## CASPER COLLEGE COURSE SYLLABUS ES 1060 Introduction to Engineering Computing

Semester/Year: Fall 2015

<b>Lecture Hours:</b> 2	Lab Hours: 2	<b>Credit Hours</b> : 3
<b>Class Time:</b> 4:00 – 5:50 pm	Days: MW	<b>Room:</b> PS 224
<b>Instructor's Name:</b> Paul Marquard	<b>Office Phone:</b> (307) 268-2250	Email: marquard@caspercollege.edu

**Instructor's Contact Information:** E-mail is the easiest way to get in touch with the instructor; email is checked continuously while in the office and is checked at home multiple times. You may also call the instructor's office at any time; if the instructor is not available, leave a voice mail and your call will be returned as soon as possible.

**Office Hours:** MTTh 10 – 10:50 AM, T 1 – 1:50 PM, Th 11 – 11:50 AM or By Appointment

**Course Description:** An introduction to engineering documentation and reports, computing tools for data presentation and graphics, equation solving, and manipulation of tabular data.

Statement of Prerequisites: MATH2200, or concurrent enrollment

**Goal:** The goal of this course is to educate the student in the use of computers in the field of engineering.

Outcomes: Upon completing this course, students will

- be able to use problem solving techniques used in engineering.
- be proficient with software systems used to create reports, display information graphically, and solve numerical systems. Specifically, the software used will be MS Word, MS Excel, and MatLab.
- have used the scientific method.
- have solved problems using critical thinking and creativity.
- have used quantitative analytical skills to evaluate and process numerical data.

**Methodology:** Most information will be presented in a lecture format demonstrating the characteristics of the software used. Some of these lectures will be recorded and posted to YouTube. The students will take lecture information and use it in a laboratory setting, where individual and small group work will be used as assessment tools to show proficiency with the problem solving techniques and software.

## **Evaluation Criteria:**

Exams	30%
Labs, Homework, & Quizzes	50%
Comprehensive Final	20%
Total	100%

Grading Scale for the Course:  $90 \le A \le 100$   $80 \le B \le 89$   $70 \le C \le 79$   $60 \le D \le 69$  $0 \le F \le 59$ 

Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

**Required Text, Readings, and Materials:** <u>Thinking Like an Engineer: An Active Learning Approach</u>, 3<sup>rd</sup> edition, by Stephan, Bowman, Park, Sill, and Ohland.

## **Class Policies:**

Homework will be submitted either on paper in class or electronically through the Moodle system. The method of submission will vary from one assignment to another. Homework will not be accepted after it is due. Make-up Labs will not be given unless arranged prior to the scheduled lab.

Quizzes will be given sporadically through the semester. They will cover reading material and when video lectures are assigned they can cover that material as well. You must read the chapters as assigned and watch videos when assigned.

Exams: If you are aware that you will have to miss an exam, let the instructor know as early as possible. A make-up exam may be given if the situation merits, and will take place outside of the regularly scheduled class period. If class is canceled the day of an exam it will be given on the next class meeting.

Last day to change to an audit or withdraw from the course is Nov 12, 2015.

**Student Rights and Responsibilities:** Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

**Chain of Command:** If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

Academic Dishonesty: (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:** Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

**ADA Accommodations Policy:** If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services

Counselor located in the Gateway Building, Room 344, (307) 268-2557, <u>bheuer@caspercollege.edu</u>. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

Week	Chapter Section Readings	Comments
Aug 24, 26	Chapter Seven	
Aug 31, Sept 2	Chapter Ten	
Sept 7, 9	Chapter Eleven	
Sept 14, 16	Chapter Twelve	
Sept 21, 23	Chapter Thirteen	Exam One
Sept 28, 30	Chapters Fourteen	
Oct 5, 7		
Oct 12, 14		
Oct 21		
Oct 26, 28	Chapters Fifteen	
Nov 2, 4	Chapter Sixteen	Exam Two
Nov 9, 11	Chapter Seventeen	
Nov 16, 18	Chapter Eighteen	
Nov 23	Chapter Nineteen	
Nov 30, Dec 2	Chapter Twenty	
Dec 7, 9		Exam Three
	Final Exams	Monday, May 11, 4:00 pm – 5:50 pm

## **TENTATIVE COURSE SCHEDULE (Subject to Change)**