TAM 201, Fall 2026

Time: Section G, 3:30 - 4:50 PM, TuTh, 226 Wohlers Hall

Instructor: Stephanie Ott-Monsivais, 1056 Lu MEB, 217-300-3102, ottmonsi@illinois.edu

Office Hours: *Tentatively* Fridays from 11am-1pm in in 1056 Lu MEB or on Zoom, or by appointment https://illinois.zoom.us/my/ottmonsi, Passcode: FA26Meet

Web site: Illinois Canvas Login Page - https://canvas.illinois.edu/

Description: Engineering mechanics (statics, dynamics, solid mechanics, and fluid mechanics) and the role that mechanics plays in engineering analysis and design. For Technology and Management majors only.

Objective: Give business majors a basic understanding of mechanical systems so they can

- Manage business entities with products using mechanical technology.
- Understand how engineers think. Effectively manage them.
- Understand how engineering projects work.

Final Grade Calculation:

20% - Project #1 (team)

40% - Project #2 (team with individual and COIL contribution weighting)

40% - Weekly Quizzes (individual with team contribution)

with

97-100 %	A+	74-76 %	C
94-96 %	A	70-73 %	C-
90-93 %	A-	67-69 %	D+
87-89 %	B+	64-66 %	D
84-86 %	B	60-63 %	D-
80-83 %	B-	0-59 %	F
77-79 %	C+		

Teamwork:

- Students will be assigned to teams (typically three or four students per team) using CATME software. Groups will change throughout the semester to promote diverse perspectives, improved collaboration skills, enhanced learning, network building, balanced workload, and reduced cliques.
- At regular intervals throughout the semester, each student will provide feedback through CATME on all team member contributions, and this feedback will be returned anonymously to each student for the purpose of personal growth and improving team dynamics.
- Team Dynamics will be incorporated into grading in the following 2 ways: 1) Projects will receive a team grade weighted by individual contributions 2) Weekly quizzes (100%) will have an individual portion at the start (66.6%) then a group portion (33.3%).

General Rules:

1. Class preparation and attendance is expected. In the event of absences (excused or unexcused), you are still expected to be aware of all class announcements and assignments. Make-up and conflict work will only be allowed as per university policy.

2. You should expect to spend 8 to 10 hours per week outside of class on projects and homework. Projects will involve approximately 20-30 hours of work; start early.

3. A 30-minute quiz will be administered on several Tuesdays/Thursdays during class in lieu of exams. The quiz will cover the previous week's material, focusing on the assigned homework due on that day. The quizzes are closed note, with the exception of a 3x5 inch notecard. You are allowed the use of a calculator. After 15 minutes you will submit your individual quiz paper and convene with your team to complete the group quiz. Individual quiz grades will be comprised of individual quiz scores (majority) and team scores (minority), with a design of learning through team reflection. Group quizzes often test concepts important for group projects, while individual quizzes with test concepts important for learning objectives all students should achieve. Your lowest quiz grade for the semester will be dropped.

Academic Integrity:

The University of Illinois at Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: http://studentcode.illinois.edu/.

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: https://studentcode.illinois.edu/article1/part4/1-401/. Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Mental Health:

Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Student Health Fee. If you or someone you know experiences any of the above mental health concerns, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do for yourself and for those who care about you.

- Counseling Center (217) 333-3704, 610 E John St
- McKinley Health Center (217) 333-2700
- National Suicide Prevention Lifeline (800) 273-8255
- Rosecrance Crisis Line (217) 359-4141 (available 24/7, 365 days a year)

If you are in immediate danger, call 911.

Community of Care:

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Connie Frank CARE Center (formerly the Student Assistance Center, 217-333-0050 or http://odos.illinois.edu/community-of-care/referral/). Based on your report, the staff will reach out to students to make sure they have the support they need to be healthy and safe.

Further, as a Community of Care, we want to support you in your overall wellness. We know that students sometimes face challenges that can impact academic performance (examples include mental health concerns, food insecurity, homelessness, personal emergencies). Should you find that you are managing such a challenge and that it is interfering with your coursework, you are encouraged to contact the Connie Frank CARE Center in the Office of the Dean of Students for support and referrals to campus and/or community resources.

Students with Disabilities:

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor as soon as possible and provide the instructor with a Letter of Academic Accommodations from Disability Resources and Educational Services (DRES). To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class should apply for services with DRES and see the instructor as soon as possible. If you need accommodation for any sort of disability, please speak to me after class, or make an appointment to see me or see me during my office hours. DRES provides students with academic accommodations, access, and support services. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 217-333-1970, e-mail disability@illinois.edu or visit the DRES website at http://www.disability.illinois.edu/. Here is the direct link to apply for services at DRES, https://www.disability.illinois.edu/applying-services.

Disruptive Behavior:

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office for Student Conflict Resolution (https://conflictresolution.illinois.edu; conflictresolution@illinois.edu; 333-3680) for disciplinary action.

Emergency Response Recommendations:

Emergency response recommendations and campus building floor plans can be found at the following website: https://police.illinois.edu/em/run-hide-fight/. I encourage you to review this website within the first 10 days of class.

Religious Observances:

Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to admissions, class attendance, and the scheduling of examinations and work requirements. Students should complete the Request for Accommodation for Religious

Observances form should any instructors require an absence letter in order to manage the absence. In order to best facilitate planning and communication between students and faculty, students should make requests for absence letters as early as possible in the semester in which the request applies.

Sexual Misconduct Reporting Obligation:

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: wecare.illinois.edu/resources/students/#confidential.

Other information about resources and reporting is available here: wecare.illinois.edu.

Class Schedule**

Week	Class	Day	Date	Subject	Comments
1	1	T	25-Aug	Introduction - Syllabus / History of Mechanics	
	2	Th	27	Terminology / Basic Math / Particle Mechanics	CATME Team Formation
2	3	T	1-Sept	Vectors	
	4	Th	3	2D Forces / Particle Equilibrium	
3	5	T	8	Statics	Quiz 1
	6	Th	10	Project 1 / Team Problem	Project 1 Assigned
4	7	T	15	Pulleys / Moments / 2D Equilibrium	
	8	Th	17	Connections / Force Systems	
5	9	T	22	Two-Force Members / Zero-Force Members	Quiz 2
	10	Th	24	Trusses	
6	11	T	29	Trusses/Dynamics	Quiz 3
	12	Th	1-Oct	Dynamics	
7	13	T	6	Springs / Friction / Examples	
	14	Th	8	Beams / Shear & Moment Diagrams	
8	15	T	13	Distributed Loads / Stress	Quiz 4
	16	Th	15	Stress / Strain / Materials Testing	
9	17	T	20	Project 1 in-class work session	Quiz 5
	18	Th	22	Types of Loading / Deformation	
10	19	T	27	Project 1 Presentations / Project 2	Project 2 Assigned
	20	Th	29	Failure Mechanisms	
11	21	T	3-Nov	UVG COIL Intro *(laptop w/headphones rec.)*	Quiz 6
	22	Th	5	Buckling/Machine Components	
12	23	T	10	SketchUp CAD *(laptop rec.)*	Quiz 7
	24	Th	12	Excel Tutorials *(laptop rec.)*	COIL Summary – Week 1
13	25	T	17	SCD Tour *(meet at SCD, the Shop)*	Quiz 8
	26	Th	19	Team Project Review *(In-Person or Zoom)*	COIL Summary – Week 2
14		T	24	FALL BREAK	
		Th	26	FALL BREAK	
15	27	T	1-Dec	Fluid Mechanics	
	28	Th	3	Heat Transfer	
16	29	T	8	Project Testing *(meet at MTIL in Talbot Laboratory)*	Truss Testing
		Th	10	READING DAY	
		M	14	Final Presentations 1:30 - 4:30 PM	226 Wohlers

**Some information above may be changed depending on progress.