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

Form Instructions

1. Request submitted by (Department or Program Name): Educational Psychology

2. Course prefix, number and complete title of course: CPSY 601: Multicultural Counseling in Schools

3. Catalog course description (not to exceed 50 words): Intersecting role of ethnicity, cultural background, gender, and sexual orientation and how they shape the psychosocial development of children and adolescents and impact their educational trajectories; development and appreciation of cultural and ethnic differences among individuals, groups, and families to enhance school counseling service delivery

4. Prerequisite(s): Graduate Classification; Approval of department head

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

6. Is this a repeatable course? ☑ 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)
      MED in Educational Psychology - School Counseling Program
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      Electives will be granted permission to enroll on a case by case basis as course enrollment permits.

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>CPSY</th>
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<th>COUNSELING</th>
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Approval recommended by:
Victor Willson, Ph.D.
Department Head or Program Chair (Type Name & Sign) Date

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

Submitted to Coordinating Board by:
Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-william@tamu.edu.
Curricular Services – 3/10
TEXAS A&M UNIVERSITY

CPSY 601: MULTICULTURAL COUNSELING IN SCHOOLS
COURSE SYLLABUS - SUMMER 2014 - Session 1

Instructor: Jamilia Blake, Ph.D.  Office: 706 Harrington Tower
Office Phone: 862-8341  Skype: jjblake25
Email: jjblake@tamu.edu  Office Hours: By appointment

*direct email is the best way to contact me

COURSE DESCRIPTION:
The Multicultural Counseling in Schools course is designed to provide students with knowledge and understanding of how the intersecting role of ethnicity, cultural background, gender, and sexual orientation shape the psychosocial development of children and adolescents and impact their educational trajectories. Students will develop an understanding and appreciation of cultural and ethnic differences among individuals, groups, and families to enhance school counseling service delivery (e.g., teaching and counseling of students) and effective communication skills in cross-cultural helping. Students will enhance their ability to apply their knowledge in multicultural counseling to their professional work in schools. Prerequisites: Graduate Classification; Approval of Department Head

COURSE OBJECTIVES:
The major goal of this course is for students to obtain knowledge and understanding about issues related to culture, diversity, and poverty, as well as the existing disparities among educational services for different cultural groups in the United States. Specifically, the objectives of this course are:

1. To increase students’ awareness of their own cultural heritage and examine how it shapes their attitudes, values, beliefs and behaviors.
2. To become familiar with practice standards related to multicultural service delivery outlined by the American School Counselor Association and the School Counselor Certificate Standards in the Texas Administrative Code Rule §239.15
3. To define multicultural counseling and competence
4. To recognize cultural variations within and between American racial/ethnic groups.
5. To develop greater sensitivity to ethnic minority issues that may impact one’s diagnostic impressions and clinical intervention approaches for individuals of differing cultures.
6. To analyze and problem solve ethical dilemmas that may arise in cross cultural professional relationships.
7. To develop and implement culturally appropriate counseling interventions for children and families of diverse backgrounds.
8. To develop effective communication skills in cross-cultural helping relationships

PROFESSIONAL STANDARDS ADDRESSED IN THIS COURSE
This course is designed to meet the following School Counselor Certificate Standards as outlined in the Texas Administrative Code Rule §239.15:

Standard I: Learner-Centered Knowledge: The certified school counselor has a broad knowledge base. The certified school counselor must know and understand:
1.5 Changing societal trends, including demographic, economic, and technological tendencies, and their relevance to school counseling
1.6 Environmental, social, and cultural factors that affect learners' development and the relevance of those factors to guidance and counseling programs;

Standard IV. Learner-Centered Equity and Excellence for All Learners: The certified school counselor promotes academic success for all learners by acknowledging, respecting, and responding to diversity while building on similarities that bond all people. The certified school counselor must:
IV.1. Understand learner differences, including those related to cultural background, gender, ethnicity, and learning styles, and know ways to create and maintain a positive school environment that is responsive to all learners;
IV.2 Advocate for a school environment in which diversity is acknowledged and respected, resulting in positive interactions across cultures.

**Standard V. Learner centered communication:** The certified school counselor, and advocate for all students and the school, demonstrates effective professional and interpersonal communication skills. The certified school counselor must:

V.1 Demonstrate effective communication through oral, written, and nonverbal expression.

This course is also designed to meet the following American School Counselor Association standards:

**Personal/Social Development:**

**Standard A:** Students will acquire the knowledge, attitudes and interpersonal skills to help them understand and respect self and others.

**A2: Acquire Interpersonal Skills**
- Recognize that everyone has rights and responsibilities
- Respect alternative points of view
- Recognize, accept, respect and appreciate individual differences
- Recognize, accept and appreciate ethnic and cultural diversity
- Recognize and respect differences in various family configurations
- Use effective communications skills
- Know that communication involves speaking, listening and nonverbal behavior
- Learn how to make and keep friends
COURSE DELIVERY STRUCTURE

This course will be taught fully online asynchronously via Elearning: . [http://elearning.tamu.edu](http://elearning.tamu.edu). Course readings, supporting materials, and lectures will be accessible via elearning. Students are strongly encouraged to complete the VISTA elearning orientation before the class starts [http://its.tamu.edu/elearning-orientation](http://its.tamu.edu/elearning-orientation). All assignments will be submitted through elearning.

Time Commitment:
Students should anticipate devoting 3 to 4 hours per day to completing reading assignments, listening to the course lectures, viewing course videos, and completing other course requirements. This amount of time is standard for any short summer session course.

Technology Requirements
To effectively participate and maximize all the benefits of your instruction, students enrolling in distance learning courses should meet the following technology requirements.

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<th>MINIMUM TECHNOLOGY REQUIREMENTS</th>
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For Technology Assistance
Go to http://elearning.tamu.edu and scroll over “NEED HELP?” and click “ASK FOR HELP” near the top of the page. You will then have several choices, including filling out an online form, searching FAQs, instructions on going to an on campus lab for help, or calling the help desk (24/7) at 979-845-8300

TEXT/READINGS:

Required Text

All other course readings will be available on Vista Elearning (http://elearning.tamu.edu/). Below please find a list of the required readings for this course:


COURSE POLICIES
Attendance: The attendance policy for this class will be administered in accordance with Student Rule #7: http://student-rules.tamu.edu/rule07.

"Netiquette"
You may find that students online are much more brash and opinionated than in the traditional classroom setting. The anonymity of the online environment seems to foster freedom of expression. This can be both a benefit and a hindrance. No language or behaviors that make others feel uncomfortable will be tolerated. You are expected to address the instructor, your peers, and guest speakers in a professional tone and manner. When your behavior adversely affects the classroom's aim to foster educational excellence, disciplinary action in accordance with the Student Rules 21.0 (Classroom Behavior) as revised in 1995 will be instituted. Below are some tips to keep in mind when communicating via the web:

- In emails, discussion boards, chat rooms, and all electronic communication, please focus comments on the content, not on someone's character.
- Think before you send. In cyberspace, what goes around comes around – fast! Anything you send out can be easily copied and forwarded with the click of a mouse.
- WRITING IN ALL CAPS INDICATES THAT YOU ARE SHOUTING! Please do not shout. Flaming is the process of expressing strong emotions or opinions via email. Given the content of this course, it is expected that students will be passionate about some topics and have strong emotional reactions to comments and posting of others. Whereas open discussion and disagreement is allowable, flaming wars are prohibited in which two or three individuals send a series of angry letters toward each other which dominate discussion forums and alter the tone of the course.

Readings: You are expected to complete all of the assigned readings prior to submitting assignments and participating in discussion boards. Students should anticipate devoting 3 to 4 hours per day to completing reading assignments, listening to the course lectures, and completing other course requirements. This amount of time is standard for any short summer session course.

Lectures: You are expected to read the material provided in the course schedule and then listen to the lectures accessed online at http://elearning.tamu.edu.

Participation: You should be prepared to discuss, analyze, synthesize, and evaluate ideas and content presented through readings on discussion boards. Your reflections on readings and other sources and ability to create personal relevance will add to the overall objectives of the course. Be prepared to take an active role in ongoing discussions. This means that all of your discussion board postings should be meaningful and related directly to the readings/sources and others’ postings. Whereas I certainly encourage you to draw on your personal experiences in your posts to use as examples, your posts should also include direct references to course readings or other external sources you mention. This means that you should provide specific citations when referencing course readings in your posts. Please note that merely agreeing with others does not count as active participation. You must contribute significant content and/or insights to discussion boards to receive credit in this area.

Assignments - All assignments must be completed individually, unless otherwise specified by the instructor. Please read the instructions/description for each assignment very carefully. The course requirement and rubrics provide excellent information. Work that does not meet the specific criteria provided will result in lost points. Proofread your work for spelling and mechanics. Assignments are due on the dates listed in this syllabus at the beginning of class unless otherwise specified. If you have questions or need clarification on assignments, I encourage you to seek assistance from me via email, phone, or by setting up an appointment. Late assignments are discouraged and may be assigned a lower score except in cases of excused absences. Please reference student rule 7 linked above for more information on excused absences. Please be aware of academic misconduct policies, including
plagiarism. If you have any questions about this, visit TAMU’s website at http://aggiehonor.tamu.edu/Student%20Rules/definitions.html

Correspondence: Correspondence related to the course is sent to your TAMU email account. Consistent with Student Rule 61.2.3 (http://student-rules.tamu.edu/rule61) students are expected to regularly check their TAMU email account for course-related communications.

**COURSE REQUIREMENTS:**

**Reading Quizzes (30 points):** Quizzes will be administered weekly on required readings, videos, and lectures. Each quiz is worth 6 points.

**Reflection Papers (20 points):** Students will complete 2 reflection papers on the content presented in assigned videos. Each video reflection paper is worth 10 points.

**Discussion group postings (20 points):** Students are expected to post one comment to the discussion board on the dates indicate in the course outline related to require course readings. Students will be evaluated by the quality of their posts and the extent to which their posts offer meaningful contributions to the online discussion and others learning. *What is meant by meaningful contributions to discussion?* There are clearly different ways to contribute to classroom board discussion. For example, students can respond to questions posed by the instructor or other students; students can pose additional questions to spark further discussion (e.g., rhetorical questions); share experiences/reactions that are relevant to course topics being discussed; or pose questions for clarification. However, frequently echoing what others state by saying “I agree,” but not offering one’s own insight or thoughts is not considered to be a meaningful contribution to class discussion. Additionally, dominating conversations with off-topic comments or debates is not considered to be a meaningful contribution to the online discussion board.

**Multicultural counseling treatment plan (30 points).** Students will have to develop 1 treatment plan and session plan for a multicultural counseling group for a socially marginalized population of their choosing (e.g., rural GLBTQ youth; African American girls; second generation Latino youth etc.) using the readings and course materials presented in this class.

**Background:** Imagine that you are a school counselor in a fairly racially and ethnically homogenous school. However, the community in which the district is housed is actually quite diverse when one considers the small yet growing populations of culturally and linguistically diverse families that have moved into certain parts of the town over the last 10 years. Although the school superintendent praises the district for having no economically-disadvantaged schools (e.g., the free-reduced lunch rate averages about 43% across schools), it is very clear that students can be classified into two groups in your school: the haves and have-nots. You’re not exactly sure why this is, but at a recent school board meeting some concerned community members attributed this problem to the district’s zoning policies. The district’s current zoning policies attempt to balance the schools economically by busing students from lower-income communities to schools in wealthier parts of the district. These community members advocated for the school board to adopt neighborhood schools as they believed that the inclusion of neighborhood schools in zoning policies would reduce student inequities, but their requests fell to death ears. Yesterday, you were informed from the principal that a group of parents from the Wally-side community met with him to express concern about the educational experiences of some of their children in your school. The parents complained that the students from Wally-side did not feel included in the school and perceived other students as receiving preferential treatment from both students and staff. Some parents reported that their children had experienced bullying and harassment because of their residence in Wally-side, whereas others indicated that their children had attempted to hide their affiliation to the community by
denying that they are residents of Wally-side and refusing to participate in common cultural practices. Most troubling are two students in your school who exhibit depressive symptoms, refuse to identify with their cultural group, and become aggressive whenever one of their peers from Wally-side attempts to interact with them at school. Given that you are the best and brightest school counselor in the district, your principal has asked that you address this issue. As a starting point, you have decided to a multicultural counseling group for the students from Wally-side. Your task for this assignment is to:

- Clearly identify a school level for your scenario (e.g., elementary, middle, or high school) and the type of socially marginalized group that the students from Wally-side community will represent (5 points).
- Multicultural Counseling group session plan
  - Describe what historical and social issues are necessary to know or understand about this population before devising a treatment plan to work with these students. This information should draw from class readings, videos, and lectures and should be appropriately cited (10 points)
  - What should your treatment plan include for this population of students? Why is it important to focus on these things for this population as opposed to other topics (draw from course readings)? What information do you feel is most important to focus on first in your counseling of students and how will you achieve this treatment goal? What will your first session include and what type of activities or discussion will you need to construct to achieve your treatment goals? This activity may be drawn from other counseling resources or manuals; however, these resources should be appropriately cited in your session plan. (10 points)
- Format of your counseling plan (5 points):
  - Your treatment plan should be typed (12 point font-Times New Roman/Arial) and submitted as a single document in Microsoft Word or as an Adobe PDF
  - Include a table of contents indicating what pages specific information can be found
  - Please appropriately label each section of your treatment plan with page headers or title pages
  - Please proofread to ensure that no grammatical/spelling errors are present

**GRADING POLICY**

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<th>Assignment</th>
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<tr>
<td>Weekly Reading Quizzes</td>
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<td>Video Reflection Papers</td>
<td>20 points</td>
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<td>Discussion Board Postings</td>
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<td>Multicultural Treatment</td>
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**Grade Determination:**

- A = 90 – 100
- B = 80-89
- C = 70-79
- F <70
TOLERANCE STATEMENT
The faculty of the College of Education and Human Development values and respects diversity and the uniqueness of each individual. The faculty affirms its dedication to non-discrimination in our teaching, programs, and services on the basis of race, color, religion, gender, age, sexual orientation, domestic partner status, ethnic or national origin, veteran status, or disability. The College of Education and Human Development at Texas A & M University is an open and affirming organization that does not tolerate discrimination, vandalism, violence or hate crimes. We insist that appropriate action be taken against those who perpetrate such acts. Further, the College is committed to protecting the welfare, rights, and privileges of anyone who is a target of prejudice or bigotry. Our commitment to tolerance, respect, and action to promote and enforce these values embraces the entire university community. In the spirit of shared responsibility, each University unit, student organization, and community member is encouraged to help make our campus, and this class, a welcoming place for all. Should you have any concerns related to respect for diversity or feel that you (or any others) are being discriminated against, please contact your departmental Ombudsperson, the Department Head, or the College Ombudsperson.

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

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

ACADEMIC INTEGRITY STATEMENT
As of September 1, 2004, all syllabi shall contain a section that states the Aggie Honor Code and refers the student to the Honor Council Rules and Procedures on the web: aggiehonor.tamu.edu

AGGIE HONOR CODE
An Aggie does not lie, cheat, or steal or tolerate those who do.” Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: aggiehonor.tamu.edu
The following course schedule of readings is recommended to help students pace themselves.

### COURSE SCHEDULE AND ASSIGNMENTS

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<th>Topic</th>
<th>Required Readings</th>
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<td><strong>Week 1: Multicultural Competence</strong></td>
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<tr>
<td>M</td>
<td>Multicultural Competence</td>
<td>• Complete VISTA elearning orientation</td>
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<td>• Carefully review the syllabus</td>
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<td>Barriers to Multicultural Counseling</td>
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<td>Sue &amp; Sue, Ch 6: Barriers to multicultural counseling and therapy (pp.133-154)</td>
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<td>Th</td>
<td>Culturally appropriate interventions</td>
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<td>Sue &amp; Sue, Ch 7: Culturally appropriate interventions strategies (pp157-181)</td>
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| **Week 2**                           |                                                                                  |                                                        |
| M                                    | Racial/ethnic identity development                                              |                                                        |
| T                                    |                                                                                  |                                                        |
| W                                    | Cultural Variation within African Americans                                    |                                                        |
| Th                                   |                                                                                  |                                                        |
| F                                    |                                                                                  |                                                        |
| Sa                                   |                                                                                  | Reading Quiz 2                                         |
| Su                                   |                                                                                  | Discussion Board Posting                               |
### Week 3: Cultural Variation within Hispanic/Latino Americans

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### Week 4: Cultural Variation within Asian American youth

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<td>Discussion Board posting</td>
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### Week 5: Multiracial Identity & GLBT

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<tr>
<td>M</td>
<td>Cultural Variation within Multi-</td>
<td>Sue &amp; Sue, Chapter 18, Counseling individuals of multi-racial descent (pp. 389-404)</td>
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CPSY 601: Multicultural Counseling in the Schools 10
<table>
<thead>
<tr>
<th>Day</th>
<th>Assignment</th>
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<tr>
<td>W</td>
<td><strong>Me, My Sex, and I: Disorders of Sexual Development Video</strong></td>
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<td>Th</td>
<td><strong>Reflection Paper 2</strong></td>
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<td>F</td>
<td><strong>Gay, Lesbian, Bisexual and Transgendered youth</strong></td>
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<td><strong>Sue &amp; Sue, Chapter 23, Counseling Sexual Minorities (pp. 443-452).</strong></td>
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<td><strong>Reading Quiz 5</strong></td>
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<td><strong>Discussion Board posting</strong></td>
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<td><strong>Final Project:</strong> <strong>Multicultural Counseling Treatment plan</strong></td>
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<td><strong>Due: First day of final exams by 5pm, CST</strong></td>
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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): Educational Psychology

2. Course prefix, number and complete title of course: CPSY 602: School Counseling Theories and Techniques

3. Catalog course description (not to exceed 50 words): Broad view of counseling theories and techniques using a microskills approach; modules will include topics pertinent to the school counseling field; opportunities to observe and practice counseling techniques.

4. Prerequisite(s): Graduate Classification; Approval of Department Head

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)

MED in Educational Psychology - School Counseling Program

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

Electives will be granted permission to enroll on a case by case basis as course enrollment permits.

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: CPSY 602 Title (excluding punctuation): School Counseling Theories and Techniques

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<td>0</td>
</tr>
</tbody>
</table>

Approval recommended by: Victor Willson, Ph.D.
Department Head or Program Chair (Type Name & Sign) Date

George Cunningham, Ph.D.
Chair, College Review Committee

Electives will be granted permission to enroll on a case by case basis as course enrollment permits.

Mark Zoran, Ph.D.
Chair, GC or UCC

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu.
Curricular Services – 3/10
CPSY 602: SCHOOL COUNSELING THEORIES & TECHNIQUES  
Fall 2013  
Asynchronous Course: Monday – Sunday 10pm

INSTRUCTOR

Instructor: Linda G. Castillo, Ph.D.  
Office: 712 Harrington Tower  
Phone: 979-845-0891  
Email: On e-campus  
Office hours: By appointment only  
Teaching Assistant: Natalia Jimenez  
Technology Assistant: Trey Armstrong

COURSE DESCRIPTION

The course is designed to provide students with a broad view of counseling theories and techniques using a microskills approach. Modules will cover a range of topics pertinent to the school counseling field and will provide the opportunity to observe and practice counseling techniques. Prerequisites: Graduate Classification; Approval of Department Head

COURSE OBJECTIVES

At the end of the course, students will be able to:
1. Demonstrate an understanding of various counseling theoretical frameworks.
2. Develop a basic idea of how counseling theories guide and inform counseling practices when working with children and adolescents.
3. Increase one’s competence of essential counseling techniques that can be used within a school setting.
4. Practice integrating theories (e.g., solution-focused) with basic counseling techniques and strategies at a beginning level of proficiency.

COURSE MATERIALS

REQUIRED:
AUTHORS: Ivey/Ivey/Zalaquett ©2012  
http://www.cengagebrain.com/shop/isbn/9781285265063
2. Theories of Counseling and Psychotherapy: A Case Approach, 3/E
   AUTHOR: Nancy L. Murdock ©2013
   ISBN-10: 0132659786

3. Webcam or digital video camera for recording.

4. Drop box account to hold video files. Get 2GB free at: https://www.dropbox.com/

TECHNOLOGY REQUIREMENTS

To effectively participate and maximize all the benefits of your instruction, students enrolling in distance learning courses should meet the following technology requirements.

<table>
<thead>
<tr>
<th>MINIMUM TECHNOLOGY REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internet Connection</strong></td>
</tr>
<tr>
<td>Cable Internet or DSL recommended.</td>
</tr>
<tr>
<td><strong>Operating System Minimum Requirements</strong></td>
</tr>
<tr>
<td>Windows XP/2000 SP3</td>
</tr>
<tr>
<td>Pentium III 450MHz or faster processor (or equivalent)</td>
</tr>
<tr>
<td>Mac OS X 10.2</td>
</tr>
<tr>
<td>PowerPC® G3 500MHz or faster processor</td>
</tr>
<tr>
<td>Intel Core™ Duo 1.83GHz or faster processor</td>
</tr>
<tr>
<td>512 MB of RAM</td>
</tr>
<tr>
<td><strong>Browser Requirements</strong></td>
</tr>
<tr>
<td>See List at:</td>
</tr>
<tr>
<td><a href="https://help.blackboard.com/en-us/Learn/9.1_SP_10_and_SP_11/Instructor/002_Browser_Support_SP_11">https://help.blackboard.com/en-us/Learn/9.1_SP_10_and_SP_11/Instructor/002_Browser_Support_SP_11</a></td>
</tr>
<tr>
<td><strong>Media Hardware</strong></td>
</tr>
<tr>
<td>DVD player</td>
</tr>
<tr>
<td>Video card with at least 64MB of dedicated memory</td>
</tr>
<tr>
<td>Webcam (Amazon.com search results)</td>
</tr>
<tr>
<td>Headset (Amazon.com search results)</td>
</tr>
<tr>
<td>Sound card with speakers</td>
</tr>
<tr>
<td><strong>Media Software</strong></td>
</tr>
<tr>
<td>Flash Player 9 or better (download)</td>
</tr>
<tr>
<td>Adobe Reader 8 or better (download)</td>
</tr>
<tr>
<td>VLC (download)</td>
</tr>
<tr>
<td>Java (for most systems use J2SE(TM) Runtime Environment 5.0) (download)</td>
</tr>
<tr>
<td>If you can't view video-streamed presentations email <a href="mailto:helpdesk@tamu.edu">helpdesk@tamu.edu</a> or call 979.845.8300. Also, you should visit the university software store for Microsoft office and other essential software needs: <a href="https://software.tamu.edu">https://software.tamu.edu</a></td>
</tr>
</tbody>
</table>
Participation/Discussion Board Postings (30%)
Students are required to participate online via discussion board postings. Since this is an asynchronous course, students are expected to pay attention to deadlines and complete all assignments and quizzes by the noted deadlines.

Modules are open and available from Monday to Sunday 10pm. Each module contains discussion board topics that must be posted by Sunday 10pm. You are required to write a meaningful post on the discussion board as well as post a meaningful reply to at least one peer's posting to obtain credit. Discussion board threads will be locked on Sunday at 10pm. Late postings are not accepted except in cases of University excused absences. Please see student rule 7 below for more information on excused absences.

Extra credit WILL NOT be offered. So, plan your schedule accordingly. Health issues or emergencies that arise during the course will be dealt with on a case-by-case basis for University excused absences. For more information on the University’s attendance policy please see: http://student-rules.tamu.edu/rule07

If you need help learning about e-campus, the following are useful links.

http://ecampus.tamu.edu/student-help.php
http://hdc.tamu.edu/
Email: helpdesk@tamu.edu
Phone: (979) 845-8300

Quizzes (20%)
Quizzes are located in each of the modules and will cover all readings for a given week. Quizzes are timed (20 minute limit). Quizzes will open Fridays at 10am and close Sundays at 10pm. Late quizzes are not accepted. The lowest quiz grade will be dropped and replaced with the final exam grade.

Final Exam (30%)
The final exam will cover all course readings. Exam opens December 6 at Noon and closes December 11th Midnight. Late exam is not accepted.

Digital Video-Recorded Counseling Demonstrations (20%)
Students are required to record three 30-minute sessions with an adult volunteer. This is a required activity that will give the student a sense of what real counseling is like. Grading for this activity is based on submitting the recordings on time. Digital video recordings will be submitted on e-campus. Students will receive feedback on their microskills and will be able to recognize their counseling strengths and areas of growth as a developing school counselor.

DO NOT ask close friends, family, or current/past romantic partners to be a volunteer client. “Permission to Record” form must be completed and submitted onto e-campus.
### Grading Scale

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

### Class Schedule

<table>
<thead>
<tr>
<th>Dates</th>
<th>Week</th>
<th>Chapters</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-Aug</td>
<td>1</td>
<td>1 and 4</td>
<td>Overview of Counseling Theory: Adlerian</td>
</tr>
<tr>
<td>2-Sep</td>
<td>2</td>
<td>5</td>
<td>Person Centered</td>
</tr>
<tr>
<td>9-Sep</td>
<td>3</td>
<td>8 and 9</td>
<td>Behavioral, REBT, Cognitive-Behavioral</td>
</tr>
<tr>
<td>16-Sep</td>
<td>4</td>
<td>10</td>
<td>Cognitive</td>
</tr>
<tr>
<td>23-Sep</td>
<td>5</td>
<td>13</td>
<td>Family Systems</td>
</tr>
<tr>
<td>30-Sep</td>
<td>6</td>
<td>11</td>
<td>Reality Therapy</td>
</tr>
<tr>
<td>7-Oct</td>
<td>7</td>
<td>14</td>
<td>Solution Focused</td>
</tr>
</tbody>
</table>

**Theories of Counseling and Psychotherapy: A Case Approach 3/E**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Week</th>
<th>Chapters</th>
<th>Topic</th>
<th>Permission to Record Form Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-Oct</td>
<td>8</td>
<td>1, 2, and 3</td>
<td>Attending and Observation</td>
<td></td>
</tr>
<tr>
<td>21-Oct</td>
<td>9</td>
<td>4</td>
<td>Questions</td>
<td></td>
</tr>
<tr>
<td>28-Oct</td>
<td>10</td>
<td>5</td>
<td>Active Listening</td>
<td></td>
</tr>
<tr>
<td>4-Nov</td>
<td>11</td>
<td>6</td>
<td>Reflection of Feelings</td>
<td>Video 1 Due</td>
</tr>
<tr>
<td>11-Nov</td>
<td>12</td>
<td>7</td>
<td>Conducting an Interview using Listening Skills</td>
<td></td>
</tr>
</tbody>
</table>

**Essentials of Intentional Interviewing: Counseling in a Multicultural World, 2nd + Counseling CourseMate**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Week</th>
<th>Chapters</th>
<th>Topic</th>
<th>Permission to Record Form Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-Nov</td>
<td>13</td>
<td>8</td>
<td>Confrontation</td>
<td>Video 2 Due</td>
</tr>
<tr>
<td>25-Nov</td>
<td>14</td>
<td>9</td>
<td>Focusing the Interview</td>
<td></td>
</tr>
<tr>
<td>2-Dec</td>
<td>15</td>
<td>10 and 11</td>
<td>Reflection of Meaning, Interpretation, Reframing, and Self-Disclosure</td>
<td>Video 3 Due</td>
</tr>
</tbody>
</table>
Final Exam over all Chapters.

Exam opens December 9 at Noon; Closes December 11th Midnight.

**PROFESSIONALISM**

This is a core course in the Texas A&M University (TAMU) Distance School Counseling/Master’s in Education (M.Ed.) Curriculum. It is anticipated that students have elected to participate in this master’s level professional training program and will participate in all scheduled discussions and timeliness in delivery of all required documents is expected.

**ACADEMIC INTEGRITY**

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

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

**AMERICANS WITH DISABILITIES ACT (ADA)**

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

_________________________ is enrolled in CPSY 689 School Counseling Theories and Techniques as one of the requirements for earning a master's degree. The course focuses on learning and practicing counseling skills. The purpose of the conversation in which you have been asked to take part is to provide an opportunity for __________________ to practice the use of these skills. The conversation will be video-recorded and the instructor and/or teaching assistant, who is a counseling psychology doctoral student, will view the recording so that ____________'s counseling skills can be evaluated. Please choose a topic to discuss which of importance and/or concern to you. However, the topic that you choose does not have to be a "problem" or a very personal issue in order to provide ______________ with the opportunity to practice the required skills. Each conversation will be 30 minutes for three sessions so that ________ can adequately demonstrate command of these skills. However, if at anytime you wish to terminate the conversation, please feel free to do so.

Thank you for helping our students as they gain the experience necessary to be effective helping professionals.

I grant permission to video-record this conversation.

__________________________
Name

__________________________
Date
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): Educational Psychology

2. Course prefix, number and complete title of course: CPSY 603: School Counseling Group Interventions

3. Catalog course description (not to exceed 50 words): Development of group counseling interventions for children and adolescents in school settings.

4. Prerequisite(s):

Graduate Classification; Approval of Department Head

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)

MED in Educational Psychology - School Counseling Program

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

Electives will be granted permission to enroll on a case by case basis as course enrollment permits.

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: CPSY

Course #: 603

Title (excluding punctuation): School Counseling Group Interventions

ECT. LAB. SCL CIP and Fund Code Admin. Unit Acad. Year EICE Code

0 3 0 0 0 3 1 3 1 1 0 1 0 0 4 0 9 2 0 1 4 - 1 5 0 0 3 6 3 2

Approval recommended by:

Victor Wilson, Ph.D. 
Department Head or Program Chair (Type Name & Sign) Date 1/3/13

George Cunningham, Ph.D. 
Chair, College Review Committee Date 1/20/14

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

George Cunningham, Ph.D. 
Dean of College Date 1/20/14

Mark Zoran, Ph.D. 
Chair, GC or UCC Date 3/20/14

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
TEXAS A&M UNIVERSITY

CPSY 603: SCHOOL COUNSELING GROUP INTERVENTIONS
COURSE SYLLABUS SUMMER 2014 - Session 2

Instructor: Jamilia Blake, Ph.D.
Phone: 862-8341
Email: jjblake@tamu.edu
Office: 706 Harrington Tower Office
Skype: jjblake25
Office Hours: By appointment

*direct email is the best way to contact me

COURSE DESCRIPTION:

The School Counseling Group Interventions course is designed to provide students instruction in developing group counseling interventions for children and adolescents in school settings.
Prerequisites: Graduate Classification and Approval of Department Head.

COURSE OBJECTIVES:
The major goal of this course is for students to obtain knowledge and skills related to the development and implementation of school-based counseling group interventions. Specifically, the objectives of this course are to:

1. Understand group theory and processes as it pertains to practice in school settings
2. Learn how group dynamics can impact counseling group interventions
3. Understand potential problems encountered when running school-based counseling group interventions
4. Develop skills to facilitate group interventions with children and adolescents
5. Learn techniques to facilitate different type of group activities, including crisis intervention in group contexts, support groups, skilled-based group interventions, and process groups
6. Become familiarized with empirically supported group intervention for children and adolescents with social anxiety/social phobia, generalized anxiety, depression and social skills deficits
7. Learn to facilitate group interventions
8. Develop ideas to produce culturally sensitive group interventions to diverse children and adolescents

PROFESSIONAL STANDARDS ADDRESSED IN THIS COURSE
This course is designed to meet the following School Counselor Certificate Standards as outlined in the Texas Administrative Code Rule §239.15:

Standard II: Learner-centered skills: the certified school counselor applies the knowledge base to promote the educational, personal, social, and career development of the learner

II.3 counsel individuals and small groups using appropriate counseling theories and techniques in response to student needs
II.6 demonstrate proficiency in teaching small and large groups by actively engaging students in the learning process

Standard III: Learner-centered process: the certified school counselor participates in the development, monitoring, and evaluation of a developmental guidance and
counseling program that promotes learners’ knowledge, skills, motivation, and personal growth.

 III.3. Use both prevention and intervening strategies to address the concerns of learners and to help them clarify problems and situations, set goals, explore options, and implement change

**Standard V: Learner-centered communication:** The certified school counselor, and advocate for all students and the school, demonstrates effective professional and interpersonal communication skills. The certified school counselor must:

 V.1 demonstrate effective communication through oral, written, and nonverbal expression
 V.2 use knowledge of group dynamics and productive group interaction

This course is also designed to meet the following American School Counselor Association 2012 National Standards for Students:

**Standard A: Students will acquire the knowledge, attitudes and inter-personal skills to help them understand and respect self and others.**

A2: Acquire Interpersonal Skills
- Recognize that everyone has rights and responsibilities
- Respect alternative points of view
- Recognize, accept, respect and appreciate individual differences
- Recognize, accept and appreciate ethnic and cultural diversity
- Recognize and respect differences in various family configurations
- Use effective communications skills
- Know that communication involves speaking, listening and nonverbal behavior
- Learn how to make and keep friends

**Standard B: Students will make decisions, set goals and take necessary action to achieve goals.**

B1: Self-knowledge Application
- Use a decision-making and problem-solving model
- Understand consequences of decisions and choices
- Identify alternative solutions to a problem
- Develop effective coping skills for dealing with problems
- Demonstrate when, where and how to seek help for solving problems and making decisions
- Know how to apply conflict resolution skills
- Demonstrate a respect and appreciation for individual and cultural differences
- Know when peer pressure is influencing a decision Identify long- and short-term goals
- Identify alternative ways of achieving goals
- Use persistence and perseverance in acquiring knowledge and skills
- Develop an action plan to set and achieve realistic goals

**COURSE DELIVERY STRUCTURE.**

This course will be taught fully online asynchronously via Elearning: [http://elearning.tamu.edu](http://elearning.tamu.edu). Course readings, supporting materials, and lectures will be accessible via elearning. Students are strongly encouraged to complete the VISTA elearning orientation before the class starts [http://its.tamu.edu/elearning-orientation](http://its.tamu.edu/elearning-orientation). All assignments will be submitted through elearning.
Time Commitment:
Students should anticipate devoting 3 to 4 hours per day to completing reading assignments, listening to the course lectures, viewing course videos, and completing other course requirements. This amount of time is standard for any short summer session course.

Technology Requirements
To effectively participate and maximize all the benefits of your instruction, students enrolling in distance learning courses should meet the following technology requirements.

<table>
<thead>
<tr>
<th>Minimum Technology Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internet Connection</strong></td>
</tr>
</tbody>
</table>
| **Operating System Minimum Requirements Windows** | Windows XP/2000 SP3  
Pentium III 450MHz or faster processor (or equivalent) |
| **Browser Requirements Windows** | Internet Explorer 6.0 or later, Firefox 3 (with the MediaWrap 0.1.7.3 add-on), Safari 3.2.1 or later, Opera 7.11 or later, or Chrome (which are all free downloads) |
| **Minimum Requirements MAC** | Mac OS X 10.2  
PowerPC® G3 500MHz or faster processor  
Intel Core™ Duo 1.83GHz or faster processor  
512 MB of RAM |
| **Browser Requirements MAC** | Firefox 3 (with the MediaWrap 0.1.7.3 add-on), Opera 6, Safari 3.2.1 or later (which are free downloads) |
| **Media Hardware** | DVD player  
Video card with at least 64MB of dedicated memory  
Webcam ([Amazon.com search results](#))  
Headset ([Amazon.com search results](#))  
Sound card with speakers |
| **Media Software** | Flash Player 9 or better ([download](#))  
Adobe Reader 8 or better ([download](#))  
Real Player 8* or better ([download](#))  
Java (for most systems use J2SE(TM) Runtime Environment 5.0) ([download](#))  
Windows Media Player 9 or better ([download](#))  
If you can’t view video streamed presentations email [helpdesk@tamu.edu](mailto:helpdesk@tamu.edu) or call 979.845.8300. Also, you should visit the university software store for Microsoft office and other essential software needs: [https://software.tamu.edu](https://software.tamu.edu) |
Go to http://elearning.tamu.edu and scroll over “NEED HELP?” and click “ASK FOR HELP” near the top of the page. You will then have several choices, including filling out an online form, searching FAQs, instructions on going to an on campus lab for help, or calling the help desk (24/7) at 979-845-8300

Required Course Materials:

All other course readings will be available on Vista Elearning (http://elearning.tamu.edu/). Below please find a list of the required readings and videos for this course:


Evidenced based interventions for children and adolescents:

http://effectivechildtherapy.com/sscap/?m=sPro&fa=pro_ESToptions#sec6

**Recommended resources (not required for course)**


**COURSE POLICIES**

**Learning Expectations and Respecting the Educational Rights of Others:** You may be doing a number of different activities and assignments during this course. In all of them, I want you to try to understand what you have heard and read, but most importantly to critically analyze what you’ve heard and read and how this information integrates with your previous experiences, professionally and personally, and prior coursework. Therefore, you are encouraged to ask questions and to agree or disagree.

I will also ask you to share your thinking both in class discussion and in writing. Sharing your thinking can feel very risky; we all have felt the fear that we will ask a stupid question, put forward some naive interpretation, or unpopular idea. I will expect you to take those risks anyway. It may help to know that I will not expect you to necessarily agree with me, the instructor, your classmates, or with any of the authors we read. If you find yourself disagreeing, I ask only that you disagree with respect for others’ ideas and do your best to explain why you disagree—that is how you will help the rest of us learn. Thus, I ask that each person exhibit respectful behavior and strive to respect the educational rights of others by exhibiting Netiquette.

**“Netiquette”**

You may find that students online are much more brash and opinionated than in the traditional classroom setting. The anonymity of the online environment seems to foster freedom of expression. This can be both a benefit and a hindrance. No language or behaviors that make others feel uncomfortable will be tolerated. You are expected to address the instructor, your peers, and guest speakers in a professional tone and manner. When your behavior adversely affects the classroom’s aim to foster educational excellence, disciplinary action in accordance with the Student Rules 21.0 (Classroom Behavior) as revised in 1995 will be instituted. Below are some tips to keep in mind when communicating via the web:
- In emails, discussion boards, chat rooms, and all electronic communication, please focus comments on the content, not on someone's character.
- Think before you send. In cyberspace, what goes around comes around – fast! Anything you send out can be easily copied and forwarded with the click of a mouse.
- WRITING IN ALL CAPS INDICATES THAT YOU ARE SHOUTING! Please do not shout.
  Flaming is the process of expressing strong emotions or opinions via email. Given the content of this course, it is expected that students will be passionate about some topics and have strong emotional reactions to comments and posting of others. Whereas open discussion and disagreement is allowable, flaming wars are prohibited in which two or three individuals send a series of angry letters toward each other which dominate discussion forums and alter the tone of the course.

Attendance: The attendance policy for this class will be administered in accordance with Student Rule #7: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

Readings: You are expected to complete all of the assigned readings prior to submitting assignments.

Lectures: You are expected to read the material provided in the course schedule and then listen to the lectures accessed online at [http://elearning.tamu.edu](http://elearning.tamu.edu).

Videos: You are expected to review all assigned videos.

Assignments: All assignments must be completed individually, unless otherwise specified by the instructor. Please read the instructions(description for each assignment very carefully. The course requirement and rubrics provide excellent information. Work that does not meet the specific criteria provided will result in lost points. Proofread your work for spelling and mechanics. Assignments are due on the dates listed in this syllabus at the beginning of class unless otherwise specified. If you have questions or need clarification on assignments, I encourage you to seek assistance from me via email, phone, or by setting up an appointment. Late assignments are discouraged and may be assigned a lower score except in cases of University excused absences. Please see students rule 7 (reference above) for more information on excused absences. Please be aware of academic misconduct policies, including plagiarism. If you have any questions about this, visit TAMU’s website at [http://aggiehonor.tamu.edu/Student%20Rules/definitions.html](http://aggiehonor.tamu.edu/Student%20Rules/definitions.html).

Correspondence: Correspondence related to the course is sent to your TAMU email account. Consistent with Student Rule 61.2.3 ([http://student-rules.tamu.edu/rule61](http://student-rules.tamu.edu/rule61)) students are expected to regularly check their TAMU email account for course-related communications.

TOLERANCE STATEMENT
The faculty of the College of Education and Human Development values and respects diversity and the uniqueness of each individual. The faculty affirms its dedication to non-discrimination in our teaching, programs, and services on the basis of race, color, religion, gender, age, sexual orientation, domestic partner status, ethnic or national origin, veteran status, or disability. The College of Education and Human Development at Texas A & M University is an open and affirming organization that does not tolerate discrimination, vandalism, violence or hate crimes. We insist that appropriate action be taken against those who perpetrate such acts. Further, the
College is committed to protecting the welfare, rights, and privileges of anyone who is a target of prejudice or bigotry. Our commitment to tolerance, respect, and action to promote and enforce these values embraces the entire university community. In the spirit of shared responsibility, each University unit, student organization, and community member is encouraged to help make our campus, and this class, a welcoming place for all. Should you have any concerns related to respect for diversity or feel that you (or any others) are being discriminated against, please contact your departmental Ombudsperson, the Department Head, or the College Ombudsperson.

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

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

ACADEMIC INTEGRITY STATEMENT
As of September 1, 2004, all syllabi shall contain a section that states the Aggie Honor Code and refers the student to the Honor Council Rules and Procedures on the web: aggiehonor.tamu.edu

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

COURSE REQUIREMENTS:

Reading Quizzes (35 points). Quizzes will be administered weekly on required readings, videos, and lectures. Each quiz is worth 7 points.

Video Quizzes (20 points): Students will complete quizzes on the content presented in assigned videos. Video quizzes will be short answer questions. Each video quiz is worth 10 points.
Group counseling session plan (45 points). Students will have to develop 2 sessions for a counseling group geared toward elementary, middle, or high school students. Students will be required to

- Identify a target developmental age for your group, how group members will be selected to participate, and the size of your group. Explain how you came to this conclusion, drawing from information you gained from the course content by providing a rationale section. (5 points)

- Describe the nature of your counseling group (what topic/area) you will be choosing and create a list of anticipated treatment goals for the group. Be sure to select one of the group topics covered in the course readings. Provide a rationale for why you believe this particular topic is important for the age group you selected. (10 points)

- Include all of the forms you need to start the group, including parent permission forms, letters to teachers/parents informing them of your group, sample advertisements about the group, sign-up sheets for students etc. (5 points)

- Describe the activities that will be done for the three components of each session and how they relate to the treatment goals you provided. These activities may be drawn from other counseling resources or manuals; however, these resources should be appropriately cited in your session plan. (20 points, with each session description worth 10 points)

- Format of your group counseling plan (5 points):
  - Your group counseling plan should be typed and submitted as a single document in Microsoft Word or as an Adobe PDF
  - Include a table of contents indicating what pages specific information can be found
  - Please appropriately label each section of your group counseling plan with page headers or title pages
  - Please proofread to ensure that no grammatical/spelling errors are present

**GRADING POLICY**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Weekly Reading Quizzes (5)</td>
<td>35</td>
<td>35%</td>
</tr>
<tr>
<td>Video Quizzes (2)</td>
<td>20</td>
<td>20%</td>
</tr>
<tr>
<td>Group Counseling Treatment Plan (1)</td>
<td>45</td>
<td>45%</td>
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<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100%</td>
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**Grade Determination:**

- **A** = 90 – 100
- **B** = 80-89
- **C** = 70-79
- **F** <70
<table>
<thead>
<tr>
<th>Topic</th>
<th>Required Readings/Videos</th>
<th>Tasks/Assignments due</th>
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</thead>
<tbody>
<tr>
<td><strong>Week 1: Stages of Group Development</strong></td>
<td></td>
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</tr>
<tr>
<td>W  Working stage of a group</td>
<td>Corey, Corey, &amp; Corey, Ch.5</td>
<td></td>
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<tr>
<td>Th</td>
<td></td>
<td></td>
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<tr>
<td>F  Transition stage of a group</td>
<td>Corey, Corey, &amp; Corey, Ch.6</td>
<td></td>
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<tr>
<td>Sa</td>
<td>Corey, Corey, &amp; Corey, Ch.7</td>
<td>Quiz 1</td>
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<td>Su</td>
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<tr>
<td><strong>Week 2: Getting Started</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M  Final stage of a group</td>
<td>Corey, Corey, &amp; Corey, Ch.8</td>
<td></td>
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<tr>
<td>T  Groups for children and adolescents</td>
<td>Corey, Corey, &amp; Corey, Ch. 9 &amp; 10</td>
<td></td>
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<tr>
<td>Th</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sa</td>
<td>Video Quiz 1</td>
<td></td>
</tr>
<tr>
<td>Su</td>
<td></td>
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</table>
| M  | Depression | What is evidenced-based practice? [http://effectivechildtherapy.com/sccap/?m=sPro&fa=pro_ESToptions#sec1](http://effectivechildtherapy.com/sccap/?m=sPro&fa=pro_ESToptions#sec1)  
<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
<th>References</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>and intervention programs for</td>
<td>Arnold, M. E. &amp; Hughes, J. N. (1999). First do no harm: Adverse effects</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td><em>Texas Education Code, Chapter 37 Section 37.001</em> <a href="http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.37.htm">http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.37.htm</a></td>
<td>Quiz 3</td>
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<tr>
<td>Su</td>
<td></td>
<td>Research Press. DVD. Disc 2</td>
<td>Video Quiz 2</td>
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**Week 4: Evidenced-Based Group Interventions Pt 2**

<table>
<thead>
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<th>Day</th>
<th>Topic</th>
<th>References</th>
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<tr>
<td>W</td>
<td>Divorce/Family Relationships</td>
<td></td>
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</tr>
<tr>
<td>Day</td>
<td>Topic</td>
<td>References/Notes</td>
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<tr>
<td>F</td>
<td>Sexting Prevention Education</td>
<td><a href="http://www.txscc.txstate.edu/K12/sexting">http://www.txscc.txstate.edu/K12/sexting</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teen Dating Violence</td>
<td><a href="http://www.txscc.txstate.edu/K12/gender-respect">http://www.txscc.txstate.edu/K12/gender-respect</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Texas Education Code, Chapter 37 Section 37.001</td>
<td><a href="http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.37.htm">http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.37.htm</a></td>
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<tr>
<td></td>
<td>Texas School Safety Center</td>
<td><a href="http://vimeo.com/46625365">http://vimeo.com/46625365</a></td>
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<tr>
<td></td>
<td>Quiz 4</td>
<td></td>
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<td>Su</td>
<td>Week 5: Crisis Intervention</td>
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<td>Quiz 5</td>
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<tr>
<td>Final Project due:</td>
<td>First day of final exams by 5pm, CST</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.

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

2. Course prefix, number and complete title of course: MARB 618 Marine Science of the Pacific Rim

3. Catalog course description (not to exceed 50 words):
   
   Course intended for students interested in conducting research on the marine biology or fisheries of the Pacific Rim countries; tailored to specific interests of individual students; course involves directed readings, participation in the student’s research project, discussions with the Instructor, and final report for possible publication.

4. Graduate standing and permission from the instructor
   
   Cross-listed with: 
   Stacked with: 

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

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

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
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<tbody>
<tr>
<td>MARB</td>
<td>618</td>
<td>MARINE SCI - PACIFIC RIM</td>
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<table>
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<th>Lab</th>
<th>SCH</th>
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<th>Fund Code</th>
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<th>Acad. Year</th>
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<td>4 - 1 5</td>
<td>0 1 0 2 9 8</td>
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</tbody>
</table>

Approval recommended by:

John Schwarz
Department Head or Program Chair (Type Name & Sign)  Date: 12/2/13

Chair, College Review Committee

Dean of College

Chair, GC of UCC

Submitted to Coordinating Board by:

Associate Director, Curricular Services

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

Curricular Services – 3/10
Instructor: Dr. Randall Davis  
Email: davisl@tamug.edu  
Office: 409-740-4712  
Cell: 281-250-7839

Office Hours: By appointment (OCSB 246)
Prerequisites: Permission of the Instructor

Class Details: Summer I and Summer II, 2014- (dates May 14 – Jul 2, Jul 8 – Aug 18, Location: For those students conducting field research, the course will involve directed reading, participation in their respective research project, discussions with the Instructor, and a final report or manuscript suitable for publication. For those students conducting a literature review only while at TAMUG, the course will involve directed reading, discussions with the Instructor, and a final report or manuscript suitable for publication.

Textbook: None required
Prerequisites: Graduate student status in a TAMU or TAMUG graduate program

Course description/objectives: This 3-0 credit hour summer course is intended for graduate students who are interested in conducting research (field or literature based) on the marine biology or fisheries of Pacific Rim countries. The course will be tailored to the specific interests of the individual students. For those students conducting field research, the course will involve directed reading, participation in their respective research project, discussions with the Instructor, and a final report or manuscript suitable for publication. For those students conducting a literature review only, the course will involve directed reading, discussions with the Instructor, and a final report or manuscript suitable for publication.

Course Syllabus

Topics/Discussions – Calendar of Activities
1 Geography and geology of the Pacific Rim
2 Oceanography of the Pacific Rim
3 Biological Oceanography of the Pacific Rim
4 Fisheries in the Pacific Rim
5 Marine Mammals of the Pacific Rim
6 Effect of climate change on the ecology of the Pacific Rim

Learning Outcomes: At the conclusion of the course, students should better understand of the physical and biological oceanography of the Pacific Rim and its influence on marine mammal populations and fisheries.
Evaluation and grading

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Overall Grade Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent research &amp; assignments (Final report at end of summer term or to be arranged between Dr. Davis and student.)</td>
<td>75%</td>
</tr>
<tr>
<td>Presentations and discussion</td>
<td>25%</td>
</tr>
<tr>
<td>Total:</td>
<td>100%</td>
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</table>

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

The Americans with Disabilities Act, ADA, is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the director of counseling.

Academic Integrity Statement
The Aggie Honor Code states: “An Aggie does not lie, cheat, or steal or tolerate those who do”. The Honor Council Rules and Procedures can be found at: [http://www.tamu.edu/aggiehonor](http://www.tamu.edu/aggiehonor)
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): College of Engineering

2. Course prefix, number and complete title of course: SYEN 640 Systems Thinking and Analysis

3. Catalog course description (not to exceed 50 words): Introduction to the systems thinking process and the fundamental considerations associated with the engineering of large-scale systems or system of systems.

4. Prerequisite(s): Graduate classification: Math 304 or approval of instructor

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)
      Master of Engineering in Systems Engineering
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      MS or ME in Industrial Engineering, Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, Aerospace Engineering, Petroleum Engineering and Computer Science and Engineering

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: SYEN Course #: 640 Title (excluding punctuation): Systems Thinking & Analysis

<table>
<thead>
<tr>
<th>Lect.</th>
<th>Lab</th>
<th>SCH</th>
<th>CIP and Fund Code</th>
<th>Admin. Unit</th>
<th>Acad. Year</th>
<th>HCE Code</th>
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<tr>
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<td>1</td>
<td>4</td>
<td>2</td>
<td>7</td>
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<tr>
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<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

Approval recommended by:
John Criscione
Department Head or Program Chair (Type Name & Sign) Date 1/16/14

John Criscione
Chair, College Review Committee Date 1/16/14

John Criscione
Dean of College Date 1/16/14

Chair, GC or SCC Date 3/20/14

Submitted to Coordinating Board by:
Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williame@tamu.edu.
Curricular Services – 3/10
COURSE NUMBER: ISEN 640
COURSE NAME: SYSTEMS THINKING AND ARCHITECTURE

COURSE DEVELOPER: Dr. Lewis Ntiamo, 4008 Emerging Technologies Building: 458-2360; ntaimo@tamu.edu

Text books: No Required Text Book, References:


Course Description:
Introduction to the systems thinking process, systems architecture, and the fundamental considerations associated with systems engineering. These include system life cycle models, systems modeling, systems design, and the system development process phases: needs analysis, concept exploration, concept definition, engineering design, integration and evaluation; production, operations and support.

Course Learning Objectives:
Students will learn the concepts and principles of systems thinking; the anatomy of engineered systems and their complex interfaces and interactions; formulating, analyzing, and interpreting issues associated with engineered systems. The student will also learn to use systems thinking techniques and software tools necessary for systems engineering practice and be able to model and analyze engineered systems using systems engineering tools.

COURSE OVERVIEW:
This course will introduce students to systems thinking and engineering and the fundamental considerations associated with the engineering of large-scale, complex systems. The course provides a comprehensive understanding of systems ideas and methods to help students achieve success with their future challenging projects regardless of their discipline. The course is suitable
for students at the master’s level and only requires the student to have linear algebra and basic analytical thinking skills. The course covers, 1) definitions and classification of systems, hierarchical models of complex systems, and systems of systems, 2) systems thinking ideas and systems engineering tools, 3) functional and information modeling for complex systems, 4) engineering and design of large scale systems, including the system development process, system life cycle models, and systems engineering documents, 5) formulation of issues and constraints, from needs analysis, concept exploration, through to concept definition, 6) design and evaluation of system models, from advanced development, engineering design, to system integration and evaluation. The course will draw on case studies and examples from several fields including engineering, ecology, healthcare, and energy. To keep up with modern systems engineering tools, the students will be introduced to Unified Modeling Language (UML) and to Rational systems Developer. To reinforce the material covered in lectures, students will form semester teams and each team will work on an interesting real-life problem of their choice, and apply the systems engineering approach to model, analyze and design a system model to address the problem. Each team will learn to use systems modeling software to develop the systems engineering documents for the project, write a project report and give a presentation of their project at the end of the semester.

Topics to be covered

- Week 1…………..Introduction to Systems Thinking and Engineering
- Week 2…………..Functional and Information Modeling
- Week 3…………..Survey of System Types & Discipline Specific Engineering
- Week 4…………..Systems Thinking: Concepts
- Week 5…………..Systems Thinking Tools: Causal Loop Models and N² Charts
- Week 6…………..Basic Set Theory: Sets, Relations and Functions
- Week 7…………..Systems Modeling: Continuous and Discrete Event Models
- Week 8…………..Model Synthesis: Combined Discrete/Continuous models; Applications and examples; Interaction and Output analysis
- Week 9…………..Systems Design Theory: System Requirements
- Week 10………..Systems Design Theory: Functional, Buildable and Implementable System Designs
- Week 11………..Systems engineering tools
- Week 12………..The System Development Process
- Week 13 & 14…Capturing Social and Technical Concerns/Issues; Formulation of Constraints, boundaries and interactions
- ………………………Project: Case Study and Report
Evaluation

- Homework
  - Weekly
  - 20% of the grade
- Test 1: After Week 5
  - 20% of the grade
- Test 2: After Week 10
  - 20% of the grade
- Final Exam: As scheduled
  - 20% of the grade
- Project Report: Due last day of class
  - 20% of the grade

The instructor reserves the right to assign written reports on outside topics which will be reviewed and used to determine the individual's class grade in borderline cases. Class participation will be noted and assessed. Final grades will be assigned as follows. There are no exceptions. GA is the students Grade Average.

<table>
<thead>
<tr>
<th>Average Grade</th>
<th>Course Grade</th>
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<tbody>
<tr>
<td>100 ≥GA ≥ 90</td>
<td>A</td>
</tr>
<tr>
<td>90 &gt; GA ≥ 80</td>
<td>B</td>
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<td>80 &gt; GA ≥ 70</td>
<td>C</td>
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<td>70 &gt; GA ≥ 60</td>
<td>D</td>
</tr>
<tr>
<td>60 &gt; GA ≥ 0</td>
<td>F</td>
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</tbody>
</table>

General Policies:
Plagiarism and "copying" will not be tolerated and will result in a grade of zero (0) for all students involved, regardless of active or passive participation. Students will be expected to have completed any HW assignments and be comfortable with the lecture material covered during the week. A departmental website directory will be maintained on the “cannibal” course drive of the ISEN website. This site will be used to archive all PPT class presentations, selected handout materials and other courseware. Cheating on any Quiz will result in a grade of zero and immediate referral to appropriate University officials.

Class Attendance and Make-Up Policy:
In a course of this nature, class attendance, participation, and the timely completion of assignments is critical. Specifically, class attendance is an individual student responsibility. Absences that permit making up a major examination or the timely fulfillment of a written assignment will be authorized by the instructor. The exception is University Calendar excused absences or sickness supported by a letter from an authorized physician. A University authorized excused absence is only a holiday posted to the University calendar. Students are referred to the current copy of University Regulations for comprehensive guidelines. It is the responsibility/obligation of the instructor to provide students with realistic due dates for homework assignments and dates for examinations far enough in advance to permit student
preparation. Major quizzes will be announced 7-10 days in advance. Class attendance might be kept by the instructor and can affect the final course grade in borderline cases.

Absences will be authorized (and work permitted to be made up or handed in for evaluation) for reasons deemed sufficient by the instructor or by the University. Authorized absences generally cover the following:

- Illness/injury (Requires a doctor’s note)
- Participation in an activity appearing on the University authorized list
- Death or major illness in a student’s immediate family (must be documented)
- Participation in legal proceedings that require the student’s presence (Court service, etc.)
- Religious holy days that are on the University Calendar

**JOB INTERVIEW TRIPS AND SOCIAL EVENTS ARE NOT ALLOWABLE ABSENCES**

**CLUB OR ORGANIZATIONAL TRIPS ARE NOT ALLOWABLE ABSENCES**

**CONFERENCES ARE NOT ALLOWABLE ABSENCES**

To qualify as an “authorized” absence, the student is totally responsible for providing written evidence to the instructor to substantiate the reason(s) for any absence. Please note: The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unauthorized absence. Please note that plant trips and travel for purpose of obtaining future employment are not technically authorized absences. However, if the student plans on missing a class, he/she must notify the instructor at least one day in advance of the missed class period, detailing the nature of the absence. Students will usually be permitted a “reasonable” number of absences for this purpose at the discretion of the instructor. Communication is most effective via e-mail at drdon@tamu.edu. It will be the stated class policy that if a student misses a scheduled major examination or fails to meet an assigned project deadline due to an unauthorized absence, the student will receive a “0” for that specific examination/project/assignment. Excessive class absences will result in lowered instructor evaluation. Failure to participate in class discussions may result in lowered instructor evaluation and a lower grade. Any late graded assignments will not be accepted unless specifically approved by the lab instructor. For further information see: http://student-rules.tamu.edu/rule07

**Promptness**

There is no excuse for habitual late arrival to class lectures. The class will start as soon as the instructor arrives and will finish when the instructor dismisses class, within the bounds of the formal class duration. The instructor will make every attempt to arrive on time and the same is expected of students. If a student arrives more than 15 minutes late, that student can be denied attendance that day. This is not simply being “picky or mean”. Late arrivals disrupt class, cause irritation and interruption, and builds poor character.
POP QUIZ POLICY:
Students are expected to attend class on any days that an “authorized” absence is not in effect. To strengthen class participation, the instructor reserves the right to adopt and use a “pop quiz” policy if necessary. Pop quizzes can be administered during the semester at any class time. These quizzes will cover basic material covered in the preceding class period or on the same day the quiz is given. Pop quizzes might be used to determine final grades in “borderline cases”, but will not be averaged into all other semester exercises to determine the final grade assignment.

Missed Test Policy (Major Test)
If a test is missed, you must have a written authorized excuse. If possible, please let me know before the test; otherwise, I must be notified within two days of your return to school. Make up exams will be given in accordance with University Rules (see Rule 7 at http://student-rules.tamu.edu).”

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

Academic Integrity
“An Aggie does not lie, cheat, or steal or tolerate those who do.”
It is the responsibility of students and instructors to help maintain scholastic integrity at the university by refusing to participate in or tolerate scholastic dishonesty. (For the Honor Council rules and procedures, see the web site http://aggiehonor.tamu.edu)
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus. •

Form Instructions
1. Request submitted by (Department or Program Name): College of Engineering

2. Course prefix, number and complete title of course: SYEN 641 Systems Engineering Methods and Frameworks

3. Catalog course description (not to exceed 50 words): Concepts, methodologies, methods and tools for discovery, definition, analysis, design, creation and sustainment of systems involving information, physical and human elements; architecture modeling methods include IDEF/UPDM; systems engineering frameworks include DoDAF/MoDAF, and Zachman; analysis tools include executable architectures to assess consistency, interoperability and performance.

4. Prerequisite(s): Math 304 or approval of instructor

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

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

      Master of Engineering in Systems Engineering

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

      MS or ME in Industrial Engineering, Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, Aerospace Engineering, Petroleum Engineering and Computer Science and Engineering

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:

John Criscione Date 1/6/14
Department Head or Program Chair (Type Name & Sign) Chair, College Review Committee Date 1/6/14

Department Head or Program Chair (Type Name & Sign) Date 3/30/14
(if cross-listed course) Dean of College Chair, GC or UGC 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 NUMBER: SYEN 641
COURSE NAME: SYSTEMS ENGINEERING METHODS AND FRAMEWORKS

COURSE DEVELOPER: Dr. Richard J. Mayer, 4068 Emerging Technologies Building: 979-260-5274; rmayer@kbsi.com

Text books: None; Current Literature, Open Source Standards, Instructor hardouts.

Course Content:
This course is designed to provide the students with an understanding of the concepts, methodology, methods and tools of systems discovery, definition, analysis, design, creation, and sustainment. The main focus of the course is to develop the students’ critical thinking skills to 1) define and analyze the as-is system, 2) develop and communicate the to-be system requirements, 3) transition these requirements into the design specification of a new or modified system, and 4) evaluate the value, correctness, interoperability, and performance of a system design.

Course Learning Objectives:
The student will learn the component methods for systems architecting including: function modeling, process modeling, information and data modeling, ontology modeling and representation, software and system behavioral and structural design, systems dynamics modeling. The student will also learn the standard frameworks for structuring the systems development process and documenting the resulting artifacts. Finally the student will learn the core techniques for system architecture analysis including: requirements analysis, allocation, assessment, and design traceability, 2) design verification, validation, and completeness (VV&C), 3) cost / performance/risk tradeoff analysis, and 4) simulation based architecture execution.

COURSE OVERVIEW:
This course will start with the study of component systems as simple or complex hybrids, involving information, computation, mechanical, and human elements. Later in the course we will study “capabilities” that are formed as collections of interoperating systems – referred to in the current vernacular as a system of systems, or SOS. We will study the way engineered orchestration of the interoperability and combined performance of the collection will result in a desired capability. Throughout the course we will study methods, languages, and techniques that enable us to ‘view’ and analyze the as-is system, develop and communicate the to-be system requirements, and transition these requirements into the design specification of a new or modified system. The initial modeling methods focus will be the IDEF function, information, process, and ontology modeling methods. Other system design modeling methods and languages to be covered are UML and SysML. In depth review of the language stack for ontology modeling will be covered including RDF, OWL, DL, and Common Logic. Our study will be performed within the context of the systems development life cycle and the use of frameworks for applying the systems engineering discipline. The DoD Architecture Framework (DoDAF) will be the primary structure studied. Other enterprise architectural frameworks such as MoDAF, FEAF, and the Zachman AF will be surveyed. The primary analysis tools covered will
be simulation based. Particular focus will be given to the use of systems dynamics models and colored Petri nets. The generation and use of executable architectures as a means to rapidly assess consistency, interoperability and performance will be studied in detail.

**Topics to be covered**

- Week 1 – System Architectures and Function Modeling Introduction
- Week 2 – Function Modeling and Introduction to Architecture Frameworks
- Week 4 – System Discovery, Definition, Design & Process Architectures
- Week 5 – System Creation & Sustainment; Process & Object State Architectures
- Week 6 – Information Architecture Method Theory & Practice
- Week 7 – Data Architectures and Introduction to Ontology Modeling Methods
- Week 8 – Ontology Languages & Logic Based Architecture Analysis Methods
- Week 9 & 10 – UML and SySML Based Architecture Methods
- Week 11 – DoDAF Framework Systems, Services, Data and Information, and Standards View
- Week 12 – Architectures to Executable Models & Systems Dynamics Simulation
- Week 13 – Analysis of Alternatives with Executable Architectures
- Week 14 – Project Presentations

**Evaluation**

- Homework
  - Weekly
  - 30% of the grade
- MidTerm: After Week 7
  - 30% of the grade
- Final Exam: As scheduled
  - 10% of the grade
- Project Report: Due last day of class
  - 30% of the grade

The instructor reserves the right to assign written reports on outside topics which will be reviewed and used to determine the individual’s class grade in borderline cases. Class participation will be noted and assessed. Final grades will be assigned as follows. There are no exceptions.
Average Grade  |  Course Grade
----------------|----------------
100 \( \geq \text{CA} \geq 90 \) | A
90 \( > \text{CA} \geq 80 \) | B
80 \( > \text{CA} \geq 70 \) | C
70 \( > \text{CA} \geq 60 \) | D
60 \( > \text{CA} \geq 0 \) | F

**General Policies:**
Plagiarism and “copying” will not be tolerated and will result in a grade of zero (0) for all students involved, regardless of active or passive participation. Students will be expected to have completed any HW assignments and be comfortable with the lecture material covered during the week. General HW assignments will not be graded. A departmental website directory will be maintained on the “cannibal” course drive of the ISEN website. This site will be used to archive all PPT class presentations, selected handout materials and other courseware. Cheating on any Quiz will result in a grade of zero and immediate referral to appropriate University officials.

**Class Attendance:**
In a course of this nature, class attendance, participation, and the timely completion of assignments is critical. Specifically, class attendance is an individual student responsibility. Absences that permit making up a major examination or the timely fulfillment of a written assignment will be authorized by the instructor. The exception is University Calendar excused absences or sickness supported by a letter from an authorized physician. A University authorized excused absence is only a holiday posted to the University calendar. Students are referred to the current copy of *University Regulations* for comprehensive guidelines. It is the responsibility/obligation of the instructor to provide students with realistic due dates for homework assignments and dates for examinations far enough in advance to permit student preparation. Major quizzes will be announced 7-10 days in advance. Class attendance might be kept by the instructor and can affect the final course grade in borderline cases.

Absences will be authorized (and work permitted to be made up or handed in for evaluation) for reasons deemed sufficient by the instructor or by the University. Authorized absences generally cover the following:

- Illness/injury (Requires a doctor's note)
- Participation in an activity appearing on the University authorized list
- Death or major illness in a student's immediate family (must be documented)
- Participation in legal proceedings that require the student's presence (Court service, etc.)
- Religious holy days that are on the University Calendar

*Job interview trips and social events are NOT allowable absences*
*Club or organizational trips are NOT allowable absences*
*Conferences are NOT allowable absences*
To qualify as an “authorized” absence, the student is totally responsible for providing written evidence to the instructor to substantiate the reason(s) for any absence. Please note: **The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unauthorized absence.** Please note that plant trips and travel for purpose of obtaining future employment are not technically authorized absences. However, if the student plans on missing a class, he/she must notify the instructor at least one day in advance of the missed class period, detailing the nature of the absence. Students will usually be permitted a “reasonable” number of absences for this purpose at the discretion of the instructor. Communication is most effective via e-mail at drdon@tamu.edu.

It will be the stated class policy that if a student misses a scheduled major examination or fails to meet an assigned project deadline due to an unauthorized absence, the student will receive a “0” for that specific examination/project/assignment. **Excessive class absences will result** in lowered instructor evaluation. **Failure to participate in class discussions** may result in lowered instructor evaluation and a lower grade. Any late graded assignments will not be accepted unless specifically approved by the lab instructor.

**Promptness**

There is no excuse for habitual late arrival to class lectures. The class will start as soon as soon as the instructor arrives and will finish when the instructor dismisses class, within the bounds of the formal class duration. The instructor will make every attempt to arrive on time and the same is expected of students. If a student arrives more than 15 minutes late, that student can be denied attendance that day. This is not simply being “picky or mean”. Late arrivals disrupt class, cause irritation and interruption, and builds poor character.

**POP QUIZ POLICY:**

Students are expected to attend class on any days that an “authorized” absence is not in effect. To **strengthen class participation, the instructor reserves the right to adopt and use a “pop quiz” policy if necessary.** Pop quizzes can be administered during the semester at any class time. These quizzes will cover basic material covered in the preceding class period or on the same day the quiz is given. Pop quizzes might be used to determine final grades in “borderline cases”, but will not be averaged into all other semester exercises to determine the final grade assignment.

**Missed Test Policy (Major Test)**

If a test is missed, you **must** have a written authorized excuse. If possible, please let me know before the test; otherwise, I must be notified within two days of your return to school. **Make up exams will be given in accordance with University Rules (see Rule 7 at http://studentrules.tamu.edu).”**

**The American Disabilities Act (ADA)**

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

Academic Integrity

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

It is the responsibility of students and instructors to help maintain scholastic integrity at the university by refusing to participate in or tolerate scholastic dishonesty. (For the Honor Council rules and procedures, see the web site http://aggiehonor.tamu.edu)
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

Form Instructions
1. Request submitted by (Department or Program Name): College of Engineering
2. Course prefix, number and complete title of course: SYEN 642 Systems Performance Modeling
3. Catalog course description (not to exceed 50 words): Develop and formulate models to evaluate and improve system performance; Survey of Math Programming; decision trees; simulation models; and economic evaluation of systems. Examples and applications of linear programming, nonlinear programming, integer programming, systems simulation, multi-objective formulations, solution interpretation and sensitivity analysis.

4. Prerequisite(s).

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)
      Master of Engineering in Systems Engineering
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      MS or ME in Industrial Engineering, Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, Aerospace Engineering, Petroleum Engineering and Computer Science and Engineering

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:

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

John Cristione, Chair, College Review Committee Date

John Cristione, Dean of College Date

Chair, GC or UCC Date

Submitted to Coordinating Board by:

Associate Director, Curricular Services

Date Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services – 3/10

RECEIVED
JAN 17 2014
GRADUATE STUDIES
COURSE NUMBER: SYEN 642
COURSE NAME: SYSTEMS PERFORMANCE MODELING
COURSE DEVELOPERS: Luca Quadrifoglio, PhD
CE/TTI Building, Room 301-I:
458-4171; quadrifo@tamu.edu
Raktim Bhattacharya, PhD
HRBB 727C
862-2914; raktim@tamu.edu

Textbooks: None; current literature, instructor handouts and notes.

Course Description:
Development and formulation of models to evaluate and improve system performance; includes a survey of mathematical programming and simulation models. Solution interpretation and sensitivity analyses. Application from a variety of engineering disciplines.

Course Learning Objectives:
Students will learn the key principles needed to identify and/or develop proper models of real systems in order to enhance their performance.

COURSE OVERVIEW:
Systems engineers require the ability to understand and recognize the complexity of real systems and properly identify and/or develop the correct tools to model them. This course will expose students to a survey of techniques needed to properly develop models of real world large complex systems to evaluate and improve their performance. Rather than focusing on solution techniques, this course is primarily intended to provide students with the ability to formulate the systems’ model, recognize and select variables, objectives, constraints and parameters, identifying the needed trade-offs to make the model detailed enough to be representative of the real system, but also simple enough to be manageable. Students will be exposed to a comprehensive overview of deterministic and stochastic models, methods and tools, including mathematical programming and simulation, in multidisciplinary complex system design. The course will also focus on the interpretation of the models’ outputs and sensitivity analyses, with applications from virtually all engineering disciplines, such as aerospace, mechanical, civil.

Topics to be covered
- Week 1 Systems’ Modeling Framework (Objectives, Variables, Constraints and Parameters)
- Week 2 Examples of Large Scale Modeling and Relevant Domain Models
- Week 3 Linear Programming (LP): Models and Graphical Solution
- Week 4 LP: Output Interpretation and Sensitivity Analyses
- Week 5 System Network Modeling and Graph Theory Overview
- Week 6 Integer/Binary and Nonlinear Programming Formulations
• Week 7  Stochastic Systems: Simulation Models (Continuous, Discrete, Combined)
• Week 8  Model Development and Validation
• Week 9  Model Input/Output Analyses
• Week 10  Hierarchical modeling: System of Systems Models
• Week 11  Descriptive Models: Architecture/ADLs
• Week 12  Behavioral Models: State Machines, Stochastic Models
• Week 13  System Analyses using Model Based Systems Engineering
• Week 14  Case Studies and Applications

**Evaluation and Understanding**

2 Tests  
50% of grade

1 Final Exam  
25% of grade

Homework assignments  
15%

Reading /Report Assignments  
10%

The instructor reserves the right to assign written reports on outside topics which will constitute 10% of the earned grade. Class participation will be noted and assessed. Final grades will be assigned as follows. There are no exceptions. GA is the student’s earned grade average.

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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): College of Engineering

2. Course prefix, number and complete title of course: SYEN 643 Theory of Socio-Technical Systems

3. Catalog course description (not to exceed 50 words): Philosophy, origins, theory, principles, and methodologies of complex socio-technical systems; emphasis on holistic thinking for systems engineering. Systems approach; cybernetics; complexity science; physical and biological systems; social, economic, and political systems; network representations of systems; real-world decision-making; system dynamics; emergent behavior; systems architecture; engineered systems today and in the future.

4. Prerequisite(s): 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)

   Master of Engineering in Systems Engineering

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

   MS or ME in Industrial Engineering, Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, Aerospace Engineering, Petroleum Engineering and Computer Science and Engineering

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 Y E N T H R Y S O C I O T E C H S Y S T E M S

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Approval recommended by:

John Cristione

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

John Cristione

Chair, College Review Committee 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 845-3201 or sandra-williams@tamu.edu.
Curricular Services – 3/10
COURSE NUMBER: SYEN 643
COURSE NAME: THEORY OF SOCIO-TECHNICAL SYSTEMS
COURSE DEVELOPER: Mark S. Avnet, 4075 Emerging Technologies Building: 458-2339; avnet@tamu.edu

Textbooks
None required; course material builds on a diverse multidisciplinary body of literature. Some of the most cited material will be drawn from the following:


Course Description:
This course will introduce the student to the philosophy, origins, theory, principles, and methodologies of complex socio-technical systems. The purpose of the course is to develop and foster the type of holistic thinking needed to be an effective systems engineer. To accomplish this, the course covers the foundations of systems thinking, natural systems (physical and biological), social and economic systems, complexity science, and various approaches to systems modeling. Based on these fundamentals of the "systems approach," students will then apply the general theory and principles learned to the design of human-made engineered systems.

Course Learning Objectives:
The primary objective of this course is to introduce students to the key principles behind the theory of complex socio-technical systems. To achieve this objective, it is essential that students learn about the foundations of complex systems from an interdisciplinary perspective. As such, the course draws on literature from a wide array of fields, including engineering, physics, biology, complexity science, economics, sociology, psychology, political science, and
management. Course topics range from the general and abstract to the applied and immediately relevant. Topics covered include foundations of the systems approach, human/machine interaction and cybernetics, complexity science and chaos theory, natural systems (physical and biological), social and economic systems, network representations of systems, real-world decision-making, system dynamics, emergent behavior in complex systems, system architecture, systems engineering organizations, and the role of complex engineered systems today and in the future. The course provides the student with a holistic view of systems (broadly defined) and an appreciation for the inherent complexity of the modern world.

**Course Overview:**
This course will survey the diverse set of topics related to the general theory of complex socio-technical systems. In the first unit (Weeks 1-3), the theoretical basis and origins of the study of complex systems and the "systems approach" are introduced. In the second unit (Weeks 4-7), the discipline of complexity science is introduced and applied to physical, biological, and social systems, and the tools used for creating and analyzing network representations of systems are discussed. The third unit (Weeks 8-10) provides an overview of modeling approaches for various aspects of complex systems, including decision-making, time dependence, and emergence. The fourth and final unit (Weeks 11-14) focuses on the organizations that design and develop complex engineered systems and discusses the relevance of complex systems in the modern world. The course will involve extensive reading covering both depth and breadth. The instruction will be highly participative and discussion-oriented with lecture being limited to brief introduction of unfamiliar topics. Guest speakers will be invited regularly to demonstrate the real-world relevance of the topics discussed.

**Topics to be covered:**
- Week 1 ........ Introduction to Socio-Technical Systems
- Week 2 .......... Theoretical Basis for the Study of Complex Systems
- Week 3 ........ Human/Machine Interaction and Cybernetics
- Week 4 ........ Complexity Science and Chaos Theory
- Week 5 ........ Physical and Biological Systems
- Week 6 ........ Social, Economic, and Political Systems
- Week 7 .......... Network Representations of Systems
- Week 8 ........ Complexity and Human Decision-Making
- Week 9 ........ Dynamic Modeling of Complex Systems
- Week 10 .......... Emergence and Agent-Based Modeling
- Week 11 .......... Systems Architecting and Social/Organizational Aspects of Design
- Week 12 .......... Complexity in the Design of Human-Made Engineered Systems
- Week 13 .......... Globalization and the World Economy as a Complex System
- Week 14 .......... Predicting the Future in a Complex World
Evaluation
- No exams
- Weekly one-page reflection papers on assigned readings and in-class discussion on material covered (25% of the grade)
- Three projects
  - The first will be completed by individuals and will involve *analyzing a system*
    - Due during Week 8
    - 25% of the grade
  - The second will be done in teams of 2 to 3 and will involve *modeling a system*
    - Due during Week 12
    - 25% of the grade
  - The third will be done in teams of 4 to 6 and will involve *designing a system*
    - Due during finals week
    - 25% of the grade

Grading Scale

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

*Important Note on Attendance:* This is a highly participative and discussion-oriented course. As such, your attendance and thoughtful discussion during class will make up a significant part of your grade. Each week, you will submit and discuss a one-page reflection paper on the assigned readings. Your reflection papers combined with your participation in these discussions will make up 25% of your overall grade for the course.

**General Policies:**
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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): College of Engineering

2. Course prefix, number and complete title of course: SYEN 644 Decision Making Under Uncertainty in Systems Engineering


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

5. Is this a variable credit course? ☑ 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)
      Master of Engineering in Systems Engineering
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      MS or ME in Industrial Engineering, Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, Aerospace Engineering, Petroleum Engineering and Computer Science and Engineering

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)
   SYEN 644   DECISIONS RISK & UNCERT
   Lect. Lab SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
   0 3 0 0 0 3 1 4 2 7 0 1 0 0 6 0 9 6 5 1 4 - 1 5 0 0 3 6 3 2

   Approval recommended by:
   John Criscione 1/6/14
   Department Head or Program Chair (Type Name & Sign)
   Date

   Chair, College Review Committee
   Date

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

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

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 3/10
COURSE NUMBER: SYEN 644
COURSE NAME: DECISION MAKING UNDER UNCERTAINTY IN SYSTEMS ENGINEERING

Course Developers: Richard Malak, 325 MEOB, 979-845-1919, rmalak@tamu.edu
Don T. Phillips, 4018 Emerging Technologies Building: 458-2347; drdon@tamu.edu

Textbook: Advanced Risk Analysis in Enterprise Systems, Cesar Ariel Pinto; Paul R. Garvey, CRC Press.

Course Description:
Systems engineers are tasked with numerous decisions that are critical to the success of an engineering project. Rarely, if ever, are these decisions free of uncertainty and risk. This course reviews and builds upon the basic principles of probabilistic modeling and statistical analysis to provide systems engineers with an understanding of how to model and reason about uncertainty and risk in large-scale complex systems engineering projects. The course presents both heuristic decision methods and the mathematical foundations of rigorous decision theory and methods. Decision problem formulation is approached from a value-driven perspective and covers topics such as sequential decisions and deferred decisions as formalized using real options theory. Techniques presented in risk modeling and analysis include the risk co-relationship (RCR) index and functional dependency network analysis (FDNA).

Course Learning Objectives:
By the conclusion of this course, students should demonstrate knowledge and/or skill in the following areas: (1) how to model uncertainty, (2) how to reason about uncertain events, (3) how to compute with uncertainty, (4) how to formulate decision problems, and (5) how to reason about risk. The context for applying this knowledge will be large-scale, complex systems that are engineered to function in enterprise-wide environments.

COURSE OVERVIEW:
In this course, students will learn how to formulate and solve decision problems under uncertainty in the context of systems engineering projects. The material covered will include fundamental concepts, rigorous methods, and commonly-used heuristic techniques for decision making and uncertainty analysis. Although there will be a brief review of probability theory and engineering statistical analysis, it is assumed students already have some familiarity with these topics. Students will build on this foundation to learn heuristic and rigorous methods for uncertainty analysis, risk analysis, and decision making. Special attention will be paid to scenarios and issues common in systems engineering, such as updating beliefs based on new evidence (e.g., Bayesian updating), dealing with dependencies in highly networked and complex systems, sequential decisions, and value-driven decision formulations. Students will apply concepts and methods discussed in lecture through project-based assignments. Every student will complete a semester-long project of their choosing.
Topics to be covered

Week 1........ Course introduction; Review of Probability Theory
Week 2........ Review of Probability Theory (continued)
Week 3........ Review of Engineering Statistical Analysis: hypothesis testing & confidence intervals
Week 4........ Uncertainty propagation via Monte Carlo and quasi-Monte Carlo methods
Week 5........ Risk assessment and management (RCR, FDNA, etc.)
Week 6........ Heuristic methods for Decision Making (Pugh selection, AHP, Borda count, etc.)
Week 7........ Heuristic methods for Decision Making (continued); Foundations of Normative Decision Theory
Week 8........ Utility Theory; Formalizing decision preferences under uncertainty
Week 9........ Value-driven decision making
Week 10....... Sequential decisions & Markov Decision Problems (MDPs)
Week 11....... Stochastic behavior and modeling of complex systems
Week 12....... Introduction to Bayesian Inference & belief updating
Week 13....... Economics of Information and decisions to gather information,
Week 14....... Deferred decisions and real options theory

Evaluation

Students will be evaluated through a large semester-long project and smaller assignments.

Regular assignments:
- Due every 1-2 weeks
- Cumulatively 40% of grade

In-class Quizzes:
- Small-scale exams (less than a full class period; usually ~10 minutes long)
- Cumulatively 20% of grade

Project Assignments:
- Proposal, progress report, final report, and presentation
- Cumulatively 40% of grade

Final grades will be assigned as follows. There are no exceptions. GA is the earned grade average.

<table>
<thead>
<tr>
<th>Average Grade</th>
<th>Course Grade</th>
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<tr>
<td>100 ≥GA ≥ 90</td>
<td>A</td>
</tr>
<tr>
<td>90 &gt; GA ≥ 80</td>
<td>B</td>
</tr>
<tr>
<td>80 &gt; GA ≥ 70</td>
<td>C</td>
</tr>
<tr>
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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): College of Engineering

2. Course prefix, number and complete title of course: SYEN 645 Management of Engineering Systems

3. Catalog course description (not to exceed 50 words): Theory and practice of leadership and management in engineering organizations; focus is on both “hard” skills (systems engineering process, project management, planning, forecasting, financial analysis) and “soft” skills (leadership styles, motivation, teamwork, managing creative people, navigating informal networks); science and technology policy; economic implications of engineering and technology.

4. Prerequisite(s): Graduate Classification

Cross-listed with: Stacked with:

Crosslisted 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:
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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)
    SYEN 645 Management of Engineering Systems

    Lect. Lab SCH CIP and Fund Code Admin. Unit Acad. Year HICE Code
    0 3 0 0 0 3 1 4 2 7 0 1 0 0 6 0 9 6 5 1 3 - 1 4 0 0 3 6 3 2

    Approval recommended by:
    John Cristione
    Department Head or Program Chair (Type Name & Sign) Date 1/16/14

    John Cristione
    Chair, College Review Committee Date 1/16/14

    John Cristione
    Dean of College Date

    Chair, CG or UGC Date 3/20/14

    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.
COURSE NUMBER: SYEN 645
COURSE NAME: MANAGEMENT OF ENGINEERING SYSTEMS
COURSE DEVELOPER: Mark S. Avnet, 4075 Emerging Technologies Building:
458-2339; avnet@tamu.edu

Textbooks:
  ISBN: 978-1-118-02227-6

Course Description:
This course is designed to teach students about the importance of people and organizations in
systems engineering and to provide them with the management skills needed to be effective in
their careers.

Course Learning Objectives:
The student will learn the key principles of leading and managing in systems engineering
organizations. The course will provide both the theoretical underpinnings and the practical tools
needed to effectively lead and manage technical people engaged in complex engineering efforts.
The content will focus on both the “hard” skills (systems engineering process and life cycle,
strategic planning, project selection, decision-making, network scheduling techniques, and
financial analysis) and the “soft” skills (effective leadership styles, psychological type and
motivation, managing creative people, negotiation, and navigating informal organizational
networks). The goal of the course is to equip students with the broad range of knowledge and
skills relevant to leading and managing in the complex organizations of the 21st century.

Course Overview:
This course will survey the theory and practical application of those management skills that are
most relevant to leaders and managers in modern engineering organizations. The course is
divided into three modules. The first module (Weeks 1-4) focuses on people and organizations.
It covers the functions and roles of managers, leadership styles, organizational structure and
culture, motivation of technical professionals, managing teams, creativity, and negotiation and
conflict management. The second module (Weeks 5-8) provides an overview of project
management, including strategic planning and technological forecasting, product life cycle and
product strategies, requests for proposals (RFPs) and contracts, decision-making approaches,
discounted cash flows and real options, work breakdown structure (WBS), Gantt and PERT
charts, project organization and control, and earned value analysis. The third module (Weeks 9-
13) focuses on system development and life cycle management, including the role of government
in research and development, history of system development programs, systems engineering
paradigms and frameworks, stakeholder analysis, requirements definition, systems engineering
life cycle and life cycle properties (also known as “-ilities”), design review, systems engineering
tools, configuration management, systems-of-systems, concurrent engineering (CE), estimation
methods, and financial analysis. In the last week of the course (Week 14), students will have the opportunity to present a project focused on their own careers to the rest of the class.

**Topics to be covered**

- Week 1. Introduction to Management and Leadership in Engineering Systems
- Week 2. Formal Organization and Informal Networks
- Week 3. Organizational Culture, Motivation, and Psychological Type
- Week 4. Managing Engineering Teams, Negotiation, and Conflict Resolution
- Week 5. Strategic Planning and Technological Forecasting
- Week 6. Project Selection (RFPs, Contracts, Decision-Making, Real Options)
- Week 7. Project Organization, Planning, and Control
- Week 8. Cost and Schedule Evaluation
- Week 9. Technology Policy and History of Large-Scale System Development
- Week 10. Stakeholder Analysis and System Requirements
- Week 11. Systems Engineering Life Cycle and Life Cycle Properties
- Week 12. Tools/Approaches, Configuration Management, Systems-of-Systems
- Week 14. Student Presentations and the Future of Engineering Systems

**Case Studies**

Several short case studies will be assigned on a sporadic basis either as homework or as in-class exercises. These case studies are intended to assist you in applying the principles and ideas learned in the course.

**Project**

During the semester, each student will submit a report applying the concepts from the course to his/her own current or intended career. The emphasis of the project will be on applying engineering management principles to actual situations that you are likely to encounter during your career.

**Examinations**

The midterm and final exam will cover both the assigned readings and the material presented in class. The exams will consist primarily of problems on specific topics and short essay questions focused on synthesizing concepts covered throughout the semester.
Teams
This course will involve working in teams, primarily on the assigned case studies. The teams will be formed during the first class day of the second week after the roster is stable (no more add/drops). Teams will be formed by the instructor such that individuals may be working in concert with students that they do not know or do not know well. This policy is intended to prepare you for a basic reality of industry – that you will regularly work in teams not of your choosing. In general, the teams will consist of 4-5 individuals.

Evaluation
Midterm Exam: 30%
Final Exam: 30%
Project: 20%
Case Studies: 20%

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

The above scale represents the minimum range necessary to achieve each grade, but the actual grades will likely be based on a curve determined by class average and standard deviation.

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If a test is missed, you must have a written authorized excuse. If possible, please let me know before the test; otherwise, I must be notified within two days of your return to school. Make up exams will be given in accordance with University Rules (see Rule 7 at [http://student-rules.tamu.edu](http://student-rules.tamu.edu)).”

**The American Disabilities Act (ADA):**

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

**Academic Integrity:**

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

It is the responsibility of students and instructors to help maintain scholastic integrity at the university by refusing to participate in or tolerate scholastic dishonesty. (For the Honor Council rules and procedures, see the web site [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu))