

MEEN 5420, Continuum Mechanics

Instructor: Yijie Jiang, Ph.D.

Fall 2022

Office: Discovery Park F101T

Time: 2:30-3:50 pm MW

Email: yijie.jiang@unt.edu

Office Hours: 8:30-11:30 AM Mondays

Course Description:

Describes the fundamental law of physics applicable to a continuous medium and to develop the linear theory. Introduces students to Cartesian tensors, state of stress, kinematics of deformation, and constitutive equation of mechanics and thermodynamics.

Prerequisites: Consent of department.

Credits: 3 hours

Course Policies:

Attendance

Students are expected to attend class meetings regularly and to abide by the attendance policy established for the course. It is important that you communicate with the professor and the instructional team prior to being absent, so you, the professor, and the instructional team can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the professor and instructional team if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community.

If you are experiencing any symptoms of COVID-19 (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Team at COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure.

Course Materials for Remote Instruction

Remote instruction may be necessary if community health conditions change or you need to self-isolate or quarantine due to COVID-19. Students will need access to a webcam to participate in fully remote portions of the class. Information on how to be successful in a remote learning environment can be found at <https://online.unt.edu/learn>

Textbooks:

An introduction to continuum mechanics with applications, J.N. Reddy, Cambridge University Press, 2008 (or newer edition).

Exams: There will be three exams - 2 quizzes and 1 final. Exams will be based on text readings, handouts, class exercises, and class lectures and discussions. Students are responsible for all text materials, regardless of whether we review the text materials in class or not.

Missed Exams: You will be allowed to make up a missed exam only if you have a documented university excused absence.

Assignments: In addition to the readings from the text, there will be weekly-based homework assignments and one project with presentation. No late assignments will be accepted. No emailed assignments will be accepted.

Grade:

Attendance	5%	Homework Assignments	15%
Two Quizzes	20% each	Project	10%
Final Exam	30%		

Distribution: 90 - 100 = A, 80 - 89 = B, 70 - 79 = C, 60 - 69 = D, Below 60 = F

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA Policy:

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website (<https://disability.unt.edu/>).

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Blackboard for contingency plans for covering course materials.

Additional Policies and Procedures:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. Tardiness: If you arrive late, please enter quietly and sit down. Do not walk in front of speakers or disrupt the class in any other way. Cell Phones: Please remember to mute or turn off phones prior to class.

Extra Help: Please do not wait until the last minute. If you are having trouble with this class, please stop by my office during office hours or send me an email (Yijie.Jiang@unt.edu).