**Instructor:** Dr. Mark Wasikowski, or just “Dr. Was”  
**Office Hours:** NTDP F101L. TBD, or by appointment.  
**Office Phone:** (940) 369-8030  
**Email Address:** mark.wasikowski@unt.edu (only for emergencies)  
**Teaching Assistants:** TBD

**Lecture:** TR 8:30–9:50 PM, NTDP B185

**Prerequisite(s):** NOT be pre-engineering major and passed the following “C” or better:  
1) MEEN/ENGR 2332 Mechanics III, Stress Analysis (implies 2301 statics)  
2) MTSE 3000/ENGR 3450 (Materials)

**Catalog Course Description:** 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.


**ABET OUTCOMES:** This course addresses following ABET program outcomes:
1) Describe / develop theory encountered in discipline of material science & manufacturing processes.  
2) Develop ability to properly assess capabilities, limitations and potentials of manufacturing processes and their competitive aspects.  
3) Describe new developments in materials, production methods, and computer integration of both technological and managerial activities in manufacturing.  
4) Define, evaluate and select appropriate materials for design and manufacturing.  
5) Apply computer aided manufacturing techniques.  
6) Execute the practical aspects of manufacturing processes via laboratory experimentation.

**Laboratory Assignments:** Basic materials and manufacturing concepts, including such topics as Metrology, Sand casting, Metal Forming, Turning, Milling, Drilling, Cutting Tools, Grinding, Welding, Brazing, Soldering. Each student must register for one of the lab sections, offered 5 days/week. Students should attend lab section registered for. Attendance is mandatory. Lab are in F157, D170, or J105. Laboratory exercises reinforce lecture by experiment. Each lab section is monitored by teaching assistant(s). No work may be performed without staff supervision present. Labs are group learning efforts, but each student performs each lab and shows the TA the results for credit by completing the lab assignment handout. It is not group lab grading.
Calculators: The only calculators that are approved for this course are those permitted on the Fundamentals of Engineering (FE) exam toward Professional Engineer (PE) licensing:

1) Hewlett Packard—HP 33s and HP 35s models, but no others.
2) Casio—All fx-115 and fx-991 models. Any Casio calculator must contain fx-115 or fx-991 in its model name.
3) Texas Instruments: All TI-30X and TI-36X models. Any TI calculator must contain either TI-30X or TI-36X in its model name.

GRADES:

Standard grading scale: 90/80/70/60. Re-grade request must be made in class day is returned. No re-grade requests after class dismissed. Entire exam will be re-graded, which may result in lower score than originally assigned. Make-up NOT allowed only exception being University excused absences with documentation provided.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>15%</td>
</tr>
<tr>
<td>On-line Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Mid Term Exam 1 (18 October)</td>
<td>20%</td>
</tr>
<tr>
<td>Mid Term Exam 2 (6 December)</td>
<td>20%</td>
</tr>
<tr>
<td>Laboratory Assignments</td>
<td>30%</td>
</tr>
<tr>
<td>Safety Quiz (30 August)</td>
<td>P/F</td>
</tr>
</tbody>
</table>

Participation: lecture participation is key to success. Group lectures are a mix of slides, problem solving, and group discussion. Slides available on CANVAS ahead of time. Download / print slides before class. Review slides / read assigned textbook sections ahead of time. Participate through attendance, group problem solving, helping others, and answering questions. UNT iClicker tracks participation. Each student must have iClicker account properly linked to this course. Log into Blackboard at “learn.unt.edu” using browser version of CANVAS, not CANVAS app, and click “Participation” link in “Participation” content area. Either create or update your iClicker account to this course.

Homework: Assigned most every class through CANVAS. Due dates specified online – typically due at the beginning of the next lecture. If in-class handouts provided as homework, it is due beginning of next class. Come to class with any questions on homework.

Mid Term Exam 1: In class closed book assessment using multiple choice with scantron format, evaluating both qualitative and quantitative engineering applications.

Mid Term Exam 2: In class closed book assessment using multiple choice with scantron format, evaluating both qualitative and quantitative engineering applications.
COMMUNICATING WITH INSTRUCTOR

The primary method of communication during lecture time for design questions. Periodic instructor team conferences (meetings) are also scheduled in the MEE office. Personal questions or concerns should be addressed through office hours or individual appointments. Last resort is email or office phone. Response times to email and voice mail communication can be significant and should be avoided.

ACCESS TO INFORMATION – EAGLE CONNECT

Students’ access point for business and academic services at UNT is located at: my.unt.edu. All official communication will be delivered to your Eagle Connect account. For more information, please visit website that explains Eagle Connect and how to forward e-mail: eagleconnect.unt.edu/. Blackboard is used to post syllabus, homework, lecture slides, grades, etc. Instructor can only communicate through CANVAS to your UNT eagle account.

COURSE SAFETY PROCEDURES

Students enrolled in Senior Design are required to use proper safety procedures and guidelines as outlined in UNT Policy 06.038 Safety in Instructional Activities. While working in laboratory sessions, students are expected and required to identify and use proper safety guidelines in all activities requiring lifting, climbing, walking on slippery surfaces, using equipment and tools, handling chemical solutions and hot and cold products. Students should be aware that the UNT is not liable for injuries incurred while students are participating in class activities. All students are encouraged to secure adequate insurance coverage in the event of accidental injury. Students who do not have insurance coverage should consider Standard Syllabus Statements Related Policy 06.049 Course Syllabi Requirements obtaining Student Health Insurance. Brochures for student insurance are available in the UNT Student Health and Wellness Center. Students who are injured during class activities may seek medical attention at the Student Health and Wellness Center at rates that are reduced compared to other medical facilities. If students have an insurance plan other than Student Health Insurance at UNT, they should be sure that the plan covers treatment at this facility. If students choose not to go to the UNT Student Health and Wellness Center, they may be transported to an emergency room at a local hospital. Students are responsible for expenses incurred there.

ACCEPTABLE STUDENT BEHAVIOR

Student behavior that interferes with an instructor’s ability to conduct a class or other students’ opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. 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. The University’s expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at deanofstudents.unt.edu/conduct.
EMERGENCY NOTIFICATION & PROCEDURES

Students’ access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student’s Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail: eagleconnect.unt.edu/

ACADEMIC INTEGRITY STANDARDS AND SANCTIONS FOR VIOLATIONS

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. Academic dishonesty will not be tolerated and will result in score of zero on the assignment. The student will be reported to Office of Academic Integrity for appropriate disposition. 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 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 at disability.unt.edu

STUDENT PERCEPTIONS OF TEACHING EFFECTIVENESS (SPOT)

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (noreply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website at http://spot.unt.edu/ or email spot@unt.edu. SPOT evaluations performed in class during last couple weeks of semester.
RETENTION OF STUDENT RECORDS

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the CONVAS online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student’s records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University’s policy. See UNT Policy 10.10, Records Management and Retention for additional information.

SEXUAL ASSAULT PREVENTION

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence against Women Act) and UNT policies prohibit discrimination based on sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759

SYLLABUS CHANGES

The Instructor reserves the right change the syllabus. Any changes will be announced in class and posted to CANVAS with an accompanying email to student’s UNT email address.