**UMASS STOCKBRIDGE SCHOOL OF AGRICULTURE**  
**STOCKSCH 485 - Capstone in Sustainable Food and Farming**  
**3 Credits**

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**Course Description:**  
This course requires a student to synthesize and integrate knowledge acquired in course work and other learning experiences (such as farm or non-profit internships) and to apply theory and principles in a situation that approximates professional practice. This course will provide seniors and first year graduate students with an opportunity to study a practical and current sustainable food and/or farming case, develop management tactics and strategies to address the problem identified in the case, and communicate their conclusions with others. The result will be a paper and poster that provides a culminating experience for seniors or allows a graduate student to begin the research process.

**Learning Objectives:**

1. To apply critical thinking, analysis, and communication skills that integrates the core academic areas of sustainable food and farming to a specific problem or case study (of the student’s choosing).
2. To condense and write a literature review of a specific sustainable food and farming problem.
3. To develop an educational or public policy program of sustainable food and farming tactics and strategies to address this problem at the field, farm, community, state or national levels.
4. To learn to provide professional peer review to other students.
5. To communicate their conclusions with other learners in a professional setting.

**Course Requirement:** Each student will develop a gradable product in the form of a research paper and poster presentation describing an original sustainable food and farming case that addresses a specific problem, as follows.

**Part One: Preparation, Introduction & Problem Statement, and Literature Review**

**Preparation:**  
Begin by becoming familiar with the research services at the DuBois Library.  
See: [http://www.library.umass.edu/getting-research-assistance/](http://www.library.umass.edu/getting-research-assistance/)

**Introduction & Problem Statement:**  
- Describe the problem as it currently exists at the field, farm, community, state or national levels. Examples: soil health, pest management, energy supply, community interaction, marketing of new products.
- This will serve as the abstract for submission to the Mass Undergrad Research Conference or other appropriate venue- less than two pages - worth 5% of your grade
Literature Review - consider the following questions:

- What is the proximal and root cause of the problem? (Use the systems analysis tools learned in PLSOILIN 265 Sustainable Agriculture class)
- What are the economic, ecological and social conditions that contribute to the problem?
- Describe the overall distribution, extent and impact of the problem.
- Describe other related factors that are known about the problem.
- What practices or strategies exist for addressing this problem and how effective are these currently?
- Who is working on solutions to this problem?
- Minimum 10 pages - doubled spaced.
- List references – see: http://www.comcol.umass.edu/academics/deansbookcourse/evaluatingsources.html
- NOTE – avoid plagiarism - see: http://www.comcol.umass.edu/academics/deansbookcourse/avoidingplagiarism.html
- Worth 15% of your grade

Part Two: Sustainable Food and Farming Theory
- Describe the economic, ecological, and/or social theory that you will use to frame the program you are designing to solve this problem.
- Minimum 5 pages, including literature citations.
- Worth 10% of your grade

Part Three: Educational or Public Policy Change Program Design – include:
- Goals and objectives of the program
- Describe the population target
- Who will implement the program?
- Describe the program in detail. Be sure to describe this program in relation to your description of theory.
- Minimum 10 pages - worth 20% of your grade

Part Four: Evaluation Plan
- Describe how you are going to evaluate the program
- Minimum 2 pages - worth 10% of your grade

References – Cite all your references - worth 5% of your grade

Poster -
- To be submitted to the Massachusetts Undergraduate Research Conference or another appropriate venue for graduate students: http://webapp.comcol.umass.edu/msc/default.aspx
- Information on how to create a poster: http://www.comcol.umass.edu/academics/deansbookcourse/posterdesign.html
- Worth 10% of your grade

Final Paper:
- The Final Paper is due on the last day of class
Other Important Issues:

* Writing and Proofreading - Proofread the document; use a spell-checker and grammar checker. Do not expect the capstone professor to be your proofreader. Peer feedback will be provided in class by at least 3 colleagues.

* Absences from class must be excused. In other words email the professor before the class if you are going to miss class. Missing more then three classes will lower your grade - participation in class is worth 10% of your grade.

* Reading other colleagues drafts – Please answer the following questions as you read other students drafts:
  * Edit any grammar mistakes.
  * Mark where you like what is written.
  * Mark sentences or paragraphs that do not flow. Suggest changes.
  * Make suggestions on how to improve the paper.
  * Finally write something positive about the paper.
  * (Return the paper with one week after receiving it. Returning it after one week will lower your paper by 5%)

* Academic Honesty - Academic honesty is expected and required of all UMass students. As stated in the University's Academic Honesty Policy on page 6 of the Academic Regulations online resource: "Intellectual honesty requires that students demonstrate their own learning during examinations and other academic exercises, and that other sources of information or knowledge be appropriately credited. Scholarship depends upon the reliability of information and reference in the work of others. No form of cheating, plagiarism, fabrication, or facilitating of dishonesty will be condoned in the University community" (http://www.umass.edu/registrar/media/academicregs.pdf).

Grading:

- Introduction and Problem Statement = 5%
- Literature Review = 15%
- Sustainable Food and Farming Theory = 10%
- Program Design = 20%
- Evaluation = 10%
- References = 5%
- Poster = 15%
- Participation and Attendance = 20%
Weekly Schedule

**Week One:** Introductions and format for the course

**Week Two:** How to create a problem statement and do a literature review

**Week Three:** Draft Introduction and Problem Statement due (bring 3 copies to class for peer review)

**Week Four:** Sustainable Food and Farming Theory Discussion

**Week Five:** Complete Part One is due (*Introduction, Problem Statement, and Literature Review*) – bring to class 3 copies (stapled) for peer review - NOTE: the deadline for application of the Undergraduate Conference is February 23. See: www.comcol.umass.edu/conference

**Week Six:** Educational or Policy Change Program Design

**Week Seven:** Draft Part Two is due (bring 3 copies to class for peer review)

**Week Eight:** Draft Part Three is due (bring 3 copies to class for peer review)

**Week Nine:** NO Class (Spring Break)

**Week Ten:** Draft Part Four is due (bring 3 copies to class for peer review)

**Week Eleven:** Poster preparation

**Week Twelve:** Bring your poster to class – practice presentations

**Week Thirteen:** Bring your poster to class – practice presentations

**Week Fourteen:** Conference Presentations

**Week Fifteen:** Hand in final paper, grading and evaluation of the course

**Resources Used in Developing this Class**


