ENGG 130 Engineering Mechanics

Winter 2021 – January 11 to April 16

Instructor: Qipei Mei, PhD
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Lecture Time: Tuesday, Thursday 14:00-15:20
Lab Time: Wednesday 14:00-15:50
Office Hours: see eClass

Course Description

*4 (fi 8) (either term, 3-0-2) Equilibrium of planar systems. Analysis of statically determinate trusses and frames. Friction. Centroids and centres of gravity. Forces and moments in beams. Second moments of area. Note: Students in all sections of this course will write a common final examination. Corequisite: MATH 100.

Course Synchronous and Asynchronous Content Delivery Schedule

Lectures are delivered in both asynchronous and synchronous manners.

Home assignments and lab assignments are asynchronous.

Instructors and/or teaching assistants (TAs) will be available during lab sessions for questions related to lab assignments.

Helpdesk to be held by TAs will be available remotely for several hours on every school day by Engineering Student Success Centre (ESSC).

Quizzes and final exams will be held synchronously online in eClass.

Course Objectives & General Content

Statics is the branch of mechanics concerned with particles and rigid bodies that have zero acceleration. The course content includes the analysis of loads (force, moment, and equilibrium conditions) and the physical properties of rigid bodies (e.g. frictional forces, center of gravity, and moment of inertia). The knowledge from ENGG 130 will be needed for later courses, such as EN PH 131, CIV E 270.

The course activities consist of lectures and labs, home assignments, two quizzes, and one final exam. Students will solve theoretical problems in labs under the help of teaching assistants and instructors. Weekly home assignments need to be completed online (see more details at the end of the syllabus).

TA Information

TA information will be given by in eClass.

Marking scheme

Activity	(A) Synchronous	Due Date/Schedule	Weight
Home Assignments	Asynchronous	see eClass	15%
Lab Assignments	Asynchronous	see eClass	25%
Quiz 1	Synchronous	Feb 13, 09:00 to 11:00, through eClass	15%
Quiz 2	Synchronous	Mar 13, 09:00 to 11:00, through eClass	15%
Final Exam	Synchronous	To be announced in Bear Tracks later	30%

The Faculty recommended grade point average for a 100-level course is 2.6. Instructors have the leeway to deviate from this average and can assign grades based on their own scheme. All grades are approved by the department chair (or delegate). The office of the Dean has final oversight on all grades.

Term Work

All term work solutions will be posted no later than the last day of classes. All term work will be returned to students by the final day of classes, with the exception of major term work due in the last week of classes. The latter will be returned by the day of the final examination or the last day of the examination period if there is no final examination in the course as per university policy; instructors will make accommodations to return these term work. It is the responsibility of the student to pick up all their term work at the specified time and place. Any unreturned term work shall be retained and then shredded six months after the deadline for reappraisal and grade appeals. Final examinations will be kept for one year as required by university guidelines and the Government of Alberta's Freedom of Information and Protection of Privacy Act.

Calculator Policy

Only approved non-programmable calculators are permitted in examinations. Any calculator taken into an examination must have a sticker identifying it as an acceptable non-programmable calculator (gold sticker). Students can purchase calculators at the University Bookstore with the stickers already affixed. Calculators purchased elsewhere can be brought to the Student Services where the appropriate sticker will be affixed to the calculator.

Additional Notes

Solutions of lab assignments will be posted in eClass after their due days.

Solutions of home assignments will be available online after their due days.

A formula sheet will be given in the exams. A PDF file of the formula sheet is available in eClass.

Text and References (Mandatory)

Engineering Mechanics, Statics, University of Alberta's open educational resources.

Free open-access via https://engcourses-uofa.ca/books/statics/

Text and References (Recommended)

J. C. Hibbeler. “Engineering Mechanics, Statics", SI units, Pearson.

J. L. Meriam. “Engineering Mechanics, Statics", SI Version, Wiley.

S. D. Sheppard. “Engineering Mechanics, Statics", Wiley.

Any Edition of above textbooks will suffice.

Website

eClass

Previous Examples of Evaluative Materials

Past or representative evaluative course materials (labs and exams) are available in eClass.

University Policies

Policy about course outlines can be found in Course Requirements, Evaluation Procedures and Grading of the University Calendar.

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at www.governance.ualberta.ca) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Only those items specifically authorized by the instructor may be brought into the exam facility. The use of unauthorized personal listening, communication, recording, photographic and/or computational devices is strictly prohibited. Students should refrain from bringing any unauthorized electronic device into an examination room, including cell phones, high tech watches, high tech glasses or other such devices.

Faculty of Engineering Statement on Safety During Learning Activities

In all Faculty of Engineering courses, labs, seminars or other learning activities, safety is of paramount importance. In some cases, laboratory work in a program requires high standards for risk management to keep potential hazards safely under control. Anyone found to be unable to function safely, due to intoxication, behavior, or other reasons, in the class, lab, seminar or other learning activity may be asked to leave or be removed for their and the safety of other participants and instructors. As members, or prospective members, of the engineering profession, it is your responsibility to identify and inform the proper authorities of an unsafe work/learning environment.

Learning Outcomes

Students who successfully complete the course will be able to:

- Conduct basic vector operations for solving engineering mechanics problems such as dot product and cross product using force and position vectors etc.
- Draw free body diagrams for 2D and 3D particles and rigid bodies.
- Write & solve force equilibrium equations for particles in 2D and 3D.
- Calculate the moment of forces in 2D and 3D for solving engineering mechanics problems.
- Write & solve the force and moment equilibrium equations for rigid bodies in 2D and 3D.
- Analyze simple structures such as trusses, frames and machines for calculating the internal forces and internal moments.
- Employ the concept of static equilibrium for evaluation of the friction problems.
- Calculate centroids, centre of mass, and moments of inertia for application in ENGG 130 and in subsequent courses.

Did you know that the University of Alberta has various low-to-no-cost services to help students succeed? Visit http://www.deanofstudents.ualberta.ca/ for information about the academic, wellness, and various other support services available to U of A students. It's never too early or too late to seek help!

WEEKLY SCHEDULE

Week No.	Date	Topics	UofA Online Textbook Sections	Note
1	Jan. 11 to 15	Review of the basics Scalars and vectors Vector addition Cartesian vector notation	1.1-1.3 2.1-2.4	
2	Jan. 18 to 22 Jan. 22 (Friday) Last day to drop the course	Addition of Cartesian vectors Position vectors Force directed along a line Dot product	2.5-2.7 3.1	Help desk and Lab #1 start in week #2; Lab #1 tests the topics in week #1, lab #2 for week #2 and so on Home Assignment (HA) #1 due
3	Jan. 25 to 29	Particle equilibrium Free body diagrams Co-planar and 3D force systems	4.1-4.3 5.1-5.2	HA #2 due Lab #2
4	Feb. 01 to 05	Vector cross product Moment of a force	2.8, 3.2	HA #3 due Lab #3
5	Feb. 08 to 12	Moment of a couple Reduction of force and couple systems Reduction of simple distributed loads	3.3-3.5	HA #4 due Lab #4
Quiz 1 (Week #1 to #3 topics) Feb 13 (Saturday), 09:00-11:00				
Feb 15 to 19 Winter Term Reading Week. No Classes, labs, and Assignments Due				
6	Feb. 22 to 26	Equilibrium in two dimensions Two- and three-force members	5.2	HA #5 due Lab #5
7	Mar. 01 to 05	Plane trusses Method of joints Method of sections	6.1	HA #6 due Lab #6
8	Mar. 08 to 12	Internal forces in members Shear force and bending moment (equations and diagrams)	7.1-7.2	HA #7 due Lab #7

Quiz 2 (Week #4 to #6 topics) Mar 13 (Saturday), 09:00-11:00				
9	Mar. 15 to Mar. 19	Relationships between distributed load, shear force, and bending moment Graphical approach for diagrams	7.3	HA #8 due Lab #8
10	Mar. 22 to 26	Dry friction	8.1-8.2	HA #9 due Lab #9
11	Mar. 29 to Apr. 2	Centre of gravity, centroids, Centroids by integration and composite bodies	9.1-9.3	HA #10 due Lab #10
12	Apr. 05 to 09	Moments of inertia for areas Parallel axis theorem Moments of inertia by integration	10.1-10.3	HA #11 due Lab #11
13	Apr. 12 to 16	Moments of inertia of composite areas Course review	10.4	HA #12 due Lab #12
FINAL EXAM (2 hours) (All Sections) Time: TBA in BearTracks				

SUPPORTING MATERIAL -- PRE-RECORDED LECTURES

Week	Video	Concept	Link
1	1	Introduction, review of the basics	https://www.youtube.com/watch?v=hLmCfb3KVko&feature=youtu.be&t=1
	2	Scalars and vectors, vector addition (parallelogram rule)	0:00 - 14:42, Scalars and vectors https://www.youtube.com/watch?v=_WQyQ0qQUqg&feature=youtu.be&t=1 14:43 - 20:01, Multiplication and division by a scalar https://youtu.be/_WQyQ0qQUqg?t=883 20:02 - 30:53, Adding and subtracting vectors, parallelogram rule https://youtu.be/_WQyQ0qQUqg?t=1200 30:54 - 42:43, Trigonometry review https://youtu.be/_WQyQ0qQUqg?t=1853 42:44 -1:02:08 Examples, parallelogram rule https://www.youtube.com/watch?v=_WQyQ0qQUqg&feature=youtu.be&t=2564
	3	Cartesian vector notation, unit vector, addition of cartesian vectors	0:00 - 21:02, Vector components and projections https://www.youtube.com/watch?v=HO3tH1z7NwM&feature=youtu.be&t=1 21:03 - 25:34, Cartesian vector notation https://youtu.be/HO3tH1z7NwM?t=1262 25:34 - 39:52, Unit vector https://youtu.be/HO3tH1z7NwM?t=1534 39:53 - 50:09, Concept of adding vectors using CVN https://youtu.be/HO3tH1z7NwM?t=2393 50:09 - 1:08:25 Examples https://youtu.be/HO3tH1z7NwM?t=3005
2	1	Vector in 3D, Direction cosines	0:00 - 19:24 Unit vector in 3D https://youtu.be/jOFzht1aYR4 19:24 - 34:55 Direction cosines https://youtu.be/jOFzht1aYR4?t=1164 34:55 - 56:23 Examples, adding vectors in 3D https://youtu.be/jOFzht1aYR4?t=2095
	2	Concurrent force systems, addition of forces in 3D	https://youtu.be/PiyDDg6NOo8
	3	Position vectors	https://youtu.be/Duxjrj5GgyQ
	4	Force directed along a line	https://youtu.be/59Oyo0nWWR4
	5	Dot product	https://youtu.be/pXVxi_VW2tk
3	1	Particle equilibrium	https://youtu.be/Vy4eHiD1Scs

	2	Free body diagrams	https://youtu.be/uChUGO_U5yM
	3	Coplanar force systems	https://youtu.be/usHca7uBIDU
	4	3D force systems	https://youtu.be/V1mXRRT7UsE
	5	Equilibrium equations and systems of equations	https://youtu.be/zxJ9SstLL0w
4	1	Moment of a force	https://youtu.be/4pd7m_Lkf2s
	2	Moment definition	https://youtu.be/uptebW97zWY
	3	Cross product	https://youtu.be/1tWVtKqCj6Y
	4	Moment of a force about a point	https://youtu.be/deMOi_1Jt0U
	5	Moment of a force about an axis	https://youtu.be/XFV35qPYxsc
5	1	Moment of a couple	https://youtu.be/r31R_g3Reds
	2	Equivalent couples	https://youtu.be/YsvjS0PA5v8
	3	Reduction of Force Systems to a Force and a Couple	https://youtu.be/EA-rp_CQfIw
	4	Forces and Moments caused by real loads	https://youtu.be/tLy68yFblY0
6	1	Equilibrium in 2D	https://youtu.be/zEQdJTk_8Ag
	2	Reaction forces	https://www.youtube.com/watch?v=MSRZBlzxBDo&feature=youtu.be&t=1
	3	Introduction to equilibrium in 3D	https://youtu.be/SHZ_Q8f58cY
7	1	Trusses	https://youtu.be/yurUcfl3eUM
	2	Method of joints	https://youtu.be/YuLeKQLY3fI
	3	Method of sections	https://youtu.be/NnhPe9jYOMQ
8	1	Internal forces in members	https://youtu.be/ld32aMsZcKc
	2	Internal forces in members (examples)	https://youtu.be/CDhVLxHmsT0
	3	Shear connections (pins)	https://youtu.be/HRzh_zkn4Yk

9	1	Shear force and bending moment diagrams (equation method)	https://youtu.be/Mb1_ZUhlufs
	2	Equation method (examples)	https://youtu.be/l6TtMrL16qg
	3	Relationship between moment and shear (graphical method)	https://youtu.be/VGAN2DTtKUE
	4	Graphical method (examples)	https://youtu.be/xFsGG2u4TSw
10	1	Friction	https://youtu.be/3jKqklnhYC8
	2	Friction examples (sliding)	https://youtu.be/gEywfUwXCNM
	3	Friction examples (tipping)	https://youtu.be/nxGF8d-cvLA
11	1	Centre of Gravity	https://youtu.be/YyyWJO7wcso
	2	Centroids by integration	https://youtu.be/JbZIFkuAgqs
	3	Centroids of composite bodies (using tables)	https://youtu.be/ScfAZyxp6xg
12	1	Moments of inertia	https://youtu.be/EGXxK12vxTE
	2	Polar moment of inertia	https://youtu.be/zwoyzDnRAO4
	3	Radius of gyration	https://youtu.be/QSYiQT3julI
13	1	Moment of inertia about an arbitrary axis, parallel axis theorem	https://youtu.be/P0ZpmU6MOJU
	2	Moment of inertia of composite bodies	https://youtu.be/8FMeIjIruV4

IMPORTANT NOTES

Video and text recording

Please note that synchronous (i.e. 'live') activities in lectures and labs for this course will be recorded (video for lectures and anonymous text logging in labs) and made available outside of class time to all students within this class and to other instructors and teaching assistants of this class.

Students have the right to not participate in the recording and are advised to turn off their cameras and audio prior to recording. It is recommended that students remove all identifiable and personal belongings from the space in which they will be participating.

Recordings will be made available until Apr 30, 2021 and accessible via eClass (files posted on eClass are stored in a Google Drive folder or in the Zoom cloud affiliated with a UAlberta account). Please direct any questions about this collection to the instructor.

Additional Information on Marking

- Total mark received for the lab assignments will be based on the 10 assignments with the highest marks out of 12 lab assignments total.
- Total mark received for the home assignments will be calculated using the 10 assignments with the highest marks out of 12 home assignments total.
- No makeup or extra credit lab assignments or homework assignments will be given.
- Total quiz marks will be calculated using the weighted sum of the two quizzes based on the following formula:

$$Total\ Quiz\ Mark = Higher\ quiz\ mark\ \times\ 1.25 + Lower\ quiz\ mark\ \times\ 0.75$$

- No makeup quiz is available. If a student misses a quiz, the weight of the quiz will be added to the student's final exam.
- If a student misses the final exam, the student can apply for a deferred exam, which will be held in the following semester.

Time zone

All times referenced in the syllabus are local Edmonton time (MST and MDT).

Home Assignments (Online)

Weekly online assignments (12 in total) will be available through eClass. You can finish the assignments in your own time.

Each assignment will be given roughly 10 days to complete. For example, Assignment #X will be open right after the lecture on Thursday of Week #X and due at the end of Week #(X+1). Lecture topics of Week #X will be covered by Assignment #X. See the schedule above for more information.

Laboratories

- The first lab starts in the **second** week of the semester. Labs will be held online with access information provided via eClass. Lecture topics of Week #X will be covered by Lab #X. Lab #X will be held in Week #(X+1).
- Students will be completing engineering calculations for each lab. All lab questions are distributed one day before the lab period and students have **one week to finish**. Solutions must be completed on **graph paper.** Photos/scans of the solutions along with the question sheet as a cover page will be **submitted through eClass**. The writing and the photos/scans need to be clear in order to be marked.
- Express your answers to appropriate significant figures.
- Clearly indicate the final answer for each question by drawing a box around the answer.

- There will be TAs available remotely during the lab sessions to help with solving problems.
- All work submitted, including assignments, must be your own. Misconduct will be treated seriously according to the policy of Faculty of Engineering. See “Code of Student Behaviour” in the University Calendar.
- Old lab assignments are provided as examples on eClass;

Examination

- **Examinations (quizzes and final exam) in ENGG 130 are common to all lecture sections.**
- Time and locations of quizzes are shown in the weekly schedule in this syllabus. Time and location of final exam will be posted on eClass and BearTracks.
- Quizzes and the final exam will take place online. Detailed instruction will be given in eClass on how to access and complete quizzes and the final exam.
- Old exams are available in eClass; course emphasis, topics, etc. may differ each year.

Help Desk

A special helpdesk held by the Engineering Student Success Centre (ESSC), organized by the Faculty of Engineering offers help to first year students for several courses. One-to-one help with a teaching assistant (TA) will be offered by ESSC to ENGG 130. TAs will be available remotely to help students with course materials related questions.

Location: Remote.

Time: from the 2nd week to the last day of classes. 10AM-8PM Monday through Thursday, 10-3 Friday. Detailed schedule will be announced by the ESSC.

The instructors and TA of ENGG130 will also be available during regular office hours to help students. Appointments outside regular office hours can be requested through emails to the instructors.

Extra Practice Questions

Extra practice questions with detailed solutions are available in eClass.

Contingency Plans

There may be situations where course events can not take place as scheduled.

If…	***Then…***
My internet connection fails during lecture and I cannot connect again	Remember that instructors are recording and posting all lectures to eClass. Pre-recorded lecture videos can also be used to learn materials that were intended for the missed lecture. If you have questions, reach out during office hours or help desk hours.
The instructor does not show or is otherwise not available for lectures.	The instructor is likely facing an internet outage or similar. Students should wait until 15 minutes into the lecture time (e.g. 8:15 am for a lecture scheduled to start at 8:00 am). If the lecture does not start after 15 minutes, it will be cancelled, and a formal announcement will be made using eClass once the instructor gets access to the system. The Instructor will describe how information from the cancelled

	lecture will be conveyed (e.g. recorded and posted, merged into the next lecture). Pre-recorded lecture videos can also be used to learn materials that were intended for the missed lecture.
One or more TAs does not show up or the online classroom is not available for labs.	If a lab time starts and the instructor and/or TA's does not show up or the online classroom is not available, students should wait until 30 minutes into the lab time. After 30 minutes, the lab will be cancelled, and a makeup lab will be scheduled. A reschedule announcement will be made in eClass and students will be notified by email.
Your internet connection fails during an examination (quiz or final exam)	The quizzes and final exam should be able to be resumed. Further accommodation efforts have been made to compensate the potential lost of marks. See detailed information in the section of Additional Information on Marking.
You upload your lab assignment before the deadline, and the file is corrupted or otherwise unreadable	Download and check that the file you uploaded was uploaded to eClass properly every time you upload new files. Be prepared to send your lab assignment over email by request from the instructor/TA.

FACULTY OF ENGINEERING

From the Office of the Dean, Faculty of Engineering

Students PLEASE READ. It is **your responsibility** to be aware of and understand the implications of contravening the University of Alberta's Code of Student Behaviour.

All suspected infractions identified by Faculty, TAs, Markers and Exam Invigilators will be:

1) Investigated by the responsible Faculty member delivering the course including an interview with the student.
   a) A second Faculty member will be present at the time of the interview.
   b) The student is entitled to an advisor sourced from the Office of the Student Ombuds during such an interview.
2) If the outcome of (1) warrants, then it will be referred to the Office of the Dean for investigation and possible disciplinary sanction.
   a) The student will be invited to meet with the Associate Dean, Dr. Joseph for an interview.
   b) The student is entitled to an advisor sourced from the Office of the Student Ombuds during such an interview.
   c) The Associate Dean will decide on a sanction weighing the evidence "**on the balance of probabilities**".
3) The student has the right to appeal any sanction imposed through the University Appeals Board.

The following is selected content from the Code of Student Behaviour that students should be particularly aware of, ref: **"CODE OF STUDENT BEHAVIOUR"**, updated July 1, 2018

"30.3.2 Inappropriate Academic Behaviour

30.3.2(1) **Plagiarism**

No Student shall submit the words, ideas, images or data of another person as the Student's own **in any academic writing, essay, thesis, project, assignment, presentation** or poster in a course or program of study."

Dispelling some of the myths that lead to plagiarism

*a) It is **not OK** to use someone else's words or work without appropriate citation and referencing but claim that you are 'honouring them' by using their words.*
*b) It is **not OK** to put references at the end of a piece of work but not cite the reference at the end of the specific section of paraphrased text or vice-versa.*
*c) It is **not OK** to use a figure, table or graph from someone else's work without appropriate citation.*
*d) It is **not OK** to put a verbatim quote in quotation marks or italics and not to cite the reference at the end of the quote, or vice-versa.*
*e) It **is OK** for you to work with a person or group on an assignment, lab report or project as long as your solution or submission for grading was worked and written **independently** of the person or group.*
*f) **No** assignment, lab report or project submission from one student should show strong similarity in written style or calculation layout to another student.*
*g) It is **not OK** to work with someone else on an assignment or lab report or paper **and** submit an identical or highly similar document for grading.*
*h) A momentary lapse in judgment **is not** an excuse.*

"30.3.2 Inappropriate Academic Behaviour

30.3.2(2) **Cheating**

30.3.2(2)a No Student shall in the course of an examination or other similar activity, obtain **or attempt to obtain** information from another Student or other unauthorized source, give or attempt to give information to another Student, or use, attempt to use or possess for the purposes of use any unauthorized material.
30.3.2(2)b No Student shall represent or attempt to represent themself as another or have or attempt to have themself represented by another in the taking of an examination, preparation of a paper or other similar activity. See also misrepresentation in 30.3.6(4).
30.3.2(2)c No Student shall represent another's substantial editorial or compositional assistance on an assignment as the Student's own work.
30.3.2(2)d No Student shall submit in any course or program of study, without the written approval of the course Instructor, all or a substantial portion of any academic writing, essay, thesis, research report, project, assignment, presentation or poster for which credit has previously been obtained by the Student or which has been or is being submitted by the Student in another course or program of study in the University or elsewhere.
30.3.2(2)e No Student shall submit in any course or program of study any academic writing, essay, thesis, report, project, assignment, presentation or poster containing a statement of fact known by the Student to be false or a reference to a source the Student knows to contain fabricated claims (unless acknowledged by the Student), or a fabricated reference to a source."

Plagiarism can also be cheating (two counts in one)

Plagiarizing within the context of assignments, papers, lab reports, tests and examinations is also an attempt to take academic advantage over others in the same class; such that a better grade may be achieved, and hence may also be subject to a charge of cheating.

"30.3.6(5) Participation in an Offence

No Student shall counsel or encourage or knowingly aid or assist, directly or indirectly, another person in the commission of any offence under this Code."

"30.3.4 Inappropriate Behaviour towards Individuals or Groups

30.3.4(1) **Disruption**

30.3.4(1)a No Student shall disrupt a Class in such a way that interferes with the normal process of the session or the learning of other Students." **Comment: *This includes use of laptops, phones and working on assignments distracting others***

"30.3.4(6) Violations of Safety or Dignity

30.3.4(6)a No Student shall have sexual or physical contact with another person without that person's consent.
30.3.4(6)b No Student shall physically abuse another person, threaten any other person with physical abuse or cause any other person to fear physical abuse.
30.3.4(6)c No Student shall create a condition which endangers or potentially endangers or threatens the health, safety or wellbeing of other persons.

30.3.4(6)d No Student shall harass another person. Harassment is defined in the Discrimination, Harassment and Duty to Accommodate Policy in UAPPOL, and includes Harassment, Bullying, Sexual Harassment and Racial Harassment.
30.3.4(6)e No Student shall use words which threaten violence or physical abuse to any group or individual whether or not the group or individual thus threatened knows of such threatening words and whether or not the words are employed with a demonstration, rally or picketing."

"30.3.6 Other Offences

"30.3.6(4) **Misrepresentation of Facts**

No Student shall misrepresent pertinent facts to any member of the University community for the purpose of obtaining academic or other advantage..." **Comment: *This includes falsely claiming ill health to defer examinations or gain extensions***

"30.3.3 Inappropriate Behaviour in Professional Programs

30.3.3(1) A Student enrolled in Professional Programs is bound by and shall comply with the Professional Code of Ethics governing that profession and the practice of its discipline.
30.3.3(2) It shall be the responsibility of each student in a Professional Program to obtain, and be familiar with, the Professional Code of Ethics relevant to the discipline and all amendments thereto as may be made from time to time."

Association of Professional Engineers & Geoscientists of Alberta - APEGA CODE OF ETHICS

1. Professional engineers and geoscientists shall, in their areas of practice, hold paramount the health, safety and welfare of the public and have regard for the environment.
2. Professional engineers and geoscientists shall undertake only work that they are competent to perform by virtue of their training and experience.
3. Professional engineers and geoscientists shall conduct themselves with **integrity, honesty**, fairness and objectivity in their professional activities.
4. Professional engineers and geoscientists shall comply with applicable statutes, regulations and bylaws in their professional practices.
5. Professional engineers and geoscientists shall **uphold and enhance the honour, dignity and reputation of their professions** and thus the ability of the professions to serve the public interest.

Unauthorized use of devices & resources

On-line resources such as **"Course-Hero"** are considered inappropriate resources that **students should avoid accessing**. Such resources are the subject of concern by the Office of the Dean and University Legal Counsel, as content has previously been identified as unauthorized use of Faculty of Engineering Professors' intellectual property, including notes & solutions. To use such resources is both **Cheating** and **Plagiarism**.

Students identified to have used **unauthorized devices**; such as **smart phones, watches and glasses**; to access E-class or communicate with others via email or social media during an **examination** have received **Cheating** sanctions which can include the loss of the full exam grade value as a minimum, up to a suspension or expulsion from University recommendation.

In many instances, cheating in examinations occurred when students were using washrooms, although some students access resources in exams in front of invigilators. Students need to be aware that the Office of the Dean uses all available technology and services to **monitor use of unauthorized devices and resources**, including IP logs specific to device traffic during examination periods. Instructors are encouraged to monitor E-class logs and 'electronic material sharing' sites during exam periods.

Faculty of Engineering rules related to unauthorized electronic devices in examinations

1. Section 23.5.1(1) Permitted References and Aids, of the University Calendar states: "Only those items specifically authorized by the instructor may be brought into the exam facility. The use of unauthorized personal listening, communication, recording, photographic and/or computational devices is strictly prohibited". Any violation of this is a violation of the Code of Student Behaviour.
2. On entering an examination, students must turn off all unauthorized electronic devices including but not limited to cell phones, laptops, tablets, watches with internet/storage capability, or other audio-visual devices. Invigilators should remind students to do this before the examination is started.
3. Such devices should be placed in a carrying bag or backpack, and placed behind or underneath the student's chair; or if the room is deemed capable, invigilators may ask all bags and backpacks be placed in a designated area and only retrieved once the examination is completed.
4. Any student in possession of an unauthorized electronic device, regardless of perceived action, will be reported by the invigilator and/or instructor for investigation under the Code of Student Behaviour. All such reports will be referred to the Office of the Dean.
5. Students requiring a washroom break must present their ONEcard to the invigilator prior to leaving the examination room. Invigilators will be responsible for noting such students' names and exact time of departure and return.
6. Calculators with storage capability other than approved programmable calculators are prohibited in examinations.

General rule for unauthorized devices in examinations

Students should refrain from bringing any unauthorized electronic device into an examination room. At the very least **no unauthorized device should be on your person** during an examination, but should be secured in your backpack or bag out of reach for the duration of the examination.

Study and assignment tips for students

1. Study in groups, but only to discuss concepts and principles, **NOT** to complete assignments.
2. Perform assignment calculations and written solutions on your own – you are only competing with yourself.
3. Take advantage of using the TA scheduled office time to ask additional questions – if in doubt ask.
4. If colleagues are getting higher grades in assignments, labs, exams, remember you are not competing with other students only with yourself.
5. If you are tempted to take a shortcut think about this: What is the value of the assignment or lab or test that I am tempted to cheat or plagiarize to get credit?

NEED HELP?

There are a lot of services available to students on campus and in Edmonton, and sometimes it's hard to know where to go. While this isn't a comprehensive list, the services shown here should at least give you some ideas about where to start. If you're still not sure, check out the services just beneath this box—they'll give you the guidance you're looking for.

DON'T KNOW WHERE TO GO?

UASU Cares
uasucares.su.ualberta.ca

Office of the Student Ombuds
Call when you don't know how to solve a problem. Earlier is better.
780-492-4689

24/7 HELP

U of A Need Help Now
ualberta.ca/current-students/need-help-now

Edmonton Distress Line
780-482-4357 (HELP)

WELLNESS

ACCESS Open Minds
Appointment-based support from social workers.
Make an appointment: 780-248-2016 or accessom@ualberta.ca

ACCESS Outreach
Drop-in, single-session support and referrals.
289 CAB; M-F, 8:30am-4:30pm

Counselling and Clinical Services
Free, short-term, appointment-based counselling and psychiatric services.
Book initial consultation: in person at 2-600 SUB or call 780-492-5205
2-600 SUB; M, R, F, 8:00am-4:30pm; T,W, 8:00am-7:00pm

Interfaith Chaplains Association
Get guidance, care, and support, whether or not you identify with a particular faith.
Make an appointment: chaplain@ualberta.ca

The Landing
Offers support to students on matters of gender and sexual diversity.
0-68A SUB; M-R, 11:00am-4:00pm

Peer Support Centre
Anonymous, confidential help from trained students. Drop in, call, or make an appointment.
Help line: 780-492-4357 (HELP)
2-707 SUB; M-F, hours vary

Sexual Assault Centre
Free, anonymous, and confidential drop-in counselling.
2-705 SUB; M-F, 9:00am-5:00pm

ACADEMIC

Engineering Student Services
Drop-in, first-come, first-served advising.
2-300 Donadeo ICE; hours vary

Engineering Student Success Centre
Drop-in tutoring for first-year courses.
ECERF W2-023; M-R, 10:00am-8:00pm; F, 10:00am-3:00pm

Academic Success Centre
Many services to maximize your academic success.
1-80 SUB; M-F, 8:30am-4:30pm

Accessibility Resources
Connects students with disabilities to accommodations.
1-80 SUB; M-F, 8:30am-4:30pm

FINANCIAL

Engineering Student Services
Drop-in, first-come, first-served advising.
2-300 Donadeo ICE; hours vary

Campus Food Bank
Many food support options available.
SUB 1-81; 12:00-6:00pm

Student Connect
Offers support for many issues, including financial support.
Administration Building; hours vary

SOCIAL

Unitea
Arrange a time to socialize with a peer.
www.ualberta.ca/community-social-work/unitea

BearsDen
Find student groups, local events, and volunteer opportunities.
www.alberta.campuslabs.ca/engage

WORRIED ABOUT SOMEONE?

HIAR (Helping Individuals at Risk)
If you're worried about someone because of the things they've been saying or doing, or there's a noticeable change in their behaviour (often in multiple ways), contact HIAR, who will protect your confidentiality and help decide how best to support the person.

Phone: 780-492-4372
Email: hiarua@ualberta.ca

CONFIDENTIAL SUPPORT

Office of Safe Disclosure and Human Rights
The OSDHR advises confidentially on sensitive issues you may not feel comfortable solving on your own. Contact the OSDHR if you want to get help or to make a report while keeping your privacy.

Phone: 780-248-1894
Email: osdhr@ualberta.ca

Engineering Wellness
www.uab.ca/enggwell