SYLLABUS

MENG 4243 – 201: Senior Design II Required Course - Spring 2026

Faculty mentors: Dr. Salim Azzouz (MY 219G), Dr. Mahmoud Elsharafi (MY 219F), Dr. Yu Guo (MY 138), Dr. Pranaya Pokharel (MY 219C), and Dr. Sheldon Wang (MY 137).

E-mail: salim.azzouz@msutexas.edu, Tel.: (940) 397-4301

Office Hours: See schedules displayed D2L, other days and times by appointment.

Lecture Schedule & Location: Lecture W 1:00 - 1:50 PM, MY 136, Dr. Salim Azzouz

<u>Lab Section, Faculty mentors, Location & Schedule:</u>

| Session | Instructor | Room | Time | Session | Instructor | Room | Time |
|---------|------------|--------|------------------|---------|--------------|--------|------------------|
| 11A | S. Azzouz | MY 136 | W 2:00 - 5:50 PM | 11F | M. Elsharafi | MY 123 | W 2:00 - 5:50 PM |
| 11B | S. Wang | MY 131 | W 2:00 - 5:50 PM | 11G | P. Pokharel | MY 121 | W 2:00 - 5:50 PM |
| 11D | Y. Guo | MY 140 | W 2:00 - 5:50 PM | | | | |

CATALOG DESCRIPTION

A continuation of MENG 4143.

COURSE PRE-REQUISITES

Successful completion of MENG 4143.

OTHER PREREQUISITES

Basic computer skills, MATLAB, SolidWorks, SolidWorks Simulation, ANSYS, LabVIEW, Automation Studio, MS Word, MS Excel, hand calculator.

OPTIONAL TEXTBOOKS

Shigley's Mechanical Engineering Design, by Richard G. Budynas, and J. Keith Nisbett, 11th edition Engineering Design, by George E. Dieter, 6th edition

Materials Science and Engineering, an Introduction, by William D. Callister, 10th edition

REFERENCES

Additional material will be provided in the form of handouts in D2L.

TOPICS COVERED AND TIMETABLE

| When | Topics | When | Topics |
|----------|--|------------|-----------------------------------|
| week 1 | Engineering ethics | week 11 | Invited speaker |
| week 2-4 | Materials selection and manufacturing | week 12 | SD II project requirements |
| | processes | | |
| week 5-7 | Case study: Dimensioning of a gear reducer | week 13-14 | Case study: Bearings dimensioning |
| week 8 | Engineering statistics | week 15 | Leadership qualities |
| week 9 | Risk, reliability, and safety | week 16 | Oral exam and final report due |
| week 10 | Robust and quality design | week 17 | Written exam |

COURSE LEARNING OBJECTIVES AND RELATIONSHIP TO PROGRAM EDUCATIONAL OUTCOMES

| Outcome-Related Course Learning | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|---|---|---|---|---|---|---|
| Explain the method for materials selection | Χ | Χ | | Χ | | Χ | |
| Cite at least three techniques for materials processing | Х | Х | | | | | |
| Explain the steps pertaining to the investment casting process | Х | Х | | | | | |
| Cite at least three probability distributions | Х | Х | | | | | |
| Explain the meaning of reliability in engineering design | | Х | Х | Х | Х | | Х |
| Define quality in engineering design | | X | Х | X | Х | | |
| Explain how to determine a shaft FOS | Х | Х | | | | Х | Х |
| Explain how to dimension a Ball Bearing for a specific application | Х | Х | | | | Х | Х |
| Write formal and informal engineering reports | | | Х | | Х | | X |
| Work as part of a team | | | Х | | Х | | |

- 1: an ability to identify, formulate, and solve complex engineering problems by applying the principles of engineering, science, and mathematics
- 2: an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety and welfare, as well as global, cultural, social, environmental, and economic factors
- 3: an ability to communicate effectively with a range of audiences
- 4: an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- 5: an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- 6: an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions
- 7: an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

CONTRIBUTION OF COURSE TO PROFESSIONAL COMPONENT

This course contributes to the engineering science component of the mechanical engineering program.

COURSE ORGANIZATION AND STUDENT PERFORMANCES ASSESSMENT

GENERAL INFORMATION

This course provides students with the opportunity to work in an instructional environment that closely simulates an engineering practice environment. Students will collaborate in project teams generally composed of two to three members with diverse academic backgrounds, technical skills, and professional strengths. Team-based work is a core component of the course and is intended to foster collaboration, communication, leadership, and project management skills consistent with industry expectations.

Senior design project teams were required to elect a team leader and a treasurer during the fall semester. These leadership roles may be revised as necessary and must be reviewed and formally confirmed at the beginning of the current semester to ensure effective project organization and accountability.

The senior design projects, whether proposed by students, developed by faculty, or sponsored by industry partners and assigned during the first week of the fall semester will continue during the Spring 2026 semester. Each project team will be responsible for completing a set of additional tasks, as outlined below, that build upon the work completed in the previous term. Successful completion of these tasks is required to fulfill the course objectives and to deliver a complete and finalized senior design project by the end of the spring 2026 semester.

• Request for Funding and Parts Ordering Phase

During the month of February, each project team will be required to submit a final and comprehensive funding request for its senior design project. This submission must include a complete and detailed bill of materials, an exhaustive list of all components and parts to be ordered, and finalized two-dimensional (2D) and three-dimensional (3D) engineering drawings. All drawings must include finalized dimensions, tolerances, and any other information necessary for fabrication or procurement approval. In addition to the written submission, each project team is required to prepare and deliver a formal PowerPoint presentation to its assigned faculty mentor. The presentation should clearly describe the proposed design concept, the selected components and materials, the identified suppliers or vendors, and the projected total cost of the project. This presentation will serve as a design and budget review. Approval of the funding request and design package is required before parts may be ordered.

Fabrication and Assembly Phase

Each project team is allocated a maximum period of two months, specifically February and March, to complete the fabrication and assembly phase of their senior design project. During this phase, teams are expected to implement their finalized designs, fabricate the required components, and assemble the complete system or machine in accordance with the specifications outlined in their approved design package. By a date determined and communicated by the assigned faculty mentor, each team is required to deliver a formal oral presentation to the faculty mentor. During this presentation, teams must demonstrate the functionality and operational performance of the fabricated system or machine. Additionally, all relevant documentation, including assembly records, updated drawings, and any supporting materials, must be submitted as part of the presentation. The same procedure and timeline apply to projects that involve the development of a designed process rather than a physical system.

Testing and Results Processing Phase

Toward the end of the semester, each project team is required to submit a fully functional prototype or a fully implemented process representing the final design to their assigned faculty mentor. The submission must include all relevant documentation, such as updated drawings, process descriptions, and any supporting materials necessary to evaluate the design's

completeness and functionality. In addition, each team must deliver a partial oral presentation that demonstrates the testing procedures for their prototype or process. This presentation should include visual evidence, such as photographs or diagrams of the experimental setup, and clearly illustrate how the system or process is tested. Testing results must be presented, analyzed, and discussed, highlighting the performance, strengths, limitations, with respect to the design specifications. Successful completion of this milestone is required to demonstrate that the project meets the course learning objectives and adheres to professional engineering standards. Failure to submit a working prototype or adequately document and present the testing procedures may negatively affect the final project evaluation in accordance with the course grading policy.

FACULTY MENTOR RESPONSIBILITIES AND STUDENT EXPECTATIONS

Role of the Faculty Mentor

The faculty mentor assigned to each project team serves as a guide, advisor, and supervisor throughout the senior design project. The mentor is responsible for providing technical guidance, monitoring project progress, offering professional advice, and evaluating each student's effective contribution to the project. The faculty mentor is an integral part of the project and plays a key role in ensuring its successful completion.

Professional and Ethical Conduct

Students are expected to behave professionally and ethically throughout the duration of the project. Once class, laboratory, or project meetings have started, the private use of cell phones, laptops, or any other electronic devices is strictly prohibited unless explicitly authorized for project work. Students must maintain appropriate behavior, including:

- Respectful communication with peers, faculty mentors, and staff
- Avoiding foul language or derogatory remarks, both written and verbal
- Focusing on course-related tasks during scheduled sessions
- Refraining from distractions such as private conversations, gaming, watching videos, eating, drinking, or sleeping
- Attending all scheduled lectures, labs, and group or mentor meetings punctually

Failure to comply with these expectations, or engaging in behavior that negatively impacts the project or team, including slowing project progress, failing to submit weekly reports, logbooks, or homework on time, dismissing teammates' ideas unfairly, or failing to communicate effectively will result in significant penalties to the student's attitude and participation grade (20%). Repeated violations may lead to removal from the course and laboratory sessions for the remainder of the semester or simply failing the course with a grade of F.

Project Deliverables

Students should be aware that project deliverables may change during the semester depending on project progress, unforeseen technical difficulties, or challenges encountered during the design and fabrication process.

Participation in Presentations

Each student is required to actively participate in all internal, external, partial, and final senior design presentations. Non-participation may negatively affect the student's project evaluation and grade.

Reporting Design Changes

Any changes to the project design or drawings that are discussed with other faculty members, department machinist technicians, lab technicians, or external engineers must be immediately reported to the faculty mentor. The mentor will evaluate the proposed changes and determine whether they should be adopted.

Approval of Final Drawings

All final drawings of machine components must receive the faculty mentor's approval and signature, as well as the approval of the machinist technician or relevant external engineer or technician, before any components are ordered or manufactured.

Approval of Purchases

All purchases of machine components must be authorized with signatures from:

- The department chair
- The faculty mentor in charge of the project
- The machinist
- The designated purchaser

The purchase request must include the signatures of all approvers and reflect the current project budget. All purchases must remain within the approved project budget, which is \$2,000/group.

COURSE STRUCTURE AND WEEKLY SCHEDULE

This course consists of one mandatory one-hour lecture session and four mandatory laboratory design sessions per week.

Lecture Session

The one-hour lecture is primarily dedicated to presentations by the instructor. It may also include general discussions on project progress, weekly assignments, challenges encountered, and other project-related issues. Students are expected to actively participate in discussions and engage with the course material during these sessions.

Laboratory Sessions

The four-hour laboratory sessions provide dedicated time for student teams to work on their projects under the supervision of the faculty mentor. When necessary, guidance may also be provided by the department machinist technician or external company engineers or technicians. Students are required to attend the full laboratory session each Wednesday from 2:00 PM to 5:50 PM and must wait for their scheduled turn to meet with the faculty mentor. Students should note that laboratory time alone may not be sufficient to complete all required weekly tasks. Therefore, students are expected to manage their own study schedules, coordinate additional meetings, and allocate sufficient time outside of scheduled labs to complete all project-related work.

FINAL EXAMINATION

The final exam will be conducted in-person and face-to-face. It will be based on the materials covered during lecture sessions, including any assigned readings and instructional videos. During the exam, the use of cell phones or any electronic devices is strictly prohibited, except for a simple hand calculator. No additional reference documents are allowed, except for a single formula sheet.

The final exam accounts for **15% of the student's total course grade**. All students are expected to take the exam at the scheduled date and time. **No make-up exams will be provided**.

WEEKLY PROGRESS REPORTS AND LOGBOOKS

Students are required to submit weekly progress reports and maintain individual logbooks throughout the semester. These assignments are intended to document project activities, track progress, and provide evidence of individual contributions to the senior design project.

Logbook Requirements

Each student is responsible for maintaining a personal logbook that details all project-related activities performed or information received during the current week. Logbooks must follow the template provided on D2L. Logbooks serve as the basis for drafting the weekly progress report.

Weekly Progress Report Requirements

Each student must submit a personal weekly progress report as a single PDF file uploaded to the D2L Dropbox designated by the group mentor. The report must follow the D2L provided template and include a copy of the current week's logbook, technical documents, drawings, and simulation results, calculations related to the project, any relevant mechanical components designed in SolidWorks, electrical, pneumatic, or PLC schematics, technical specification sheets, or partial/finished technical reports

Submission Requirements

Weekly reports and logbooks must be uploaded as a single PDF file to the designated D2L Dropbox. Reports must be clearly organized, legible, and properly numbered according to the weekly report template. Each student is responsible for submitting their own individual weekly report. Weekly progress reports and logbooks constitute **15% of the total course grade** and are due at the beginning of each laboratory session. Weekly progress reports and logbooks will be reviewed and graded by the faculty mentor on a weekly basis. Late reports and logbooks will be accepted until the end of the semester; however, late submissions will receive a maximum grade of 50% of the full score (100%).

PEER EVALUATION

The instructor will conduct two peer evaluations during the semester: one at mid-semester and one at the end of the semester. These evaluations are intended to assess individual student performance, contribution and communication, and level of commitment to the senior design project within each group. Each student is required to complete a peer evaluation for all members of their project team. Evaluations must be completed honestly and professionally, based on observed contributions, teamwork, reliability, and engagement throughout the Spring semester. As part of the evaluation, students are required to identify both strengths (**pros**) and areas for improvement (**cons**) for each individual group member. This requirement is mandatory and essential for a fair and meaningful assessment. Peer evaluations account for **10% of the total course grade**. Completed evaluations must be submitted by the specified deadline to the designated D2L Dropbox, as requested by the course instructor. Failure to submit a peer evaluation by the deadline will result in a peer evaluation score of 0%, with no exceptions. All peer evaluation submissions will be treated as confidential and will be used by the instructor to assess individual contributions and to inform final grading decisions.

ATTITUDE, ABSENTEEISM, PROJECT CONTRIBUTION, SHARING KNOWLEDGE WITH TEAMMATES AND FACULTY MENTOR, ATTENDING GROUP MEETINGS, ETHICAL BEHAVIOR, AND DELIVRABLES

Professional Conduct, Participation, and Contribution Assessment

Student professional conduct, participation, and individual contribution will be continuously assessed throughout the Spring 2026 semester by the main senior design instructor in coordination with the group's assigned faculty mentor. This assessment reflects each student's level of engagement, professionalism, and effective contribution to the senior design project. The final grade for this component will be based on multiple criteria, including but not limited to:

- Classroom and laboratory behavior
- Attendance, punctuality, and number of absences
- Timely completion of weekly and project-critical tasks
- Participation in scheduled meetings with the project team and faculty mentor
- Willingness to collaborate, share knowledge, and support team members, the faculty mentor, and the machinist technician
- Use of respectful, professional, and appropriate language
- Adherence to ethical standards and professional engineering conduct
- Additional evaluation criteria, including those listed in the student expectation section, as deemed appropriate by the main instructor and faculty mentor

This component accounts for **20% of the total course grade**. Failure to meet the expectations outlined above may result in a significant reduction of this portion of the grade.

Project Documentation and File Submission

All engineering drawings created using SolidWorks or other design software must be saved using the *Pack and Go* feature, with clear, concise, and descriptive file names. These files must be stored on a memory key and submitted to the instructor at the end of the semester. Any additional supporting documents, including calculations, reports, simulations, and technical files must be properly organized in clearly labeled folders and included on the same memory key. Failure to submit complete and properly organized documentation may adversely affect the student's project attitude grading.

PUBLIC PRESENTATIONS, PUBLICATIONS, AND POSTER REQUIREMENTS

Students are required to participate in scholarly and professional dissemination activities as part of the senior design experience. Each student must actively participate in at least three (3) of the following university, or conference-sponsored activities over the two senior design semesters:

- University Undergraduate Research and Creative Activity Forum (Fall 2025 and/or Spring 2026)
- North Texas Area Students Conference (NTASC, Spring 2026)

In addition, students may be required to participate in other scholarly activities as deemed appropriate by the instructor, including but not limited to:

- Council on Undergraduate Research (CUR) Conference (Spring 2026)
- IdeaMSU (Spring 2026)
- Preparation and submission of conference or journal papers
- Other approved research, presentation, or publication venues

Students are expected to begin preparation for these activities during the Fall semester. This preparation may include, but is not limited to, the development of draft posters, oral presentations, and manuscript drafts. Timely progress toward these deliverables is essential to ensure successful participation in the required activities. Participation in public presentations, publications, and poster sessions constitutes 10% of the total final course grade. Failure to participate in the required number of activities or to meet preparation and presentation expectations may result in a significant reduction of this portion of the grade.

FINAL SENIOR DESIGN II PRESENTATION & ORAL EXAM

Each project team is required to deliver a collective oral presentation with a total duration of twenty (20) minutes. The presentation will consist of a ten (10) minute formal presentation, followed by ten (10) minutes of questions and discussion. Presentations will be delivered before a panel composed of department faculty responsible for overseeing the senior design laboratories. Following the group presentation, each team member will be required to respond individually to a series of questions prepared by the faculty panel. These questions will assess the student's understanding of the project objectives, design decisions, technical content, and overall contribution to the senior design project. The final oral presentation and oral examination are scheduled for **Wednesday**, **April 29**, **2026**, at **1:00 PM in MY 136**. Attendance and participation by all group members are mandatory. Failure to attend or participate without prior approval may result in a grade of zero for this component. All final oral presentations must be prepared using Microsoft PowerPoint and saved in their final form on the provided memory key. No alternative presentation formats will be accepted. The final oral presentation and oral examination together constitute **15% of the total final course grade** and will be evaluated based on content quality, technical accuracy, organization, clarity of delivery, and individual responses during the question-and-answer session.

SENIOR DESIGN II FINAL REPORT

Toward the end of the semester, **on April 22, 2026**, each project team is required to submit a **final major draft report** for faculty review. This draft report must be comprehensive and professionally prepared, and it must include, at a minimum, the following components:

- An introduction and project overview
- A detailed description of the final design or process
- A complete set of finalized two-dimensional (2D) and three-dimensional (3D) drawings for all parts and assemblies
- Theoretical background supporting the machine concept or process
- Detailed testing procedures
- Exhaustive experimental results and/or simulations evaluating multiple design solutions
- A funding request
- A complete bill of materials
- A detailed final cost analysis with vendor quotes
- A comprehensive Gantt chart outlining project scheduling
- A Comprehensive conclusion
- References, appendices, and acknowledgments

On the same date, each group must also submit a **draft version of the final PowerPoint presentation**. The faculty mentor will review the draft report and presentation materials and provide written feedback and recommendations. Students are responsible for addressing all comments and incorporating required revisions into the final submission.

The **final report must be submitted by May 6, 2026**. All final reports must be prepared in **Microsoft Word format** and saved in their final form on the **provided memory key**. Submission in any other format will not be accepted.

Prototype, Design, and Simulation Requirements

All project teams are required to demonstrate a fully functional working prototype or a fully implemented process at the end of the spring semester. In addition, during the spring semester, each group must produce and present computer-based designs, including finalized 2D and 3D drawings, as well as simulations addressing relevant aspects of the assigned project. These simulations may include, but are not limited to, stress analysis, fluid flow, hydraulic or pneumatic circuits, PLC logic, or other appropriate engineering analyses. While multiple software tools may be used to develop simulations, the preferred platforms are SolidWorks and ANSYS, as these software packages are widely available on computers within the McCoy School of Engineering. The final report must also address all requirements specified in the individualized project contract distributed by the group instructor at the beginning of the Fall semester.

Grading and Completion Policy

The final written report constitutes **15% of the total final course grade** and will be evaluated based on technical quality, completeness, accuracy, organization, and adherence to professional engineering standards. If the materials submitted at the end of the semester, including the final report, documentation, and prototype or process are deemed **partial, incomplete, or unfinished**, the student(s) will receive a grade of **Incomplete (I)**. In such cases, students will be required to complete the remaining project requirements within a timeframe determined by the instructor. If the instructor determines that the students have deliberately or consistently failed to maintain adequate progress on the project and have not met the established project objectives, a **failing grade of F** will be assigned.

COURSE GRADES

Course grades are based on the following items and summarized in the below grading form:

| Graded Items | Percentage Assigned to Items |
|--|------------------------------|
| Final Written Exam | 15% |
| Weekly Progress Report & Log books | 15% |
| Peer Evaluation | 10% |
| Attitude & Absenteeism & Project Contribution & Sharing Knowledge with Teammates and Faculty Mentor & Attending Group Meetings & Ethical Behavior & Deliverables | 20% |
| Public Presentations & Paper Publication & Poster | 10% |
| Final SD II Presentation & Oral Exam | 15% |
| Final SD II Project Report | 15% |
| Total maximum Grade | 100% |

A total of five bonus points will be awarded to students who complete at least three extracurricular activities approved by the instructor. Valid documentation verifying participation must be provided to receive credit.

The below scale is used to assign the final course grade X:

| Value Range of X (in %) | Letter Grade | | |
|-------------------------|--------------|--|--|
| 90 ≤ X ≤ 100 | А | | |
| 80 ≤ X < 90 | В | | |
| 70 ≤ X < 80 | С | | |
| 60 ≤ X < 70 | D | | |
| < 60 | F | | |

STUDENT/FACULTY CONTRACT (Done in the Fall 2025 semester)

A Student/Faculty contract will be read by the group instructor and signed by the all parties participating in the senior design laboratory. The student/faculty contract encloses the following items:

- 1. Contracting parties
- 2. Assigned faculty instructor
- 3. Goals and expected achievements of the project
- 4. Team member responsibilities
- 5. Meeting's policy
- 6. Deadline policy
- 7. Ethical rules within the group
- 8. Archiving and recording the project documentation
- 9. Decision making
- 10. Resolving disputes

MACHINE SHOP & TOOLS AVAILABILITY

Students are not allowed in the machine shop without the presence of the machinist. The machine shop is closed to the students during the weekend and evening time periods. If tools are needed during the weekend or evening periods, please ask our machinist-technician (Mr. Frank Bohuslav) or our labtechnician (Mr. Jay Barnett) to provide you with the needed tools.

PRINTED COPY OF THE DRAFT & FINAL REPORT

The draft copies of the final report should be printed on both sides of the printing paper. If a student needs a printed bonded copy of their senior project, they have to write a check of \$50 to our secretary (Mrs. Christina Miller).

MIDTERM PROGRESS REPORT

In order to help students, keep track of their progress toward course objectives, the instructor for this class will provide a Midterm Progress Report through each student's WebWorld account. At-risk students will be reported and will receive a midterm overall grade. Midterm grades will not be reported on the students' transcript; nor will they be calculated in the cumulative GPA. They simply give students an idea of where they stand at the midpoint of the semester. Students earning below a C at the midway point should have a meeting with the professor and seek out tutoring.

CONFLICT RESOLUTION

If a misunderstanding or a conflict arises between the student and the instructor. Please follow this conflict resolution procedure:

- 1) The student should contact the instructor face to face or via e-mail if there is an issue with the course or the instructor. The faculty and the student will discuss this face to face or via email. Hopefully a resolution is reached on the issue.
- 2) The student should notify the faculty via email again if the issue still did not get resolved after the first encounter or communication.
- 3) The student can then contact the Chair of the McCoy School of Engineering, Dr. Desai, face to face or via email, (<a href="railto:ra
- 4) The student should notify the Chair via email if the issue still did not get resolved.
- 5) The Chair will contact the Dean and try to resolve the conflict. In case the conflict deals with the student grade, she will forward the case to the Grade Appeals Committee if necessary.

UNDERGRADUATE RESEARCH INFORMATION

• Research and Creative Activity Opportunities at MSU Texas

Enhancing Undergraduate Research Endeavors and Creative Activities (EURECA) is a program that provides opportunities for undergraduates to engage in high-quality research and creative activities with faculty. EURECA provides incentives and funding through a system that supports faculty and students in a cooperative research process. For more information contact the Office of Undergraduate Research, (940) 397-6275 or by sending a message to eureca@msutexas.edu or better yet, stop by the UGR office located in the atrium of the Clark Student Center, room 161. Information and resources are available at www.msutexas.edu/eureca.

• Council on Undergraduate Research (CUR)

To support undergraduate research and creative activities, Midwestern State University holds an enhanced institutional membership with the Council on Undergraduate Research (CUR). This institutional membership includes unlimited memberships for any interested faculty, staff, and students. Students may find information on benefits and resources at: https://www.cur.org/engage/undergraduate/.

The CUR Undergraduate Resources Webpage contains:

Research Opportunities
Presentation Opportunities
Undergraduate Research Journals
CUR-Sponsored Student Events
and more!

UGROW

Like EURECA, the Undergraduate Research Opportunities and Summer Workshop, UGROW provides opportunities for students to conduct research with faculty. However, the research occurs in the summer. For five weeks, UGROW students experience the authenticity of scientific research in faculty's laboratories, in a highly interdisciplinary environment. Students work on projects of their choice and present their findings at the end of program and the MSU Undergraduate Research Forum. Faculty members publicize research projects in the spring. The application deadline for

UGROW 2026 has not been established yet; however, it will be announced in the upcoming spring semester. Information and resources are available at www.msutexas.edu/ugrow.

CAMPUS CARRY STATEMENT

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's webpage at http://msutexas.edu/campus-carry/rules-policies.

GENERAL EDUCATION STATEMENT

Students in this course must demonstrate their competency in oral and written communication through written homework assignments, weekly progress reports, and exams. They must also demonstrate their ability to use the English language. The senior design II course is designed as an **INTENSIVE WRITING ENGLISH COURSE**.

ACADEMIC INTEGRITY POLICY AND ETHICS

Scholastic dishonesty will not be tolerated and will be prosecuted to the fullest extent. You are expected to have read and understood the current issue of the student handbook:

https://msutexas.edu/student-life/ assets/files/handbook.pdf.

regarding student responsibilities & rights, and the intellectual property policy information about procedures and what constitutes acceptable on-campus behavior. Any form of plagiarism will not be accepted, and will be heavily reprimanded. For more information, please visit the MCOSME student resources website: https://msutexas.edu/academics/scienceandmath/student resources.php.

Since writing, analytical, and critical thinking skills are part of the learning outcomes of this course, all writing assignments should be prepared by the student. Developing strong competencies in this area will prepare you for a competitive workplace. Therefore, Al-generated submissions are not permitted and will be treated as plagiarism.

DISABILITY SUPPORT SERVICES

Students registered with Disability Support Services should have a letter verifying their disability and the appropriate accommodations.

INCLEMENT WEATHER

Key decision-makers will monitor weather projections and communicate with local news agencies and WFISD leadership to make a delay or cancellation decision. The timeline is as follows:

| Event | Time | Day | Decision |
|-----------------------------------|---------|-----------------------|-----------------------|
| Inclement weather occurs during | 3:30 PM | Day of inclement | Cancel classes/events |
| regular work/class day | | weather | after 5 PM |
| Overnight inclement weather | 8 PM | Day before inclement | Close campus or delay |
| expected | | weather | opening |
| Delay called the day before but | 6:15 AM | Day of delay | Close campus |
| change to closure due to the | | | |
| extent of weather impact | | | |
| No cancellation or delay decision | 5:30 AM | Day after no decision | Close campus or delay |
| made the night before | | made the night before | opening |

Delay/closure times are as follows:

- MWF class day: Delay to either 10 AM or 11 AM; all classes prior to opening do not meet.
- TR class day: Delay to 11 AM; all classes prior to opening do not meet
- Saturday or Sunday: Delay to either 10 AM or 11 AM; classes may start after campus is open.

Notification processes: Notification occurs through official campus channels and in communication with the local news networks. MSU channels include MSU Alert, MSU Safety app, Postmaster, and website headers. MSU Police and the Office of Marketing and Public Information.

During the campus closure, the instructor will upload the notes related to the missed classes on D2L. He will ask the students to thoroughly study them. When class resume, the instructor will go briefly over the notes and will respond to any issues raised by the students. If the closure lasts more than a week, the instructor will start using the Zoom software to teach remotely the current courses.

DISCLAIMER STATEMENT

Information contained in this syllabus, other than grading, late assignments, makeup work, and attendance policies, <u>may be subject to change</u> with advance notice, as deemed appropriate by the instructor.

Prepared by: Dr. Salim Azzouz, Dr. Sheldon Wang, Dr. Yu Guo, Dr. Mahmoud Elsharafi, and Dr. Pranaya Pokharel. 12/18/2025