

## ENG 111: MEP Mentoring

For First Year Students in Engineering

<b>Section:</b> M1	<b>Time:</b> Tues, 11:00am – 12:15pm	<b>Classroom:</b> 1035 Campus Instructional Facility
<b>Section:</b> M2	<b>Time:</b> Tues, 4:00pm - 5:15pm	<b>Classroom:</b> 1035 Campus Instructional Facility
<b>Section:</b> M2	<b>Time:</b> Weds, 11:00am – 12:15pm	<b>Classroom:</b> 2039 Campus Instructional Facility
<b>Section:</b> M2	<b>Time:</b> Weds, 4:00pm - 5:15pm	<b>Classroom:</b> 2039 Campus Instructional Facility

Instructors: Ivan Favila and Aldo Montagner  
Office Hours: Walk-ins and Appointments Welcome  
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<https://canvas.illinois.edu/courses/36595>

**MEP Commitment:** MEP is committed to the EMPOWERMENT of Native, Black and African American, and Latino students in the Grainger College of Engineering. It is with that in mind that we affirm our stance as an anti-racist organization. The environment that we are creating in this class specifically is about inclusion and respect. We will discuss topics that are intended to help you transition from a high school graduate to a world-class engineer. We ask that you be respectful of yourselves, your classmates, the mentors, guests, and instructors.

### Course Logistics

**Course Objective:** This course will facilitate a successful campus experience. Students will build their academic and professional understanding through the development of a working academic success portfolio. This portfolio will help students identify, understand, and prepare to exceed expectations of them on campus, in the engineering curriculum, and in professional interactions with faculty and industry.

**Credit:** 1 credit hour. Grade constitutes attendance, homework completion, and completion of personal development portfolio. The amount of time required for this class will be approximately 2 hours per week.

- 30%: Homework completion
- 30%: Class participation (attendance)
- 40%: The Final Report is required for a passing grade in the class

Grades are as follows: A = 90%, B = 80%, C = 70%, D = 60%, F= below 60% with +/- grades attributed to participation.

**Course Work:** Class assignments include dynamic documents developed over several iterations including time-management assessments, professional resume, statement of interest in engineering, and a periodic assessment of progress. If we need to transition to be fully online, we will provide further instructions then.

**Recommended Text:** Landis, **STUDYING ENGINEERING; A Roadmap to a Rewarding Career**, 5th ed. Discovery Press, 2019

### Class Participation

We value the diversity embodied by the participants in this course. Such diversity allows us to learn and challenge ideas and perspectives. We feel that we can do so in a collegial and respectful manner. Each class is divided into open forum, lecture, group discussion, peer mentor activity, and recap. Students are expected to give their best effort to share, inquire, elaborate, and discuss each topic in a productive manner. We also encourage students to connect with classmates outside of class through study groups, student organizations, and in other positive college experiences!

### Disability Accommodations

Students who require accommodations should contact the course instructors as soon as possible. DRES (Disability Resources and Educational Services) coordinates campus-wide services for students with disabilities. They provide

guidance and support in acquiring required accommodations. Contact DRES via email at [disability@illinois.edu](mailto:disability@illinois.edu) or in person at 1207 S. Oak Street, Champaign, or by phone 333-4603 (V/TTY).

### Academic Integrity

We expect students to be honest. While most work will come from your own narrative, please cite any sources used. The Student Code states, "It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions."

### Family Educational Rights and Privacy Act

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should contact the course instructors to ensure protection of the privacy of their attendance in this course. See <http://registrar.illinois.edu/ferpa> for more information on FERPA.

### Course Topics

- Introduction to Engineering – "So you want to be an Engineer?"
- Academic Expectations and Time Management - "Being smart is not enough"
- Learning Math, Science, and Engineering concepts and Test Anxiety - "Study skills"
- Perspectives of successful engineers – "How ILLINOIS prepared me to be a good engineer"
- Professional Preparation – "Requirements for the engineering profession"
- Discussion with Engineering Faculty - "Breaking the ice"
- Engineering Students-"Do as successful engineering students do"
- Academic Assessment- "What do we do from here?"

### Weekly Schedule (final schedule maintained on the course page)

Week	Objective(s)	In-Class Activity	Peer Mentor activities	Homework
1	Articulate what you want and what it takes to achieve it	Class intro, set expectations	Introductions.	Personal statement 1.0 (statement of purpose)
2	1. Recognize the value of time-on-task 2. Apply a proven study technique	On Learning; Use of lecture; track time	Approaches to learning; HS vs college; Faculty teaching styles (contrast to HS teachers); productive life of college students	1. Organization and approach (Track activities every 1/2 hr for a week) 2. Feynman Technique (apply this to one topic in a math or science class)
3	Identify academic approaches that you can commit to	Track time; Process goals; Exam prep (Career fair advice)	College exams: exams, HW, and quizzes; power tips for managing self, avoiding procrastination; practice is key; tutoring and other resources	Reflection: Describe how you spend your time and effort. What does your effort look like? How does it compare to HS?
4	Plan learning through reinforcement and academic support	Homework & Exam cycles	What works and stories on managing self and others. Mistakes made and lessons learned.	Describe plan for using repetition (preview, notes, review) and supplements (office hours, groups, tutoring)
5	Adopt a learning technique that works (growth mindset)	Expert vs novice learners; interviewing	Identity as a quantitative thinker; Attitudes: the good, the bad, the ugly	Revisit Feynman Technique

6	1. Review time management 2. Assess first exam experience 3. Articulate adjustments necessary for improvement	Midterm checkpoints; mistakes made; stress mgmt.	Open reflection: self-efficacy (i.e., going to/from "you can do it")	1. Track activities every 1/2 hr for a week 2. Reflect on first round of exams 3. Suggest improvements
7	Understand academic opportunities available on campus for undergrads	Attitudes; demystifying classroom experience	Campus involvement (student orgs or department involvement)	Research Reflection: If you were to participate in the development of an intellectual/academic idea on campus, what would it be and why?
8	Affirm sense of support in MEP community. Reflect on mid-semester progress.	Next steps; assessing progress	Campus involvements (research or projects)	* Midterm Reflection: adjustment to campus, attitude check, and progress on learning
9	Demonstrate awareness of course planning. Identify potential study groups	Organize class clustering	Campus involvements (study abroad or community service)	Develop plan for next 3 semesters and identify resources and study groups
10	Awareness of professional opportunities and requirements to qualify for them	Review job descriptions	Professional involvements	1. Search for and share "Dream Job Descriptions" related to your major 2. Compose a draft of a resume of your "future self" who qualifies for the above
11	Outline responses to scholarship application themes	Effectively articulating one's story	Professional involvements	Outline your responses to scholarship application themes: identity, community/volunteerism, motivation/drive, technical/academics, leadership
12	Demonstrate reflection of growth and progress throughout the first semester	Q & A: the academic experience	AMA style discussion	Final Paper: synthesize all homework assignments into a paper titled "My Process on Becoming a World-Class Engineering Student"
13	Prepare for the end of the semester	Finals preparation	Finals preparation	Work on Final Paper
14	Summarize lessons learned	Semester review	Finals preparation	Work on Final Paper
15	Encouragement for the end of semester	Semester review	Words of advice and support	Work on Final Paper
16	Finals	-	-	Submit Final Paper