College of Natural Science
MICHIGAN STATE UNIVERSITY

Department of Chemistry

FALL 2024 SYLLABUS

General Chemistry Laboratory I
CEM 161
1 Credit Hour

Course Modality

CEM 161 is an in-person course. Attendance and participation in all course meetings for the section in which you are enrolled is required.

Lab Sections

Lab sections meet once a week for 2 hours, 50 minutes. Look at your course schedule for the day/time/location of the section you are enrolled in to attend.

Labs will not meet in -person on these weeks:

- Monday, August 26th – Friday, August 30th
- Monday, September 2nd – Friday, September 6th
- Monday, October 21st – Friday, October 25th
- Monday, November 25th – Friday, November 29th

Any asynchronous assignments on the weeks you do not meet in-person are provided on your D2L site.

TABLE OF CONTENTS

Instructors

The Laboratory Coordinator oversees the CEM 161 laboratory courses. While you will most likely never see a Lab Coordinator in the lab throughout the semester, they collaborate with the general chemistry teaching team. Every time the lab session meets, you will work with two laboratory instructors. The laboratory instructors are your primary resource for any questions you have.

If you have a question about the course, reach out to your laboratory instructor(s) first.

Instructor Information

Coordinator (pronouns)	Laboratory Instructors
Names: Dr. Brittany Busby (she/her/hers) Dr. Sherif Ramadan (he/him/his)	Names: See Content on D2L for names.
Office: 2007 STEM Building	Office: Not applicable
Office Hours: Schedule online! You must log in with your MSU email account to access the bookings form. If you would like to meet with a Lab Coordinator as a group or team, please have one person book the meeting slot and denote in the booking form the full name and MSU email address for each person that will attend the meeting. Please, make sure to select your course's primary Laboratory Coordinator.	Help room hours: Laboratory Instructors answer questions in the STEM Chemistry Help Room. Check the Help Room Schedule for days, times and locations.
Phone: Not applicable. Contact your instructor by email.	Phone: Not applicable. Contact your laboratory instructor(s) by email.
E-mail: CEM.GenCEMLab@msu.edu When sending emails, please put "CEM 161" in the subject line.	E-mail: Laboratory instructor email addresses are listed under Content on D2L.

Coordinator Introduction

Welcome to CEM 161! My name is Dr. Brittany Busby. I look forward to working with you this semester. I have taught General Chemistry labs at MSU since 2021. I completed my doctorate and post doctorate in Chemistry Education and value creating environments to explore and construct your own concepts. The general chemistry labs are designed so you can work collaboratively in a team to design and execute your own experiments based on real-world scenarios. There is never only one way to investigate scenarios, so we do not expect any specific procedures or results. These labs are meant to provide an opportunity to do science, explore, and have fun!

My name is Dr. Sherif Ramadan, and I am excited to work with you this semester. With extensive experience in synthetic organic chemistry, including my current roles as a Research Assistant Professor at Michigan State University and an Associate Professor at Benha University (Egypt), I am passionate about fostering a deep understanding of chemistry through hands-on exploration and discovery. In this course, you will have the opportunity to collaborate with your peers, design and execute experiments, and explore the fascinating world of chemistry. My approach to teaching is rooted in encouraging creativity and critical thinking—there's rarely just one way to approach a problem in science. The experiments you'll conduct are designed to reflect real-world challenges, allowing you to develop your own methods and solutions. I look forward to guiding you through this

journey of scientific discovery. Together, we will explore the complexities of chemistry in a way that is engaging, collaborative, and, most importantly, enjoyable!

Course Resources

Office Hours and the STEM Chemistry Help Room (Where to Get Help)

Successful students ask for help as soon as they have a question they cannot answer! Write down your question (and attempted answer) on paper and bring it to the chemistry help room or your instructor's office hours. You can attend ANY of your instructor's office or help room hours without making an appointment. We expect to see each one of you in the help room and office hours this semester! The chemistry help room schedule can always be found on D2L under Content.

Technical Assistance

If you need technical assistance at any time during the course or to report a problem, you can:

- Get help from MSU Tech Support by calling (517)432-6200 or (844)678-6200, emailing ithelp@msu.edu, or visiting the MSU Help site
- Visit the Desire2Learn Help Site or get browser/mobile support for D2L
- For help with CATME, contact support@catme.org

Course Information

Course Overview

This first-semester cooperative, project-based general chemistry laboratory course provides opportunities for students to gain exposure to basic measurement and observation techniques used in chemistry laboratories, engage in scientific practices, learn about important laboratory safety practices, and work as part of a team to accomplish a common goal.

Students will work in teams to plan their own experimental investigations to answer scientific questions, solve problems, and/or design solutions associated with project scenarios. Students will analyze and interpret data provided for their planned experiments and then engage in argumentation using experimental evidence to support their claims. Finally, students will communicate their results in a variety of common scientific report formats (narrative, poster, and oral) and scientific presentations.

Course Materials

Required

You must have the following items available for **every laboratory session, including the first**:

- **Splash-proof safety GOGGLES with indirect venting:** You must wear your goggles while you or anyone else is working in the laboratory space. Safety *glasses* are not permitted. Appropriate goggles are sold by the MSU bookstore, online retailers, and hardware stores. The "UVEX" or "UVEX - OTG" (for those who wear glasses) Lab Safety Goggles are great choices
- **CEM 161 Course Pack:** Pick up before attending your first scheduled in-person lab session.
  - Copies cannot be shared between students.
  - The course pack is only available at the Spartan Bookstore located in the MSU International Center. Visit the Spartan Bookstore for purchase.
  - If you have any trouble obtaining your course pack, please call the bookstore at 517-355-3450 and ask for the textbook department.
  - Even if you experience issues obtaining a course pack, please continue to attend all laboratory sessions.

- **Dress appropriately:** All skin below your neck must be covered including while sitting or stretching (short sleeves are allowed). Protective, closed-toe, closed-heel shoes are required (slippers, crocs, and moccasins are not allowed). *You cannot be in the lab without proper clothing*.
- **Laptop or tablet:** You will need to regularly access your MSU authenticated email, D2L, Microsoft OneDrive, and CATME accounts inside and outside of lab.
    - Your device will need at least **one USB port** OR **one USB-C port** available to connect with laboratory equipment, and **one HDMI port** OR **one USB-C port** to connect with presentation equipment.

Recommended

- **Scientific Calculator:** You may rent a calculator for the semester through Associated Students of MSU.

Laboratory Expectations

Working toward a common goal is a central feature of this course. This course consists of four cooperative projects that you will plan and analyze as a team with two or three other students. There are a few things you can do to ensure a positive learning environment and productive working relationships with your team.

- Arrive to your lab session on time and prepared to work. The rest of your team is counting on you to contribute to all assigned tasks.
- Eliminate distractions. Silence your cell phone and put it away during your lab session. Research has shown that "multitasking" diminishes effectiveness on all tasks.
- Be courteous and respectful of the opinions and contributions of others.
- Actively participate in discussions with your group. Your group wants to hear what you have to say.

Instructional Objectives

Course Learning Outcomes

Students will gain experience with the following activities that are central to the work of science, providing a foundation for future experimental work and scientific investigation:

1. Collaborating with other students to reach a common goal.
2. Designing experimental procedures to investigate scientific questions, solve problems, and/or design solutions.
3. Developing an awareness of safe laboratory practices and learning how to identify hazards and minimize risk.
4. Analyzing experimental data and observations.
5. Constructing explanations and/or arguments supported by data.
6. Communicating findings to peers and the general scientific community through narrative, oral, and poster reports and presentations.

Alignment with MSU's Undergraduate Learning Goals

This course will support students' development in four of the five areas that comprise MSU's Undergraduate Learning Goals:

- Analytical Thinking
- Effective Citizenship
- Effective Communication
- Integrated Reasoning

Course Outline

There are four (4) laboratory projects throughout the semester. Details on each project are available in the course pack and D2L.

1. **Traveling Across Climates** (TAC): Investigating relationship between gas volume & temperature.
2. **Sorting Commercial Plastics** (SCP): Sorting commercial plastics using density and IR spectroscopy.
3. **Food Dye Spectroscopy** (FDS): Replicating name–brand beverage color profile using UV–Vis spectroscopy.
4. **Unknown Ionic Compounds** (UIC): Identifying an unknown ionic compound using patterns in qualitative analysis techniques.

A typical lab project consists of:

Project Week 1:	Teams complete a Planning Document, which includes the **Preliminary Investigation and Experimental Design.** The Preliminary Investigation explores concepts, techniques, and materials related to each project. A series of guiding questions is then addressed to complete the Experimental Design.
Project Week 2:	Execute your team's experimental plans from Project Week 1. Document your contributions, analysis, and interpretations in your individual **Notebook**.
Project Week 3:	Communicate your findings from Project Week 1 and 2 to a general audience. Communication will be either a narrative report, poster presentation, or oral presentation.

Assessments

Throughout the semester you will complete a series of individual and team assessments. Listed below is a brief overview of each type of assessment. **Further details and instructions for each of these assessment types can be found in Content under Course Resources on D2L**.

- **Planning:** Four (4) planning documents will be completed as a team in the lab session proceeding experimentation.
- **Notebooks:** Notebooks are each completed individually. Four (4) experimental notebooks will be completed to document your laboratory notes, observations, measurements, and conclusions. Two (2) presentation notebooks will be completed to document your self- and peer-evaluations for the two presentation sessions.
- **Narrative Report:** One (1) narrative report will be completed individually.
- **Presentation Design**: Two (2) presentation designs will be completed as a team to prepare for the poster and oral report presentations.
- **Presentation:** Two (2) presentation sessions will be held in which the team poster and oral reports are presented. For each presentation session, a presentation score is earned individually.
- **CATME Surveys:** One (1) Team-Maker survey is used to arrange lab teams. Four (4) project-specific peer- and self-evaluations are used to gather feedback on teamwork following each project. All CATME surveys are completed using the external, online CATME Peer Evaluation tool. Scores are earned individually.
- **Contribution:** Earned individually for attendance, participation, conduct, and compliance with safety standards during each of the eleven (11) laboratory sessions. Contribution scores are at the discretion of the Laboratory Instructors.

Grading

You will be able to view your ongoing grades by selecting "Grades" in the Assessments tab in D2L. **NOTE:** Throughout the semester, your assessments will be graded by your section's Laboratory Instructors. If you have any questions or concerns about your grade, attend their office hours. Please do not discuss grades during the lab sessions.

Grade Categories & Weights

Your final course grade will be based on a weighted average across the following grade categories.

Orientation	Project 1	Project 2	Project 3	Project 4
10%	15%	25%	25%	25%

Grading Scale

Final grades submitted to the Registrar's Office (final RO grade) will be based on the following scale.

Earned Percentage	100–90%	89–85%	84–80%	79–75%	74–70%	69–65%	64–60%	<60%
RO Grade	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.0

Any grade adjustments will take place at the end of the semester. **NOTE:** This adjustment process is NOT "curving"; grades will not be adjusted down or scaled to fit a "curve".

Late Assignments

Experimental designs, notebooks, report designs, and reports may be submitted **up to five (5) days from the original deadline**. Late submissions for these assessments will be subjected to a **10% per day (maximum of 50%) penalty from the earned score**.

No work will be graded if submitted after five (5) days from the original deadline or following the last day of labs being in session; whichever is sooner. If you are a student with an Accommodation Letter, please carefully review the Accommodations for Students with Disabilities section.

Team versus Individual Grades

Each project will consist of individual and team assignments. Approximately 65% of your grade is determined by individual submissions, and about 35% is determined by team submissions; therefore, you have a majority influence over the outcome of your overall course grade. Team assignments must be completed on time regardless of team dynamics or absent members.

Apart from extenuating circumstances, every team member receives the same grade on team assignments. If you are concerned about team member participation on team assignments, please contact your Lab Instructors and the Lab Coordinators. CATME peer– and self–evaluations will be used to gauge team member engagement. The Lab Coordinators reserve the right to alter a student's grade on team assessments should it be determined that the student has not adequately contributed.

Grade Disputes

If you are concerned with a grade that you have earned throughout the semester, please visit any Laboratory Instructor during their office hours in the **STEM Chemistry Help Room**. In help room hours, a Laboratory Instructor can sit down with you, one-on-one, and help you understand your grade.

Please **DO NOT** ask any Laboratory Instructor to discuss grades during laboratory sessions. We understand that this is a convenient time for you to talk with a familiar Laboratory Instructor; however, the laboratory sessions

do not offer the privacy or time necessary to discuss grade concerns. **Help room hours are the most appropriate place to discuss grade concerns**.

Course Schedule

The calendar below details what you need to review to prepare for each session, the activities to be completed during each session, and the assignments due before and after each session. **This schedule is subject to change at the Laboratory Coordinators' discretion to meet desired course outcomes.**

Be especially mindful of the deadlines for completing assignments; **Laboratory Instructors are NOT responsible for reminding you when assignments are due**. Generally, timeframes for due assignments are as listed below. You can find specific due dates and times for your course section programed into the Calendar tool or listed by the assignments of the D2L course site.

- **Planning, Notebooks, and Presentation Designs:** A preliminary check by your lab instructor is due by the end of the lab period they are created in; final draft due by 11:59 pm the day AFTER your lab session.
- **Narrative Report:** 11:59 pm the day BEFORE your next lab session.
- **Presentations:** Submit your team presentation slide(s) by 11:59pm the day BEFORE your presentation session. You will present the slide(s) with your team during the lab session.
- **CATME Surveys:** Vary by survey type; the Team survey must be completed prior to the start of in-person lab session. Project evaluation surveys are open for two (2) days at the end of each project.

Lab Preparation (Prior to coming to Lab)	Lab Activities (During the Lab)	Assignments Due 11:59pm Day After Lab Session
(Monday) August 26th – (Friday) September 6th		
NO LAB SESSIONS SCHEDULED! The activities listed below should be completed in an asynchronous (on your own) format before Session 1 meets.*** ○ **Obtain Required Course Materials** (listed in syllabus) ○ **Proof of Safety Knowledge** (In "Quizzes" under Assessments tab in D2L; *minimum score required to participate in future activities*) ○ **Sign MANDATORY CEM Safety Sheet** (In "Quizzes" under Assessments tab in D2L; *completion required prior to first lab*) ○ **CATME:** Team-Maker Survey (Link provided in an email from CATME to your MSU email address; *must be completed by 11:59PM on Tuesday, September 3rd*)		
Session 1: (Monday) September 9th – (Friday) September 13th		
○ Complete the 4 tasks above***	○ **Course Orientation**	○ **Notebook:** Course Orientation
Session 2: (Monday) September 16th – (Friday) September 20th		
○ **Review:** Scientific Preparation & Design guide ○ **Review:** **Project 1** background	○ **Plan:** Team Contract ○ **Plan:** **Project 1**	○ **Team Contract** ○ **Planning:** **Project 1**
Session 3: (Monday) September 23rd – (Friday) September 27th		
○ **Review:** Scientific Notebook guide	○ **Experiment:** **Project 1**	○ **Notebook:** **Project 1** ○ **CATME:** **Project 1** Peer/Self Evaluation
Session 4: (Monday) September 30th – (Friday) October 4th		
○ **Review:** **Project 2** project background	○ **Plan:** **Project 2**	○ **Planning:** **Project 2**
Session 5: (Monday) October 7th – (Friday) October 11th		
○ **Review:** Scientific Reporting guide	○ **Experiment:** **Project 2**	○ **Notebook:** **Project 2** ○ **CATME:** **Project 2** Peer/Self Evaluation

Lab Preparation (Prior to coming to Lab)	Lab Activities (During the Lab)	Assignments Due 11:59pm Day After Lab Session
Session 6: (Monday) October 14th – (Friday) October 18th		
○ **Review:** **Project 3** project background ○ **Report:** **Project 2** Narrative Report **(Due the day BEFORE your lab session by 11:59pm)**	○ **Plan:** **Project 3**	○ **Planning:** **Project 3**
(Monday) October 21st – (Friday) October 25th		
NO LAB MEETINGS SCHEDULED		
Session 7: (Monday) October 28th – (Friday) November 1st		
○ **Review:** Scientific Reporting & Presentation guides	○ **Experiment:** **Project 3** ○ **Design:** **Project 3** Oral Presentation	○ **Notebook:** **Project 3** ○ **Presentation Design:** **Project 3**
Session 8: (Monday) November 4th – (Friday) November 8th		
○ **Project 3** Oral Presentation file **(Due the day BEFORE your lab session by 11:59pm)**	○ **Present:** **Project 3** Oral Presentation	○ **Notebook:** Oral Presentations ○ **CATME:** **Project 3** Peer/Self Evaluation
Session 9: (Monday) November 11th – (Friday) November 15th		
○ **Review:** **Project 4** project background	○ **Plan:** **Project 4**	○ **Planning:** **Project 4**
Session 10: (Monday) November 18th – (Friday) November 22nd		
○ **Review:** Scientific Reporting & Presentation guides	○ **Experiment:** **Project 4** ○ **Design:** **Project 4** Poster Presentation	○ **Notebook:** **Project 4** ○ **Presentation Design:** **Project 4**

Lab Preparation (Prior to coming to Lab)	Lab Activities (During the Lab)	Assignments Due 11:59pm Day After Lab Session
(Monday) November 25th – (Friday) November 29th		
NO LAB MEETINGS SCHEDULED		
Session 11: (Monday) December 2nd – (Friday) December 6th		
○ **Project 4** Poster Presentation file **(Due the day BEFORE your lab session by 11:59pm)**	○ **Present: Project 4** Poster Presentation	○ **Notebook:** Poster Presentations ○ **CATME: Project 4** Peer/Self Evaluation

Missed Class & Missed Assignment Policies

We expect full participation of all students in every lab session of the semester. **Attendance at your scheduled lab sessions, for the entire session time, is required.** If you cannot stay for the entire lab session, you may use one of your allowed make-ups for the semester.

- **Makeup labs will be available on D2L for each project.** The makeup assignment is meant to cover either one planning OR one experimental session per project. If you must miss both sessions for the same project, one will count as an absence with no credit earned. You will be allowed to utilize Makeup labs for two (2) absences in different projects.
- To complete a Makeup assignment, you must email your Lab Coordinator and Instructors within two (2) days of your absence. You **DO NOT** need to provide proof for your absence. Please maintain your privacy and **DO NOT** send personal documentation to any Laboratory Instructor or the Laboratory Coordinators. The Lab Coordinator will then provide access to the Makeup drop box in D2L.
- **Missing more than 60 minutes** of any lab session will be considered an absence. Late arrivals or early departures will result in a deduction of Contribution points for the lab session.
- An absence, for any reason, will result in a score of zero (0) for any applicable Contribution, Planning, or Notebook scores associated with the missed lab session.
    - Makeup assignments apply to emergency absences, grief absences, religious holidays, and any other unavoidable absences. Emergencies and illnesses come up unexpectedly; therefore, you'll want to keep your options available for such situations and only miss lab if you absolutely must.
    - You will have up to five (5) days from the original due date to turn in your makeup assignment without late points applying.
- **Four (4) or more absences**, for any reason, will automatically result in a **final course grade of zero (0)** for the semester. Missing four out of eleven lab sessions is more than one-third of the semester and greatly interferes with course integrity. Any day that you are not at your scheduled lab session, even if you complete the Makeup assignment, will count as an absence.

Planned Absences

If you have a planned absence that interferes with your attendance to any lab session, you must contact the Laboratory Coordinators before the end of the first week of lab to move to a lab section that minimizes scheduling conflicts, space permitting. The absence policies outlined above will be upheld for planned and emergency absences; therefore, it is critical for you to be enrolled into a lab section that minimizes your planned absences. No section changes can occur after the open-add period ends.

Planned absences include personal (military duty, religious holiday, etc.) or university-related trip (club, organization, athletic team, etc.) that require you to be absent during one or more lab sessions.

For planned absences, please inform your team members, Laboratory Instructors, and the Laboratory Coordinators as far in advance as possible. This will allow your team to plan for the lab session knowing that they will be short one person. You and your team can also decide on your responsibilities for contributing to team assignments outside of the regularly scheduled lab session.

If you have more than two planned absences for this semester, please consider enrolling in this course in a future semester. Attendance at the scheduled lab sessions is important; your team members will depend on your contribution for every lab session.

Grief Absences

If you experience the death of a family member or emotional distress from a similar tragedy, please complete the Grief Absence Request form available on the right-hand side of the Registrar's Student Resources website and contact your instructor if you wish to request to make-up missed work. Also consider contacting your academic adviser and consulting MSU's mental health resources listed below.

It is the student's responsibility to **promptly** contact the Laboratory Coordinator directly to work out a plan for completing missed work. Grief absences will be handled on a case-by-case basis, and a determination will be made about what work can reasonably be made up. If you are absent from a laboratory session due to a grief absence, it is your responsibility to coordinate with your team to contribute to team assignments to receive credit.

Student Expectations

The All-University Policy on Integrity Of Scholarship and Grades

All participants in this class are held to the standard set by MSU's Policy on Integrity of Scholarship and Grades. The policy can be read in full at the MSU Ombudsperson's website. Cheating and plagiarism will not be tolerated in this course. Refer to the Student Handbook for guidelines on expected student behavior.

Distribution & Commercialization of Course Materials[1]

As members of a learning community, students are expected to respect the intellectual property of course instructors. All course materials provided to students are the copyrighted property of the course instructor. MSU prohibits students from distributing online or commercializing University-provided class materials without the written consent of the instructor. The instructor and Michigan State University retain copyright to all materials provided in this course unless otherwise indicated. Any student violating the conditions described above may face academic disciplinary sanctions.

Accommodations for Students with Disabilities[2]

Michigan State University is committed to providing equal opportunity for participation in all programs, services, and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities by phone at 517-884-RCPD or through the web. Once eligibility for an accommodation has been determined, a verified individual services accommodation letter will be issued. Please **present your Accommodation Letter to the Laboratory Coordinators at the start of the semester or at least two weeks prior to the accommodation request**. Requests received without prior receipt of an accommodation letter will be honored whenever possible. The Laboratory Coordinators may request that you schedule an appointment to discuss meeting your accommodations. Web-accessible course materials can be provided upon request.

Student Perceptions of Learning Survey (SPLS)

The University will administer an SPLS evaluation for your laboratory instructors at the end of the semester. Students will be notified by email when these evaluations are made available.

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[1] Adapted from suggested syllabus language in the final report of the Ad Hoc Committee on Social Media, Pedagogy, Academic Rights and Responsibilities, January 10, 2014.

[2] Adapted from "Model Statements for Disability Inclusion", Resource Center for Persons with Disabilities.

Academic Integrity

By enrolling as a student at Michigan State University, you have joined an academic community built on trust and mutual respect. As stated in the *Spartan Life Student Handbook*, "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards."[3] As such, each time that you submit work for a grade you are attesting that it is your work and that it has been prepared following the guidelines provided for the assignment. Further, if you observe an act of academic dishonesty, you are obligated to report it to the instructor. In any work that involves collaboration, you are expected to make a good-faith effort to contribute.

You are expected to develop original work for this course; therefore, you may not submit work completed for another course to satisfy the requirements for this course. You are not authorized to use the www.allmsu.com website (or any other similar website) to complete any work in this course. The Department of Chemistry adheres to MSU policies on the *Integrity of Scholarship and Grades*, Protection of Scholarship and Grades, and *Ordinance on Examinations*. In this course, any student who cheats by copying the work of others, or using unauthorized materials, will receive a penalty grade of 0. Contact your instructor if you are unsure about the appropriateness of your course work. An Academic Dishonesty Report will be filed as required by MSU policy any time that a penalty grade is given.

In Spring 2016, the Associated Students of MSU (ASMSU) adopted The Spartan Code of Honor Academic Pledge:

> *As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor in ownership is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do.*

Use of Artificial Intelligence (AI)

All work submitted for CEM 161 assignments is expected to be the original work of the student submitting the assignment. The use of any form of artificial intelligence to generate assignment responses will not benefit your learning.

Professionalism Policy

MSU welcomes a full spectrum of experiences, viewpoints, and intellectual approaches because they enrich the conversation, even as they challenge us to think differently and grow. However, we believe that expressions and actions that demean individuals or groups compromise the environment for intellectual growth and undermine the social fabric on which the community is based.

The classroom should be a safe and comfortable place for all students to make mistakes and learn. All students must act in a tolerant and civil manner. Any acts of discrimination, bullying, or cyberbullying will not be tolerated and will be reported for disciplinary action.

Plagiarism

Plagiarism includes direct copying of someone else's work, published or unpublished, and representing it as your own; sentence-by-sentence paraphrasing of someone else's—or your team's—work; and/or changing words here and there in material from another source. If you use a reference or another source,

[3] "Article 2: Academic Rights and Responsibilities, III.B.2," *Spartan Life Student Handbook*.

you should appropriately cite it and convey the ideas that you are using from the reference in your own words. **In short, make sure that all ideas in your work for this course are expressed in your own words**.

Figures (diagrams, graphs, etc.), tables, and captions submitted for an individual grade must be your own work. **Whether accidental, blatant, or self-plagiarism, the same standards and penalties apply**. Anything submitted for an individual grade, even though such assignments will be based on your team's experimental work, must be your own work and not copied from your fellow team members, other sources, or generated using Artificial Intelligence (AI). Do not share your work on assignments with other students or ask other students to see their work on assignments because both constitute academic misconduct.

Additional information about plagiarism and MSU's policies on plagiarism can be found on the website of the Office of the Ombudsman. **If you are unsure that you are or are not plagiarizing, please reach out to the Laboratory Coordinator for guidance**.

Turnitin[4]

Consistent with MSU's efforts to enhance student learning, foster honesty, and maintain integrity in our academic processes, we have chosen to use a tool called Turnitin to compare your papers with multiple sources. The tool will compare each report you and your team submit to an extensive database of prior publications and papers, providing links to possible matches and a "similarity score." The tool does not determine whether plagiarism has occurred. Instead, we make a complete assessment and judge the originality of submissions. In choosing to use Turnitin in this class, we have agreed to follow four guidelines:

1. We will use Turnitin as part of a balanced approach to encourage academic integrity and foster student success.
2. We will openly disclose use of Turnitin in the syllabus and at the time assignments are announced.
3. We will make the final determination of originality and integrity.
4. To ensure privacy, we will ask students to remove identification (e.g., names and student numbers) from submissions.

You should submit papers to Turnitin Drop boxes **without identifying information included in the report (e.g., name or student number)**. D2L will retain the submission author. If you submit your paper with your identifying information on it, your identifying information will be retained and viewable within the global Turnitin repository. If you have any questions about the use of Turnitin in this course, please ask.

Relationship Violence, Sexual Misconduct & Mandatory Reporting[5]

Michigan State University is committed to fostering a culture of caring and respect that is free of relationship violence and sexual misconduct, and to ensuring that all affected individuals have access to services. For information on reporting options, confidential advocacy and support resources, university policies and procedures, or how to make a difference on campus, visit the Office for Civil Rights and Title IX Compliance and Education website.

Confidentiality Limits

Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility

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[4] Adapted from "Syllabus FAQ," Office of Ombudsman.
[5] Syllabus statement from "Information for Mandatory Reporters," Office of Institutional Equity.

to report certain issues to protect the health and safety of MSU community members and others. As instructors, we must report the following information to other University offices (including the Department of Police and Public Safety) if you share it with me:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child.
- Allegations of sexual assault, relationship violence, stalking, or sexual harassment.
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the MSU Counseling and Psychiatric Services.