident command and rapid response. Prerequisite(s): SCSC 634 Regulatory Science: Principles and Practices in Food Systems.

VIBS 611. Tumor Cell Biology and Carcinogenesis. (3-0). Credit 3. Basic principles of tumor biology; role of gene-environment interactions; molecular mechanisms regulating cancer initiation and progression; therapeutic treatment of cancer. Prerequisite(s): BIMS 320 or equivalent; graduate classification. Stacked with VIBS 411.

VIZA 630. Contemporary Art Studio/Seminar I. (2-4). Credit 4. Critical, theoretical, and historical readings on art and artists prompt visual and textual responses; development of personal ideas, methods, and processes; research, writing, discussion, and preliminary studies contribute to a final, in-depth body of work situated within the context of contemporary art. Prerequisite(s): MFA in Visualization status or approval of instructor; graduate classification.

VIZA 631. Contemporary Art Studio/Seminar II. (2-4). Credit 4. Theoretical and critical tools for contemporary digital art practice and technology-based cultural production; project proposal and development; exhibition planning, site selection and installation. Prerequisite(s): MFA in Visualization status or approval of instructor; graduate classification.

VTMI 629. Laboratory Quality Systems. (3-0). Credit 3. Quality systems and method development used within a laboratory; ensuring the integrity of procedures used in lab processes, chain of custody, information management, and international laboratory standards; regulatory requirements for laboratory operation; bio-security precautions; laboratory management. Cross-listed SCSC 629.

WFSC 643. Geospatial Technology in Military Land Management. (3-0). Credit 3. Tools for visualizing, creating, managing, and analyzing geographic data on military lands and outside areas critical to mission sustainment; familiarization with ArcMap and ArcCatalog in military-related land management scenarios. Prerequisite(s): Graduate classification or approval of instructor. Previous experience with ArcMap and ArcCatalog is helpful.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions:

1. Request submitted by (Department or Program Name): Department of Architecture

2. Course prefix, number and complete title of course: ARCH 669, Foundations of Research in Architecture

3. Catalog course description (not to exceed 50 words): Introduction to the research process and its application to problems in architecture; survey of current literature on research design methods relevant to diverse architectural problems; qualitative and quantitative research strategies and techniques; communicating research results.

4. Prerequisite(s): Graduate Classification; concurrent enrollment in ARCH 681 and 690

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

6. 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

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

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

9. Prefix: ARCH 669
   Course #: Foundations of Research in Architecture
   Title (excluding punctuation): Foundations of Research in Architecture
   Lect. Lab SCh CIP and Fund Code: 0 3 0 0 0 3 0 4 0 2 0 1 0 0 0 0 6
   Admin. Unit: 0 2 9 0
   Acad. Year: 1 2 - 1 3 0 0
   HCL Code: 3 6 3 2
   Approval recommended by: Ward V Wells
   Department Head or Program Chair (Type Name & Sign) Date: 10.19.2011

   Chair, College Review Committee Date: 11.30.2011

   Dean of College Date: DEC 1 2011

   Chair, OC or UCC Date: Mark J. Zoran

   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-west@tamu.edu.
Curricular Services – 3/10
COURSE: ARCH 669  
Fall 2012

INSTRUCTOR: Valerian Miranda, Ph.D.  
Rm. 006 Williams  
Ph: 845-3033  
Office Hours: Wed. 9:00-10:00am  
e-mail: v-miranda@tamu.edu

PREREQUISITE: Graduate Classification; concurrent enrollment in ARCH 681 and 690

I. CATALOG DESCRIPTION
Foundations of Research in Architecture (3-0). Credit 3. Introduction to the research process and its application to problems in architecture; survey of current literature on research design and methods relevant to diverse architectural problems; qualitative and quantitative research strategies and techniques; communicating research results.

II. INTRODUCTION
Though architecture is an ancient discipline, formalized architectural research is in its infancy. By its nature, architectural research encompasses various subject areas and no single research method can accommodate all these areas. This course is meant to expose beginning architectural research students to a variety of research methods that are appropriate to architectural research.

III. LEARNING OUTCOMES AND COURSE OBJECTIVES
By the end of the semester, the student will be expected to:
- Develop an awareness and understanding of a variety of strategies and tactics appropriate to architectural and allied fields of research.
- Develop the ability to seek, identify, frame and express a research problem.
- Develop the ability to discuss and develop a research design as well as choose appropriate tools and techniques.

IV. COURSE SCHEDULE
See attached course schedule.
V. GRADING POLICY:
Letter grades will be based on the evaluation of each assignment, attendance and class participation as follows:

- Discussion presentation : 40%
- Poster Presentation (HW#4) : 35%
- Written assignments : 15%
- Attendance : 10%

Letter grades are based on the following standard:

A = 90-100 ... excellent performance in all work, clearly superior work well beyond stated requirements and expectations.
B = 80-89 ... good performance in all work, satisfying all stated requirements and expectations.
C = 70-79... satisfactory completion of all work.
D = 60-69 ... below average, unsatisfactory performance.
F = 59 or less..failure: substandard work throughout.

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

VI. ATTENDANCE
Project due dates will be provided in the project statements. Students should contact the instructor if work is turned in late due to an absence that is excused under the University’s attendance policy. In such cases the instructor will either provide the student an opportunity to make up any quiz, exam or other graded activities or provide a satisfactory alternative to be completed within 30 calendar days from the last day of the absence. There will be no opportunity for students to make up work missed because of an unexcused absence.

VII. REQUIRED TEXT

VIII. COSTS
In addition to the required text, each student is expected to keep a notebook for this class. Additional costs involve printing costs for a research poster.

IX. POLICIES
**Americans with Disabilities Act (ADA Policy Statement):**

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

**Scholastic Dishonesty**

AGGIE HONOR CODE

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

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: http://www.tamu.edu/aggiehonor.
| WEEK 1 | Introduction  
         | Architecture and Research |
|--------|-------------------------|
| WEEK 2 | Framing your research  
         | Systematic Inquiry (Read Chap. 2)  
         | Homework #1 due |
| WEEK 3 | Theory and Method (Read Chap. 4)  
         | Research design (Methods, Strategies, Tactics) |
| WEEK 4 | Literature Review (Read Chap. 3)  
         | Research Ethics, Plagiarism, IRB |
|        | Homework #2 due |
| WEEK 5 | Interpretive-Historical Research Read (Chap. 6)  
         | Student led discussion |
| WEEK 6 | Qualitative Research (Chap. 7)  
         | Student led discussion |
| WEEK 7 | Communicating Research (incl. posters)  
         | Innovation  
         | Homework #3 due |
| WEEK 8 | Correlation Research (Chap. 8)  
         | Student led discussion |
| WEEK 9 | Logical Argumentation (Read Chap. 11)  
         | Student led discussion |
| WEEK 10 | Case Studies (Chap. 12)  
         | Student led discussion |
| WEEK 11 | Simulation/Modeling (Chap. 10)  
         | Student led discussion |
| WEEK 12 | Experimental Research (Chap. 9)  
         | Student led discussion |
| WEEK 13 | Combined Strategies  
         | Thanksgiving (NO CLASS) |
| WEEK 14 | Student Presentations  
         | Student Presentations |
TO BE RETURNED TO THE INSTRUCTOR

NOTE: After you have read the entire syllabus handed out in class, please clarify with the instructor any of your questions regarding the syllabus, workload, what is expected of you, grading criteria, etc. Then sign and date the declaration below, detach this sheet and hand it back to the instructor.

DECLARATION

I have read and understood the syllabus for ________, handed to me in class.

NAME (capitals): ____________________
SIGNATURE : ____________________
UIN : ____________________
e-MAIL : ____________________
DATE : ____________________
Texas A&M University

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

Form Instructions

1. Request submitted by (Department or Program Name): Teaching, Learning, and Culture

2. Course prefix, number and complete title of course: EDCI 632: Program Evaluation in Curriculum and Instruction

3. Catalog course description (not to exceed 50 words): Program evaluation, investigating its purposes and procedures, with attention to settings, personnel, and performance: review of standards, principal theories, and models; study of histories, political contexts, ethics, and the nature of evidence.

4. Prerequisite(s): Graduate classification

Cross-listed with: n/a
Stacked with: n/a

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

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

6. 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

7. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Online Ed.D in Curriculum and Instruction
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      M.Ed.; PhD in Curriculum and Instruction

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

9. Prefix: EDCI
   Course #: 632
   Title (excluding punctuation): Program Evaluation in Curriculum and Instruction

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Approval recommended by:

Yeping Li
Department Head or Program Chair (Type Name & Sign)
Date: 9/9/2011

Yige Li
Chair, College of Education
Date: 11-2-11

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

Date: 11-2-11

Mark Ziran
Chair, GC of UCC
Date: DEC 1, 2011

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
EDCI 632: Program Evaluation in Curriculum and Instruction
Online Course Syllabus
Summer 20XX

Instructor: Dr. Jacqueline Stillisano

Contact Information: 979-845-8098 (office)
979-450-5149 (cell)
jstillisano@tamu.edu

Virtual office hours: By request.

I am generally at my computer and available for IMs, chats, and Skype calls during the workday or the evenings. You can e-mail me at any time; I try to answer e-mails the same day I receive them. If it's something urgent, please text me your phone number and I'll call you as soon as I'm available.

Course Description:

Study of program evaluation in education, investigating its purposes and procedures, with attention to settings, personnel, and performance; with review of standards, principal theories, and models; and study of histories, political contexts, ethics, and the nature of evidence.

Prerequisites:

- Graduate classification
- Basic understanding of principles of descriptive and inferential statistics,
- Reasonable level of understanding about research "paradigms," worldviews, and quantitative and qualitative methods
- Basic understanding of experimental design and sources of invalidity
- Basic library and computer research skills to conduct an effective review of research
- Familiarity with requirements contained in the APA 6th edition

Learning Outcomes or Course Objectives:

EDCI 632 is concerned with the areas of program evaluation design and the investigative, methodological, and evaluative techniques pertaining to this field. Approaches to evaluating school-based programs and school curriculums as well as conducting more limited investigations will be examined. It is the purpose of this course to examine various approaches to the evaluation of school programs, to develop understandings of basic contemporary evaluation designs, and to apply known and
evolved designs to simulated problems. Various philosophical as well as measurement and methodological questions will be explored.

Students will be involved in formulating, reviewing, designing, and critiquing program and curriculum evaluation studies. More specifically, EDCI 632 is designed to provide doctoral students with a framework that will allow them to demonstrate the following competencies:

- Students will have a working knowledge of the terminology of the area of program evaluation, which will permit them to readily comprehend the terms in the literature of the field.
- Students will be able to state several similarities and differences between educational research and evaluation research.
- Students will have a working knowledge of the political context involved in program evaluation.
- Students will know and understand how to apply the Four Standards of Program Evaluation, (Joint Committee, 1994): utility standards, feasibility standards, propriety standards, and accuracy standards.
- Students will have a working knowledge of the assumptions behind the different approaches for conducting program evaluations.
- Students will have a working knowledge of the importance of utilization in program evaluation.
- Students will be able to evolve patchwork designs, as well as use quasi-experimental and experimental designs in developing evaluation proposals.
- Students will be aware of the importance of interpersonal and communication skills in evaluation.
- Students will be able to critically analyze evaluation articles and reports.
- Students will be able to analyze and interpret evaluation data.
- Students will be able to design and prepare an evaluation proposal.
- Students will have a working knowledge of how to present evaluation findings.

**Course Pedagogy:** The course will be taught using the Five Standards of Effective Pedagogy (Tharp, 1997; Tharp, Estrada, Dalton, & Yamauchi (2000). The five standards are (a) Teacher and Students Producing Together, (b) Developing Language and Literacy Across the Curriculum, (c) Making Meaning: Connecting School to Student's Lives, (d) Teaching Complex Thinking, and (e) Teaching Through Conversation.

The first standard, Teacher and Students Producing Together, indicates that the classroom environment will be collaborative. In other words, there will be many opportunities where students will work together (i.e., cooperatively) to produce specified products (i.e., assignments). The second standard, Developing Language, indicates that the course will emphasize learning the language of program evaluation as well as the content. The third standard, Making Meaning, suggests that an important aspect of the course will be connecting what we learn about program evaluation to students' personal interests and prior experiences. In other words, we will highlight the need to contextualize the knowledge we learn about research to everyday issues and concerns. The fourth standard, teaching complex thinking, illustrates the point that the course will focus on developing students' higher-level thinking skills such as analyzing, synthesizing, and evaluating evaluation situations. The fifth standard, Instructional
Conversation, suggests that there will be extended online discussions about the course content.

**Attendance and Work Completion:** This class is conducted in a totally online environment. "Attendance" and presence are required. Students are expected to actively participate in online discussions initiated by the instructor and/or students by posting substantive contributions.

The course will have specific dates by which assignments will be due; assignments are due by 11:30 p.m. Central Daylight Time. Points will be assigned for each course activity, and failure to complete assignments by due dates may result in reduced or no credit for the assignment (See Make-Up Work Policy below).

**Make-up Work Policy:** Missing any part of this schedule may negatively impact your grade in the course. Excused absences are based on Texas A&M University student rule guidelines (http://student-rules.tamu.edu/rule07). If you foresee difficulty of any type (e.g., an illness, employment change, etc.) that may prevent timely submission of assignments, please notify me as soon as possible.

If you have some extraordinary circumstance that necessitates a request for an extension, I highly recommend that your request be made in advance.

**Course Netiquette:** Students should show respect to fellow students and the professor during all online class discussions (see Netiquette Guidelines below). Remember, discussion boards are for whole-group/class discussions. If a question that is private in nature needs to be asked of the professor or a fellow student, a personal e-mail is the appropriate communication tool. When in doubt, an email to the individual(s) is always best.

**Required Materials:**


In addition to the assigned readings from the textbooks, several articles will be assigned as required reading. These articles will be available on the course web site.

**Course Assignments and Values.** You will be evaluated in this course based on your participation in class (via the discussion board), your submission of written assignments, and your completed evaluation plan proposal. Each assignment for the course has specified points.

- Critique of Evaluation Study Journal Article: 5%
- Critique of Evaluation Report: 5%
- Weekly Course Assignments/Responses/Peer Review: 40%
- Comprehensive Exam: 15%
- Final project: 35%
Grades will be assigned as follows:

Grade of "A" will be assigned for accumulating between 90% and 100% of total points.
Grade of "B" will be assigned for accumulating between 80% and 89% of total points.
Grade of "C" will be assigned for accumulating between 70% and 79% of total points.
Grade of "D" will be assigned for accumulating between 60% and 69% of total points.
Grade of "F" will be assigned for accumulating less than 60% of total points.

An incomplete will be given only upon written request and then only if the request meets the requirements listed in the Student Rules under Section 10: Grading (http://student-rules.tamu.edu/rule10). If a student receives an "incomplete" grade (i.e., "I") for EDCI 632, he or she must make up the missing work within one year or the grade for the course will become a "Fail."

Academic Integrity Statement

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

All students are bound by the Aggie Honor Code (as stated above). Honor Council Rules and Procedures can be found on the web at: http://www.tamu.edu/aggiehonor.

Students will submit, as part of the first week's assignment a file with the following statement:
"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this semester's academic work."

[Signature of Student]

Response/Participation Criteria:

The following criteria are used to evaluate your response to assigned prompts listed in the syllabus and your responses to others' postings in the follow-up class discussions:

1. Does your response show respect toward others' opinions?
2. Does your response address all the relevant issues or questions posed in the prompt?
3. Does your response integrate concepts from the readings?
4. Does your response demonstrate reflection or thoughtful discussion of the content of the readings?
5. Does your response make explicit connections between your professional and personal experiences and content of the assigned readings?
6. Does your response present the content in an organized and coherent format?
7. Does your response contain minimal errors in grammar and spelling?
8. Does your response include references to professional literature and/or web sites, where appropriate?
9. When directly quoting or paraphrasing from another's work, does your response include APA citations and page numbers?
Evaluation Article and Report Critiques:

All students are expected to do a written critique of (a) a journal article reporting the results of a program evaluation and (b) a technical (non-published report) of a program evaluation. The written critiques should follow the specific guidelines that are included in the syllabus (see attached guidelines). For the most part, the critiques will follow the Joint Committee’s *Standards for Program Evaluation* (1994). All articles and reports must be approved by the instructor in advance of the assignment.

Program evaluation articles are often included in all types of journals, but you may want to check some of the typical evaluation journals first (e.g., *American Journal of Evaluation; Evaluation Practice; Journal of Personnel Evaluation in Education; Evaluation and Program Planning; Canadian Journal of Evaluation; Journal of Multi-Disciplinary Evaluation; Evaluation Review; Evaluation: The International Journal of Theory, Research, and Practice; New Directions for Evaluation; Evaluation and Health Professions; and Studies in Educational Evaluation*) to select the article you will critique. You will find many examples of program evaluation reports on the Internet. Major research and development (R & D) centers like the Stanford Research Institute (SRI), MDRC, Mathematica Policy Research, RMC Research Corporation, RAND Corp, Charles A. Dana Center, West Ed, and Learning Point Associates—as well as state agencies such as TEA and THECB—often include evaluation reports on their web sites. Make sure, however, the instructor approves your article and/or report before you start critiquing it. Ideally, you should choose to critique an evaluation that is similar to the program evaluation proposal (i.e., topic) you are planning to complete for the course’s final project.

Final Project:

The final project will consist of a written, formal program evaluation proposal. The evaluation proposal will be approximately 20–25 pages in length, including references and appendices. The proposal will follow APA guidelines and will be double-spaced with 1-inch margins all around. The proposal will be based on Smith and Costello’s model for constructing an operational evaluation design (in Mertens, 1989) and will include a brief literature review of the relevant research on the program.

A brief (1–2 pages) proposal on your proposed final evaluation project will be due early in the semester. This brief proposal should briefly describe the program you intend to evaluate and some initial thoughts on how you will be evaluating it (keeping in mind that these ideas may change as you work through the course). Students must receive written approval from the instructor before proceeding with the formal proposal.

Comprehensive Examination:

The exam will consist of "Presidential Strand" questions from the American Evaluation Association (AEA) and discussion questions from the textbook. Students will be given a choice of questions from which to respond.

Netiquette Guidelines:

"Netiquette" is Network Etiquette, the rules of proper behavior in an online environment. Online communication can be difficult sometimes due to the absence of non-verbal cues and body
language that we all depend upon when communicating face to face—thus the need for proper Netiquette. Rules of conduct are somewhat in a state of flux because the online medium is a relatively new one, but the following are always worthwhile suggestions to observe:

1. Remember, there's always a human on the other end of an electronic communication. Treat him or her with the same respect that you'd like to receive.
2. What you say may be forgotten, but what you write will live on for a long time.
3. Be careful with humor; what appears witty or ironic to you may appear sarcastic and critical to your reader. By the same token, you may misinterpret messages sent by others to you.
4. Use emoticons and other symbols to indicate humorous intent. 😊
5. Be diplomatic; written communication often appears harsher than spoken communication. Tone is almost impossible to pick up in an email, and it's easy to offend others.
6. DON'T USE ALL CAPS—in addition to being difficult to read, this is considered "shouting" in electronic communication.
7. Be brief.
8. Use pertinent subject lines.
9. Keep in mind that an e-mail lacking a greeting and/or a closure may appear curt and unfriendly to your reader. (ex: Howdy! Or Regards.)
10. "Blind" copying others on personal/professional emails or forwarding others' emails without their knowledge is not only bad Netiquette, it is unprofessional and borders on being unethical.


Student Concerns:

If you have a concern about any aspect of the course, I would appreciate it if you could let me know as soon as possible. If I cannot resolve the issue to your satisfaction, then you are expected to complete the TLAC Concern/Opportunity/Acknowledge (COAF) Form and submit it to the TLAC Department Head (Dr. Ye Ping Li). The COAF Form is available on the TLAC website (http://tlac.tamu.edu/articles/gradforms).
## Calendar of Readings, Assignments, and Due Dates

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<tr>
<th>Assignments/Directions/Resources</th>
<th>Assessment</th>
<th>Date Due</th>
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<tr>
<td><strong>Week 1</strong> 5/31/11 – 6/6/11</td>
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<tr>
<td>• Read syllabus</td>
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<tr>
<td>• Post/update your contact information and picture of yourself under the Roster tool of Vista.</td>
<td>• Roster Post</td>
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</table>
| • "Sign" and return Honor Code Statement. | • Please submit the Aggie Honor Code statement as a Word attachment in an email to me.  
• This file should be saved as lastnamefirstinitialhonorcode.doc |          |
| **Readings**                     |            |          |
| • FSW: Chapter 1                 |            |          |
| • Fitzpatrick & Riccio: *A Dialogue About an Award-Winning Evaluation of GAIN* | |          |
| **Assignment**                   |            |          |
| • Write a 1-page reaction to the Riccio interview. | • Reaction post | 6/1/11 (5 pts) |
| **Online Discussion**            |            |          |
| • Read reaction posts of at least 5 of your colleagues  
• Post a thoughtful response to at least 3 | | 6/2/11 (5 pts) |
| **Readings**                     |            |          |
| • FSW: Chapter 2                 |            |          |
| • *Guidelines for Scientifically-Based Evaluation Methods*  
• AEA Response to the US DOE:  
  [http://www.eval.org/doestatement.htm](http://www.eval.org/doestatement.htm) | |          |
| **Assignment**                   |            |          |
| • Write a 1-page reaction to the US DOE Guidelines for Scientifically-Based Evaluation Methods & AEA's response | • Reaction Post | 6/3/11 (5 pts) |
| **Online Discussion**            |            |          |
| • Read reaction posts of at least 5 of your colleagues  
• Post a thoughtful response to at least 3 | | 6/4/11 (5 pts) |
| **Readings**                     |            |          |
| • FSW: Chapter 4                 |            |          |
| • *Qualitative and Quantitative Inquiries Are Not Incompatible* (Reichardt & Rallis) | |          |
| **Assignment**                   |            |          |
| • Write a 1-page reaction to Reichardt & Rallis | • Reaction Post | 6/5/11 (5 pts) |
| **Online Discussion**            |            |          |
| • Read reaction posts of at least 5 of your colleagues  
• Post a thoughtful response to at least 3 | | 6/6/11 (5 pts) |
<p>| <strong>Week 2</strong> 6/7/11 – 6/13/11      |            |          |</p>
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<td>FSW: Chapter 5</td>
<td>Write a 1-page reaction to AEA’s Position statement on high stakes testing.</td>
<td>Reaction Post</td>
<td>6/7/11</td>
<td>5 pts</td>
</tr>
<tr>
<td>American Evaluation Association: <em>Position Statement on High Stakes Testing</em></td>
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<tr>
<td></td>
<td>• Read reaction posts of at least 5 of your colleagues</td>
<td></td>
<td>6/8/11</td>
<td>5 pts</td>
</tr>
<tr>
<td></td>
<td>• Post a thoughtful response to at least 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>FSW: Chapter 6</td>
<td></td>
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</tr>
<tr>
<td><em>Unintended Consequences</em>: file:///Volumes/STORE%20%20GO/EDCI%20689%20Evaluation%20Class/Articles/Unintended%20Consequences.webarchive</td>
<td></td>
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<tr>
<td></td>
<td>Write a 1-page reaction to Gillor’s article</td>
<td>Reaction Post</td>
<td>6/9/11</td>
<td>5 pts</td>
</tr>
<tr>
<td></td>
<td>• Read reaction posts of at least 5 of your colleagues</td>
<td></td>
<td>6/10/11</td>
<td>5 pts</td>
</tr>
<tr>
<td>Online Discussion</td>
<td>• Post a thoughtful response to at least 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>FSW: Chapter 7</td>
<td></td>
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</tr>
<tr>
<td>Case study of theory-based evaluation</td>
<td>Write a 1-page reaction to assigned case study</td>
<td>Reaction Post</td>
<td>6/11/11</td>
<td>5 pts</td>
</tr>
<tr>
<td>Assignment</td>
<td>• Read reaction posts of at least 5 of your colleagues</td>
<td></td>
<td>6/13/11</td>
<td>5 pts</td>
</tr>
<tr>
<td>Online Discussion</td>
<td>• Post a thoughtful response to at least 3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><em>Additional Assignment</em></td>
<td>Submit <em>evaluation article</em> to instructor for approval</td>
<td></td>
<td>6/11/11</td>
<td></td>
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</tbody>
</table>

**Week 3**

6/14/11 – 6/20/11

<table>
<thead>
<tr>
<th>Reading</th>
<th>Assignment</th>
<th>Online Discussion</th>
<th>Date</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>FSW: Chapter 8</td>
<td>Write a 1-page reaction to the two articles from New Directions</td>
<td>Reaction Post</td>
<td>6/15/11</td>
<td>5 pts</td>
</tr>
<tr>
<td>New Directions for Evaluation: <em>Making Sense of Participatory Evaluation Practice</em></td>
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<tr>
<td>New Directions for Evaluation: <em>A Case Study of Participatory Evaluation in Haiti</em></td>
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<tr>
<td>Online Discussion</td>
<td>• Read reaction posts of at least 5 of your colleagues</td>
<td></td>
<td>6/16/11</td>
<td>5 pts</td>
</tr>
<tr>
<td></td>
<td>• Post a thoughtful response to at least 3</td>
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</table>

Reading

FSW: Chapters 9 & 10

Video: *Creating a Culture of Evaluation*
<table>
<thead>
<tr>
<th>Week 4</th>
<th>6/21/11 – 6/27/11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading</strong></td>
<td></td>
</tr>
<tr>
<td>• FSW: Chapter 11</td>
<td></td>
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<tr>
<td>• <em>Evaluation in Action</em> Case Study</td>
<td></td>
</tr>
<tr>
<td><strong>Assignment</strong></td>
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</tr>
<tr>
<td>• 1-page reaction to the case study your group is assigned to read</td>
<td>Reaction Post</td>
</tr>
<tr>
<td>6/22/11 (5 pts)</td>
<td></td>
</tr>
<tr>
<td><strong>Online Discussion</strong></td>
<td></td>
</tr>
<tr>
<td>• Read reaction posts of at least 5 of your colleagues</td>
<td>Reaction Post</td>
</tr>
<tr>
<td>• Post a thoughtful response to at least 3</td>
<td>6/23/11 (5 pts)</td>
</tr>
<tr>
<td><strong>Week 5</strong></td>
<td>6/28/11 – 7/4/11</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td></td>
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<tr>
<td>• FSW: Chapter 14</td>
<td></td>
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<tr>
<td>• <em>AJE: A Conversation with Ross Conner: The Colorado Trust Community-Based Collaborative Evaluation</em></td>
<td></td>
</tr>
<tr>
<td><strong>Assignment</strong></td>
<td></td>
</tr>
<tr>
<td>• Evaluation Article Critique</td>
<td>Submit as a Word document, using the assignment tool</td>
</tr>
<tr>
<td>• This file should be saved as LastnameFirstinitialArticleCritique.doc</td>
<td>6/28/11 (25 pts)</td>
</tr>
<tr>
<td>• 1-page reaction to Conner interview</td>
<td>Reaction Post</td>
</tr>
<tr>
<td>6/29/11 (5 pts)</td>
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<tr>
<td>• Using the instructor-provided outline, complete step 1 (program description) of your draft evaluation proposal</td>
<td>Post step 1 (program description)</td>
</tr>
<tr>
<td>7/2/11</td>
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<tr>
<td><strong>Online Group Discussion</strong></td>
<td><strong>Reading</strong></td>
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<td>-----------------------------</td>
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<tr>
<td>Read drafts of program description for all members of your group. Use instructor-provided template to provide feedback.</td>
<td>FSW: Chapter 15</td>
</tr>
<tr>
<td></td>
<td>New Directions for Evaluation: <em>Crafting Mixed-Method Evaluation Designs</em></td>
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<tr>
<td></td>
<td>New Directions for Evaluation: <em>Mixing and Matching Methods and Models</em></td>
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<table>
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<tr>
<th><strong>Week 6</strong></th>
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<td><strong>7/5/11 – 7/11/11</strong></td>
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<table>
<thead>
<tr>
<th><strong>Assignment</strong></th>
<th><strong>Online Group Discussion</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Using the instructor-provided outline, complete (a) step 2 (literature review) and (b) step 3 (evaluation focus) of your draft evaluation proposal</td>
<td>Read drafts of literature review and evaluation focus for all members of your group. Use instructor-provided templates to provide feedback.</td>
</tr>
<tr>
<td></td>
<td>Feedback for Step 2</td>
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<tr>
<td></td>
<td>Feedback for Step 3</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Additional Assignment</strong></th>
<th><strong>Post step 2 (literature review)</strong></th>
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<tbody>
<tr>
<td>Submit evaluation report to instructor for approval</td>
<td>Post step 3 (evaluation focus)</td>
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<tr>
<th><strong>Week 7</strong></th>
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<tr>
<td><strong>7/12/11 – 7/18/11</strong></td>
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<table>
<thead>
<tr>
<th><strong>Assignment</strong></th>
<th><strong>Online Group Discussion</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Using the instructor-provided outline, complete (a) step 4 (evaluation questions) and (b) step 5 (question/ procedure plan) of your draft evaluation proposal</td>
<td>Read drafts of evaluation questions and question/procedures plan for all members of your group. Use instructor-provided templates to provide feedback.</td>
</tr>
<tr>
<td></td>
<td>Feedback for Step 4</td>
</tr>
<tr>
<td></td>
<td>Feedback for Step 5</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Additional Assignment</strong></th>
<th><strong>COMPREHENSIVE EXAM OPENS</strong></th>
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<tbody>
<tr>
<td>COMPREHENSIVE EXAM OPENS</td>
<td>7/14/11 (10 pts)</td>
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<tr>
<th><strong>Week 8</strong></th>
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<tbody>
<tr>
<td><strong>7/19/11 – 7/25/11</strong></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Assignment</strong></th>
<th><strong>COMPREHENSIVE EXAM</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit comprehensive exam to instructor as a Word document, using the assignment tool.</td>
<td>This file should be saved as LastnameFirstInitialComprehensiveExam.doc</td>
</tr>
<tr>
<td></td>
<td>7/20/11 (75 pts)</td>
</tr>
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</table>
### Week 9
7/26/11 – 8/1/11

**Reading**
- FSW: Chapter 3
- AJE: A Clash of Cultures: Improving the "Fit" Between Evaluative Independence and the Political Requirements Of a Democratic Society

**Assignments**
- Critique of an Evaluation Report
- Submit as a Word document, using the assignment tool LastnameFirstInitialReportCritique.doc
- This file should be saved as LastnameFirstInitialReportCritique.doc
- Post step 8
- 7/29/11

**Online Group Discussion**
- Read drafts of evaluation budget for all members of your group. Use instructor-provided template to provide feedback.
- Feedback for Step 8
- 7/30/11 (10 pts)

### Week 10
8/2/11 – 8/7/11

**Reading**
- FSW: Chapter 18

**Assignment**
- Based on feedback from your group members, make any revisions necessary and submit a final copy of your evaluation proposal.
- Submit final copy of your evaluation plan to instructor as a Word document email attachment
- This file should be saved as LastnameFirstInitialFinalProj.doc
- Post PPT summary of your project
- 8/5/11 (25 pts)

**Online Group Discussion**
- Post feedback and questions to other members of your group
- 8/7/11

### Americans with Disabilities Act (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, in Cain Hall, Room B118, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu)
Diversity Statement for the Department of Teaching, Learning and Culture

The Department of Teaching, Learning and Culture (TLAC) does not tolerate discrimination, violence, or vandalism. TLAC is an open and affirming department for all people, including those who are subjected to racial profiling, hate crimes, heterosexism, and violence. We insist that appropriate action be taken against those who perpetrate discrimination, violence, or vandalism. Texas A&M University is an Affirmative Action and Equal Opportunity institution and affirms its dedication to non-discrimination on the basis of race, color, religion, gender, age, sexual orientation, domestic partner status, national origin, or disability in employment, programs, and services. Our commitment to non-discrimination and affirmative action embraces the entire university community including faculty, staff, and students.

Plagiarism Statement

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 passing off as one’s own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”

Course Evaluation

The evaluation of a course is one of the measures used to assess quality, strengths and need for improvement. The course evaluation information will be e-mailed to your neo account during the last month of classes.

The web site for completing the on-line evaluation is https://pica.tamu.edu

Diversity Statement for the Department of Teaching, Learning, and Culture

The Department of Teaching, Learning, and Culture (TLAC) does not tolerate discrimination, violence, or vandalism. TLAC is an open and affirming department for all people, including those who are subjected to racial profiling, hate crimes, heterosexism, and violence. We insist that appropriate action be taken against those who perpetrate discrimination, violence, or vandalism. Texas A & M University is an Affirmative Action and Equal Opportunity institution and affirms its dedication to non-discrimination on the basis of race, color, religion, gender, age, sexual orientation, domestic partner status, national origin, or disability in employment, programs, and services. Our commitment to non-discrimination and affirmative action embraces the entire university community including faculty, staff, and students.
The Family Education Rights and Privacy Act (FERPA) requires that student grades be accessible only to individual students and other authorized personnel. Posting grades in a secure course management system like Blackboard Vista (Bb Vista, formerly WebCT Vista) is the preferred method for distributing grades online at Texas A&M University. Instructors may either enter grades directly into the Bb Vista Grade Book or upload grades into Note. However, that giving student’s access to shared grading spreadsheets from within Bb Vista is NOT a secure way to post grades. Students must log into Bb Vista using their NetIDs and all Web pages are delivered via SSL encryption. Once logged in, students may only view their own grades as posted in the Grade Book, so there is no chance of inadvertently releasing confidential student information. Since 2003, there have been five separate incidents at Texas A&M reported to Computing and Information Services in which confidential student information has been accidentally released. In one incident, a spreadsheet containing confidential student information was accidentally sent as an email attachment to over 1,300 undergraduate students. In the other four incidents, grading personal information within either hidden columns or additional worksheets (tabs). Anyone with access to the spreadsheets could basically unhide the columns or view the confidential student information on the extra worksheets. Based on the small number of these types of incidents, most faculty clearly understand the university regulations regarding the posting of student grades and often the issue is essentially human error. Instructional Technology Services (ITS) would like to remind faculty of the secure, online technologies available on campus for delivering student grades. IT is available to support faculty in adhering to university regulations, especially in terms of incorporating new technologies. If you would like more information about using the Bb Vista Grade Book, contact ITS at 979-862-3977 or email http://its@tamu.edu. Handouts specifically written for Grade Book use are available on the ITS Web site: http://itsinfo.tamu.edu/workshops/vista_handouts.htm. In addition, a university Standard Administration Procedure (SAP) concerning notification of unauthorized disclosure of sensitive personal information was approved July 27, 2006 and is posted on the TAMU Rules Web Site: http://rules-saps.tamu.edu/PDFs/24.99.99M1.24.pdf

Instructional Technology Services, 004C Heldenfels Hall, Texas A&M University, 3002 TAMU, 979-862-3977, its@tamu.edu, http://itsinfo.tamu.edu

Additional Resources


Critique of a Program Evaluation Report or Article

1. Is there an adequate review of the prior literature/research that highlights the need or purpose of the evaluation?

2. Is there an explicit evaluation model/approach that was used in this study? If so, please identify/describe.

3. Describe the evaluation design.

4. Does the article do an adequate job of describing the evaluation context (e.g., technical, social, political, organizational, and economic features)?

5. Describe the methods used in this study.

6. Is the instrumentation clearly addressed? Are the reliability and validity properties of the instruments adequately addressed?

7. Is the program clearly defined, and are there adequate measures that address the implementation of the program (e.g., degree of implementation)?

8. What are some of the major validity threats, concerns, or biases that are present in this study?

9. Do you have any concerns or questions about the statistics or data analyses employed in this study?

10. Are there any potential conflicts of interest in the evaluation? Does it appear that the evaluation did a complete and fair assessment of the program's strengths and weaknesses? Are the results impartially reported and interpreted?

11. What would you do to improve this evaluation?

12. What policy recommendations did the authors make based on the results of this study? Are the recommendations justified?

13. Do you think that this article should be disseminated to other stakeholders? Why or why not? If yes, to which stakeholders?

14. Do you have any other further comments or concerns that you would like to address regarding this study?
Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
- Submit original form and attach a course syllabus.

Form Instructions
1. Request submitted by (Department or Program Name): Department of Geology and Geophysics

2. Course prefix, number and complete title of course: GEOL 653. Geobiological Research

3. Catalog course description (not to exceed 50 words): GEOL 653. Geobiological Research. (1-6). Credit 3. Team-based research in modern or historical geobiology; definition of questions and hypothesis testing; analytical techniques; project lifecycle; reporting of results.

4. Prerequisite(s): Approval of instructor

Cross-listed with: n/a

Stacked with: n/a

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

5. Is this a variable credit course? □ Yes □ No If yes, from ______ to ______

6. 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

7. 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 geology)

   M.S., Ph.D. in geology

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

9. Prefix | Course # | Title (excluding punctuation)
---|---|---
GEOL | 653 | GEobiological Research

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>GIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
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<td>16</td>
<td>3</td>
<td>400601</td>
<td>00081305</td>
<td>12-15</td>
<td>003632</td>
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</tbody>
</table>

Approval recommended by:

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

Chair, College Review Committee Date

Dean of College Date

Chair, CS or UCE Date

Mark J. Zoran Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 3/10
Course title and number: GEOL653: Geobiological Research
Term: Spring 2012
Meeting times and location: TBD

Course Description and Prerequisites
Team-based research in modern or historical geobiology; definition of questions and hypothesis testing; analytical techniques; project lifecycle; reporting of results. May be taken 2 times for credit. For Spring 2012, a one-week field trip to Death Valley from February 4–12 will be required. Field expenses (transportation, lodging, and food) will be covered by a donation from Shell, so there are no field trip fees.
Prerequisites: approval of instructor

Learning Outcomes or Course Objectives
This course is designed to speed the transition from classroom-style learning to research on novel problems in geobiology. Students will learn strategies for managing collaborative research projects from question definition to presentation of results. Students will also develop skills in field-based sedimentology and paleoecology, and lab-based geochemical and petrographic techniques.

Instructor Information
Name: Mike Tice and Mike Pope
Telephone number: 845-3138; 845-4376
Email address: mtice@geos.tamu.edu; mc pope@geos.tamu.edu
Office hours: TBD
Office location: Halbouty 314; Halbouty 051

Textbook and/or Resource Material
Readings from the primary literature will be selected by students advised by instructors.

Grading Policy
Grades will be based on participation in 1) the field trip (33.3%), 2) weekly discussion, lab review, and strategy sessions (33.3%), and 3) composition of a final written report (33.3%). Final grades will be assigned based on the following scale: A=90-100%, B=80-89.9%, C=70-79.9%, D=60-69.9%, F=0-59.9%.

Course Topics, Calendar of Activities, Major Assignment Dates
The course will be organized into one hour each week of group discussion and six hours each week of lab. Course content will consist primarily of a team research project, so discussion topics will be somewhat fluid and vary from week to week depending largely on recent lab results. The overall flow of the course will move from an initial section focusing primarily on data collection techniques, to a section focusing primarily on data collection and literature searches, to a section focusing primarily on results description and writing. However, some writing will begin within the first four weeks of the course, and data collection will proceed through the final weeks.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
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</table>
| 1    | Discussion: Snowball Earth  
*Lab: carbonate facies descriptions* | Hoffman, et al., 1998 |
| 2    | Discussion: the Noonday Dolomite  
*Lab: XRF mapping* | Corsetti and Kaufman, 2005; Corsetti and Grotzinger, 2005 |
| 3    | Discussion: Hypotheses  
*Lab: XRF mapping* | Corsetti, et al., 2002 |
| 4 (Feb. 4–12) | Field trip to Death Valley | |
5 Discussion: Sample preparation strategy
   \textit{Lab: sample preparation}

6-10 Discussion: lab results and student-selected literature
   \textit{Lab: data collection based on goals set in discussion sessions}

11-13 Discussion: lab results and student-written report sections
   \textit{Lab: data collection or writing based on goals set in discussion sessions}

14 Discussion: final group editing of report/manuscript
   \textit{Course Activities and Expectations}

Data collection in the field and lab will be performed by small teams of students. These teams will also take turns selecting papers for discussion during weeks 6-10, and will collectively author selected report sections. A key goal of the course will be production of a concrete research result in the form of a conference poster or publishable manuscript on which all participating students will be coauthors. Most of the time in discussion sessions during weeks 11-14 will be devoted to group editing of group report sections.

In the field, the focus of this class will be on collecting data that can be used to address a primary research question. In lab, you will be analyzing materials collected in the field and interpreting the results in the context of the geologic framework defined by field mapping. As the instructors, we will do everything we can to provide you with access to necessary materials, keep the research on track, and make ourselves available as a resource (especially for those who have limited experience with fieldwork and the laboratory techniques that we will be using). However, we expect that students will make a strong effort to find solutions to problems by themselves and by collaborating with other students. Figuring out how to define a research question and solve a new kind of problem is exactly what the process of scientific discovery is about and learning how to deal with the unknown is part of becoming graduate-level geoscientists.

\textbf{Americans with Disabilities Act (ADA)}

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

\textbf{Academic Integrity}

For additional information please visit \url{http://www.tamu.edu/aggiehonor}.

\textit{An Aggie does not lie, cheat, or steal, or tolerate those who do.}
28 October 2011

Dr. Michael Tice  
Department of Geology  
Texas A&M University  
College Station, TX 77843

Dear Mike,

I have reviewed the syllabus for your proposed course, GEOL 653 Geobiological Research. It does not overlap with any course in the Department of Biology, and we have no objection to it. In fact, it looks like a great course, and we strongly support it.

Sincerely,

Thomas D. McKnight  
Professor and Associate Head of Biology
Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
Submit original form and attach a course syllabus.

1. Request submitted by (Department or Program Name): Department of Horticultural Sciences
   (Date)

2. Course prefix, number and complete title of course: HORT 626 International Floriculture Marketing

3. Catalog course description (not to exceed 50 words):
   Importance, cost, and opportunities in marketing floral products, fresh cut flowers, flowering potted plants, foliage plants, and bedding/garden plants; topics include: world production areas, economic value, species grown, marketing channels, retail environments, current/future consumers, postharvest handling, promotion/advertising, perceived/added value, marketing trends and employment opportunities

4. Prerequisite(s): Graduate Classification
   Cross-listed with: Stacked with: Stacked with HORT 426
   Cross-listed courses require the signature of both department heads.

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

7. 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.Ag., Ph.D. in Horticulture

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

9. Prefix Course # Title (excluding punctuation): HORT 626 INTERNATIONAL FLORICULTURE MKTG
   Lect. Lab SCH CIP and Fund Code Admin. Unit Year. Year HCCE Code
   0 2 0 2 0 3 0 1 0 6 0 8 0 0 0 5 1 5 2 0 1 2 - 1 3 0 3 6 3 2
   Approval recommended by:
   Department Head or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee Date
   (if cross-listed course)
   Department Head or Program Chair (Type Name & Sign) Date
   Dean of College Date
   Submitted to Coordinating Board by:
   Chair, GC or UCC Date
   Mark J. Zoran Date
   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 3/10
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions

1. Request submitted by (Department or Program Name): Department of Horticultural Sciences

2. Course prefix, number and complete title of course: HORT 626 International Floriculture Marketing

3. Catalog course description (not to exceed 50 words): Importance, cost, and opportunities in marketing floral products, fresh cut flowers, flowering potted plants, foliage plants, and bedding/garden plants; topics include: world production areas, economic value, species grown, marketing channels, retail environments, current/future consumers, postharvest handling, promotion/advertising, perceived/added value, marketing trends and employment opportunities.

4. Prerequisite(s): not open to students with previous credit for HORT 426

Cross-listed with: Stacked with: HORT 426
Cross-listed courses require the signature of both department heads.

5. Is this a variable credit course? □ Yes □ No If yes, from _____ to _____

6. 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

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

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

   M.S., M.Ag., Ph.D. in Horticulture

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

9. Prefix Course # Title (excluding punctuation)
   H O R T 6 2 6 I N T L F L O R I C U L T U R E M K T G
   Lect. Lab SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
   0 2 0 2 0 3 0 1 0 6 0 8 0 0 0 5 1 5 2 0 1 2 - 1 3 0 0 3 6 3 2

   Approval recommended by:
   Dr. Leland S. Pierson Department Head or Program Chair (Type Name & Sign) Date
   Dr. David Reed Chair, College Review Committee Date
   Dr. David Reed Dean of College Date
   Dr. Mark Zurowski Chair, GC or DEC 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.
Instructors:

Terri W. Starman, PhD
Office: HFSB 424
Office Hours: open door policy
Office Phone: 979-862-2910
Email: tstarman@tamu.edu

Charles Hall, PhD
Office: HFSB 222
Office Hours: call for appt.
Office Phone: 979-458-3277
Email: c-hall@tamu.edu

Credit: 3 hours total credit
Prerequisite: Graduate classification
Meeting times and location: TBD
Organization: Web-based course with hands-on lab held on campus

Introduction: Are you interested in the global marketing of floriculture products? Did you know that many of the cut flowers used in the U.S. are grown in South America? Did you know that as much as 30% of floral products never reach the market place due to postharvest loss? Did you know that Texas is a major producer of floriculture crops such as foliage plants and bedding/garden plants? Do plants get you so excited that you want to learn how to motivate other people to buy plants and share your enthusiasm? Then this is the course for you.

Course Description: This course provides an overview of the importance, cost, and opportunities in marketing floral products. It is divided into five modules with each the major categories of floral crops produced and consumed across the world including fresh cut flowers, flowering potted plants, foliage plants, and bedding/garden plants. Topics to be covered for each floral commodity will include production areas in the world, economic value, species grown, marketing channels, and retail environments, profiles of current and future consumers, postharvest handling techniques, promotion and advertising, perceived and added value, trends in marketing and employment opportunities.

Course Objectives / Learning Outcomes:

1. Examine the industry-wide value chain for the floriculture industry to gain a fuller perspective of the major industry sectors and the numbers and types of firms competing in each sector.

2. Identify the major production areas worldwide and the niches that each region fills in order to gain a broader perspective of the nature of competitive rivalry in the floral industry.
3. Identify harvest stages of floral products, quality criteria, and factors impacting quality in order to understand how quality is the basis of competitive dynamics in the floral industry.

4. Examine postharvest principles and techniques to prevent shrinkage/loss of floral products throughout the supply chain, while gaining an appreciation of the effects of shrinkage on firm-level and industry profitability.

5. Outline procedures and technologies for harvesting, shipping, packaging, staging, and selling floral products in order to better understand the obstacles that occur in managing the logistics of floral product distribution.

6. Profile floral product consumers and identify marketing strategies that floral firms utilize to increase current consumption, develop loyal customers, and attract new customers now and in the future.

7. Examine current cross-cutting issues and driving forces of change (e.g. sustainability, immigration, etc.) that are facing floriculture industry firms and evaluate firm-level and industry-wide strategies to proactively address them.

8. Conduct a case study analysis of selected floricultural firms with an emphasis of analyzing the external operating environment, assessing competitive advantages associated with firm resources and capabilities, developing alternative strategies to accomplish specific marketing, distribution, and product development objectives.

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**Learning Tools:**

Lecture / Objectives  
Readings & Handouts / Study Questions  
Lab Practices  
Reality Field Trip  
Virtual Field Trips and Lecture Series / Study Questions  
Industry-related Websites  
Floral Crop Product ID Photo Sets

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**Course Expectations:**

Successful completion of HORT 626 requires a great deal of discipline and self-motivation. Since much of the background material is auto-tutorial, students must explore the readings and other sources on the Internet for information and "pull" themselves through the course material. Students are expected to attend all specified classes, complete all assignments on time, and participate fully in class discussions.

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**Additional Requirements for Graduate Students:**

Those students enrolled in this “stacked” portion of the course for graduate credit will complete all of the Assessments and Lab Activities as students enrolled in the undergraduate portion but with more in-depth course objectives and learning outcomes. In Module 2, 626 students will
have additional readings about international trade in more widespread areas of the world. In Module 3 and 4, students are expected to read research papers on Postharvest Physiology and the Maturing Marketplace. Students will be tested on these additional readings in questions on the hourly exams that will not be included on the undergraduate students’ version of the exams. In addition to watching the virtual field trips, students enrolled for 626 credit will read case studies on the businesses visited and lead discussions about the case studies and virtual field trips in lab. Participation in the case studies will be part of the student’s Lab Exercise grade. Two final projects will be to: (1) write an essay to proactively address a current issue facing floriculture industry firms; and, (2) conduct a case study analysis of a selected floricultural firm.

**Assessments:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage of Grade</th>
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<tbody>
<tr>
<td>Hourly exams (4)</td>
<td>40 % of your grade</td>
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<tr>
<td>Class Field Trip</td>
<td>05 % of your grade</td>
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<tr>
<td>Lab Exercises</td>
<td>25 % of your grade</td>
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<tr>
<td>Issues Essay</td>
<td>15 % of your grade</td>
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<tr>
<td>Marketing Case Study Analysis</td>
<td>15% of your grade</td>
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**Grading Scale:**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tr>
<td>90-100</td>
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<td>80-89</td>
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<td>70-79</td>
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<td>60-69</td>
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<td>&lt;60</td>
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**Absences**

Attendance at exams, in lab and on the field trip is required. 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](http://student-rules.tamu.edu/_rule07).

**Late Assignments**

All late assignments will be assessed a 10% penalty for each weekday past the due date except in the case of University excused absences. (See Student Rule 7)

**Americans with Disabilities Act (ADA) Policy Statement:** The American 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 Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu).
Academic Integrity
For additional information please visit: http://aggiehonor.tamu.edu
"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Copyrights: Please note that all handouts and supplements used in this course are copyrighted. This includes all materials generated for this class, including but not limited to syllabi, exams, in-class materials, review sheets, and lecture outlines. Materials may be downloaded or photocopied for personal use only, and may not be given or sold to other individuals.

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

Disruptive Behavior: Disruptive Activity is defined by TAMU Student Rule 24.3.12 as classroom behavior that seriously interferes with either (a) the instructor's ability to conduct the class or (b) the ability of other students to profit from the instructional program. If a student exhibits Disruptive Activity in this class the instructor will follow Texas A&M Student Rules, Classroom Behavior, section 21. Essentially, any disruptive student will get one warning to inform him/her that their behavior is inappropriate. The second time the student breaks the rule that same day in class, he/she will be asked to leave the class for the remainder of the class period that day.

HORT 626 Course Topics

Module 1: Overview of the Floriculture Industry
Floriculture Products
- Floral Products Lecture Video
- Floral Products Lecture Notes
- Floral Products Lecture Notes 3/page

Economic impact of the industry
- Economic Impact of the Green Industry (Executive Summary only)
- Economic Impact of the Cut Flower Industry (page 9)

Market structure of the industry
- Floral Products Market Channels Lecture Video
- Floral Products Market Channels Lecture Notes
- Floral Products Market Channels Lecture Notes 3/page
- Lifestyle Horticulture
- Green industry market structure
- Changes in market structure

Growers
- USDA Floriculture Crops Report (peruse casually; notice TX rankings)
• Top 100 growers in the U.S. (read all articles)

*Wholesale florists*
• Wholesale Florist & Florist Supplier Association (notice the services WFFSA provides)
• Florists’ Supplies Wholesaling in the US

*Retail firms (florists, garden centers, supermarkets)*
• Society of American Florists (notice the services SAF provides)
• Texas State Florists’ Association (notice the services TSFA provides)

*Auctions*
• Reengineering Dutch Flower Auctions
• Flower auctions around the world (take note of where flower auctions are located) Pull on price but push customer service. FloraCulture International, January 2008, Pages 40-43.
• Online videos describing flower auctions
• Online video describing Amsterdam’s flower auction

*Careers in floriculture*
• Ellison Chair in International Floriculture (become familiar with the site, notice the blog!)
• SAF Career brochure
• GrowerTalks Wage & Benefit Survey – Dec 2008

Exam 1 Quiz

*Module 2: International Trade*
• Evolution of Cut Flower Imports, Greenhouse Grower, January 1983. (How has the industry changed since 1983?)
• Industry & Trade Summary (Skim all, then focus on Appendix pages 44-45 -- tariff/trade terms)
• Floriculture World Wide (What conclusions can be drawn regarding international production, consumption, and trade patterns and what are the expectations for the future?)
• The Impact of Preferential Trade Arrangements
• International Flower Networks: Transparency and Risks in Marketing Channel Choice (What transaction cost differences exist between auctions and direct [mixed] marketing channels?)

*Central and South America*
• Ernesto Vélez Koppel, Colombian Flower Growers and Exporters (ASOCOLFLORES) -- What is Florverde? What actions does Chairman Velez suggest for the future?
• Video regarding fair trade in Ecuador
• Icon of South American, Floriculture International, February 2008, pages 40-42

*Europe*
Rest of the World

- Survival of the Fittest, Floriculture International, April 2008. (626)
- Orchid Beauty, Floriculture International, June 2008. (626)

Exam 2 Quiz

Module 3: Post-harvest Handling

- Postproduction Quality Lecture Video
- Postproduction Quality Lecture Notes 3 per page
- Postproduction Quality Lecture Notes 6 per page
- SAF Flower and Plant Care Guide (pages 1 - 30)
- Instructions for Care and Handling (optional) Word document
- Improving the Cold Chain for Cut Flowers and Potted Plants (read entire document)
- Chain-of-Life Network (peruse casually to know what the website offers)
- Visser VBD Plant Shipping System
- Visser Packaging System
- Shipping Duration on Vegetative Annuals (626)
- Toning on Vegetative Annuals (626)
- Abscissic acid and drought stress (626)
- Preservatives and cold on holy branches (626)
- BA and GA on leaf chlorosis (626)
- High temperatures on garden plants (626)

Exam 3 Quiz

Module 4: The Maturing Marketplace

The Marketplace

- What's Hot and What's Not?
- Retailing 2015 (pp. 3-22)
- GMG 2009 Garden Trends (4 pages)
- Shrinking Markets (4 pages)
- Competing During Contractions (5 1/2 pages)
- How to Survive the Maturing Market (4 pages)
- Practical Actions for Surviving a Down Economy (video)

*The Floral Consumer*
- Teleflora Super Bowl Ad
- Generation X and Y Consumers (3 pages)
- An Analysis of Floral Consumption Values and Their Difference for Genders and Geographic Regions (7 pages)
- Floral Market Behaviors and Their Influence of Consumer Floral Purchase Frequency (6 pages)
- Behavioral Differences in Prepurchase Processes between Purchasers of Flowers for Self Use and for Gift Use (8 pages)
- Evaluating the Role of Ethnicity on Gardening Purchases and Satisfaction (5 pages) (626)
- Estimating U.S. Consumers’ Choice of Floral Retail Outlets (6 pages) (626)
- Consumer Preferences for Price, Color Harmony, and Care Information of Container Gardens (5 pages)
- Flower Marketing Possibilities

Exam 4 Quiz

*Lab Activities, Experiments, and Virtual Field Trips*

*Lab Activities*
- Association of Specialty Cut Flower Growers -- Flower Search
- About Flowers.com -- Flower Library
- Bedding Plant ID Pictures
- Geranium Plant Judging
- Color Potted Plants Judging
- Techniques in Flower Judging
- Flower Judging Instructions
- Alstroemeria Judging
- Carnation Judging
- Snapdragon Judging
- Cut Flower ID Practice Quiz
- Floral Product ID Pretest Quiz
- Floral Products ID Quiz

*Lab Experiments*
- Flower Preservative Concentration Lab Word document
- Postharvest Handling of Flowering Potted Plants Lab Word document
- Azalea Demonstration Pictures
- Azalea Experimental Photos
- Effect of Floral Preservative Type Lab Word document
- Bud Harvesting of Zinnias Lab Word document
• STS in Prevention of Shattering in Geraniums Word document
• STS experiment with Geraniums Pictures

Virtual Field Trips
• Bachman's Virtual Field Trip
• Bachman's Virtual Field Trip Case Study
• Glass Corner Greenhouse Virtual Field Trip
• Glass Corner Virtual Field Trip Case Study
• C. Raker and Son's Virtual Field Trip
• C. Raker Virtual Field Trip Case Study
• Klassic Beauty Virtual Field Trip (Kerry's Nursery -- www.kerrys.com)
• Klassic Beauty (Kerry's) Virtual Field Trip Case Study

Essay: Issues Confronting the Industry (626 only)
• Guidelines for the HORT 626 Issues Essay Assignment Resource
• Essay Grading Rubric Resource
• What Will It Take To Grow Our Industry? Greenhouse Grower December 2008 (626)
• Sustainability section on the Ellison Chair website (626)
• Water resources section on the Ellison Chair website
• Marketing and Economics section on the Ellison Chair Website

Guidelines for the HORT 626 Issues Essay Assignment

Choose an issue affecting the floriculture industry that you have read about in this module and develop a 2,000 word essay summarizing the issue and how industry firms will need to respond to it.

Grades for your essay will be awarded on the basis of "style" and "substance," with the latter receiving about 75% of the weight. "Style" refers to grammar, spelling, use of appropriate vocabulary, and overall writing quality. "Substance" refers to use of facts, depth of understanding, thoroughness in answering the question posed, and indication of a well-thought out position. Be sure to consult the Essay Grading Rubric in evaluating the completeness of your essays before you turn them in. Remember, the ability to write effectively is important to your success. Your essays allow you to practice abbreviated technical writing, with the focus on conveying your ideas with economy of words and clarity of organization.

Remember to enclose the cited material in quotations if the material is a direct quote. Be sure to cite ALL work that you are using for your essay. When citing your references, use the citation style included in the ASHS Style Manual.

Marketing Project: Case Study Analysis of a Floriculture Firm (626 only)
• Guidelines for the HORT 626 Marketing Project (Case Study Analysis) Resource
• Helpful Case Analysis Tool: Porter's Five Forces Model (626)
• Aalsmeer Flower Auction Case (626)
• Bloom Flower Company Case (626)
Choose one of the cases that have been uploaded to the Moodle website and develop a case study analysis using the following guidelines:

What is a Case Study?

A case study is a description of an actual business situation involving a decision to be made or a problem to be solved. It can be a real situation that actually happened just as described, or portions may have been disguised for reasons of privacy. Most case studies are written in such a way that the reader takes the place of the manager whose responsibility is to make decisions to help solve the problem. In almost all case studies, a decision must be made, although [in very rare instances] that decision might be to leave the situation as it is and do nothing.

How to do a Case Study

While there is no one definitive "case study method" or approach, there are common steps that most instructors recommend be followed in tackling a case study. It is inevitable that different instructors will tell you to do things differently for their individual courses; this is part of life and will also be part of working in industry. This variety is beneficial since it will show you different ways of approaching decision making. What follows is intended to be a rather general approach that you can use to analyze the many different types of case studies and/or business scenarios you will likely encounter.

Preparing A Case Study Analysis

It helps to have a system when sitting down to prepare a case study analysis since the amount of information and the number of issues to be resolved can initially seem quite overwhelming. The following is a good way to start.

Step 1: The Quick Overview

1. ** Quickly read the case.** If it is a long case, at this stage you may want to read only the first few and last paragraphs.

2. **You should then be able to answer the following questions:**
   
a) Who is the decision maker in this case, and what is their position and responsibilities?

   b) What appears to be the issue (of concern, problem, challenge, or opportunity) and its significance for the organization?

   c) Why has the issue arisen and why is the decision maker involved now?
d) When does the decision maker have to decide, resolve, act or dispose of the issue? What is the urgency to the situation?

3. **Take a look at the Exhibits or Appendices** to see what numbers have been provided.

4. **Review the case subtitles** to see what areas are covered in more depth.
5. **Review the case questions** if they have been provided. This may give you some clues as to what the main issues are to be resolved.

You should now be familiar with what the case study is about, and are ready to begin the process of analyzing it. One of the primary reasons for doing the short cycle process is to give you an indication of how much work will need to be done to prepare the case study properly.

**Step 2: The Deep-Thinking Process**

At this point, the task of conducting your case analysis consists of two parts: (1) A detailed reading of the case, and then (2) Analyzing the case strategically. When you are doing the detailed reading of the case study, look for the following sections:

1. **Opening paragraph**: introduces the situation.

2. **Background information**: industry, organization, products, history, competition, financial information, and anything else of significance.

3. **Specific (functional) area of interest**: marketing, finance, operations, human resources, or integrated across all functions.

4. **The specific problem** or decision(s) to be made.

5. **Alternatives** open to the decision maker, which may or may not be stated in the case.

6. **Conclusion**: sets up the task, any constraints or limitations, and the urgency of the situation.

Most, but not all case studies will follow this general format. The purpose here is to thoroughly understand the situation and the decisions that will need to be made. Take your time, make notes, and keep focused on your objectives.

Analyzing the case thoroughly involves taking the following steps:

1. **Defining the issue(s)**
2. **Analyzing the case data**
3. **Generating alternatives**
4. **Selecting decision criteria**
5. **Analyzing and evaluating alternatives**
6. **Selecting the preferred alternative**
7. Developing an action/implementation plan

Defining the issue(s) / Problem Statement

The problem statement should be a clear, concise statement of exactly what needs to be addressed. This is not easy to write! The work that you did in the short cycle process answered the basic questions. Now it is time to decide what the main issues to be addressed are going to be in much more detail. Asking yourself the following questions may help:

1. **What appears to be the problem(s) that the company is trying to overcome?**

2. **How do I know that this is a problem?** Note that by asking this question, you will be helping to differentiate the symptoms of the problem from the problem itself. **Example:** while declining sales or unhappy employees are a problem to most companies, they are in fact, symptoms of underlying problems which need to be addressed.

3. **What are the immediate issues that need to be addressed?** This helps to differentiate between issues that can be resolved within the context of the case, and those that are bigger issues that needed to addressed at a another time (preferably by someone else!).

4. **Differentiate between importance and urgency for the issues identified.** Some issues may appear to be urgent, but upon closer examination are relatively unimportant, while others may be far more important (relative to solving our problem) than urgent. You want to deal with important issues in order of urgency to keep focused on your objective. Important issues are those that have a significant effect on:
   a) profitability,
   b) the strategic direction of the company,
   c) source of competitive advantage,
   d) morale of the company's employees, and
   e) customer satisfaction.

The problem statement may then be framed as a question. For example: *What should Joe do? How can Mr. Smith improve market share?* Usually the problem statement has to be re-written several times during the analysis of a case, as you peel back the layers of symptoms or causation.

Analyzing Case Data

In analyzing the case data, you are trying to answer the following questions:

1. **Why or how did these issues arise?** You are trying to determine cause and effect for the problems identified. You cannot solve a problem that you cannot determine the cause of!
It may be helpful to think of the organization in question as consisting of the following components:

a) **resources**, such as materials, equipment, or supplies, and

b) **people** with various **capabilities** who transform these resources using

c) **processes**, which create something of greater value.

2. **Who is affected most by this issue?** You are trying to identify who are the relevant stakeholders to the situation, and who will be affected by the decisions to be made.

3. **What are the constraints and opportunities implicit to this situation?** It is very rare that resources are not a constraint, and allocations must be made on the assumption that not enough will be available to please everyone.

4. **What do the numbers tell you?** You need to take a look at the numbers given in the case study and make a judgment as to their relevance to the problem identified. Not all numbers will be immediately useful or relevant, but you need to be careful not to overlook anything. When deciding to analyze numbers, keep in mind why you are doing it, and what you intend to do with the result.

5. **Analyze the company’s history, development, and growth.** A convenient way to investigate how a company’s past strategy and structure affect it in the present is to chart the critical incidents in its history - that is, the events that were the most unusual or the most essential for its’ development into the company it is today. Some of the events have to do with its founding, its initial products, how it makes new-product market decisions, and how it developed and chose functional competencies to pursue. Its entry into new businesses and shifts in its main lines of business are also important milestones to consider.

6. **Identify the company’s internal strengths and weaknesses.** Once the historical profile is completed, you can begin the first half of the SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats). Use all the incidents you have charted to develop an account of the company’s strengths and weaknesses as they have emerged historically. Examine each of the value creation functions of the company, and identify the functions in which the company is currently strong and currently weak. Some companies might be weak in marketing; some might be strong in research and development. Make lists of these strengths and weaknesses. The SWOT checklist gives examples of what might go in these lists.

7. **Analyze the external environment.** The next step is to identify environmental opportunities and threats (the second half of the SWOT analysis). Here you should apply all information you have learned in this course (and the case itself) regarding the industry and the macroenvironment, to analyze the environment the company is confronting. One useful tool of analysis is Michael Porter’s Five Forces Model. Which factors in the macroenvironment will appear salient depends on the specific company being analyzed.
However, use each factor in turn (for instance, demographic factors) to see whether it is relevant for the company in question.

Generating Alternatives

This section deals with different ways in which the problem can be resolved. Typically, there are many and being both creative and critical at this stage helps. Things to remember at this stage are:

1. **Be realistic!** While you might be able to find a dozen alternatives, keep in mind that they should be realistic and fit within the constraints of the situation.

2. The alternatives should be **mutually exclusive**, that is, they cannot happen at the same time.

3. **Not making a decision pending further investigation** is generally **not** an acceptable decision for any case study that you will analyze. A manager can always delay making a decision to gather more information, which is not managing at all! The whole point to this exercise is to learn how to make good decisions, and having imperfect information is normal for most business decisions, not the exception.

4. **Doing nothing** (as in not changing your strategy) can be a viable alternative, provided it is being recommended for the correct reasons, as will be discussed below.

5. Avoid the **softball** method of providing only two other clearly undesirable alternatives to make one reasonable alternative look better by comparison. This will be painfully obvious to your instructor, and just shows laziness on your part in not being able to come up with more than one decent alternative.

6. Keep in mind that any alternative chosen will need to be implemented at some point, and if serious obstacles exist to successfully doing this, then you are the one who will look bad for suggesting it.

Once the alternatives have been identified, a method of evaluating them and selecting the most appropriate one needs to be used to arrive at a decision.

**Key Decision Criteria (KDC's)**

A very important concept to understand, they answer the question of how you are going to decide which alternative is the best one to choose. Other than choosing randomly, we will always employ some criteria in making any decision. Think about the last time that you make a purchase decision for an article of clothing. Why did you choose the article that you did? The criteria that you may have used could have been: (1) fit, (2) price, (3) fashion, (4) color, (5) approval of friend/family, and/or (6) availability. Note that any one of these criteria could appropriately finish the sentence: “the brand/style that I choose to purchase must...”

These criteria are also how you will define or determine that a successful purchase decision has been made. For a business situation, the key decision criteria are those things that are important
to the organization making the decision, and they will be used to evaluate the suitability of each alternative recommended. **Key decision criteria should be:**

1. **Brief**, preferably in point form, such as
   1. improve (or at least maintain) profitability,
   2. increase sales, market share, or return on investment,
   3. maintain customer satisfaction, corporate image,
   4. be consistent with the corporate mission or strategy,
   5. within our present (or future) resources and capabilities,
   6. within acceptable risk parameters,
   7. ease or speed of implementation,
   8. employee morale, safety, or turnover,
   9. retain flexibility, and/or
   10. minimize environmental impact.

2. **Measurable**, at least to the point of comparison, such as alternative A will improve profitability more that alternative B.

3. **Be related to your problem statement and alternatives.** If you find that you are talking about something else, that is a sign of a missing alternative or key decision criteria, or a poorly formed problem statement.

Students tend to find the concept of key decision criteria very confusing, so you will probably find that you re-write them several times as you analyze the case. They are similar to constraints or limitations, but are used to evaluate alternatives.

**Evaluation of Alternatives**

If you have done the above properly, this should be straightforward. You measure the alternatives against each key decision criteria. Often you can set up a simple table with key decision criteria as columns and alternatives as rows, and write this section based on the table. Each alternative must be compared to each criteria and its suitability ranked in some way, such as met/not met, or in relation to the other alternatives, such as better than, or highest. This will be important to selecting an alternative. Another method that can be used is to list the advantages and disadvantages (pros/cons) of each alternative, and then discussing the short and long term implications of choosing each. Note that this implies that you have already predicted the most likely outcome of each of the alternatives. Some students find it helpful to consider three different levels of outcome, such as best, worst, and most likely, as another way of evaluating alternatives.

**Recommendation(s)**

You must have one! Business people are decision-makers; this is your opportunity to practice making decisions. Give a justification for your decision (use the KDC's). Check to make sure that it is one (and only one) of your Alternatives and that it does resolve what you defined as the Problem.
Structure of the Written Report

Different instructors will require different formats for case reports, but they should all have roughly the same general content. For this course, the report should have the following sections in this order:

1. Title page
2. Table of contents
3. Executive summary
4. Problem (Issue) statement
5. Data analysis
6. Key Decision Criteria
7. Alternatives analysis
8. Recommendations
9. Action and Implementation Plan
10. Exhibits

Notes on Written Reports:

Always remember that you will be judged by the quality of your work, which includes your written work such as case study reports. Sloppy, disorganized, poor quality work will say more about you than you probably want said! To ensure the quality of your written work, keep the following in mind when writing your report:

1. **Proof-read your work!** Not just on the screen while you write it, but the hard copy after it is printed. Fix the errors before submitting.

2. Use **spell checker** to eliminate spelling errors.

3. Use grammar checking to avoid common grammatical errors such as run on sentences.

4. Note that **restating of case facts** is not included in the format of the case report, nor is it considered part of analysis. Anyone reading your report will be familiar with the case, and you need only to mention facts that are relevant to (and support) your analysis or recommendation **as you need them**.

5. If you are going to include exhibits (particularly numbers) in your report, you will need to refer to them within the body of your report, not just tack them on at the end! This reference should be in the form of supporting conclusions that you are making in your analysis. The reader should not have to guess why particular exhibits have been included, nor what they mean. If you do not plan to refer to them, then leave them out.

6. Write in a formal manner suitable for scholarly work, rather than a letter to a friend.

7. Common sense and logical thinking can do wonders for your evaluation!

8. You should expect that the computer lab's printer **will not** be functioning in the twelve hours prior to your deadline for submission. **Plan for it!**
9. **Proof-read your work!** Have someone else read it too! (particularly if English is not your first language) This second pair of eyes will give you an objective opinion of how well your report holds together.

**Information for the Oral Presentation:**

1. When making oral presentations of case analyses or strategic audits, visual aids **must** be employed (including the use of handouts, PowerPoint, etc). Be sure to pre-check equipment availability. Regardless of the type of visual aids used, bring a hardcopy of the visuals just in case there is equipment failure.

2. It is recommended that you dress professionally and exhibit the same level of decorum and consideration that you would in a real business setting.

3. Library and online research beyond the case is **required**. Research must be limited to information that would be reasonably available to company executives at the time of the case. All of the cases assigned this semester are fairly recent, so you should be able to make use of online sources and those available in the library. Analysis in hindsight is not permitted in either oral or written reports. "What a company did" is not justification for choosing a particular course of action. There are many possibilities that companies do not often consider. Also, in the long run, the company’s action may not be successful.

4. When presenting, indicate the outside sources used. If you present industry averages, for example, or demographic data, indicate (cite) where you got them.

5. After you have presented, be prepared to receive questions regarding your assumptions, your use of data, your conclusions, your logic, and your recommendations. Other class members may not agree with your analysis. Your instructor may challenge your evaluation of environmental or internal characteristics. **Do not become defensive.** This is a natural part of the process. You are being asked to think on your feet and demonstrate that you have a deep understanding of the case issues. Rigorous probing by the instructor reflects the high expectations associated with this course activity. Everyone learns from this experience, even class members who are not presenting.

6. You will be given an opportunity to evaluate your class members concerning their performance on their oral presentation of the case analysis. You will receive specific feedback from the instructor concerning the content of the oral presentation as well as feedback on your presentation style.
Texas A&M University
Departmental Request for a New Course
Undergraduate ♦ Graduate ♦ Professional
Submit original form and attach a course syllabus.

Form Instructions

1. Request submitted by (Department or Program Name): Department of Marine Biology
   MARB 604 Behavioral Ecology of Marine Mammals in the Seas of New Zealand

2. Course prefix, number and complete title of course:
   MARB 604 Behavioral Ecology of Marine Mammals in the Seas of New Zealand

3. Catalog course description (not to exceed 50 words):
   Ecology and behavior of marine birds and mammals of the South Island, New Zealand; literature comparisons of marine vertebrates; emphasis is on animals in nature; laboratory experience of the animals from boats, shore, readings, videos, interpretation, and peer-review scientific papers and books.

4. Prerequisite(s):
   Graduate standing and permission from instructor
   Cross-listed with: MARB 404
   Stacked with: MARB 404

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

6. Is this a repeatable course? ☑ Yes
   Will this course be repeated within the same semester? ☑ Yes
   ☐ No
   If yes, this course may be taken _____ times.

7. 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)
   any master's or doctoral level program

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

9. Prefix    Course #    Title (excluding punctuation)
    MARB 604    Behavioral Ecology of Marine Mammals in the Seas of New Zealand

   Lect.  Lab  SCH  CIP and Fund Code  Admin. Unit  Acid. Year  HCF Code
   0  3  0  3  0  4  2  6  1  3  0  5  0  0  0  2  1  8  0  5  1  2  -  1  3  0  1  0  2  9  8

   Approval recommended by:
   John Schwarz  10/10/11
   Department Chair (Type Name & Sign)  Date
   Chair, College Review Committee  Date

   Department Chair (Type Name & Sign)  Date
   Dean of College  Date

   Submitted to Coordinating Board by:
   Associate Director, Curricular Services  Date
   Chair, GC or UCC  Date
   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra williams@tamu.edu.
Curricular Services - 3/10
Behavioral Ecology of Marine Mammals and Seabirds of New Zealand
Texas A&M University MARB 404/604
Fall-Spring 2011-2012 Intersession
Meetings, research, or readings 8AM-8PM every day, 18-30 Dec. 2011

Lectures by Regent's Professor Bernd Würsig
Labs by Jody Weir, MS, and Dave Lundquist, MS, with one or two extra Ph.D graduate assistant(s) to be named. Both Jody and Dave are also Ph.D. candidates.

Würsig Office Phone: 409-740-4413
E-Mail: wursigb@tamug.edu

This course consists of lectures, readings, and labs on the ecology and behavior of marine birds and mammals of the South Island, New Zealand, with copious comparisons to the relevant literature of other homeothermic marine vertebrates, worldwide. Emphasis will be on animals in nature, although results from aquaria will also be presented in light of social strategies in the wild. Laboratory will consist of actual hands-on experience of the animals from boats and shore, readings, videos, interpretation, and select major peer-review scientific papers and books.

Grading for undergraduates will be by evaluation of one mid-session exam (15%), one second-session exam (not cumulative, 25%), daily lecture quizzes (20%), and the lab, which also consists of developing your own research project (40%). Grades are assigned at 90+ = A, 80-89 = B, 70-79 = C, 60-69 = D, and under 60 = F. Course prerequisites are at least sophomore standing and MARB 315 or some other vertebrate or chordate course, or permission of instructor.

Graduate students taking this course as MARB.604 will team with one to more (depending on relative numbers) of undergraduates, and help the undergraduates develop their own projects. In other words, every graduate student will also serve as a teaching assistant/mentor. Würsig will monitor this progress, and the graduate students will keep a separate research log of their mentoring activities, to be graded by Würsig.

Grading for graduate students will be by evaluation of one mid-session exam (15%), one second-session exam (not cumulative, 25%), daily lecture quizzes (20%), and the lab, which in the case of graduate students consists of participation and success of helping to mentor one to several undergraduates, as monitored by Würsig, and by grading upon verbal meetings (20%) with Würsig and grading of the separate research log of mentoring activities (also 20%, for a total of 40% for graduate mentoring of undergraduate research projects). Grades are assigned at 90+ = A, 80-89 = B, 70-79 = C, 60-69 = D, and under 60 = F.

Learning Outcomes: The students will a) have an understanding of the diverse marine bird and mammal fauna of a southern hemisphere near-shore oceanic environment where deep waters meet near-shore shallow areas, and provide a complex interaction of closely juxtaposed ecosystems; b) be able to extrapolate from the present study area to marine birds and mammals
worldwide; c) have an understanding of anthropogenic factors affecting the animals, including underwater noise, fishing, tourism, near-shore habitat changes or degradation; d) begin to understand the different manner in which the New Zealand Department of Conservation relates to management and conservation activities from that of the U.S. National Marine Fisheries Service, and other protective agencies, e) understand how to formulate, conduct, and describe results of a basic short-term research project, and f) have a basic understanding of the indigenous Maori view of oceanic nature, and the settlers’ past of whaling, sealing, and birding.

Course Objectives: From the testable above learning outcomes, Würsig will ascertain that students have acquired enough knowledge and skills of marine birds and mammals and their diverse environments in order to understand the animals, their ecosystems, and the relative fragility of nature. As a secondary but important objective, knowledge of others’ views and past views of nature and place in nature will be obtained.

To apply for this Intersession course, contact Bernd Würsig: wursigb@tamu.edu, with your resume or Cv, and a short paragraph or two of why you are interested in taking this course, and your undergraduate or graduate GPA. All in total confidence of course. Selections will take place as soon as possible in spring and summer 2011.

The required texts are 1) Encyclopedia of Marine Mammals, 2009, by Perrin, Würsig, and Thewissen; and 2) The Dusky Dolphin: Master Acrobat off Different Shores, 2010, by Würsig and Würsig. Both books are by Elsevier/Academic Press. Select readings, for both lecture and lab, will be available as handouts and by web.

American Disability 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 for their disabilities. If you believe you have a disability requiring accommodation, please contact the Disability Services, at Texas A&M University, College Station, Cain Hall, Room B118, or call 979-845-1637. For additional information visit: http://disability.tamu.edu

Academic Integrity

The Aggie Code of Honor includes a simple statement: "Aggies do not lie, cheat, or steal, nor do they tolerate those who do". It is the responsibility of students, faculty, and staff to help maintain scholastic integrity. Those who cheat undermine the work of all other students in the lab. Cheating will not be tolerated in this course, and action will be taken against violators. For further information, refer to: http://www.tamu.edu/aggiehonor
# Behavioral Ecology of Marine Mammals and Seabirds of New Zealand

**Syllabus of Classes and Labs (with field days on all possible weather days, usually >80%)**

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Readings supplied; Encourage study on airplane to NZ</td>
<td>Intro. to cetaceans and marine birds – taxonomy/systematics Group living -- non-cetaceans Introduction to the Kaikoura environment</td>
</tr>
</tbody>
</table>
| 1   | Dec. 18 | Quiz 1  
The Dusky Dolphin – A southern hemisphere semi-pelagic example  
Field trip to dusky dolphins, divided by boat and shore |
| 2   | Dec. 19 | Quiz 2  
Social strategies of dolphins socializing in day-time  
Mother-calf strategies of dusky dolphins close to shore |
| 3   | Dec. 20 | Quiz 3  
The Sperm Whale -- Social strategies off Kaikoura  
Sperm whales as a comparison worldwide  
Develop own research project; review with Würsig and graduate mentor |
| 4   | Dec. 21 | Quiz 4  
Other Whales of the southern hemisphere  
Baleen whale habitat use and environmental problems  
Present research proposal; critiques by colleagues |
| 5   | Dec. 22 | Quiz 5  
Maori and white settler attitudes to the marine environment  
Whaling, habitat degradation, and other environmental concerns |
| 6   | Dec. 23 | **8-930 AM, Exam 1**  
Personal research: conduct, questions and protocols |
<p>| 7-8 | Dec. 24-25 | Holiday break, with encouragement for conducting own research, and participating in local marine and other studies |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event/Activity</th>
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<tr>
<td>9</td>
<td>Dec. 26</td>
<td>Quiz 6</td>
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<tr>
<td></td>
<td></td>
<td>Comparative Studies -- Group Living</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dusky dolphins and other marine mammals in different habitats</td>
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<tr>
<td>10</td>
<td>Dec. 27</td>
<td>Quiz 7</td>
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<td>Marine bird behavior, behavioral ecology, and conservation</td>
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<td>Culture as a consideration in conservation</td>
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<td>11</td>
<td>Dec. 28</td>
<td>Quiz 8</td>
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<td>Review of society structure and culture</td>
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<td>Intelligence and cognition in homeothermic marine vertebrates</td>
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<td>12</td>
<td>Dec. 29</td>
<td>Quiz 9; Exam #2/Study/Reading</td>
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<td>13</td>
<td>Dec. 30</td>
<td>Research Presentation Day</td>
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</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. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences

2. Course prefix, number and complete title of course: SCSC 629 Laboratory Quality Systems

3. Catalog course description (not to exceed 50 words): Quality systems and method development used within a laboratory; ensuring the integrity of procedures used in lab processes, chain of custody, information management, and international laboratory standards; regulatory requirements for laboratory operation; bio-security precautions; laboratory management.

4. Prerequisite(s): None

Cross-listed with: VTMI 629
Stacked with: N/A

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

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

6. 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

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

     any master's or doctoral program

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

9. Prefix
   Course #
   Title (excluding punctuation)

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   Approval recommended by:
   David Baltensperger
   Department Head or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee Date
   Dean of College Date
   Chair, OF or UCE Date
   Mark J. Zoran Date
   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 3/10
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions

1. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences

2. Course prefix, number and complete title of course: SCSC 629 Laboratory Quality Systems

3. Catalog course description (not to exceed 50 words): Quality systems and method development used within a laboratory to assess regulated products and environment in agriculture, ensuring the integrity of procedures used in lab processes, chain of custody, information management, and international laboratory standards. Regulatory requirements for laboratory operation; bio-security precautions; laboratory management.

4. Prerequisite(s): None

Cross-listed with: YTMJ 629

Stacked with: N/A

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

5. Is this a variable credit course? □ Yes □ No
   If yes, from _______ to _______

6. 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

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

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

   any master's or doctoral program

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

9. Prefix Course # Title (excluding punctuation)

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</table>

Approval recommended by:

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

Chair, College Review Committee Date

Dean of College Date

Chair, GC or UCO 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 – 3/10
Laboratory Quality Systems
VTMI/SCSC 629 | Summer (10-week) 2012
Dr. Dai & Dr. Herrman

Instructors:
Dr. Susie Dai, Research Assistant Professor
Department of Veterinary Pathobiology
Office of the Texas State Chemist
Phone: (979) 845-1121
Fax: (979) 845-1389
E-mail: susie@otsc.tamu.edu

Dr. Tim Herrman, Professor
Department of Soil & Crop Sciences
Texas A&M University
State Chemist and Director
Office of the Texas State Chemist
Phone: (979) 845-1121
Fax: (979) 845-1389
E-mail: tjh@otsc.tamu.edu

Course Description:
Quality systems and method development used within a laboratory; ensuring the integrity of procedures used in lab processes, chain of custody, information management, and international laboratory standards; regulatory requirements for laboratory operation; bio-security precautions; laboratory management.

Student Credit Hours: 3

Prerequisites: None

Course Goals:
After completing this course, students will possess a practical knowledge of standard laboratory practices and quality systems required to oversee a scientific laboratory's quality management program. This course is intended to equip the student with the breadth of knowledge needed to obtain laboratory data and results that are reliable, interpretable, repeatable, and defensible. Students will possess the capability to participate on a laboratory management team including budgeting and forming a technology strategy.

Key Topics:
This course will address the following topics:
- Ensuring Validity and Reliability
- Laboratory Procedures
- Quality Assurance: Procedures, Tools & Methods
- Laboratory Management
Course Tools:
Blackboard Learning Management System
All course materials and activities will be presented using the Blackboard Learning Management System. You access Blackboard by logging into http://elearning.tamu.edu
Before you access course materials, please perform Vista Browser Check by clicking on the Check Browser button.

Textbooks:
Lab Procedure Manuals – OTSC, FAO
A Laboratory Quality Handbook of Best Practices and Relevant Regulations [Paperback] Donald C. Singer (Editor)

The Laboratory Quality Assurance System: A Manual of Quality Procedures and Forms - Ratliff

Additional Readings: Readings will be taken from other reference materials including government publications and standards. Most readings will be available in Blackboard in .pdf format. Other readings will be available online, with a hyperlink provided in Blackboard.

Presentations
Online slide presentations with audio or each module can be accessed from Blackboard. The slides for each presentation will be provided as a .pdf file which can be downloaded and printed. Participants will also receive a packet of materials, which includes course materials on CD, via mail.

Course Activities:
Every week, you will be expected to complete the following:
- View all presentations
- Complete all readings
- Participate in course discussion
- Submit quiz for the week’s readings and presentation

Quizzes: Each week there will be a short quiz on the week’s readings and presentation. All quizzes will be administered through the course management system.

Exams: There will be a midterm and final exam which will be administered through the course management system.

Projects/ Final Paper
1. Tracing Chain of Custody for Lab Samples
2. Determine if a certain set of results are valid – defend your conclusion
3. Corrective/ Preventative Actions for a situation where you have non-conforming work
4. Draw a diagram/visual – showing lab functions and what quality assurance procedures should be implemented and why
Discussions: Course discussions will be held on the discussion forum on the course management system. These discussions are good way for you to communicate with other students and the instructor and to share ideas and insights. If you need an immediate answer, please e-mail me directly.

Grading:
Your grades will be determined as follows

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<tbody>
<tr>
<td>Quizzes</td>
<td>20% of total grade</td>
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<tr>
<td>Exams</td>
<td>40% of total grade</td>
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<tr>
<td>Projects</td>
<td>40% of total grade</td>
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<tr>
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<td>D</td>
<td>60 - 69</td>
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<tr>
<td>F</td>
<td>&lt;60%</td>
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Grading Policy
Class assignments, quizzes, and final exam must be completed on the dates set by the instructor on the course website unless prior approval has been granted by the instructor.

Attendance, Homework and Make-up Exam Policy
Due to the participatory nature of this Web-based class, regular log-in to the course Web site is expected. Excused absences are subject to TAMU rules and guidelines please see: [http://student-rules.tamu.edu/rule7.htm](http://student-rules.tamu.edu/rule7.htm) for details.

Instructor/ Student Communication
Please send all e-mails to the email address: susie@otsc.tamu.edu. Please post any questions you have about the material to the discussion board so other students can respond to it and/or benefit from the ensuing discussion. I will be reading the discussion board and will reply to messages when necessary.

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

Copyright
Course packets and all other materials generated and/or used during this course are copyrighted. Because these materials are copyrighted, you do not have the right to copy the course packets, unless the instructor expressly grants permission.

Academic Integrity Statement
“An Aggie does not lie, cheat, or steal or tolerate those who do.” For more information, read the Honor Council Rules and Procedures at [http://www.tamu.edu/aggiehonor](http://www.tamu.edu/aggiehonor)
### Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td><strong>Unit 1 - Laboratory Quality Systems: Ensuring Validity and Reliability</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Laboratory Organization Laboratory Networks</td>
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<td></td>
<td>Laboratory Accreditation</td>
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<td></td>
<td>Traceability</td>
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<tr>
<td>2</td>
<td>Good Laboratory Practices</td>
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<tr>
<td></td>
<td>Bio-security Systems</td>
</tr>
<tr>
<td><strong>Unit 2 Laboratory Procedures</strong></td>
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<tr>
<td>3</td>
<td>Analytical Procedures</td>
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<tr>
<td></td>
<td>(microbiology)</td>
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<tr>
<td>4</td>
<td>Analytical Procedures</td>
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<tr>
<td></td>
<td>(instrumental &amp; spectroscopy)</td>
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<tr>
<td>5</td>
<td>Analytical Procedures</td>
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<td></td>
<td>(rapid methods)</td>
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<tr>
<td>5</td>
<td>Mid-Term Exam</td>
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<tr>
<td><strong>Unit 3 – Quality Assurance: Procedures, Tools &amp; Methods</strong></td>
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<tr>
<td>6</td>
<td>Sampling and Handling Evidence Reporting Results</td>
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<td>Laboratory Information Mgt</td>
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<td>Chain of Custody</td>
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<td>7</td>
<td>Statistical Procedures</td>
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<td>8</td>
<td>Control of no-conforming work, Auditing</td>
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<td>Corrective Actions</td>
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<td><strong>Unit 4 – Laboratory Management</strong></td>
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<td>9</td>
<td>Technology Strategy</td>
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<td>Instrument purchase, installation</td>
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<td>Cost Analysis</td>
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<td>10</td>
<td>Summary</td>
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<tr>
<td>10</td>
<td>Final Exam</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. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences
2. Course prefix, number and complete title of course: SCSC 634 Regulatory Science: Principles & Practices in Food Systems
3. Catalog course description (not to exceed 50 words): Regulatory tools, standards and approaches in production, processing, and distribution of agricultural goods; development and implementation of regulations; interdependence of federal and state agencies; use of risk analysis.

4. Prerequisite(s): None
Cross-listed with: N/A Stacked with: N/A

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

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

6. 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

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

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

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

9. Prefix Course # Title (excluding punctuation)

| S | C | S | C | 6 | 3 | 4 | R | E | G | S | C | I | F | O | O | D | S | Y | S | S | T | E | M | S |
| Lect. | Lab | SCH | CIP and Fund Code | Admin. Unit | Acad. Year | FICE Code |
| 0 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 2 | 6 | 2 | 0 | 1 | 2 | 1 | 3 | 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
(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 – 3/10

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

Form Instructions

1. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences

2. Course prefix, number and complete title of course: SCSC 634 Regulatory Science: Principles & Practices

3. Catalog course description (not to exceed 50 words): Regulatory tools, standards and approaches in production, processing, and distribution of agricultural goods; development and implementation of regulations; interdependence of federal and state agencies; use of risk analysis

4. Prerequisite(s): None

Cross-listed with: N/A

Stacked with: N/A

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

5. Is this a variable credit course? □ Yes ☑ No

If yes, from ______ to ______

6. 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

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

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

   any master's or doctoral program

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

9. Prefix | Course # | Title (including punctuation)

| SCSC 634 | REGULATORY SCIENCE |

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>STL</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
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<td>1</td>
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</tbody>
</table>

Approval recommended by:

David B. Biltmore
Department Head or Program Chair (Type Name & Sign) Date

Chair, College Review Committee

Dean of College

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 — 3/10
Instructor:
Dr. Tim Herrman, Professor
Department of Soil & Crop Sciences
Texas A&M University
State Chemist and Director Office of the Texas State Chemist
Phone: (979) 845-1121
Fax: (979) 845-1389
E-mail: tjh@otsc.tamu.edu

Course Description:
Regulatory tools, standards and approaches in production, processing, and distribution of agricultural goods; development and implementation of regulations; interdependence of federal and state agencies; use of risk analysis.

Course Goals:
After completing this course, students will possess a practical knowledge of how to evaluate regulations using a science based approach to risk management and develop best practices as a regulator or corporate risk manager to achieve conformance to state, national and international regulations and standards.

Key Topics:
This course will address the following topics:
- Emerging Field of Regulatory Science
- Food Regulatory Policy
- Regulatory Compliance Practices
- Implementing a Food Protection System
- Current Issues and Problems

Course Tools:
All course materials and activities will be presented using the Blackboard Learning Management System. Access the course through Blackboard by logging into http://elearning.tamu.edu with your NetID and password. Before you access course materials, please perform Vista Browser Check by clicking on the Check Browser button.

Textbooks: Food Regulation by Neal D. Fortin; Enhancing Food Safety by the National Academies of Science
Additional Readings:
Readings will be taken from other reference materials including government publications and standards. Most readings will be available in Blackboard in .pdf format. Other readings will be available online, with a hyperlink provided in Blackboard.

Presentations
Online slide presentations with audio or each module can be accessed from Blackboard. The slides for each presentation will be provided as a .pdf file which can be downloaded and printed.

Course Activities:
Every week, you will be expected to complete the following:
- View all presentations
- Complete all readings
- Participate in course discussion
- Submit quiz for the week’s readings and presentation

Quizzes
Each week there will be a short quiz on the week’s readings and presentation. All quizzes will be administered through the course management system.

Exams
There will be a midterm and final exam which will be administered through the course management system.

Projects/ Final Paper
Course projects include evaluating a regulation (state or national), conducting a risk assessment and writing a white paper.

Discussions
Course discussions will be held on the discussion forum on the course management system. These discussions are good way for you to communicate with other students and the instructor and to share ideas and insights. If you need an immediate answer, please e-mail me directly.
Grading
Your grades will be determined as follows:

<table>
<thead>
<tr>
<th></th>
<th>20% of total grade</th>
<th>100% - 90%</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>B</td>
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<td>89% - 80%</td>
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<td>C</td>
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<td>79% - 70%</td>
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<tr>
<td>D</td>
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<td>69% - 60%</td>
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<tr>
<td>F</td>
<td>&lt;60%</td>
<td></td>
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</tbody>
</table>

Exams 40% of total grade

Grading Policy
Class assignments, quizzes, and final exam must be completed on the dates set by the instructor on the course website unless prior approval has been granted by the instructor.

Attendance and Homework Policy
Due to the participatory nature of this Web-based class, regular log-in to the course Web site is expected. Excused absences are subject to TAMU rules and guidelines please see: http://student-rules.tamu.edu/rule7.htm for details.

Instructor/Student Communication
Please send all e-mails to the email address: tih@otsc.tamu.edu. I will not be using the Blackboard Mail Tool.

Please post any questions you have about the material to the discussion board so other students can respond to it and/or benefit from the ensuing discussion. I will be reading the discussion board and will reply to messages when necessary.

University Policies
American Disability Act (ADA)
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 Life/Services for Students with Disabilities, in Cain Hall. The phone number is (979) 845-1637.

Copyright
Course packets and all other materials generated and/or used during this course are copyrighted. Because these materials are copyrighted, you do not have the right to copy the course packets, unless the instructor expressly grants permission.

Academic Integrity Statement
"An Aggie does not lie, cheat, or steal or tolerate those who do."
For more information, read the Honor Council Rules and Procedures at http://www.tamu.edu/aggiehonor
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Assignments</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What is Regulatory Science; Origins and Rationale behind Regulation</td>
<td>Self-intro. Reading</td>
<td>Advancing Regulatory Science; Fortin 1;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quiz</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Globalization of the Food Supply</td>
<td>Reading Quiz</td>
<td>Import Safety Action Plan; Hemphill 2009; Fortin 11</td>
</tr>
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<td></td>
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<tr>
<td>3</td>
<td>Integrated Food Protection System; Regulatory Institutions and Jurisdiction</td>
<td>Reading Quiz</td>
<td>Knutson et al. 10; Food Protection Plan; Enhancing Food Safety 3, 4</td>
</tr>
<tr>
<td>4</td>
<td>Food Legislation</td>
<td>Reading Quiz</td>
<td>FSMA, FDAAA, Bioterror, FDCA</td>
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<tr>
<td>5</td>
<td>Investigation and Evidence Collection</td>
<td>Reading Class Project</td>
<td>Fortin 12, 13</td>
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<td></td>
<td>Enhancing Food Safety 8</td>
</tr>
<tr>
<td>6</td>
<td>Investigation and Evidence Collection</td>
<td>Reading Exam</td>
<td>Fortin 14</td>
</tr>
<tr>
<td>7</td>
<td>Risk Analysis</td>
<td>Reading</td>
<td>Risk Analysis Principles FAO-WHO</td>
</tr>
<tr>
<td>8</td>
<td>Risk Analysis</td>
<td>Reading Quiz</td>
<td>Principles and Methods of Risk Assessment FAO-WHO</td>
</tr>
<tr>
<td>9</td>
<td>Risk Analysis</td>
<td>Reading Class Project</td>
<td>Enhancing Food Safety 5, 6, 9</td>
</tr>
<tr>
<td>10</td>
<td>Manufactured Feed and Food Standards</td>
<td>Reading Quiz</td>
<td>Manufactured Food Standard, Enhancing Food Safety 8</td>
</tr>
<tr>
<td>11</td>
<td>Preventative Strategies; Ensuring Compliance</td>
<td>Reading Quiz</td>
<td>Enhancing Food Safety 11</td>
</tr>
<tr>
<td>12</td>
<td>Social and Economic Implications of Compliance</td>
<td>Reading</td>
<td>Fortin 10</td>
</tr>
<tr>
<td>13</td>
<td>Regulatory Equivalence in a Global Market</td>
<td>Reading</td>
<td>Cork and Checkley 2011; Fortin 16</td>
</tr>
<tr>
<td>14</td>
<td>International Standards</td>
<td>Reading White Paper Due</td>
<td>Codex Alimentarius</td>
</tr>
<tr>
<td>15</td>
<td>Final Exam</td>
<td>Final Exam</td>
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</tbody>
</table>
You may insert your syllabus (Word document) to this section of the form. Simply delete this paragraph and use the Insert/File option in the menu bar to insert your syllabus. If you cut and paste your syllabus, it is recommended that you first paste it after this statement and then delete this paragraph. Otherwise, it will lock the syllabus as read-only.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions

1. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences

2. Course prefix, number and complete title of course: SCSC 635 Comparative Global Standards in Food Systems

3. Catalog course description (not to exceed 50 words): Laws, regulations and standards governing the production, distribution, processing, and marketing of food across regions of the world; international standard setting bodies and risk assessment committees; regulatory equivalency and harmonization; product approval procedures; cost/benefits of global standards and trade agreements.

4. Prerequisite(s): None

5. Cross-listed with: N/A

6. Stacked with: N/A

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

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

6. If yes, from ______ to ______

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

6. If yes, this course may be taken ______ times.

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

7. 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)

any master's or doctoral program

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

9. Approval recommended by:

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

Dean of College Date
Chair, CO or UCC
Mark J. Zoran Date

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 3/10
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions

1. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences

2. Course prefix, number and complete title of course: SCSC 635 Comparative Global Standards

3. Catalog course description (not to exceed 50 words): Laws, regulations and standards governing the production, distribution, processing, and marketing of food across regions of the world; international standard setting bodies and risk assessment committees; regulatory equivalency and harmonization; product approval procedures; cost/benefits of global standards and trade agreements.

4. Prerequisite(s): None

5. Cross-listed with: N/A

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

7. If yes, from ________ to ________

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

7. If yes, this course may be taken ________ times.

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

7. 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)

8. Any master's or doctoral program

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

Attach approval letters.

Prefix: SCSC
Number: 635
Title (excluding punctuation): Comparative Global Standards

Lect. Lab SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
0 3 0 0 0 3 0 1 0 7 0 1 0 0 0 5 2 6 2 0 1 2 - 1 3 0 0 3 6 3 2

Approval recommended by:

[Signature] 11-11-11
Department Head or Program Chair (Type Name & Sign) Date

[Signature] 11-16-11
Chair, College Review Committee Date

[Signature] 11-16-11
Dean of College Date

[Signature] 11-16-11
Chair, GC or ECC Date

[Signature] 11-16-11
Mark J. Zoran Date

Questions regarding this form should be directed to Sandes Williams at 845-8201 or sandes.williams@tamu.edu
Curricular Services – 3/10
Dr. Tim Herrman, Professor  
**Department of Soil & Crop Sciences**  
State Chemist and Director **Office of the Texas State Chemist**  
Phone: (979) 845-1121  
Fax: (979) 845-1389  
E-mail: tjh@otsc.tamu.edu

**Course Description:**  
Laws, regulations and standards governing the production, distribution, processing, and marketing of food across regions of the world; international standard setting bodies and risk assessment committees; regulatory equivalency and harmonization; product approval procedures; cost/benefits of global standards and trade agreements.

**Student Credit Hours:** 3

**Prerequisites:** None

**Course Goals:**  
After completing this course, students will possess a working knowledge of food and food law, regulations, and standards in different regions of the world including product approval procedures. The course is intended to equip the student with breadth of knowledge needed to make decisions about which standards apply and under which circumstances based on economic, public health and safety, and quality management factors.

**Key Topics:**  
This course will address the following topics:  
- Globalization and Standards Development  
- Principles of Standards Development  
- Food Laws and Regulations – by Region  
  - European Union  
  - Canada  
  - Latin America  
  - Australia  
  - Asia  
  - Africa  
- Impact of Food Law and Regulations on Trade, Food Security, and Food Protection  
- Emerging Issues
Course Tools:
Blackboard Learning Management System
All course materials and activities will be presented using the Blackboard Learning Management System. You access Blackboard by logging into http://elearning.tamu.edu. Before you access course materials, please perform Vista Browser Check by clicking on the Check Browser button.

Textbooks:
International Standards for Food Safety (2000)
Ensuring Global Food Safety [electronic resource]: exploring global harmonization/edited by Christine Boisrobert et al. (online)

Additional Readings:
Readings will be taken from other reference materials including government publications and standards. Most readings will be available in Blackboard in .pdf format. Other readings will be available online, with a hyperlink provided in Blackboard.

Presentations
Online slide presentations with audio or each module can be accessed from Blackboard. The slides for each presentation will be provided as a .pdf file which can be downloaded and printed. Participants will also receive a packet of materials, which includes course materials on CD, via mail.

Course Activities:
Every week, you will be expected to complete the following:
- View all presentations
- Complete all readings
- Participate in course discussion
- Submit quiz for the week’s readings and presentation

Quizzes: Each week there will be a short quiz on the week’s readings and presentation. All quizzes will be administered through the course management system.

Exams: There will be a final exam which will be administered through the course management system.

Projects/ Final Paper: Three course projects include 1) evaluating a global standard developed by Codex Alimentarius, 2) investigating a country’s regulatory requirements for a food or feed, 3) writing a white paper on a US or regional trade agreement.

Discussions: Course discussions will be held on the discussion forum on the course management system. These discussions are good way for you to communicate with other students and the instructor and to share ideas and insights. If you need an immediate answer, please e-mail me directly.
Grading
Your grades will be determined as follows:

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<tr>
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<tr>
<td>Exams</td>
<td>40% of total grade</td>
<td>B</td>
</tr>
<tr>
<td>Projects</td>
<td>40% of total grade</td>
<td>C</td>
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<td>D</td>
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<td>E</td>
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</table>

Grading Policy
Class assignments, quizzes, and final exam must be completed on the dates set by the instructor on the course website unless prior approval has been granted by the instructor.

Attendance, Homework and Make-up Exam Policy
Due to the participatory nature of this Web-based class, regular log-in to the course Web site is expected. Excused absences are subject to TAMU rules and guidelines please see: http://student-rules.tamu.edu/rule7.htm for details.

Instructor/Student Communication
Please send all e-mails to the email address: tih@otsc.tamu.edu. I will not be using the Blackboard Mail Tool.

Please post any questions you have about the material to the discussion board so other students can respond to it and/or benefit from the ensuing discussion. I will be reading the discussion board and will reply to messages when necessary.

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

Copyright
Course packets and all other materials generated and/or used during this course are copyrighted. Because these materials are copyrighted, you do not have the right to copy the course packets, unless the instructor expressly grants permission.

Academic Integrity Statement
“An Aggie does not lie, cheat, or steal or tolerate those who do.” For more information, read the Honor Council Rules and Procedures at http://www.tamu.edu/aggiehonor
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>Unit 1 Globalization and Standards</strong>&lt;br&gt; Global Food Chain&lt;br&gt; • Trade flows&lt;br&gt; • Resource base&lt;br&gt; • Population&lt;br&gt; Public Health and Safety</td>
</tr>
<tr>
<td>2</td>
<td>Codex Alimentarius and the role of&lt;br&gt; • Harmonization&lt;br&gt; • Equivalency&lt;br&gt; • Transparency</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>Unit 2 Principles of Standards Development</strong>&lt;br&gt; Legal systems&lt;br&gt; • Liability orientation versus regulatory orientation&lt;br&gt; • Precautionary principle&lt;br&gt; • Science-based standards&lt;br&gt; • Litigation-recent history in U.S. food system</td>
</tr>
<tr>
<td>4</td>
<td>3rd party certification and audit&lt;br&gt; • GFSI&lt;br&gt; • SQF level 3&lt;br&gt; • AIB&lt;br&gt; • NSF Cook and Therber</td>
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<td><strong>Unit 3 Food Laws and Regulations – by Region</strong>&lt;br&gt; European Union</td>
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<td>6</td>
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<td>7</td>
<td>Canada, Latin America</td>
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<td>10</td>
<td>Africa</td>
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<tr>
<td><strong>11</strong></td>
<td><strong>Unit 4 Impact of Food Law and Regulations on Trade, Food Security, and Food Protection</strong>&lt;br&gt; Trade policy regimes&lt;br&gt; • GATT-WTO&lt;br&gt; • MFN</td>
</tr>
<tr>
<td>12</td>
<td>Regional customs unions</td>
</tr>
<tr>
<td>13</td>
<td>Regional customs unions</td>
</tr>
<tr>
<td><strong>14</strong></td>
<td><strong>Unit 5 Emerging Issues</strong>&lt;br&gt; Global sourcing of food and feed ingredients</td>
</tr>
<tr>
<td>15</td>
<td>Final Exam</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. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences

2. Course prefix, number and complete title of course: SCSC 636 Regulatory Science Methodology in Food Systems

3. Catalog course description (not to exceed 50 words): Risk management methodology including investigation of food and feed firms, conducting internal compliance audits; sample collection, chain-of-custody, trace-back and trace-forward, recalls, label review, data interpretation, risk ranking, resource prioritization, incident command and rapid response.

4. Prerequisite(s): SCSC 634 Regulatory Science: Principles & Practices in Food Systems

<table>
<thead>
<tr>
<th>Cross-listed with:</th>
<th>N/A</th>
<th>Stacked with:</th>
<th>N/A</th>
</tr>
</thead>
</table>

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

5. Is this a variable credit course? ☐ Yes ☒ No If yes, from ________ to ________

6. 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

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

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

   any master's or doctoral program

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

9. Prefix | Course # | Title (excluding punctuation) | Lect | Lab | SCH | CIP and Fund Code | Admin. Unit | Acad. Year | FICE Code | Level |
|---------|----------|-----------------------------|------|-----|-----|-------------------|-------------|------------|-----------|-------|

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<th>REG</th>
<th>SCI</th>
<th>METHOD</th>
<th>FOOD</th>
<th>SYS</th>
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</table>

Approval recommended by:

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

Chair, College Review Committee Date

Dean of College Date

Chair, GC or UCC Mark J. Zoran 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 – 3/10
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions:
1. Request submitted by (Department or Program Name): Department of Soil & Crop Sciences
2. Course prefix, number and complete title of course: SCSC 636 Regulatory Science Methodology
3. Catalog course description (not to exceed 50 words): Risk management methodology including investigation of food and feed firms, conducting internal compliance audits, sample collection, chain-of-custody, trace-back and trace-forward, recalls, label review, data interpretation, risk ranking, resource prioritization, incident command and rapid response.

4. Prerequisite(s): SCSC 634 Regulatory Science: Principles & Practices

5. Is this a variable credit course? No

6. Is this a repeatable course? No

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

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

   any master's or doctoral program

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

9. Prefix  Course #  Title (excluding punctuation)
    SCSC  636  REGULATORY SCIENCE METHOD

   Lect. Lab SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
   0 3 0 0 0 3 0 1 1 1 0 2 0 0 0 5 2 6 2 0 1 2 - 1 3 0 0 3 6 3 3 2

   Approval recommended by:

   David Balonsperger 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

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 3/10
Instructor:
Dr. Tim Herrman, Professor
Department of Soil & Crop Sciences
Texas A&M University
State Chemist and Director Office of the Texas State Chemist
Phone: (979) 845-1121
Fax: (979) 845-1389
E-mail: tjh@otsc.tamu.edu

Course Description:
Risk management methodology including investigation of food and feed firms, conducting internal compliance audits; sample collection, chain-of-custody, trace-back and trace-forward, recalls, label review, data interpretation, risk ranking, resource prioritization, incident command and rapid response.

Student Credit Hours: 3

Prerequisites: SCSC 634 Regulatory Science: Principles & Practices in Food Systems

Course Goals:
After completing this course, students will possess a practical knowledge to develop a science-based plan of work to management risk, conduct an investigation, achieve regulatory compliance, evaluate the effectiveness of a regulatory agency and respond to a crisis using incident command.

Key Topics:
This course will address the following topics:
- Strategies in Developing a Plan of Work
- Investigation Procedures
- Standards for Regulatory Bodies
- Techniques to Achieve Compliance
- Incident Command and Other Crisis Management Techniques

Course Tools:
Blackboard Learning Management System
All course materials and activities will be presented using the Blackboard Learning Management System. You access Blackboard by logging into http://elearning.tamu.edu
Before you access course materials, please perform Vista Browser Check by clicking on the Check Browser button.
Textbooks: Food Regulation by Neal D. Fortin; Enhancing Food Safety by the National Academies of Science

Additional Readings:
Readings will be taken from other reference materials including government publications and standards. Most readings will be available in Blackboard in .pdf format. Other readings will be available online, with a hyperlink provided in Blackboard.

Presentations
Online slide presentations with audio or each module can be accessed from Blackboard. The slides for each presentation will be provided as a .pdf file which can be downloaded and printed. Participants will also receive a packet of materials, which includes course materials on CD, via mail.

Course Activities:
Every week, you will be expected to complete the following:
- View all presentations
- Complete all readings
- Participate in course discussion
- Submit quiz for the week's readings and presentation

Quizzes
Each week there will be a short quiz on the week's readings and presentation. All quizzes will be administered through the course management system.

Exams
There will be a midterm and final exam which will be administered through the course management system.

Projects/ Final Paper
Course projects include three papers evaluating/proposing compliance strategies and activities used by government agencies or industry. Students will be provided a list of potential topics for each of the five key topics to facilitate their selection.

Discussions
Course discussions will be held on the discussion forum on the course management system. These discussions are good way for you to communicate with other students and the instructor and to share ideas and insights. If you need an immediate answer, please e-mail me directly.
Grading
Your grades will be determined as follows:

<table>
<thead>
<tr>
<th></th>
<th>20% of total grade</th>
<th>40% of total grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td></td>
<td></td>
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<tr>
<td>Exams</td>
<td></td>
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<tr>
<td>Projects</td>
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</tbody>
</table>

Grading Policy
Class assignments, quizzes, and final exam must be completed on the dates set by the instructor on the course website unless prior approval has been granted by the instructor.

Attendance, Homework and Make-up Exam Policy
Due to the participatory nature of this Web-based class, regular log-in to the course Web site is expected. Excused absences are subject to TAMU rules and guidelines please see: http://student-rules.tamu.edu.rule7.htm for details.

Instructor/ Student Communication
Please send all e-mails to the email address: tjh@otsc.tamu.edu. I will not be using the Blackboard Mail Tool.

Please post any questions you have about the material to the discussion board so other students can respond to it and/or benefit from the ensuing discussion. I will be reading the discussion board and will reply to messages when necessary.

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

Copyright
Course packets and all other materials generated and/or used during this course are copyrighted. Because these materials are copyrighted, you do not have the right to copy the course packets, unless the instructor expressly grants permission.

Academic Integrity Statement
"An Aggie does not lie, cheat, or steal or tolerate those who do."
For more information, read the Honor Council Rules and Procedures at http://www.tamu.edu/aggiehonor
# Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Unit 1 – Strategies in Developing a Plan of Work</strong></td>
</tr>
</tbody>
</table>
| 1    | Plan of Work Criteria  
       | Standards for Managing Risk  
       | Defining Confidence Levels |
| 2    | Investigator Manual  
       | Standard Operating Procedures  
       | Resource Allocation Techniques |
|      | **Unit 2 – Investigation Procedures** |
| 3    | Sampling Techniques |
| 4    | Inspection Techniques |
| 5    | Label Review |
| 6    | Other Forms of Evidence Collection |
|      | **Unit 3 – Standards for Regulatory Bodies** |
| 7    | Manufactured Food Standard |
| 8    | Manufactured Feed Standard |
|      | **Unit 4 – Techniques to Achieve Compliance** |
| 9    | Federal and State Enforcement |
| 10   | Administrative Enforcement |
| 11   | Industry Compliance Strategies |
| 12   | Cost and Benefits of Compliance |
|      | **Unit # 5 – Incident Command and Other Crisis Management Techniques** |
| 13   | Incident Command |
| 14   | Rapid Response Methodology |
| 14   | Table Top Exercises |
| 15   | Final Exam |
Texas A&M University
Departmental Request for a New Course
Undergraduate ∙ Graduate ∙ Professional
• Submit original form and attach a course syllabus.

1. Request submitted by (Department or Program Name): Department of Veterinary Integrative Biosciences
2. Course prefix, number and complete title of course: VIBS 611 Tumor Cell Biology and Carcinogenesis
3. Catalog course description (not to exceed 50 words):
Basic principles of tumor biology; role of gene-environment interactions; molecular mechanisms regulating cancer initiation and progression; therapeutic treatment of cancer.

4. Prerequisite(s):
BIMS 320 or equivalent; graduate classification

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

6. 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

7. 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)

PhD in Toxicology

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

9. Prefix Course # Title (excluding punctuation)
   VIBS 611 TUMOR CELL BIOLOGY CARCINOLOGY
   Lect Lab SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
   0 3 0 0 3 2 6 0 1 0 2 0 0 0 2 2 8 7 3 1 2 1 3 0 0 3 6 3 2

   Approval recommended by:
   Evelyn Tiffany-Castinioni ♡ 11-2-11
   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

   Jane Welsh ♡ 11-3-11
   Chair, College Review Committee Date

   Bhanu ♡ 11-4-11
   Dean of College Date

   Mark Zoran ♡ DEC 1, 2011
   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 — 3/10
VIBS 611
Tumor Cell Biology and Carcinogenesis
Spring 2012

Instructor: Weston Porter, PhD
Room 406, Veterinary Research Building
Phone: 845-0733
Office hours: After class and by appointment
Classes: TR
Time: 9:30-10:50
Room: VMR 423

Objectives:
1. To understand the phenotypic basis of tumor cell biology.
2. To understand the molecular mechanism of cancer initiation and progression.

Grading:
Grades will be based upon one written assignment (25%), three tests (25% each). The written assignment will focus on cancer and represent a major milestone or seminal paper in the field. 90-100=A, 80-89.9=B, 70-79.9=C, 60-69.9=D, 59.9 or below=F

Prerequisites:
BIMS 320 or equivalent, graduate student status

Readings:

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

Absentee Policy:
Attendance will be based on the policy set forth on the Texas A&M Student Rules and Regulation website (http://student-rules.tamu.edu/rule7.htm).
**Academic Integrity Statement**

**Aggie Honor Code**

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

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/) On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge shall be preprinted and signed by the student:

"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."
### VIBS 611

**Tumor Cell Biology and Carcinogenesis**

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Lect 1</th>
<th>Introduction to Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect 2</td>
<td>Phenotypic characteristics of cancer I</td>
<td>Chapter 2</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 2</th>
<th>Lect 3</th>
<th>Phenotypic characteristics of cancer II</th>
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</thead>
<tbody>
<tr>
<td>Lect 4</td>
<td>Multi-stage carcinogenesis I</td>
<td>Chapter 2</td>
<td></td>
</tr>
<tr>
<td>Lect 5</td>
<td>Multi-stage carcinogenesis II</td>
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<tr>
<td>Lect 6</td>
<td>Growth factors and signal transduction I</td>
<td>Chapter 5</td>
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<thead>
<tr>
<th>Week 3</th>
<th>Lect 7</th>
<th>Growth factors and signal transduction II</th>
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</thead>
<tbody>
<tr>
<td>Lect 8</td>
<td>Growth factors and signal transduction III</td>
<td>Chapter 6</td>
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<thead>
<tr>
<th>Week 4</th>
<th>Lect 9</th>
<th>Exam 1</th>
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<tbody>
<tr>
<td>Lect 10</td>
<td>Oncogenes I</td>
<td>Chapter 4, 11</td>
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<tr>
<th>Week 5</th>
<th>Lect 11</th>
<th>Oncogenes II</th>
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<tbody>
<tr>
<td>Lect 12</td>
<td>Tumor suppressor genes I</td>
<td>Chapter 7</td>
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<tr>
<th>Week 6</th>
<th>Lect 13</th>
<th>Tumor suppressor genes II</th>
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<tbody>
<tr>
<td>Lect 14</td>
<td>Overview of Cell Cycle I</td>
<td>Chapters 8-9</td>
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<thead>
<tr>
<th>Week 7</th>
<th>Lect 15</th>
<th>Overview of Cell Cycle II</th>
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<tbody>
<tr>
<td>Lect 16</td>
<td>Overview of Cell Cycle-Apoptosis</td>
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<thead>
<tr>
<th>Week 8</th>
<th>Lect 17</th>
<th>Immortalization and tumorigenesis</th>
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<tbody>
<tr>
<td>Lect 18</td>
<td>Stem cells and progression</td>
<td>Chapter 10</td>
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<thead>
<tr>
<th>Week 9</th>
<th>Lect 19</th>
<th>Exam 2</th>
<th></th>
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<tbody>
<tr>
<td>Lect 20</td>
<td>Stem cells and DNA damage repair pathways</td>
<td>Chapter 12</td>
<td></td>
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<thead>
<tr>
<th>Week 10</th>
<th>Lect 21</th>
<th>Tumor environment (it aint simple) I</th>
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<tbody>
<tr>
<td>Lect 22</td>
<td>Tumor environment II</td>
<td>Chapter 13</td>
<td></td>
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<tr>
<td>Week 12</td>
<td></td>
<td>Chapter 15</td>
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<tr>
<td>Lect 23</td>
<td>Hijacking of the immune system</td>
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<tr>
<td>Lect 24</td>
<td>Invasion and metastasis (going for a walk)</td>
<td>Chapter 14</td>
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<tr>
<td>Week 13</td>
<td>pomocnom</td>
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<tr>
<td>Lect 25</td>
<td>Invasion and metastasis</td>
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<td>Lect 26</td>
<td>Senescence and EMT</td>
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<tr>
<td>Week 14</td>
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<td>Chapter 16</td>
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<tr>
<td>Lect 27</td>
<td>Chemoprevention</td>
<td></td>
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<tr>
<td>Lect 28</td>
<td>Treating the disease &amp; Written assignment due</td>
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<tr>
<td>Lect 29</td>
<td>Over-view</td>
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<tr>
<td>Final Exam</td>
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</tbody>
</table>
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

1. Request submitted by (Department or Program Name): Department of Visualization

2. Course prefix, number and complete title of course: VIZA 630 Contemporary Art Studio/Seminar I

3. Catalog course description (not to exceed 50 words):
   Critical, theoretical, and historical readings on art and artists prompt visual and textual responses; development of personal ideas, methods, and processes; research, writing, discussion, and preliminary studies contribute to a final, in-depth body of work situated within the context of contemporary art.

4. Prerequisite(s): MFA in Visualization status or approval of instructor; graduate classification.

   Cross-listed with: 

   Stacked with: 

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

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

6. 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

7. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in History)
      MFA in Visualization
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in Geography)
      MS in Visualization

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

9. Prefix | Course # | Title (excluding punctuation)
   VIZA | 630 | Contemporary Art Studio/Seminar I

   Lec Lab SCH CIP and Fund Code Admin Unit Acad Year FTE Code
   0 2 0 4 0 4 5 0 0 7 0 2 0 0 0 3 2 9 3 8 1 2 - 1 3 0 0 3 6 3 2

   Approval recommended by:

   Department Head or Program Chair (Type Name & Sign) Date
   Chair, College Review Committee Date
   Dean of College Date
   Chair, GCC 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 – 3/10
Course title and number
VIZA 630 Special Topics in Contemporary Art Studio/Seminar I

Term (e.g., Fall 200X)
Fall 2012

Meeting times and location
TBA

Course Description and Prerequisites

Prerequisite: MFA in Visualization status or approval of instructor; graduate classification. Critical, theoretical, and historical readings on art and artists prompt visual and textual responses; development of personal ideas, methods, and processes; research, writing, discussion, and preliminary studies contribute to a final, in-depth body of work situated within the context of contemporary art.

Learning Outcomes or Course Objectives

This course focuses on the convergence of art, science, and technology. While one can find many historical examples of trans-disciplinary practice, contemporary art-making is increasingly engaged in crossing boundaries of discipline, medium, geography, and culture. While the studies you create in this course can be done with any medium—digital or analog—technology will be a large part of the conversation. Emphasis is placed on sketching and studies in the first half of the course, in order to generate a range of possible final projects worthy of pursuit.

Instructor Information

Name
Carol LaFayette

Telephone number
979-845-5691

Email address
lurleen@viz.tamu.edu

Office hours
TBA

Office location
Langford C418

Textbook and/or Resource Material


Additional references
Check the website for links: http://www.viz.tamu.edu/courses/viza639/11fall/

General

Theory


The Language of New Media, Lev Manovich (Cambridge: MIT Press, 2001)
Simians, Cyborgs and Women: The Reinvention of Nature, Donna J. Haraway
(NY: Routledge, 1991)
Technoromanticism: Digital Narrative, Holism, and the Romance of the Real, ed. Ken
Goldberg,

Bio art
Telepresence & Bio-art: Networking Humans, Rabbits, and Robots, Eduardo Kac
(University of Michigan Press, 2008)

Virtual environments
Immersed in Technology: Art and Virtual Environments, ed. Mary Anne Moser with Douglas

Ubiquitous and Physical computing
Digital ground: architecture, pervasive computing, and environmental knowing,

Readings and reviews
Leonardo Online Almanac

Digital art organizations
Rhizome
Texas Arts: Glasstire
ACM/SIGGRAPH

Festivals and conferences
Ars Electronica
SIGGRAPH
Inter-Society for Electronic Arts (ISEA)
College Art Association

Other visual resources
Evans Library Educational Media Services and online content at Mediamatrix
Instructor handouts, lectures, and web links

Grading Policies
Evaluation
In this course, you must demonstrate excellence in order to earn an A. Only proactive
involvement with the subject matter and with your projects is considered "excellent."

A = "Excellent" — dramatically exceeding assignment requirements
B = "Good" — somewhat exceeding assignment requirements
C = "Satisfactory" — meeting assignment requirements
D = "Unsatisfactory" — effort, but not meeting assignment requirements
F = "Failure" — no effort, not meeting assignment requirements

Evaluation is based on quality results and evident effort in developing projects, writing papers,
and contributing to class discussions. There will be 3 visual studies from weeks 1 through 6.
Weekly readings require a written response (200 words minimum each). A final project
beginning week 7 will be evaluated in 5 stages, and the final result in terms of form, content,
method, and overall quality. Quality points at the end of the semester evaluate your effort in the
class relative to discussion, attendance, and ideas.

3 visual studies at 50 points each 150
10 reading responses (includes visual presentation), 25 points each 250
4 stages to final project at 25 points each 100
Final project: form (100), content (100), method (100), and overall quality—both aesthetic and technical (100): 400
Quality points for class involvement and attendance (50), and transformative project ideas (50) 100
Total 1000

Grading scale:
A: 1000 – 900 / B: 899 to 800 / C: 799 to 700 / D: 699 to 600 / F: below 600

We will observe all university policies related to attendance. An assignment turned in on time may be reworked at any time until the last day of class for reconsideration of the grade. A late assignment, if it occurs as a result of an unexcused absence, receives a 10-point reduction for each class day beyond the deadline and no makeup is allowed. Quality points for class involvement include on-time attendance, proactive participation, and exceeding assignment requirements. For university rules on attendance, see: http://student-rules.tamu.edu/rule07

Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Art is Research</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Meeting 1:</strong></td>
<td>Reading: Wilson, Chapter 1 + handout</td>
</tr>
<tr>
<td></td>
<td>Lecture 1: about the course, the arts, and the focus of our work</td>
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<tr>
<td></td>
<td>Assignments:</td>
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<tr>
<td></td>
<td>Write a 500 word summary of each reading for next class (handout on guidelines provided)</td>
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<tr>
<td></td>
<td><strong>Meeting 2:</strong></td>
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<tr>
<td></td>
<td>Discussion of readings + hand in summaries</td>
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<tr>
<td></td>
<td>Lecture 2: Art is research</td>
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<td>Assignment: Visual study 1</td>
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<tr>
<td>Course</td>
<td>Meeting 1:</td>
<td>Meeting 2:</td>
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<tr>
<td>2 Bio Art</td>
<td>Lecture 3: Bio-art</td>
<td>Wilson, Chapter 2 + handout</td>
</tr>
<tr>
<td></td>
<td>Assignments: Write a 500 word summary of each reading</td>
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<td></td>
<td><em>Meeting 2:</em> Discussion of readings + hand in summaries</td>
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<tr>
<td></td>
<td>Review of study 1</td>
<td></td>
</tr>
<tr>
<td>3 Art and Physical Sciences</td>
<td><em>Meeting 1:</em> Lecture 4: Nonlinear, nanotech, space, GPS art</td>
<td>Wilson, Chapter 3 + handout</td>
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<tr>
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<td>Assignments: Write a 500 word summary of each reading, Visual study 2</td>
<td></td>
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<tr>
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<td><em>Meeting 2:</em> Discussion of readings + hand in summaries, Review study 2 sketches</td>
<td></td>
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<tr>
<td>4 Art with Algorithms</td>
<td><em>Meeting 1:</em> Lecture 5: algorithms, artificial life, and genetic art</td>
<td>Wilson, Chapter 4 + handout</td>
</tr>
<tr>
<td></td>
<td>Assignments: Write a 500 word summary of each reading, Finalize visual study 2</td>
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<tr>
<td></td>
<td><em>Meeting 2:</em> Discussion of readings + hand in summaries, Review visual study 2</td>
<td></td>
</tr>
<tr>
<td>5 Kinetics, Sound, and Robotic Art</td>
<td><em>Meeting 1:</em> Lecture 6: kinetics, sound installations, robotic art</td>
<td>Wilson, Chapter 5 + handout</td>
</tr>
<tr>
<td></td>
<td>Assignments: Write a 500 word summary of each reading, Visual study 3</td>
<td></td>
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<tr>
<td></td>
<td><em>Meeting 2:</em> Discussion of readings + hand in summaries, Review visual study 3 sketches</td>
<td></td>
</tr>
</tbody>
</table>
Meeting 1: Lecture 7: telecommunications and web based art
Assignments:
Write a 500 word summary of each reading

Meeting 2:
Discussion of readings + hand in summaries
Review visual study 3

Meeting 1: Lecture 8: art with digital information systems
Assignments:
Write a 500 word summary of each reading
Final project proposal sketch

Meeting 2:
Discussion of readings + hand in summaries
Discussion of final project

Meeting 1: Lecture 9: review of readings, future implications
Assignments:
View and Write one 500 word summary
Finalize project proposals

Meeting 2:
Discussion of materials + hand in summaries
Review of final project proposal sketches

Meeting 1: Discussion of final project ideas
Assignments:
Write one 500 word summary
Final project visual study

Meeting 2:
Discussion of materials + hand in summaries
Review of final project visual study
10 Final Project
Stage 1

Meeting 1:
Individual meetings on project stage 1

Meeting 2:
Individual meetings on project stage 1

11 Final Project
Stage 2

11 Final project stage 2

Meeting 1:
Review 1, final project stage 2

Meeting 2:
Review 1, final project stage 2

12 Final Project
Stage 3

Meeting 1:
Review 2, final project stage 3

Meeting 2:
Review 2, final project stage 3

13 Final Project
Stage 4

Meeting 1:
Individual meetings, final project stage 4

Meeting 2:
Individual meetings, final project stage 4

14 Final Project
Review

Final projects due
Discussion and summary of class
Course evaluation

15

Other Pertinent Course 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, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

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

"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. Request submitted by (Department or Program Name): Department of Visualization

2. Course prefix, number and complete title of course: VIZA 631 Contemporary Art Studio/Seminar II

3. Catalog course description (not to exceed 50 words):
Theoretical and critical tools for contemporary digital art practice and technology-based cultural production; project proposal and development; exhibition planning, site selection and installation.

4. Prerequisite(s):
MFA in Visualization status or approval of instructor; graduate classification.

5. Is this a variable credit course? □ Yes □ No If yes, from _______ to _______

6. 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

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

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

9. Prefix Course # Title (excluding punctuation)
<table>
<thead>
<tr>
<th>VIZA</th>
<th>631</th>
<th>CONTEMP ARTSTUDIO/SEM II</th>
</tr>
</thead>
</table>

Admin. Unit 3293812 - 13
FICE Code 003 6 3 2

Approval recommended by:

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

Chair, College Review Committee
Date

Dean of College
Date

DEC 1, 2011

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Chair, GS & UCC
Mark J. Zoran
Date
Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services - 3/10
Course title and number  VIZA 631 Contemporary Art Studio/Seminar II
Term  Spring 2013
Meeting times and location  MW 12:40-3:00 PM ARCC 414

Course Description and Prerequisites

Credit: 4 (2-4)

Description: Theoretical and critical tools for contemporary digital art practice and technology-based cultural production; project proposal and development; exhibition planning, site selection and installation. Prerequisites: MFA in Visualization status or approval of instructor; graduate classification.

Introduction: This course draws from contemporary forms, contents and methods of creative expression with an emphasis on the intersections of art, science and technology. Through focused engagements with history, theory and practice in the visual arts, participants will propose and develop technology-based, critically-informed bodies of work. Individual and collaborative studies will generate dialogues with contemporary art history, theory, criticism and practice, resulting in an in-depth final project. In addition to the body of work undertaken for the final project, each student will produce an artist's statement, an autobiographical entry written in the third person and a short, critical exhibition review in the style of Art Peper or Burlington Magazine.

Learning Outcomes or Course Objectives

Seminar participants who complete all reading and writing assignments, participate in weekly discussions and complete studio/lab assignments will be able to:

- Demonstrate an understanding of the tensions between and synthetic potential of art+science+technology
- Articulate an expanding scope of contemporary art history, theory, criticism and practice
- Identify, interpret and incorporate complex principles from texts and images into discrete works of artistic expression (individually and collaboratively)
- Clearly situate his or herself and define his or her work in relation to historical, contemporary and emerging trends in art+science+technology research and production
- Employ strategic and tactical tools with which to propose and organize solo and group exhibitions with a specific emphasis on digital content delivery mechanisms

Instructor Information

Name  Stephen Caffey
Telephone number  979-845-5134
Email address  scaffey@arch.tamu.edu
Office hours  TBA
Office location  ARCA 314

Textbook and/or Resource Material

Additional resources will be available through the course website, elearning.tamu.edu and mediamatrix.tamu.edu.

Sample resources include:

**Readings and Reviews**

- Digital art organizations
- Festivals and conferences
- ZKM
- Ars Electronica
- Rhizome
- SIGGRAPH
- ACM SIGGRAPH
- Inter-Society for Electronic Arts (ISEA)
- Texas Arts: Glasstire
- College Art Association
- Electronic Visualization and the Arts (EVA)

**Grading Policies**

**Coursework and Student Evaluation:** Because this course is designed to offer participants the opportunity to pursue art as research, preparation of the final project should include records of such processes as proposal, interrogation, problem-solving, struggle, accident, failure, reconsideration, diversion, resolution, compensation, abandonment and triumph. Final course grades will be calculated as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Possible points</th>
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</table>

### Seminar Participation

- 30% of final course grade
  - Weekly participation in group discussion
    - Possible points: 10
  - Weekly presentation of work in progress
    - Possible points: 10
  - Ongoing record of research (includes working bibliography of all media sources)
    - Possible points: 10

### Final Project

- 70% of final course grade
  - Idea/Proposal (including Theoretical/Critical Basis of Cohesion)
    - Possible points: 10
  - Form
    - Possible points: 10
  - Content
    - Possible points: 10
  - Method
    - Possible points: 10
  - Planning and Execution of Public Exhibition
    - Possible points: 10
  - Artist's statement, Autobiographical Entry, Critical Essay
    - Possible points: 10
  - Public and Peer Reviews of Exhibition
    - Possible points: 10

**Grading Scale:**

- *A=90-100% B=80-89.99% C=70-79.99% D=60-69.99% F=0-59.99%*

We will observe all university policies related to attendance. An assignment turned in on time may be reworked at any time until the last day of class for reconsideration of the grade. A late assignment, if it occurs as a result of an unexcused absence, receives a 10-point reduction for each class day beyond the deadline and no makeup is allowed. Quality points for class involvement include on-time attendance, proactive participation, and exceeding assignment requirements. For university rules on attendance, see: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07)

### Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Introductions and Seminar Preview; Preliminary declarations of final project title, form, content, method, medium</td>
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<tr>
<td>2.1</td>
<td>Digital Aesthetics/Digital Affect (digital thingness)</td>
<td>selections in course website folder</td>
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<tr>
<td>2.2</td>
<td>Virtuality and (non)Dimensionality (digital worldness)</td>
<td>selections in course website folder</td>
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<tr>
<td>3.1</td>
<td>Labor (who/what is doing the work?)</td>
<td>selections in course website folder</td>
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</tbody>
</table>
3.2 not-art/not-science/not-technology
4.1 Constructing and Situating the Consumer
4.2 Post-Production, Relational Aesthetics and the Barnacle Effect
5.1 What's missing?
5.2 Individual Thematic Presentations to Summarize Research
6.1 Individual Thematic Presentations to Summarize Research
6.2 Individual Thematic Presentations to Summarize Research
7.1 Individual Thematic Presentations to Summarize Research
7.2 Peer and Instructor Responses to Individual Thematic Presentations
8.1 Peer and Instructor Responses to Individual Thematic Presentations

Spring Break
10.1 Individual Meetings: Final Project Status Check I
10.2 Individual Meetings: Final Project Status Check I
11.1 Individual Meetings: Final Project Status Check I
11.2 Individual Meetings: Final Project Status Check I
12.1 Individual Meetings: Final Project Status Check II
12.2 Individual Meetings: Final Project Status Check II
13.1 Individual Meetings: Final Project Status Check II
13.2 Individual Meetings: Final Project Status Check II
14.1 Individual Meetings: Final Project Status Check III
14.2 Individual Meetings: Final Project Status Check III
15.1 Last class day; short reports on status of final project exhibit; viewing of online exhibitions; course evaluations

All final revisions to project and all documents due by 5:00 pm on the last day of final exams

Other Pertinent Course 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, in Cain Hall, Room B118, or call 845-1837. For additional information visit [http://disability.tamu.edu](http://disability.tamu.edu)

**Academic Integrity**

For additional information please visit [http://www.tamu.edu/aggiehonor](http://www.tamu.edu/aggiehonor)

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

Upon accepting admission to Texas A&M University, a student automatically assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research
papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: www.tamu.edu/aggiehonor. Academic integrity is encouraged in keeping with Texas A&M University policies. On each exam, you will be asked to sign the following pledge: "On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work." Students cheating or illicitly obtaining/providing answers on an exam or quiz will receive at a grade "0" for the exam and possibly a grade of "F" for the entire course. All suspected violations will be reported to the Honor Council to determine whether further sanctions are necessary.

Care of Facilities: "It is unlawful for any person to damage or deface any of the buildings, statues, monuments, trees, shrubs, grasses, or flowers on the grounds of any state institutions of higher education (Texas Education Code Section 51.204). "The words 'damage or deface' refer specifically to any and all actions, whether direct or indirect, that either diminish the value or mar the appearance of the physical environment."
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions

1. Request submitted by (Department or Program Name): Department of Veterinary Pathobiology

2. Course prefix, number and complete title of course: VTMI-629 Laboratory Quality Systems

3. Catalog course description (not to exceed 50 words): Quality systems and method development used within a laboratory; ensuring the integrity of procedures used in lab processes, chain of custody, information management, and international laboratory standards; regulatory requirements for laboratory operation; bio-security precautions; laboratory management.

4. Prerequisite(s): None

Cross-listed with: SCSC 629

Stacked with: N/A

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

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

If yes, from ______ to ______

6. 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

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

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

   any master's or doctoral program

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

9. Prefix: VTMI

Course #: 629

Title (excluding punctuation): Laboratory Quality Systems

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
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<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>FICE Code</th>
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<td>0</td>
<td>1</td>
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<td>7</td>
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Approval recommended by:

Linda Logan
Department Head or Program Chair (Type Name & Sign) Date: 11/14/11

Chair, College Review Committee Date: 11/15/11

Dean of College Date: DEC 1 2011

Chair, GC or UCC Date: Mark J. Zoran

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 – 3/10
Instructors:
Dr. Susie Dai, Research Assistant Professor
Department of Veterinary Pathobiology
Office of the Texas State Chemist
Phone: (979) 845-1121
Fax: (979) 845-1389
E-mail: susie@otsc.tamu.edu

Dr. Tim Herrman, Professor
Department of Soil & Crop Sciences
Texas A&M University
State Chemist and Director
Office of the Texas State Chemist
Phone: (979) 845-1121
Fax: (979) 845-1389
E-mail: tjh@otsc.tamu.edu

Course Description:
Quality systems and method development used within a laboratory; ensuring the integrity of procedures used in lab processes, chain of custody, information management, and international laboratory standards; regulatory requirements for laboratory operation; bio-security precautions; laboratory management.

Student Credit Hours: 3

Prerequisites: None

Course Goals:
After completing this course, students will possess a practical knowledge of standard laboratory practices and quality systems required to oversee a scientific laboratory’s quality management program. This course is intended to equip the student with the breadth of knowledge needed to obtain laboratory data and results that are reliable, interpretable, repeatable, and defensible. Students will possess the capability to participate on a laboratory management team including budgeting and forming a technology strategy.

Key Topics:
This course will address the following topics:
- Ensuring Validity and Reliability
- Laboratory Procedures
- Quality Assurance: Procedures, Tools & Methods
- Laboratory Management
Course Tools:
Blackboard Learning Management System
All course materials and activities will be presented using the Blackboard Learning Management System. You access Blackboard by logging into http://elearning.tamu.edu
Before you access course materials, please perform Vista Browser Check by clicking on the Check Browser button.

Textbooks:
Lab Procedure Manuals – OTSC, FAO
A Laboratory Quality Handbook of Best Practices and Relevant Regulations [Paperback] Donald C. Singer (Editor)

The Laboratory Quality Assurance System: A Manual of Quality Procedures and Forms - Ratliff

Additional Readings: Readings will be taken from other reference materials including government publications and standards. Most readings will be available in Blackboard in .pdf format. Other readings will be available online, with a hyperlink provided in Blackboard.

Presentations
Online slide presentations with audio or each module can be accessed from Blackboard. The slides for each presentation will be provided as a .pdf file which can be downloaded and printed. Participants will also receive a packet of materials, which includes course materials on CD, via mail.

Course Activities:
Every week, you will be expected to complete the following:
• View all presentations
• Complete all readings
• Participate in course discussion
• Submit quiz for the week’s readings and presentation

Quizzes: Each week there will be a short quiz on the week’s readings and presentation. All quizzes will be administered through the course management system.

Exams: There will be a midterm and final exam which will be administered through the course management system.

Projects/ Final Paper
1. Tracing Chain of Custody for Lab Samples
2. Determine if a certain set of results are valid – defend your conclusion
3. Corrective/ Preventative Actions for a situation where you have non-conforming work
4. Draw a diagram/visual – showing lab functions and what quality assurance procedures should be implemented and why
Discussions: Course discussions will be held on the discussion forum on the course management system. These discussions are a good way for you to communicate with other students and the instructor and to share ideas and insights. If you need an immediate answer, please e-mail me directly.

Grading:
Your grades will be determined as follows

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<tr>
<td>Quizzes</td>
<td>20% of total grade</td>
<td>A</td>
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<tr>
<td>Exams</td>
<td>40% of total grade</td>
<td>B</td>
</tr>
<tr>
<td>Projects</td>
<td>40% of total grade</td>
<td>C</td>
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<td>D</td>
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<td>F</td>
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</table>

Grading Policy
Class assignments, quizzes, and final exam must be completed on the dates set by the instructor on the course website unless prior approval has been granted by the instructor.

Attendance, Homework and Make-up Exam Policy
Due to the participatory nature of this Web-based class, regular log-in to the course Web site is expected. Excused absences are subject to TAMU rules and guidelines please see: [http://student-rules.tamu.edu/rule7.htm](http://student-rules.tamu.edu/rule7.htm) for details.

Instructor/Student Communication
Please send all e-mails to the email address: susie@otsc.tamu.edu. Please post any questions you have about the material to the discussion board so other students can respond to it and/or benefit from the ensuing discussion. I will be reading the discussion board and will reply to messages when necessary.

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

Copyright
Course packets and all other materials generated and/or used during this course are copyrighted. Because these materials are copyrighted, you do not have the right to copy the course packets, unless the instructor expressly grants permission.

Academic Integrity Statement
"An Aggie does not lie, cheat, or steal or tolerate those who do." For more information, read the Honor Council Rules and Procedures at [http://www.tamu.edu/aggiehonor](http://www.tamu.edu/aggiehonor)
### Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td><strong>Unit 1 - Laboratory Quality Systems: Ensuring Validity and Reliability</strong></td>
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<tr>
<td>1</td>
<td>Laboratory Organization</td>
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<td></td>
<td>Laboratory Networks</td>
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<td></td>
<td>Laboratory Accreditation</td>
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<td>Traceability</td>
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<td>2</td>
<td>Good Laboratory Practices</td>
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<td></td>
<td>Bio-security Systems</td>
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<tr>
<td><strong>Unit 2 Laboratory Procedures</strong></td>
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<td>3</td>
<td>Analytical Procedures</td>
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<td>(microbiology)</td>
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<tr>
<td>4</td>
<td>Analytical Procedures</td>
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<td></td>
<td>(instrumental &amp; spectroscopy)</td>
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<td>5</td>
<td>Analytical Procedures</td>
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<td></td>
<td>(rapid methods)</td>
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<tr>
<td>5</td>
<td>Mid-Term Exam</td>
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<tr>
<td><strong>Unit 3 – Quality Assurance: Procedures, Tools &amp; Methods</strong></td>
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<td>6</td>
<td>Sampling and Handling Evidence Reporting Results</td>
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<td></td>
<td>Laboratory Information Mgt</td>
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<td></td>
<td>Chain of Custody</td>
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<td>7</td>
<td>Statistical Procedures</td>
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<td>8</td>
<td>Control of non-conforming work, Auditing</td>
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<td></td>
<td>Corrective Actions</td>
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<tr>
<td><strong>Unit 4 – Laboratory Management</strong></td>
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<tr>
<td>9</td>
<td>Technology Strategy</td>
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<td></td>
<td>Instrument purchase, installation</td>
</tr>
<tr>
<td></td>
<td>Cost Analysis</td>
</tr>
<tr>
<td>10</td>
<td>Summary</td>
</tr>
<tr>
<td>10</td>
<td>Final Exam</td>
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</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. Request submitted by (Department or Program Name): Department of Wildlife and Fisheries Sciences

2. Course prefix, number and complete title of course: WFSC 643 Geospatial Technology in Military Land Management

3. Catalog course description (not to exceed 50 words): Tools for visualizing, creating, managing, and analyzing geographic data on military lands and outside areas critical to mission sustainment; familiarization with ArcMap and ArcCatalog in military-related land management scenarios.

4. Prerequisite(s): Graduate classification or approval of instructor. Previous experience with ArcMap and ArcCatalog is helpful.

Cross-listed with: n/a
Stacked with: n/a

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

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

6. 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

7. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   Graduate Certificate in Military Sustainability
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   MNRED, MS, Ph.D. in ESSM and WFSC.

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

9. Prefix Course # Title (excluding punctuation)

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<td>643</td>
<td>GEO</td>
<td>SPAT</td>
<td>TECH</td>
<td>MIL</td>
<td>LND</td>
<td>MGT</td>
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</tbody>
</table>

Lect. Lab SCH CIP and Fund Code: 0 5 0 0 0 3 0 2 0 6 0 0 0 5 2 9 5 1 1 2 1 3 0 3 6 3 2

Approval recommended by:

John Casey, WFSC
Department Head or Program Chair (Type Name & Sign) 7/3/11

Chair, College Review Committee 9/21/11

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

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 3/10
WFSC 643 Geospatial Technology in Military Land Management (3 hrs) (Fall)

Instructor
Dr. Roel R. Lopez, 979-845-4067 (office), 979-324-9636 (cell), roel@tamu.edu.
Ms. Amy Snelgrove, 979-845-4476 (office), 609-923-5592 (cell), amy-snelgrove@tamu.edu
College Station office – 1500 Research Parkway, Suite 110, College Station, TX 77843
San Antonio office – 2632 Broadway Suite 301 South, San Antonio, Texas 78215

Course Description
Course reviews tools for visualizing, creating, managing, and analyzing geographic data on military lands and outside areas critical to mission sustainment. Students will become familiar and proficient in use of ArcMap, ArcCatalog, and CommunityViz in military-related land management scenarios.

Delivery and Prerequisites.—Course is web-based and part of a series of graduate courses supporting the Certificate in Military Sustainability (http://military.tamu.edu/). Short video lectures from instructor, assigned readings, and group projects will shape the course curriculum. A personal computer, access to a high-speed Internet connection, Windows XP or higher OS, Microsoft’s PowerPoint (version Office 2007 or newer), and recording microphone is recommended. Course enrollment requires graduate classification or instructor approval (3 credit hours). Previous experience with ArcMap and ArcCatalog is helpful.

Reading List

Participation and Grading
Student participation with online lectures, readings, and group discussions is imperative for successfully completing the course but ultimately the responsibility of the student. Student participation in weekly lectures and class project will be graded based on attendance and professionalism demonstrated throughout the semester. Final class project will consist of students’ evaluating a military installation-specific project. Assignment instructions are available on the course website.

| Table 1. Course Grade Distribution (points and %) |
|----------------|----------------|
| Item and maximum points available | Grade (%) |
| Quizzes (11 @ 5 points each) | 55 |
| Class Participation | 25 |
| - Assignments – 20% | |
| - Web blogging – 5% | |
| Case Study Review | 20 |
| - PowerPoint presentation – 10% | |
| - Short Report – 10 % | |
| Total Points | 100 |
| A => 90 points, B = 80-89 points, C = 70-79 points, D = 60-69 points, F < 60 points |
Attendance policy

Students will be expected to participate in all weekly activities unless excused by a verified university excused absence (Student Rule #7). If absence is excused a completion date of the required assignment will be assigned by the course instructor.

Academic dishonesty

We believe in the Aggie Code of Honor: “Aggies do not lie, cheat, or steal, Nor do they tolerate those who do.”

Academic dishonesty includes copying, sharing, or obtaining information from an unauthorized source, attempting to take credit for the intellectual work of another person, falsifying information, and giving or receiving information about exam or assignment to students in another course section. Any student involved in academic dishonesty will receive no credit for work done and/or may be penalized in accordance with published University Rules. Plagiarism software is used in class to ensure academic integrity. http://aggiehonor.tamu.edu

Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu
<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topic</th>
<th>Readings</th>
<th>Assignments/Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Video: Orientation to Class</td>
<td>(A) Ch. 1-4</td>
<td></td>
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<tr>
<td></td>
<td>Video: Introduction to GIS</td>
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<tr>
<td></td>
<td>Course overview of history and uses of GIS with focus on military lands. Introduction to tools, extensions and terminology of ArcGIS, ArcMap, ArcCatalog, ArcEditor, ArcInfo.</td>
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<td>2</td>
<td>Video: Data Acquisition</td>
<td>(A) Ch. 5-7</td>
<td>Review of DISD databases for military lands Assignment</td>
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<tr>
<td></td>
<td>Video: Data Acquisition for the Military</td>
<td>(B) Ch. 2</td>
<td>Quiz 1</td>
</tr>
<tr>
<td></td>
<td>Video: Manipulating Data Layers in ArcGIS</td>
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<tr>
<td></td>
<td>Creating, downloading and manipulating data (raster and vector) in ArcGIS. Review of DoD spatial resources and land uses.</td>
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<tr>
<td>3</td>
<td>Video: Layer Symbology: Categorical and Quantitative</td>
<td>(A) Ch. 12</td>
<td>Camp Lejeune: Red Cockaded Woodpeckers Assignment Part I</td>
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<tr>
<td></td>
<td>Data visualization in ArcGIS using symbology and labeling of categorical and quantitative data.</td>
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<td>Quiz 2</td>
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<tr>
<td>4</td>
<td>Video: Raster and Vector Data</td>
<td>(A) Ch. 15-16</td>
<td>Cockaded Woodpeckers Assignment Part II</td>
</tr>
<tr>
<td></td>
<td>Investigating and analysis of geographic data (raster, vector, grid cells and layer geometry. Development of Geodatabase datasets.</td>
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<td>Quiz 3</td>
</tr>
<tr>
<td>5</td>
<td>Video: Points, Lines and Polygons</td>
<td>(A) Ch. 8</td>
<td>Cockaded Woodpeckers Assignment Part III</td>
</tr>
<tr>
<td></td>
<td>(B) Ch. 1</td>
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<td>Quiz 4</td>
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<tr>
<td></td>
<td>Creation of data layers in ArcGIS (points, lines, polygons). Review of attribute tables, table structure and tools for analyzing data spatially.</td>
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<tr>
<td>6</td>
<td>Video: Attribute Tables</td>
<td>(A) Ch. 11, Ch. 13 and Ch. 17</td>
<td>Fort Hood and Golden Cheek Warblers Assignment Part I</td>
</tr>
<tr>
<td></td>
<td>Managing tabular data by joining and relating (spatial vs. non-spatial).</td>
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<td>Quiz 5</td>
</tr>
<tr>
<td>7</td>
<td>Video: Editing and Digitizing Map Attributes</td>
<td>(A) Ch. 9</td>
<td>Fort Hood and Golden Cheek Warblers Assignment Part II</td>
</tr>
<tr>
<td></td>
<td>Editing features and attributes with the editor toolbar in ArcGIS.</td>
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<td>Quiz 6</td>
</tr>
<tr>
<td>8</td>
<td>Video: Defining and Projecting Data</td>
<td>(A) Ch. 18</td>
<td>Fort Hood and Golden Cheek Warblers Assignment Part III</td>
</tr>
<tr>
<td></td>
<td>Overview of coordinate systems and map projections.</td>
<td></td>
<td>Quiz 7</td>
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<tr>
<td>9</td>
<td>Video: Geoprocessing</td>
<td>Introduction to Key West Naval Air Station and Marsh Rabbit Part I</td>
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<td></td>
<td>Solving spatial problems using geoprocessing tools (overlay, clip, erase, intersect, union, buffer, merge and append).</td>
<td>Quiz 8</td>
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</tr>
<tr>
<td>10</td>
<td>Video: Map Layout</td>
<td>(A) Ch. 7, Ch. 10 and Ch. 19</td>
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<td></td>
<td>Working with data frames and map layout for printing and exporting maps created in ArcGIS. Overview of responsible cartography for sharing and distributing maps.</td>
<td>Key West Naval Air Station and Marsh Rabbit Assignment Part II</td>
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<td>Quiz 9</td>
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<tr>
<td>11</td>
<td>Video: Spatial Analysis</td>
<td>(B) Ch. 3-5</td>
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<td></td>
<td>Performing raster surface analysis using spatial analyst, map algebra, raster calculator in ArcGIS.</td>
<td>Key West Navel Marsh Rabbit Assignment Part III</td>
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<td>Quiz 10</td>
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<tr>
<td>12</td>
<td>Video: Surface Analysis</td>
<td>(B) Ch. 6-7</td>
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<tr>
<td></td>
<td>Performing raster surface analysis using masking, interpolation, zonal statistics tools in ArcGIS.</td>
<td>Key West Navel Marsh Rabbit Assignment Part IV</td>
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<td></td>
<td></td>
<td>Quiz 11</td>
<td></td>
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<tr>
<td>13</td>
<td>SMR Workshop</td>
<td>No Assignment or Quiz</td>
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<tr>
<td></td>
<td>Video: Challenges in Geospatial Data Use</td>
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<td>Video: Web-Based Tools and Other GIS Tools/Approaches</td>
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<td></td>
<td>Video: Facilitation Approaches using Geospatial Data</td>
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**Undergraduate and Graduate Projects**

| 14 | Work on Final student project involving military lands. | No Assignment or Quiz |
| 15 | Final student project involving military lands. | Final Project Due |
| 16 | Final class project submission | |

No Assignment or Quiz
November 3, 2011

Graduate Council
Office of Graduate Studies
Texas A&M University
College Station, TX 77843-1113

Dear Graduate Council Members:

This letter confirms that the Department of Ecosystem Science and Management (ESSM), including our spatial sciences group, supports the creation of WFSC 643 Geospatial Technology in Military Land Management.

Sincerely,

Steven G. Whisenant
Professor and Department Head

SGW/cw

305 Horticulture/Forest Science Building
2138 TAMU
College Station, Texas 77843

Tel. 979.845.5033
Fax. 979.845.6049
http://essm.tamu.edu
-----Original Message-----
From: Vatche Tchakerian [mailto:v-tchakerian@tamu.edu]
Sent: Monday, November 07, 2011 12:19 PM
To: David Reed
Cc: d-gatlin@tamu.edu
Subject: WFSC 643

Dave and Del:

Geography has no objection to the proposed online course, WFSC 643 - Geospatial Technology in Military Land Management. I hope your new certificate program will be of benefit to our veterans.

All the best, Vatche

Dr. Vatche P. Tchakerian
Professor and Head
Department of Geography
College of Geosciences
Texas A&M University
College Station, TX 77843-3147
v-tchakerian@tamu.edu