**Instructor**

Justin Yates, PhD  
Office: 237D Zachry  
Phone: 845-1506  
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Office Hours: by appointment

**TA**

Ronny Polansky  
Office: 301A Zachry  
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Office Hours: by appointment

**Prerequisites**

ISEN 314 - Statistical Control of Quality  
ISEN 416 - Facilities Location, Layout and Material Handling  
ISEN 424 - Systems Simulation

**Course Description**

Teams of 4 students work on industry projects that are managed on the academic end by the instructor/TA’s and on the industrial end by a company-assigned technical point-of-contact. The emphasis of this course is on the identification of, solutions to, and recommendations for corporate systems improvement. Balancing corporate desires with academic requirements is paramount for a successful project. Group projects integrate knowledge gained from all required industrial engineering courses in the form of application to an industry sponsored system design project. The course is intended for students in their final semester of undergraduate studies.

**Course Calendar**

Lecture:  
Section 501 - M 9:10am - 12pm  
Section 502 - W 9:10am - 12pm

Team Meetings:  
MW 9am - 12pm
**Spring 2010 Course Schedule***

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First day of class</td>
<td>Jan. 20</td>
</tr>
<tr>
<td>Team selection and project preference due</td>
<td>Jan. 20</td>
</tr>
<tr>
<td>Project assignment and weekly meeting time announced (by email)</td>
<td>Jan. 25</td>
</tr>
<tr>
<td>Deadline to contact client and arrange first meeting</td>
<td>Jan. 27</td>
</tr>
<tr>
<td>Initial meeting with client</td>
<td>Week of Jan. 25</td>
</tr>
<tr>
<td>Draft project proposal due</td>
<td>Feb. 8</td>
</tr>
<tr>
<td>Project proposal due</td>
<td>Feb. 15</td>
</tr>
<tr>
<td>Submit proposal to the client</td>
<td>Week of Feb. 15</td>
</tr>
<tr>
<td><strong>SPRING BREAK</strong></td>
<td>Week of Mar. 15</td>
</tr>
<tr>
<td>Mid-term project presentations</td>
<td>Week of Mar. 22</td>
</tr>
<tr>
<td>Final report roundtable (optional)</td>
<td>Week of April 19</td>
</tr>
<tr>
<td>Final presentation practice (optional)</td>
<td>Week of April 26</td>
</tr>
<tr>
<td>Final report due</td>
<td>May 4</td>
</tr>
<tr>
<td>Final presentations</td>
<td>May 5,6</td>
</tr>
<tr>
<td>Submit final report to the client</td>
<td>By May 14</td>
</tr>
</tbody>
</table>

* the deadline for turning in any required materials/documents is 5pm on the day indicated

We will conform to the University Academic Calendar: [http://www.tamu.edu/admissions/records/academic_calendar.html](http://www.tamu.edu/admissions/records/academic_calendar.html).

Consideration for University Authorized Absences will be made [http://student-rules.tamu.edu/](http://student-rules.tamu.edu/)

**Grading**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Grades*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Proposal</td>
<td>20%</td>
<td>A: ≥ 90%</td>
</tr>
<tr>
<td>Weekly Meetings</td>
<td>10%</td>
<td>B: 80% - 89%</td>
</tr>
<tr>
<td>Midterm Presentation</td>
<td>15%</td>
<td>C: 70% - 79%</td>
</tr>
<tr>
<td>Final Presentation</td>
<td>20%</td>
<td>D: 60% - 69%</td>
</tr>
<tr>
<td>Final Report</td>
<td>25%</td>
<td>F: &lt; 60%</td>
</tr>
<tr>
<td>Peer/Supervisor Evaluations</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

* the distribution provided is the MINIMUM numeric requirement to GUARANTEE the corresponding letter grade. The instructor reserves the right to revise this distribution as necessary.
**Project Proposal**
The project proposal is the written intention of the senior design group and is used both by the instructor and the partner company in evaluation of project performance. The proposal illustrates project details and discusses the proposed solutions of the senior design group.

**Weekly Meetings**
Weekly meetings with the instructor/TA will be held to assess progress, ensure conformity to course standards and evaluate project details. All group members must be present with the exception of university excused absences. A meeting agenda must be received no later than 5pm on the day preceding the scheduled group meeting time and a Weekly Meeting Form must be filled out and presented at the beginning of each meeting. There will be no tolerance for canceled/missed meetings with the exception of university excused absences or extreme extenuating circumstances.

Weekly meetings are also required with the company technical point-of-contact. These meetings will occur either in the form of a conference phone call, web conference, or on-site company visit. All group members must be present with the exception of university excused absences. Meeting times will be arranged between the group and the company technical point-of-contact. There will be no tolerance for missed or canceled meetings that are not at the company’s request.

**Midterm Presentation (PPT)**
Mid-semester project updates will be given by each design team as a formal report on the current status and remaining plans/goals of the team. The presentation will be 20 minutes, with 5 minutes allocated for questions afterwards. Students are expected to attend half of the presentations (your own team presentation counts toward this total). Attendance will be taken at the start of each presentation.

**Final Presentation (PPT)**
Final presentations will be 30 - 35 minutes long and will describe the teams’ project as well as their solution approach. Final presentations are open to all students, company representatives and the general public. Students are expected to attend half of the presentations (your own team presentation counts towards this total). Attendance will be taken at the start of each presentation. Groups are also expected to conduct an on-site final presentation if the company so requests.

**Final Report (DOC/DOCX/PDF)**
The final report will have two main sections: the body and accompanying appendices. The final report body describes the project and its results such that someone unfamiliar with Industrial Engineering will know: (a) what problem(s) were identified, (b) how they were validated and addressed, (c) what recommendations/solutions resulted and (d) how this will help improve corporate operations. Appendices will provide all technical documentation to support understanding and implementation of the project solutions and deliverables.
Peer/Supervisor Evaluations
As your final assignment, each team member will evaluate the productivity, contribution and responsibility demonstrated throughout the semester by their teammates. Team members will also be given the opportunity to evaluate themselves. The instructor and TA will evaluate overall team performance, group efficacy, and professionalism as demonstrated in the Midterm and Final presentations/reports and weekly meetings. Company feedback will also be considered.

Travel
All groups are required to abide by the travel guidelines set forth by the University and those prescribed by the department. A detailed discussion of the ISEN 459 travel policy and related documentation is presented at the end of this syllabus. Students will only be reimbursed for course-related travel if ALL steps are followed. Failure to abide by these rules will result in a 0% for all group members in the Peer/Supervisor Evaluation component of your grade.

Attendance
Students enrolled in ISEN 459 are expected to attend all lectures, group meetings (both with the instructor/TA and with the company technical point-of-contact) and meet the aforementioned requirements for Midterm/Final presentation attendance. Poor attendance will be reflected in both the Meeting and Peer/Supervisor Evaluation portions of the final grade.

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

Turning in the proposal and final reports and giving the Midterm and Final presentations represents each group’s certification that the entirety of the presented material and all approaches, techniques, and applications utilized were the result of the individual group members, the instructor/TA and the company technical point-of-contact only. There is absolutely no “outsourcing” of any duty tasked to the group. Any knowledge obtained from an individual or reference outside of the group must be cited and referenced within any presentation or report to which it contributes. There will be absolutely no tolerance extended to groups found in violation of this policy.

Academic Dishonesty
http://www.tamu.edu/aggiehonor/acadmisconduct.htm

Americans with Disabilities Act Statement
If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Koldus 126 (phone: 845-1637, e-mail: disability@tamu.edu, web: disability.tamu.edu).
All student travelers MUST DO the following BEFORE going on official university business.

You must submit the following required documentation:

1. **CIRT Notification Form**
   a. Can be found at [https://studentactivities.tamu.edu/online/forms/cirt](https://studentactivities.tamu.edu/online/forms/cirt)
   b. Must be submitted by driver BEFORE EACH trip
   c. Jaime Vykukal should be listed under Advisor Name, NOT Dr. Yates

2. **ISEN Student Traveler Documentation Form**
   a. Can be found on SharePoint
   b. ONE TIME ONLY submission by the driver

3. **ISEN Student Travel Form**
   a. Can be found on SharePoint
   b. Driver must submit AFTER EACH trip

All students should review the university policy for student travel so that they understand and accept the risks involved in participating in the travel activity and assume responsibility for their behavior. This information can be accessed online at [http://rules-saps.tamu.edu/PDFs/13.04.99.M1.01.pdf](http://rules-saps.tamu.edu/PDFs/13.04.99.M1.01.pdf)

Students will be reimbursed for actual mileage (no meals). Students driving privately owned vehicles for organized student travel must have a valid Texas or other state driver’s license and have current personal automobile insurance coverage as mandated by the State of Texas, and their vehicle must have a current state inspection and registration. **Proof of these items must be presented to the Course Instructor prior to the first trip along with the Traveler Documentation Form located above.** Students who drive their own vehicle must document the odometer readings before departure and upon return of their trip. The mileage, students name, address and social security number should be submitted on the Student Travel Form located above to Jaime Vykukal in room 238E Zachry. This location is next door to the undergraduate student advisor office.

For additional information or questions please contact:

Jaime Vykukal  
Business Coordinator II  
Zachry 238E  
(979)845-5547  
jmv@tamu.edu

You will not be reimbursed unless you follow these specific guidelines PRIOR to your departure. Any submissions to the Student Affairs Critical Incident Response Team (CIRT) after the fact will not be eligible for reimbursement and will also not be recognized as an excused absence from the course.