ENGR 1182.01 and 1182.02 – Autumn Semester 2015 Syllabus
Fundamentals of Engineering II

Classroom: HI 308; Lab: Hi 224; Student Computer Lab: HI 324

Course Objectives: ENGR 1182 is the second course in a two course sequence designed to provide you with knowledge of engineering fundamentals: technical communications, technical graphics, problem solving, the design process, data collection, and data analysis. The goal of the two-course sequence is to expand that knowledge to a point of maximum usefulness with respect to both your future academic work and your professional career. This course is divided into two segments: (1) Classroom and (2) Hands-on Laboratory. The courses involve both individual and team based performance.

Class Activities: Each week, you will be introduced to important engineering skills and given an opportunity to practice those skills. Class will include a short lecture, activity, and homework assignments. Assignments consist of pre-class readings and quizzes and homework.

Lab Activities: Each week students will attend an 80 minute hands-on laboratory session. During the laboratory sessions, students will perform a variety of hands-on activities to expose to engineering principles over various topics. Assignments may include gathering additional information from the internet or library, solving problems related to the lab work, and preparing lab memos and reports. Questions on important concepts covered in the laboratories will be included on the Lab Practical Exam (LPQ). There may be time at the end of lab sessions for teams to work on lab write-ups or deliverables, when required.

Exams: Two mid-term exams will be given. Exams are given closed book, closed notes, closed outside resources unless otherwise stated at the time of the exam. A portion of the exam may be completed on Carmen.

Participation: Individual and team-based evaluations will be conducted throughout the semester. Electronic journal entries are required and factored into the course grade. The final team evaluation results will also be a factor in assigning a final team grade.

<table>
<thead>
<tr>
<th>Class Assignments</th>
<th>47%</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>17%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>4%</td>
</tr>
<tr>
<td>Exams (10% &amp; 16%)</td>
<td>26%</td>
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<tr>
<td><strong>Design Project</strong></td>
<td><strong>48%</strong></td>
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<tr>
<td>Labs</td>
<td>13%</td>
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<tr>
<td>Lab Practical Exam (LPQ)</td>
<td>3%</td>
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<tr>
<td>Test Readiness Reviews</td>
<td>4%</td>
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<tr>
<td>Performance Tests</td>
<td>7%</td>
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<tr>
<td>Design Reviews</td>
<td>10%</td>
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<tr>
<td>Final Documentation</td>
<td>7%</td>
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<tr>
<td>Quizzes</td>
<td>4%</td>
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<tr>
<td><strong>Teamwork</strong></td>
<td><strong>5%</strong></td>
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<tr>
<td>Team Evaluation</td>
<td>3%</td>
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<tr>
<td>Journals</td>
<td>2%</td>
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<td><strong>Bonus Video</strong></td>
<td><strong>2%</strong></td>
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</tbody>
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Grading: The contribution of each course segment to the overall course grade is outlined below. The University’s grade scale is:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Numerical Grade</th>
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<tbody>
<tr>
<td>A</td>
<td>93-100</td>
</tr>
<tr>
<td>A-</td>
<td>90-93</td>
</tr>
<tr>
<td>B+</td>
<td>87-90</td>
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<tr>
<td>B</td>
<td>83-87</td>
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<tr>
<td>B-</td>
<td>80-83</td>
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<tr>
<td>C+</td>
<td>77-80</td>
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<tr>
<td>C</td>
<td>73-77</td>
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<tr>
<td>C-</td>
<td>70-73</td>
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<tr>
<td>D+</td>
<td>67-70</td>
</tr>
<tr>
<td>D</td>
<td>60-67</td>
</tr>
<tr>
<td>E</td>
<td>&lt;60</td>
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</table>
scale is posted below for your reference. Please note that the upper range of the numerical grade is the cut-off for that letter grade (e.g. 92.9% is an A-grade).

**Minimum Grade Requirements:** A minimum grade of 50% is required in the following course components: Class Assignments and Design Project to receive a passing grade in this course. This policy is independent of the overall course calculation that automatically appears in Carmen. For example, a student with less than 50% credit in Class Assignments would not pass the course, even if the Design Project score was above 50%. You must take each component seriously and complete the assigned work. You can track your progress in the Carmen grade-book by ensuring that your grades are posted in the appropriate columns, and by checking the columns marked Cumulative Class and Cumulative Project.

**Note:** This policy is independent of the overall course calculation that automatically appears in Carmen. Your overall grade must still be 60% or above.

**Course Materials:**

- **Book (At Campus Area Bookstores)**
- **Engineering 1182.01 Student Course Packet** (*Purchase at campus Barnes and Noble*)
- **EEIC Courses Website:** The EEIC Courses website contains course material including preparation documents, instructor’s presentations, in-class activities, and homework assignments. The site link is eeicourses.engineering.osu.edu/1182.
- **Student Resource Guide:** This guide is available on the EEIC Courses website under Resources. It includes information which will help you be successful in this course. Some key components are:
  - Information on course organization and where to find all needed course materials.
  - Software availability for your personal computer.
  - Computer labs and password policies.
  - Remote access to the FEP network and software.
- **Technical Communications Guide:** This guide is available on the EEIC Courses website under Resources. It includes information on the style and format which will be required for all written lab assignments including, executive summaries, memos, reports, and presentations. The guide also includes recommendations on technical writing.

**Classroom Communications:**

- Your instructor or GTA may, from time to time, post course information under Carmen News or through email.

**Homework Submission Guidelines:**

- **“On-Time Policy”:** The UTAs will collect the homework within the first five minutes of class. Homework due at the beginning of class should not be worked on or printed during presentation or lectures.
- For an excused absence, homework due dates should be arranged with the instructor. Allowed due dates will depend on when the need for an excused absence became known and the length and nature of the absence.
- Late homework (without a valid, documented excuse) should be turned in by the next meeting time (lab or class) after they were originally due. Undocumented or invalid excuses for late homework will be graded as normal, but with a 30% penalty (e.g. if the student gets 80/100 before the penalty, the final grade will be (80-24) = 56/100).
- Assignments received more than one session late will be marked but no credit will be given.
- **Re-dos:**
  - There are re-dos for homework assignments in general, for which the student is allowed to resubmit the assignment if their score is less than 70% for a maximum of 70%. The redone assignment is due at the next meeting time after it has been returned.
  - Late assignments cannot be redone.

**Lab Submission Guidelines:**

- **“On-Time Policy”:**
  - The GTA will collect any lab assignments within the first five minutes of lab. Lab Assignments should not be worked on or printed during the presentation or lectures.

- **Missing a lab meeting time:**
  - If a student misses a lab without a valid, documented excuse, he/she should immediately meet with their instructor and GTA to discuss options.
  - Any valid and documented absences must be approved by the instructor or GTA. The instructional staff needs to be notified as soon as the need for the absence is known. Students are expected to make arrangements with the instructor or GTA to make up the missed lab.
  - The student is allowed to contribute to the missed lab assignment if the student attends a separate lab section. Otherwise, the student must submit a separate lab assignment.
  - For an excused absence, a student who is not able to contribute to his or her team in time should arrange with the GTA a new due date and submit an individual lab assignment. Allowed due dates will depend on when the need for an excused absence became known and the length and nature of the absence.

- **Late lab assignments:**
  - Lab Assignments (without a valid, documented excuse) should be turned in by the next meeting time after they were originally due. Undocumented or invalid excuses for late lab assignments will be graded as normal, but with a 30% penalty (e.g. if the student gets 80/100 before the penalty, the final grade will be (80-24) = 56/100).

- **Re-dos:**
  - There are no re-dos for lab documents in general, except for the first executive summary, for which the student is allowed to resubmit the assignment if their score is less than 90% for a maximum of 90%. The redone executive summary is due at the date shown on the website.
  - Late lab documents cannot be redone.

- **General:**
  - If a student does not sign the Lab Participation Agreement when a team lab document (i.e. executive summary, lab memo, lab report, or project notebook) is submitted, they will receive a zero until they contact the GTA to discuss the issue. The student’s teammates may be given the opportunity to vouch for the student in question’s participation.
  - Students are required to attach the Lab Participation Agreement to all lab documents. If it is missing, points will be deducted from the final grade for that assignment as designated on the Grading Guidelines sheet.
  - Students are required to attach the corresponding Grading Guidelines to all lab documents. If it is missing, a 2% penalty will be applied to the assignment.
  - Any deviation from these guidelines must be approved by the class instructor. This includes any situation not covered in these guidelines or any special circumstances.

**Makeup Exam Policy and Guidelines:** All students are expected to take each exam at the regularly scheduled time, unless an accommodation is given. WRITTEN DOCUMENTATION supporting the need for an accommodation must be SIGNED by an appropriate person (e.g., physician, employer, or parent)
with their NAME and TELEPHONE NUMBER or other contact details clearly printed on the document. Such documentation must be submitted to the course professor for approval.

**Allowed Accommodations:**

- **ILLNESS OR EMERGENCY ON EXAM DAY:** Students who are ill or have a family emergency (death or serious illness of a close family member) on the day of an exam will be allowed to take a makeup exam. Written documentation is required for illness or medical emergencies. You must contact your instructor and GTA as soon as possible and WITHIN 24 HOURS after the exam. The makeup exam is usually scheduled with an open section in the same course.

- **UNAVOIDABLE CONFLICTS WITH EXAM TIME:** Such conflicts include another class scheduled to meet at the exam time, or participation in University sponsored events. Documentation of a conflict with the regularly scheduled exam time must be provided in writing one week prior to the day of the regularly scheduled exam.

**Lateness:**

A student who is late for his/her scheduled exam has two options:

a. Take a seat quietly and begin the exam regardless of how much time remains; no additional time will be granted; no penalty will be applied to the exam score.

b. Reschedule the exam for the full allotment of time with a 20% penalty.

**No Show:**

A student who misses a scheduled exam without a written excuse may reschedule the exam through his/her GTA or instructor with a 20% penalty, provided the student contacts his/her GTA or instructor within 24 hours of the scheduled exam time. Undocumented or invalid excuses for the exam will be graded as normal, but with a 20% penalty (e.g. if the student gets 80/100 before the penalty, the final grade will be \((80 - 16) = 64/100\)).

Exceptions will be made only under unusual circumstances approved by the section’s professor and the College Office for Academic Affairs. These policies are strictly enforced so that all students are treated equally and fairly.

**First Year Engineering Student Computer Lab (HI 324):** In addition to your classrooms and labs, you will have access to the First Year Engineering Student Computer Lab located in Hitchcock Hall Room 324. This lab can be used for assignments and lab reports, as it contains MATLAB, SolidWorks, Excel, and Word. You may not install any software onto, or copy any software from the lab computers. **Food and drink are not permitted in the lab.** Violation of these policies will result in expulsion from the lab.

- The door is unlocked the following hours: **Monday - Thursday 7:30 am – 5:30pm** and is accessible using your Buck ID during other hours.

- There is a free tutoring service offered by the UTA’s to First Year Engineering students Monday - Friday in HI 324 per the posted schedule. The tutors may not answer direct homework or lab questions, but can assist your understanding of concepts.

**Online Evaluation Tools:**

**Journal Entries:** Journals are located on Carmen under Activities: Quizzes. Students will be asked to respond to prompts about aspects of the class; the journals include multiple choice questions, short answer questions, and essay responses. Journals are due on designated Sundays at 11:59 PM as
specified on the course website. All entries will be read and summarized by the instructors and GTAs and kept confidential beyond the instructional staff. Your responses are used to assess the use of technology in the classroom, and to measure student satisfaction of the instructional team, teaching styles, curriculum decisions, policies, and programs. You are encouraged to be honest and leave constructive feedback. If you have a complaint, please follow it with a suggestion for improvement or cite exactly where the problem is. Be clear and precise in your comments.

**Team Evaluations:** There will be two mid-semester team evaluations and one final team evaluation. These will be the weeks of the midterm and near the end of the semester. You will receive an e-mail from your GTA with instructions. As part of each evaluation, you will rate each of your teammates in several areas of teamwork skills. The mid-semester evaluations do not count towards your grade but act as a tool to monitor how your group views your contributions. The final team evaluation will count towards your grade. If you need to change your working habits you should do so quickly. **There is a 10% deduction for not completing the evaluation.**

**Student Permission for Program Publicity:** During participation in the First-Year Engineering Program, photographs, printed material, and videotapes may be made for the purpose of informing the university community and the general public about activities in the College. Student images in the above media may be used to promote College programs and to make public announcements of student accomplishments and those of other students. If you do not wish for your image to be used, please contact eeic@osu.edu.

**Academic Misconduct:** Cheating or plagiarism will be reported using official University procedures. With respect to all written assignments and oral presentations, the material must be relevant to and support the course objectives. Inappropriate language and visuals will not be tolerated. Policies and procedures can be found in a Synopsis of the Code of Student Conduct included in each semester’s Master Schedule Book. The Code of Conduct is printed in the Student Handbook and Student Telephone Directory. Copies may be obtained from Student Conduct, a department within the Office of Student Life, 33 W 11th avenue, Room 115.

- All cases of suspected misconduct must be reported to the University Committee on Misconduct. Any students observing misconduct should report such to the course instructor.
- The Code of Student Conduct defines Academic misconduct to include
  - Violation of course rules,
  - Providing or receiving information during quizzes or exams,
  - Submitting plagiarized work,
  - Falsification, fabrication, or dishonest in reporting research results.
- Students need to know that faculty is obligated to report all misconduct cases to the University Committee on Academic Misconduct. This is not an option.
- For purposes of Academic misconduct, the Associate Dean for Academic Affairs will act as the Department Chair in any reported cases.
- The College of Engineering encourages collaboration among students. However, work turned in as an individual must be the product of that person.

ENGR 1182 will utilize Turn-It-In, an online originality checking tool. This tool compares submitted assignments with other submitted assignments, online journals, articles, and books, among other sources. All class and lab assignments are subject to review by this software.

**Methods to Determine the Quality of Individual Work:**
1. Can the student explain and/or demonstrate how to complete each step or element of a problem or exercise?
2. Did the student complete the work using his/her own words and terms?
3. Can each person complete the end product for themselves as an individual or explain the process involved?

**Official Ohio State Academic Misconduct Code:** Committee on Academic Misconduct

Academic misconduct is defined as any activity which tends to compromise the academic integrity of the institution, or subvert the educational process. The First Year Engineering Program takes Academic Misconduct very seriously. Examples of academic misconduct include, but are not limited to:

- violation of course rules as contained in the course syllabus or other information provided the student; violation of program regulations as established by departmental committees;
- providing or receiving information during quizzes and examinations such as course examinations and general examinations; or providing or using unauthorized assistance in the laboratory, at the computer terminal, or on field work;
- submitting plagiarized work for an academic requirement. Plagiarism is the representation of another's works or ideas as one's own; it includes the unacknowledged word for word use and/or paraphrasing of another person's work, and/or the inappropriate unacknowledged use of another person's ideas; see an expanded definition at the end of the syllabus
- falsification, fabrication, or dishonesty in reporting research results;
- serving as, or enlisting the assistance of, a "ringer" or substitute for a student in the taking of examinations;
- alteration of grades or marks by the student in an effort to change the earned grade or credit.
- alteration of University forms used to drop or add courses to a program, or unauthorized use of those forms

Source: [http://oaa.osu.edu/coam.html](http://oaa.osu.edu/coam.html)

**Ten Suggestions for Preserving Academic Integrity:** The following suggestions will help you preserve academic integrity by avoiding situations where you might be tempted to cheat or you might be perceived to be cheating (see [http://oaa.osu.edu/coam/ten-suggestions.html](http://oaa.osu.edu/coam/ten-suggestions.html) and [http://oaa.osu.edu/coam/faq.html](http://oaa.osu.edu/coam/faq.html) for more information).

1. Acknowledge the sources that you use when completing assignments.
2. Avoid suspicious behavior.
3. Do not fabricate information.
4. Do not falsify any type of record.
5. Do not give in to peer pressure.
6. Do not submit the same work for credit in two courses.
7. Do your own work.
8. Manage your time.
9. Protect your work and the work of others.
10. Read the course syllabus and ask questions.

**Official Ohio State Sexual Harassment Policy:** The University administration, faculty, staff, student employees, and volunteers are responsible for assuring that the University maintains an environment for work and study free from sexual harassment. Sexual harassment is unlawful and impedes the realization of the University's mission of distinction in education, scholarship, and service. Sexual harassment violates the dignity of individuals and will not be tolerated. The University community seeks to eliminate sexual harassment through education and by encouraging faculty, staff, student employees, and volunteers to
report concerns or complaints. Prompt corrective measures will be taken to stop sexual harassment whenever it occurs.
Source:  http://hr.osu.edu/policy/policy115.pdf

**Students with Disabilities:** Course materials and exercises can be made available in alternative formats. Please contact the instructor or the Office for Disability Services (ODS) at 292-3307 for further information. Test accommodations may include, but are not limited to:

- Adaptive technology
- Scanned exams
- Extended time
- Braille
- CCTV
- Large print
- Computer
- Reader
- Raised table
- Computer
- Scribe
- Tape recorded exam
- Distraction reduced space
- Distraction reduced space

ODS facilitates exam accommodations in cooperation with instructors.

**For exam accommodations through ODS:**
- Obtain a "Proctor Checklist" from ODS for each course. New Proctor Checklists must be obtained each semester. They do not transfer from semester to semester.
- Have your instructor fill out the "Proctor Checklist" completely including signatures required (refer to specific instructions on the back of the form). Incomplete checklists may result in exams not being scheduled.
- Give your instructor the pink copy of the checklist after being completed and before bringing the white and yellow copies to ODS.
- Personally bring (do not mail) all completed Proctor Checklists to ODS at the beginning of each semester to schedule exams for the entire semester or at least within five days of your exam or quiz. You are more likely to get your accommodations, equipment, or space that you need.

*Failure to notify ODS of cancellations or changes of scheduled exam times subjects you to possible loss of exam accommodations through ODS. Please refer to the "Policy for No Show, Lateness, or Illness" in the link below for detailed information.*
Source:  http://www.ods.osu.edu/services/exam-accommodations/