

*Syllabus*  
**ENTO 435 Case Studies in Problem Solving**  
Spring Semester 2014  
Three Credit Hours (3-0)  
T-Th 12:45-14:00  
Room 102 Heep Center-West Campus

Instructors: Dr. Cecilia Tamborindeguy, Assistant Professor

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**Description/Expectations:** This capstone course is designed to help students develop problem-solving skills for real world situations. Entomological systems provide excellent material for gaining experience due to biological diversity, expansive scale, and importance to environmental, agricultural, and human health issues. Students are expected to identify and provide order to the components of problem solving, develop logical arguments from different perspectives, and communicate decision-making processes as a member of a problem solving team. The scale of problem solving will extend from laboratory and field, to community, state, and national levels.

**Student Learning Outcomes:**

- Assess, define and communicate problems from simple to complex levels.
- Define and debate problems and solutions from different points of view.
- Participate in the development and assessment of logical arguments, appropriate uses of evidence, and integration of varied types of information (quantitative, qualitative, text, image, etc.) in problem solving.
- Recognize the responsibilities and opportunities associated with citizenship in an increasingly interconnected and interdependent world.

**Prerequisites:** Junior or Senior classification, or approval of instructor.

**Required Reading:** Selected materials include web-based, scientific and public domain articles, and other selected materials appropriate to specific case studies.

**Grading:**

- Paper and presentation on Scientific Method.....15% (150 pts)
- Team paper and presentation on Critical Analysis \*.....20% (200 pts)
- Case Study Analyses\* .....25% (250 pts)
- Current Issues Debate\* .....25% (250 pts)
- Attendance and Participation.....15% (150 pts)
- There is no final examination in this course.

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

Course activities designated by \* include formal presentations with a requirement for business casual or business professional dress. Students are guided to “Dress for Success” at the Career Center website for information and guidelines on professional dress.

Each course activity will include assessment of written documents and oral presentations. Activities indicated by \* will be assigned to teams and teamwork will be evaluated by individual assessments based upon a rubric for participation.

**Estimated Schedule of Classroom Activities (Schedule and Assignments are Subject to Change):**

Jan 14 Introduction; syllabus review; development of “participation rubric”; initial review of the Scientific Method.

Jan 16 Discussion of the Scientific Method.

Jan 21 Presentation of different types of articles– Assignment of single scientific article review.

Jan 23 Discussion of the Scientific Method and preparations for assignment completion.

Jan 28 Classroom presentations: single peer reviewed article.

Jan 30 Classroom presentations: single peer reviewed article.

Feb 4 Expanded problem solving in science: interconnected ideas and critical assessment. Assignment II teams; Assignment and Review of Topic Selection and Rubric for Written and Oral Products.

Feb 6 Expanded problem solving in science: developing and testing hypotheses. Teams select topic areas for research.

Feb 11 Classroom Teamwork; Q&A Session.

Feb 13 Classroom presentations.

Feb 18 Classroom presentations.

Feb 20 Classroom presentations.

Feb 25 Case studies: Granovsky Associates.

Feb 27 Case studies: Granovsky Associates.

Mar 4 Case studies team assignments and case reviews; products of assignment II reviewed and discussed.

Mar 6 Teamwork and classroom discussion.

Mar 10-14 Spring Break

Mar 18 Case study final Q/A and preparation.  
Mar 20 Classroom Presentations.

Mar 25 Classroom Presentations.  
Mar 27 Classroom Presentations.

Apr 1 Case study written products due. Presentation: *Expanded Problem Solving – Science, Technology, Policy, & Regulation*.

Apr 3 Presentation on Debate: a forum for argument, compromise, and finding solutions. Issue debate topics and team assignments.

Apr 8 Debate protocol; Teamwork and classroom discussions.  
Apr 10 Debate research, class discussion and final preparation.

Apr 15 Debates.  
Apr 17 Debates.

Apr 22 Debates.  
Apr 24 Course summary and discussion.

Classroom Expectations: Be in class on time and be prepared for classroom discussion/participation. Turn off all cell phones, pagers, and other communication devices that would cause interruptions. Gentlemen remove caps. Be aware of and observe all classroom safety rules and regulations. Assist others.

#### **Americans with Disabilities Act (ADA) Policy**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall or call 845-1637.

#### **Academic Integrity Statement**

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

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

#### **C-course**

The University Writing Center (UWC), located in 214 Evans Library and 205 West Campus Library, offers one-on-one consultations to writers preparing documents, slides,

or oral presentations. UWC consultations are highly recommended but are not required. Help is available for all of the steps of the writing and speechwriting process including assistance with brainstorming ideas, narrowing the topic, creating outlines or drafts, and presenting a speech to an audience. UWC consultants can help you practice your speech with a real audience or develop visual presentation aids like slides and handouts. Consultants can also help you improve your proofreading and editing skills. If you visit the UWC, take a copy of your assignment, a hard copy of your draft or any notes you may have, as well as any material you need help with. To find out more about UWC services or to schedule an appointment, call 458-1455, visit the web page at [writingcenter.tamu.edu](http://writingcenter.tamu.edu), or stop by in person.