



CAMOSUN COLLEGE
Trades & Technology
Mechanical Engineering Department

ENGR 293 Project Management & Engineering Design
W2021

COURSE OUTLINE

The calendar description is available on the <http://camosun.ca/learn/calendar/current/web/meng.html>
web @ _____

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

(a) **Instructor** Lilah Amlani, P.Eng.
(b) **Office hours** By appointment
(c) **Location** _____
(d) **Phone** _____ **Alternative:** _____
(e) **E-mail** AmlaniL@camosun.bc.ca
(f) **Website** _____

2. Intended Learning Outcomes

This course covers mechanical design, including design methodology, synthesis and analysis. The design projects will represent both mechanical mechanism design and thermo-fluid systems.

Upon successful completion of this course a student will be able to:

- Describe the engineering design process and related tools;
- Apply the design process and related tools to solve unstructured open-ended problems with specific goals but multiple potential solutions;
- Demonstrate practical applications of key engineering concepts from technology programs in fluids, thermodynamics, solid mechanics and dynamics;
- Demonstrate effective and professional communication skills through oral presentations and written documents;
- Work effectively in a group and apply strategies to improve group dynamics;
- Describe the role of an engineer as a professional in society.

3. Required Materials

Recommended: The Engineering Design Process: An Introduction for mechanical engineers. (2010) – by P. Ostafichuk, etc.

4. Course Content and Schedule

OFFERED: Winter Semester
IN-CLASS WORKLOAD: 2 hrs lecture (per week)

CREDIT: 3
OUT-OF-CLASS WORKLOAD: 4 (per week)

5. Basis of Student Assessment (Weighting)

(Should be directly linked to learning outcomes.)

- (a) Project Assignments: – 70%
- (b) Final Exam – 30%

6. Grading System

(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.)

(Mark with “X” in box below to show appropriate approved grading system – see last page of this template.)

Standard Grading System (GPA)

Competency Based Grading System

7. Recommended Materials to Assist Students to Succeed Throughout the Course

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

A. GRADING SYSTEMS <http://www.camosun.bc.ca/policies/policies.php>

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <http://www.camosun.bc.ca/policies/E-1.5.pdf> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete</i> : A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress</i> : A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal</i> : A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.