

UNIVERSITY OF NORTH TEXAS SYLLABUS
MEEN 3100 Manufacturing Processes
MFET 3110 Machining Principles and Practices
Spring 2022. 3 Credit hours

Instructor: Dr. Mark Wasikowski

Office Hours: By appointment at NTDP F101L or via Zoom

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Lectures:

1. DP B142, MW 8:30 – 9:20, MEEN 3100.001 and MFET 3110.001
2. DP B142, TR 8:30 – 9:20, MEEN 3100.003 and MFET 3110.003

Laboratory: Multiple labs available. Lab enrollment is required co-requisite

Course Format: Face-to-Face only, unless UNT directs otherwise.

Teaching Assistants: TBD

CATALOG DESCRIPTION:

MEEN 3100: Major manufacturing processes, their capabilities, analysis, and economics. Study of the fundamentals of engineering processes in manufacturing as related to design and production and materials properties. Traditional and non-traditional manufacturing process and selection optimization. Students given laboratory assignments in material removal, forming, casting, joining, forging, and computer aided machining.

MFET 3110: Machine tool manufacturing techniques emphasizing sequence of operations, cutting tool geometry, tooling systems, tool materials and performance characteristics, cutting forces, speeds, feeds, surface finish, horsepower calculation and cutting fluids

REQUIRED TEXT: none

RECOMMENDED TEXTS:

1. "Manufacturing Engineering and Technology", Kalpakjian, 7th, Pearson.
2. "Manufacturing Processes for Engineering Materials", Kalpakjian, 6th, Pearson.
3. "Fundamentals of Modern Manufacturing: Materials, Processes and Systems", Groover, 7th, Wiley.
4. "Machine Tool Practices", Kibbe, 10th, Pearson
5. "Machinery's Handbook", Oberg, Industrial Press

ABET OUTCOMES: course addresses ABET program outcomes as addressed in department policies.

GRADING RUBRIC: standard 90/80/70/60 scale. No rounding.

1. 15%: **Lecture Attendance Quiz:** Lecture attendance is student responsibility. Can occur anytime, including 8.30 start. May be unannounced. No make-ups. Solutions available immediately.
2. 35%: **Homework:** Assigned via CANVAS weekly. Due Sunday evenings at 8 pm. Solutions available immediately. Covers lecture and lab material.
3. 20%: **Final Exam:** Comprehensive. Taken in person during final exam week.
4. 30%: **Laboratories:** Lab attendance and participation required and graded

COVID Plan: If labs are canceled, credit will be transferred to a second exam & additional home practice

LATE WORK: No late work accepted without a documented excused absence, per UNT policy

EXTRA CREDIT: There is no extra credit in this course.

SAFETY PROCEDURES: Students required to use proper safety procedures per UNT Policy 06.038 in lab activities. UNT not liable for injuries incurred participating in class activities. Students encouraged to secure insurance in event of accidental injury. Students who do not have insurance should consider Policy 06.049. If students have insurance other than Student Health Insurance, be sure plan covers treatment at this facility. If students choose not to go to Health and Wellness Center, they may be transported to local hospital. Students are responsible for expenses.

ACCEPTABLE BEHAVIOR: I consider this room to be place where you will be treated with respect. All expected to contribute to respectful and inclusive environment. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. We enforce student Code of Student Conduct at deanofstudents.unt.edu/conduct.

ACADEMIC INTEGRITY STANDARDS AND SANCTIONS FOR VIOLATIONS: According to UNT Policy 06.003, 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. Academic dishonesty will not be tolerated and will result in zero assignment score and reported to Office of Academic Integrity. No exceptions.

ADA STATEMENT: UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify eligibility. If a disability verified, ODA would provide student with 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. For additional information see the ODA website at disability.unt.edu

STUDENT PERCEPTIONS OF TEACHING EFFECTIVENESS (SPOT) Course participate in SPOT evaluations (<http://spot.unt.edu/> or email spot@unt.edu).

RETENTION OF STUDENT RECORDS Course follows Family Educational Rights and Privacy Act (FERPA) laws and UNT Policy 10.10, Records Management and Retention.

SYLLABUS CHANGES Instructor reserves right change syllabus. Any changes announced in class and posted to CANVAS with an accompanying email to student's UNT email address.