Class Information:  
Credit – 2  
Spring 2014  
Room: ABEN 208  
Time: 10:00 – 10:50 pm; M, W

Instructor:  
Dr. Halis Simsek  
ABEN 106  
Phone: 701-231-6107  
E-mail: halis.simsek@ndsu.edu

Office Hours: By appointment or drop in.

Description:  
Capstone learning experience involving team solution to problems in agricultural systems management. Oral and written communications are emphasized. Two lectures, 2 credits.  
Prerequisite: Senior standing.


Objectives:  
1. To gain experience in applying what has been learned in other ASM classes.  
2. To gain experience in working as part of a team to solve a problem.  
3. To gain experience in oral and written technical communications.  
4. To interact with professionals in the field of agriculture.

Procedure:  
1. Real-life problems will be jointly identified by students and instructor.  
2. Teams of students will work together to develop a solution to the problem (normal team size should be three).  
3. Solutions of the problem should result in a final oral and written report of professional quality.  
4. Final findings of the project will be presented to the class and critiqued by faculty and students.

Student expectations:  
Active participation in class and as a contributing project team member is an essential component of this class.

Grades will be determined based on:  
1. Unannounced quizzes and homework (5% each)  
2. Project Proposal (5%)  
3. Faculty and student evaluation of presentations (Project Proposal and Final presentation – 5% each)  
4. Preparation of Draft Report and corrected by the NDSU Center for Writers (5%)  
5. Submission of Draft Report to the instructor for evaluation (10%)  
6. Faculty evaluation of final written reports (40%)
7. Student peer evaluation of team participation and Instructor’s evaluation of class participation and attendance (10%)

Project Report:
Project reports are a team effort. Team feedback forms provide peer evaluation for team members. It is possible for individual grades to be higher or lower than the team grade based on these evaluations. The draft of final project report needs to be presented to NDSU Center for Writers for corrections (5% grade). The suggested corrections should be incorporated in the draft report presented to the instructor for evaluation (10%). The final report (40% grade) should be submitted to the instructor by 05/09/2014. Team projects will be evaluated for students’ contribution during the project period (Spring 2014).

The Project Proposal should include:

- Introduction:
  o Problem Statement, Rationale and Society impacts,
  o Objective of the projective
- Available Resources and steps to be taken
- Expected results when the project will be
- Project Schedule: Gantt chart (time line)

The Project Report should include

- Front Matter (title page, table of content, list of tables, list of figures, list of symbols)
- Introduction:
  o Problem statement
  o Rationale and society impacts
  o Objective of the project
- Literature review in details about previous similar work
- Materials and Methodology:
  o Materials required
  o Methodology used
  o Economic and social impact
  o Statistical analysis if needed
- Results and Discussion
- Conclusion

(The project report should be written in third person. No “I”, “we”, “my”, “our”, “you”, “your” etc. should be in the report).

All the reports should be submitted on time. Late submission of reports will not be accepted.

Agricultural Technology Expo:
Students are encouraged to participate in Ag Expo on Saturday, February 15, 2014 in Agricultural and Biosystems Engineering Building.
**Grading:**

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<thead>
<tr>
<th></th>
<th>Undergraduate (ASM 475)</th>
<th>Graduate (ASM 675)</th>
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</thead>
<tbody>
<tr>
<td>Quizzes and Home Work</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Project Proposal</td>
<td>5%</td>
<td>5%</td>
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<tr>
<td>Presentations</td>
<td>20%</td>
<td>20%</td>
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<tr>
<td>Draft Report corrected</td>
<td>5%</td>
<td>5%</td>
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<tr>
<td>Draft Report</td>
<td>10%</td>
<td>10%</td>
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<tr>
<td>Final Report</td>
<td>40%</td>
<td>40%</td>
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<tr>
<td>Participation</td>
<td>10%</td>
<td>10%</td>
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</tbody>
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The cut off for letter grades:  
A=90-100%, B=80-89%, C=70-79%, D=60-69%, F<60%

**MISSING CLASSES**

You are expected to attend all class periods but there is no roll-call. If a class is missed, contact the instructor or class mates for notes. The PowerPoint presentations will be posted in the blackboard.

**MISSING QUizzes**

Quizzes **cannot** be made up. For legitimate emergency, contact the instructor before the class and allowance can be made. If you miss a quiz, your score for the quiz is **"0"**. Quizzes will be unannounced and will be given for one or more of the following reasons:

1. To see if the class understands some of the concepts.
2. To encourage response to questions in the form of quiz.
3. To encourage class attendance.

**MISSING HOMEWORK ASSIGNMENTS**

Homework is an important learning tool and assessment for you. It helps to understand the concepts discussed in class and it helps to develop good problem solving skills, which will be important in later courses and in professional life. You are expected to complete all homework assignments and hand them in for grading on time. **Late submissions of homework are not accepted.**

**Topics:**

Introduction  
Managerial overview of Ag. systems  
Project Management  
Business plan – by Mr. Scott Handy, CEO, Cass County Electric  
Economic feasibility studies  
Fixed and variable cost of machinery  
Optimization of resources and Project Scheduling
Academic Honesty: All students taking any course in the College of Agriculture, Food Systems, and Natural Resources are under the Honor System (http://www.ag.ndsu.edu/academics/honor-system-1). The Honor System is a system that is governed by the students and operates on the premise that most students are honest and work best when their honesty, and the honesty of others, is not in question. It functions to prevent cheating as well as penalize those who are dishonest. It is the responsibility of the students to report any violations of the honor pledge to the instructor, honor commission or the Dean of the College of Agriculture, Food Systems, and Natural Resources.

All work in this course must be completed in a manner consistent with NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct (http://www.ndsu.edu/fileadmin/policy/335.pdf).

Students with special requirements: Any students with disabilities or other special needs, who need special accommodations in this course are invited to share these concerns or requests with the instructor as soon as possible. Assistance is also available from Disability Services in 212 Ceres Hall (231-8463). http://www.ndsu.edu/disabilityservices/

Veterans and military personnel: Veterans or military personnel with special circumstances or who are activated are encouraged to notify the instructor as early as possible.