

## **ENGR 102**

## **Engineering Graphics Communication**

## Term XXXX

Instructor: **Dr. Siming Guo** 

Office Address SCI 123 D
Phone Number 843-349-2765
Email address sguo@coastal.edu

Office hours MW 10-11am, T 10:40-11:30am, Th 2-3pm

Webpage: We will use the Moodle course management system.

Class Times: TTh 9:25-10:40am, Smith 113

Texts: Beginner's Guide to Solidworks 2018, Level 1, Alejandro Reyes

Beginner's Guide to Solidworks 2018, Level 2, Alejandro Reyes

Description: ENGR 102 - Engineering Graphics Communication (3 credits). This course is a project-based

introduction to engineering graphics using computer-aided design and drafting software. Topics include sketching, 3D part and assembly creation, and documented drawings. Students utilize the principles of engineering graphics to visualize, communicate, and analyze solutions

to engineering problems. F, S.

Outcomes: At the end of the course, the student will be able to:

1. Use Solidworks to produce 3D models

- 2. Use Solidworks to analyze parts and systems
- 3. Visualize 3D objects given engineering drawings
- 4. Produce engineering drawings from 3D models using standard conventions, labels, dimensions, and tolerances
- 5. Communicate technical information effectively using engineering drawings

ABET This course supports the following ABET student learning outcomes:

- 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- 2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- 3. an ability to communicate effectively with a range of audiences
- 4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- 5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

- 6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- 7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Grading: Grades will be assigned as follows:

A 90.0 – 100 exceptional work, significantly above the expectations of the course

B+ 85.0 - 89.9

B 80.0 – 84.9 excellent work, solid understanding of all concepts

C + 75.0 - 79.9

C 70.0 – 74.9 good work, solid understanding of main concepts

D+ 65.0 - 69.9

D 60.0 – 64.9 poor work, weak understanding of main concepts

In class activities: 25%
Assignments: 40%
Projects: 30%
Participation: 5%

## Attendance:

STUD-SENA-332: Unexcused Absence Penalties – an instructor is permitted to impose a penalty, including assigning the grade of F, for unexcused absences in excess of 25 percent of the regularly scheduled class meetings.

STUD-SENA-332 also lists the valid circumstances for an excused absence, notably:

- Incapacitating illness
- Official representation of the university
- Death of a close relative
- Religious holidays

In class activity: In class activities are due by midnight following that class. They will be submitted on Moodle.

Late activities will not be accepted.

Assignments: Assignments will be assigned every class and due before the beginning of the next class. They

will be submitted on Moodle. Late assignments will not be accepted.

Projects: There will be two projects during the semester. Late projects may not be accepted.

Exams: There are no exams for this class.

Honesty: Code of Student Conduct: Plagiarism, cheating, attempted cheating and all other forms of

academic dishonesty is prohibited. This includes copying on homework or tests, using unauthorized aids on tests, and knowingly aiding another student. The Code of Student Conduct provides further information, including other examples of cheating and the list of

possible sanctions.

Communication: I will try to respond to emails within one business day. Please use your @coastal.edu email.

ADA statement: Coastal Carolina University is committed to equitable access and inclusion of individuals with

disabilities in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. Individuals seeking reasonable accommodations should contact

Accessibility & Disability Services (843-349-2503 or https://www.coastal.edu/disabilityservices/).

Revisions: This syllabus and schedule are tentative and subject to change by the instructor with notice

to the student as the semester progresses.