

MSE 280: Engineering Materials

3 cr., Spring 2025, CRN: 38203

T/R 11:00 - 12:20

2035 Campus Instructional Facility

Contact

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210 Ceramics Building

Office Hours: TBD (210 or 213 Ceramics)

TA: Phillip Sin

Contact via Canvas

213 Ceramics Building

Office Hours: Mon 4:30-6:00; Thurs 2-3

Class Description and Objectives

The long-term objective of this course is to aid practicing engineers in materials selection and design by understanding the interplay among structure, processing, properties, and ultimately performance. This course provides a broad coverage of the field and serves as the introductory course in the major field.

Course Delivery

1. Canvas (lectures, grades)
2. PrairieLearn (homework & practice exams): <https://www.prairielearn.org/pl>
3. PrairieTest: <https://us.prairietest.com/>

Grading Policies

35% Weekly homework

40% Exam I & II

25% Final

Preliminary Grading Scheme

A+	97% and up	B+	87–89.99%	C+	77–79.99%	D+	67–69.99%
A	93.0–96.99%	B	83–86.99%	C	73–76.99%	D	63–66.99%
A-	90–92.99%	B-	80–82.99%	C-	70–72.99%	D-	60–62.99%

Weekly Homework: Problem sets will be posted on PrairieLearn. It is the responsibility of the student to complete them outside of class. Each problem will have a set number of attempts and points awarded. The lowest homework score will be dropped.

Late Homework: For homework, there is a -10% penalty for every 24 hours late, to a minimum penalty of -60% if submitted before the final exam is taken.

Exams: Two exams and one final will be given on PrairieTest through the Computer Based Testing Facility (CBTF). CBTF allows students to choose a time slot that works best within a set window. Exam 1 will be offered Feb 27-Mar 1, Exam 2 will be offered Apr 17-19, and the final exam will be offered during finals week. Sign up for exam time slots begin Feb 13 (Exam 1), Apr 3 (Exam 2), and Mar 14 (final exam). A formula sheet will be provided for the exams.

Makeup Assessments: This is at the sole discretion of the instructor and requires timely reporting of the absence by the student. For planned absences, notice must be given to the instructor at least 7 days prior to the start of the assessment, with the expectation that the exam will be taken prior to the planned absence.

For excused and verified absences due to illness or other unexpected/unplanned event, a makeup quiz will be available for full points if it can be administered in a timely manner. If, due to the absence, this cannot occur, a "0" will be given as a temporary grade, with the final replacing this score at the end of the semester.

Late penalties on homework may be eliminated or adjusted and will be dealt with on a case-by-case basis.

i>clicker extra credit: i>clicker will be used during class to facilitate discussion. Answering the majority of questions, to the best of your ability, in >85% of the lectures will result in a 10% increase on your final exam.

Re-grading policy: For simple addition/subtraction errors on points awarded, please bring up the assignment or exam after class or stop by during office hours. Any other requests require a cleanly written explanation that includes your name, assignment or exam, problem in question, and a written description describing the mis-grading and why a re-grading is warranted. Any attempt to "doctor" or manipulate the assignment will be dealt with under the Student Code.

Academic Integrity

Alleged misconduct is a violation of the Student Code and must be reported as an infraction of academic integrity. I reserve the right to take photographic evidence.

The University of Illinois 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
- 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.

*This statement is approved by the University of Illinois Counseling Center

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 Student Assistance Center (217-333-0050 or <http://odos.illinois.edu/community-of-care/referral/>). Based on your report, the staff in the Student Assistance Center reaches 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 [Student Assistance Center \(SAC\)](#) 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 accommodations 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 Office. In turn, an individual with the Title IX 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.