

SPC St. Petersburg College

COURSE SYLLABUS

Introduction to Biomedical Engineering

BME 1008

Spring 2016

Instructor Information

Name:

Email:

Office:

Office Hours:

Program Manager

Course Description

This class is an introduction and overview of Biomedical Engineering. The goal is to provide students with an appreciation for the breadth of the field and guide them in making major and career choices.

Important Dates and Times

Course Duration: 16 weeks

Class Meeting Day:

Course Hours:

Class Location:

Textbook

Introduction to Biomedical Engineering 3rd Edition by Enderle

ISBN: 9780123749796

Minimum Technology Requirements

It is required for you to bring a device to every class so that you can actively participate in online activities. Acceptable devices include a laptop, smartphone, or tablet. If you are unable to consistently bring a device to class, please contact the instructor within one week of the first class.

Class Preparation and Behavior

You are expected to have and maintain a high degree of respect for your instructor and peers during in class and out of class interactions. The use of cell phones can be disruptive during class, and these must be silenced during class. Please only use cellular devices when instructed to do so. Attendance at all class lectures is essential for you to learn the course material. Therefore, attendance in class is required. If you cannot come to a lecture due to a legitimate reason, contact me prior to class. You are expected to perform and actively engage in class by being prepared to learn and by establishing foundational knowledge through reading and homework. You may visit the instructor during office hours for help with assigned work. It is recommended that you take notes during class, but the sale of these notes and/or recordings is not permitted.

Evaluation

There will be assigned projects, case studies, and online activities. There will also be exams and quizzes that will be taken over the 16 weeks of the course. All assigned activities must be completed by the end of the course. Make-up projects will be given in only extreme circumstances (i.e family emergencies, injury, etc.)

Grading

Class participation/Online work/
In-class exercises: 50%
Online/Out of class work 20%
Presentations 30%

A	90-100%	4.00
B	80-89%	3.00
C	70-79%	2.00
D	60-69%	1.00
F	<60%	0.00

Grade Dispute

To dispute a grade earned on an exam or an assignment, you should submit a written email stating the specific rationale for why your grade should be adjusted. This must be done in writing within 72 hours after the graded work has been returned. Grade disputes will not be considered if submitted more than 72 hours after the graded work has been returned.

Homework

Homework will be given throughout the semester and assigned in class and online. You will be expected to complete homework assignments and submit them for grading. All assignments will be turned in online before the due date. Homework assignments that are submitted late

will not be accepted. You are allowed (and encouraged) to work with other students in the class on homework, but the write up should be in your own words and style.

Group Project

You will be involved in a group project where each team will be tasked to innovatively design a solution to a real world challenge. Additional information, including due dates, will be provided in a separate project description. Part of the grade will include a peer evaluation, where students from your group will describe your participations in the group and which parts of the project you contributed to.

Academic Integrity

Your integrity as a student is essential to your future success, therefore the academic integrity of this class will be held to a high standard. All work done in and out of class should be done with fairness and honesty. Therefore it is important to avoid any form of plagiarism, cheating, fabrication, forgery, obstruction, multiple submissions, assisting another person in acts of academic dishonesty and computer misuse. In the event of academic dishonesty the penalties you earned will be based on those deemed appropriate by the college. See the syllabus addendum for more information on academic honesty. Please view this link to read more about the academic honesty policy. <http://www.spcollege.edu/academichonesty/>

Attendance and Withdrawal Policy

The college-wide attendance policy can be seen in the syllabus addendum. For this class, attendance is defined as arriving to class on time and participating in classroom activities (lectures, projects, online activities, labs, etc.) **80% of the class time, by 80% semester reporting attendance date.** If a student fails to participate as defined above, they will be automatically dropped from the class. The college wide attendance policy is included in the Syllabus Addendum: <http://www.spcollege.edu/addendum/#attend>.

Attendance and Punctuality

Your learning and the learning of your peers is influence by your attendance in class. Attendance in this class is defined as being present and prepared. The preparation required for each class is accomplished by completing and understanding the homework and online assignments. Your understanding of the homework and online work will be tested through online quizzes and through activities. If you are clearly unprepared for class your class participation grade will be affected. If there is something that you did not understand, you should bring a thoughtful question to class, "I did not understand anything" does not qualify as a thoughtful question. Be specific and be able to articulate what you do know and what you are

not able to grasp. If you are absent more than 3 days of class or are late more than 3 times you must show proof of why you were absent or late to class. If you are unable to show a justified reason for your absence or lateness your class participation grade will be affected.

Absences for Religious Reasons

Students are to notify instructors in advance of an anticipated absence to observe religious holidays. There is no penalty for such absences. Students are responsible for making up work covered during such an absence and should be given a reasonable amount of time to do so. Major class assignments, exams and official ceremonies should be scheduled at times that do not conflict with major religious holy days when possible.

Class & Online Activities

Scheduled classes will include lecture and hands on activities. These activities will complement lecture topics and learning outcomes. Additionally, group projects may be assigned to demonstrate knowledge of different electrical and mechanical systems. Online activities will include discussion posts, homework assignments, quizzes and exams.

STUDENT'S EXPECTATIONS AND INSTRUCTOR'S EXPECTATIONS

College-wide student expectations are located in the Syllabus Addendum:
<http://www.spcollege.edu/webcentral/policies.htm>.

Accommodations for Students with Disabilities

Your instructor wants to provide support for students with disabilities. Please make sure your instructor and the college is aware of any academic accommodation needed for a disability that you may require. It is important that you provide a notice, within a reasonable amount of time, prior to requesting accommodation. For more information call disability resources at (727)791-2523.

Student Survey of Instruction (SSI)

The student survey of instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All students' responses are confidential and anonymous and will be used solely for the purpose of performance improvement. The survey will be available online, and will be active towards the end of the semester.

Academic Continuity in the Event of a Campus Closure

In the event of an emergency, it may be necessary for the college to suspend normal operations. It is your responsibility to stay up to date with current communications from the college website. In some cases the coursework normally done in class may need to be

completed online during extended periods of campus closure. For more information see the emergency preparedness section of SPC syllabus addendum.

Syllabus Changes

The professor has the right to change or modify the syllabus as he/she sees fit. Notifications of changes will be made to the students in class. However, once the notifications have been made, it is the responsibility of the student to adhere to the changes.

The SPC Syllabus Addendum

Provides students with the most comprehensive information on SPC policies and can be found at www.spcollege.edu/addendum

Learning Outcomes and Objectives:

1. The student will demonstrate knowledge of the history, impact and application of the field of biomedical engineering by recognizing, defining, summarizing and explaining key concepts, historical context and technology related to this field
2. The student will demonstrate knowledge of key subdivisions of the biomedical engineering field
3. The student will identify the role key subdivisions of biomedical engineering have on the field of biomedical engineering
4. The student will demonstrate detailed knowledge of significant scientific contributors and the impact of their research on biomedical engineering technology
5. The students will identify and discuss ethical and professional standards associated with the biomedical engineering profession

“This product was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.”