**CEMS 050 – CEMS First Year Seminar (1 credit)**

**Fall 2020**

**The University of Vermont**

**Remote (REMT) & Mixed (MIXT) MEETING TIMES**

‘Large Class Sections’ (L01 and L02) will meet remotely at the scheduled time each week in MS Teams (aka ‘synchronous meetings’). ‘Small Sections’ (A - H) will follow a mixed format in which students and teams will alternate between in-person attendance in Votey 242 and remote attendance in MS Teams.

**Large Class Sections (REMT)**

L01 Thursday 10:05-11:15 AM REMT Dr. Giles

L02 Thursday 08:30-09:45 AM REMT Dr. Giles

**Small Sections (MIXD)**

A Tuesday 12:50-01:40 PM MIXD/ Votey 242 Dr. Giles

B Tuesday 02:00-02:50 PM MIXD/ Votey 242 Dr. Giles

C Tuesday 03:10-04:00 PM MIXD/ Votey 242 Dr. Giles

D Wednesday 12:00-12:50 PM MIXD/ Votey 242 Dr. Giles

E Wednesday 01:10-02:00 PM MIXD/ Votey 242 Dr. Giles

F Wednesday 02:20-03:10 PM MIXD/ Votey 242 Dr. Giles

G Friday 12:00-12:50 PM MIXD/ Votey 242 Dr. Schadler

H Friday 01:10-02:00 PM MIXD/ Votey 242 Dr. Buzas

I Friday 02:20-03:10 PM MIXD/ Votey 242 Dr. Schadler

**OUR COMMUNITY!**

**INSTRUCTOR CONTACT INFORMATION:**

Courtney Giles, Ph.D.

Lecturer, Department of Civil & Environmental Engineering

Office: Votey 235 B; Email: [cdgiles@uvm.edu](mailto:cdgiles@uvm.edu)

MS Teams Office Hours\*: Tuesday 9:00-10:00, Wednesday 10:30-11:30, Thursday 11:30-12:30.

Linda Schadler, Ph.D.

Dean, College of Engineering & Mathematical Sciences

Professor, Department of Mechanical Engineering

Office: Votey 109; Email: [lsf@uvm.edu](mailto:lsf@uvm.edu)

MS Teams Office Hours\*: Friday 1:00-2:00 PM

Jeff Buzas, Ph.D.

Chair and Professor, Department of Mathematics & Statistics

Office: Innovation 226; Email: [jeff.buzas@uvm.edu](mailto:jeff.buzas@uvm.edu)

MS Teams Office Hours\*: Tuesday 10:00-11:00, Wednesday 10:30-11:30, or by appointment.

\*Drop-in office hours. Please send a note to the instructor in MS Teams Chat to begin a conversation.

**CEMS PROGRAM MENTORS:**

CEMS 050 recruits 30-40 undergraduate students every year to help guide first year CEMS students through the course and their first semester at UVM. Students will be assigned their CEMS Program Mentor (CPM) prior to the start of classes. Your CPM will be available to answer questions specifically about CEMS 050 or any other experience in CEMS or at UVM. You will meet your CPM in the first week of class and they will attend some small sections as well. Students can connect with their CPM via email or on the MS Team ‘CEMS 050 CPM Team FA20’.

**COURSE COLLABORATORS*:***

Corey Berman (UVM Recyling & Zero Waste Program) 2020 Project Partner

Lynn Wood (UVM Physical Plant Dept.) 2020 Project Partner

Gioia Thompson (UVM Office of Sustainability) 2020 Project Partner

Jeff Rettew (UVM Wellness Environment) 2020 Project Partner

Jim Hudziak (UVM Wellness Environment) 2020 Project Partner

Abbey Bleything (UVM Transportation) 2020 Project Partner

Bridget Croke (Closed Loop Partners) 2020 Project Partner

KC Williams (UVM Office of Student Services) CPM Program Lead

Lisa Washburn (UVM Office of Student Services) CPM Program Support

Matt Manz (UVM Office of Student Services) International Experiences

Amanda Stemple (UVM Office of Student Services) Recruitement and Retention

**ABOUT THIS COURSE**

**COURSE DESCRIPTION**

This 1 credit seminar is specifically designed for first year students in the College of Engineering and Mathematical Sciences. Students will explore the design process as it relates to CEMS disciplines and learn strategies for building equitable and effective teams. These skills will be developed in the context of a semester-long project with the aim of solving a campus-based problem that relates to the National Academy of Engineering (NAE) [Grand Challenges](http://www.engineeringchallenges.org/) themes. In 2020, the themes are: Resources@UVM, Energy@UVM, and Health@UVM. Throughout the semester, students will interact with faculty, professionals and peers in CEMS, explore the many resources at UVM that support the health and success of students, and develop strategies for success in college.

# COURSE GOALS

1. To introduce students to each of the CEMS disciplines (engineering, math, statistics, computer science) and how these disciplines work together to address global and local problems
2. To introduce students to the process of design to solve open-ended problems through teamwork
3. To create a welcoming culture and environment for new CEMS students
4. To help students build a network of support, including peers, instructors, and staff at UVM
5. To provide students with opportunities to practice the skills that will be important for their success in CEMS and beyond

# STUDENT LEARNING OUTCOMES

At the end of this semester, students will be able to:

1. Apply the core elements of the design process to solve challenges that relate to a campus-based problem.
2. Understand and demonstrate the key components of effective and inclusive team work, including communication, team member roles, constructive team behaviors, and awareness of bias.
3. Communicate information effectively to a broad audience of instructors, mentors, and peers.
4. Compare potential solutions to the design projects considering ethical, cultural, and societal implications.
5. Gather and evaluate relevant and reliable information and data from a variety of sources.
6. Demonstrate key skills necessary for success in college and beyond.

**REQUIRED MATERIALS**

**Text:** None

**Technology:**

* Laptop or other device with functioning webcam, microphone, and audio (See [CEMS Laptop Recommendations](https://www.uvm.edu/cems/computer_services) and [CEMS Computer Loaner Program](https://www.uvm.edu/it/kb/article/cems-computer-loaner-program/))
* Please review this [technology checklist](https://www.uvm.edu/it/kb/student-technology-resources/) to make sure you are ready for classes.

**LEARNING PLATFORMS:**

* Blackboard (UVM’s Learning Management System, free to all students)
* MS Teams (UVM’s conferencing software, free to all students)
* Flipgrid (Social media/discussion App, free to all students)

**COURSE POLICIES**

**COMMUNICATION** Communication is a two-way street. Therefore, instructors and students are expected to communicate with eachother in a *constructive and thoughtful* way. Below are the expectations for communication by students and instructors in CEMS 050:

**INSTRUCTORS**

* All communication for this course will be provided through Blackboard and email.
* Course materials and lecture recordings will be made available on Blackboard in a timely manner.
* Weekly emails will be sent to students via Blackboard to communicate upcoming assignments, due dates, and in-class activities.
* The instructor may email individual students to check in on progress or other issues that arise.

**STUDENTS**

* **Check your UVM e-mail *regularly*** for announcements and course updates.
* **Email the instructor *early*** about absences or missed due dates.
* **Email the instructor with *constructive* feedback** about the course or any issues you are experiencing *early and often.*
* **Practice professional and friendly *email etiquette***. This means, provide any feedback, questions, or requests in a *constructive* manner. Avoid *destructive* or *negative* communication (e.g., petty complaints, demands).
* **Practice professional and friendly *in-class etiquette***. Raise your hand, avoid speaking over others, treat your classmates and teachers with respect and *listen* to all perspectives with an open mind.

**ATTENDANCE AND PARTICIPATION** Attendance and participation represent 20% of the final grade and will be tracked in all classes using TopHat, which will record a grade in each session that the student participates.

**LARGE SECTIONS (L01 – L02; REMT):** All Students will connect remotely using MS Teams.

**SMALL SECTIONS (A – I):** Students and student teams will be assigned to in-person sessions (meeting in Votey 242) or remote sessions (accessed using MS Teams) prior to the start of the semester.

The [**Green and Gold Promise**](https://www.uvm.edu/deanofstudents/green-and-gold-promise) clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington. This include following all rules regarding facial coverings and social distancing when attending class. If you do not follow these guidelines, I will ask you to leave the class. If you forget your mask, you cannot enter the class and should go back and retrieve your mask. The Code of Student Conduct outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension

*All classes* will begin promptly and students are expected to be on time. If you cannot attend an in-person or remote session for a given week for any reason (including illness or quantine), you must notify the instructor in writing *as soon as possible* and preferably prior to the class meeting. Students may be permitted to review course materials asynchronously (after the scheduled classes) and still receive participation credit upon request and with sufficient notice to the instructor.

**CLASS RECORDINGS** Classes will be audiovisually recorded for students in the class to refer back to, and for enrolled students who are unable to attend in-person or live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.

# ASSESSMENT AND GRADING:

* ***Participation*** is graded as 0 (did not participate) or 1 (participated).
* ***Assignments*** are graded out of 10 points. Rubrics are provided in the Blackboard/Rubrics section for each assignment and course activity.
* ***What is considered ‘late’?*** If an assignment is due at 11:59 PM on Monday 9/9 and is submitted at 12:01 AM on Tuesday 9/10 (two minutes late), that assignment will lose one point. If it is submitted on at 12:01 AM on Wednesday 9/11, it will lose two full points.
* ***How will I know my grade?*** Grades will be updated regularly in Blackboard under ‘My Grades’. You will be able to review feedback from instructors and CPMs here as well.

Final numeric percentages will translate into final letter grades as follows:

*97+* = A+; *93-97* = A; *90-93* = A- ; *88-90* = B+; *83-88* = B; *80-83* = B-; *78-80* = C+; *73-78* = C; *70-73* = C-;

*68-70* = D+; *63-68* = D; *60-63* = D-; *Below 60* = F

**Final grades will be based on the following:**

|  |  |
| --- | --- |
| **Item** | **% Final Grade** |
| Attendance/Participation | 20% |
| Teamwork | 20% |
| Assignments | 50% |
| Final Project Presentation | 10% |

**WRITTEN ASSIGNMENTS:**

The first assignment (Academic Planner) is due in Week 1 to your CEMS Program Mentor. All other written assignments will be submitted in Blackboard.

**PROPER USE OF ELECTRONICS:** Students attending in-person meetings should only use laptops, tablets and smartphones when prompted by the instructor. Students at home or connecting remotely should refrain from using any device or web application other than what is required for the class session and for the specific class activity. Please be courteous to your instructors and guest presenters and give them your full attention when they are speaking.

**UVM POLICIES**

**ACCESSIBILITY:** In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact Student Accessibility Services (SAS). SAS works with students to create reasonable and appropriate accommodations via an accommodation letter to their professors as early as possible each semester. Contact SAS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu; or [www.uvm.edu/access.](http://www.uvm.edu/access)

**RELIGIOUS HOLIDAYS:** Students have the right to practice the religion of their choice. Please submit in writing your documented religious holiday schedule for the semester to [cdgiles@uvm.edu](mailto:cdgiles@uvm.edu) by the end of the second week of classes (Friday, September 11, 2020).

**ACADEMIC INTEGRITY**: The University of Vermont and the College Engineering & Mathematical Sciences are learning communities. Consistent with the University’s mission and purpose, and the values the College seeks to foster within its community, it is expected that academic honesty and integrity guide the actions of all its members. **It is the responsibility of every person in the academic community to ensure that honesty, integrity, and transparency are upheld by faculty and students alike.** Violations of the Academic Integrity Policy and may result in an “F” on the work involved or in the course. Academic dishonesty not only violates the Academic Integrity Policy, but also may be grounds for probation, suspension, and/or expulsion. <http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf>

# COURSE EVALUATIONS: All students are expected to complete a mid-term evaluation and final evaluation of each course they are enrolled in at its conclusion. Course evaluations are anonymous and confidential. The information gained through the course evaluation, including constructive criticisms of the instructor, will be used to improve future versions of the course.

**FERPA RIGHTS DISCLOSURE:** The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974. <http://catalogue.uvm.edu/undergraduate/academicinfo/ferparightsdisclosure/>

**HEALTH & WELL-BEING:** The Center for Health & Wellbeing (CHWB) at UVM offers a wide range of services to support your mind, body, and soul while you're at UVM. The Student Health Services staff of board certified physicians, physician assistants, nurse practitioners, nurses, and dietitians work with patients and collaborate with other CHWB providers to ensure personalized and timely care to UVM students. Counseling & Psychiatry Services (CAPS) offers short-term individual counseling, urgent needs counseling, group counseling, outreach and education, psychiatry, referrals, and consultation services. To learn more: <http://www.uvm.edu/~chwb/>

**C.A.R.E.** If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <https://www.uvm.edu/studentaffairs>

**SAFETY**: UVM promotes a Culture of Safety. CEMS 050 small class sessions will be held in the CEMS Fabrication Lab (FabLab) space in Votey 242. This space is full of 3D printers, laser-cutter/engravers, soldering equipment, and associated physical hazards. Therefore, while working in this space, students must follow UVM Laboratory Safety Policies and wear appropriate Personal Protective Equipment (PPE). Students will be required to wear safety glasses (provided) at all times while working in Votey 242 and may be required to wear additional PPE (lab coat, gloves) depending on the nature of work. Information on UVM Safety Policies can be found here: <https://www.uvm.edu/riskmanagement/safety>

**STATEMENT ON ALCOHOL & CANNABIS IN THE ACADEMIC ENVIRONMENT:** As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and acquire knowledge. It is important to note that alcohol and cannabis can seriously impair your ability to learn and retain information, not only in the moment you may be using, but up to 48 hours or more afterwards. New research shows that the human brain is not fully developed until you are 25 years old. How you treat your brain now will have long lasting impacts on your life. In addition, alcohol and cannabis can:

* Cause issues with attention, memory and concentration
* Negatively impact the quality of how information is processed and ultimately stored
* Affect sleep patterns, which interferes with long-term memory formation

It is my expectation that you will do everything you can to optimize your learning and to fully participate in this course. Here is an interesting article on the impacts of cannabis on developing minds: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3930618/>

**SYLLABUS & COURSE CHANGES:** This syllabus is subject to change with verbal and/or electronic notice.The University of Vermont reserves the right to make changes in the course offerings, mode of delivery, degree requirements, charges, regulations, and procedures contained herein as educational, financial, and health, safety, and welfare considerations require, or as necessary to be compliant with governmental, accreditation, or public health directives.

# COURSE SCHEDULE

*Important Note:* Small class sections (Votey 242) do no begin until ***after*** the first Thursday, large class sections on 9/3/20. The first section to meet in-person is section G on Friday 9/4/20 12:00-12:50 PM.

|  |  |
| --- | --- |
| Week &  Section Dates | Topic / activities |
| Week 1  Thurs. 9/3 – Wed. 9/9/20 | ***Large Class Sections: Welcome & Introduction*** *(Thursday 9/3/20)*  We will review the course structure and syllabus, expectations and grading. We will discuss what we mean by ‘Grand Challenges’ and how they relate to this course. We will review important information, such as CEMS Core Competencies, academic standards, (n)ettiquette, lab safety, add/drop and withdrawal policies. You will then meet CEMS Student Services Advisors (30 min). Pay attention! You will need this information later!  ***Week 1 Small Sections: Time-Management and Self Awareness*** *(begins Friday 9/4/20) If your small class section is on a Tuesday or Wednesday, your labs will meet on Tuesday (9/8/20) or Wednesday (9/9/20). This session will be COMPLETELY REMOTE.*  We cover two important topics this week:  (1) Time Management – Being able to manage your time and anticipate important assignments/exams and extra-curricular activities will help you be successful throughout college. We will discuss one tool for this, the academic planner, and expectations for Assignment 1.  (2) Self-Awareness – The ability to reflect on your own strengths and areas for improvement is an important skill in life. We will discuss examples of how self-reflection strategies can be used to help navigate life’s challenges and complete a short self-reflection survey.  ***Assignment 1:*** *Individual Assignment***.** Due when you first meet with your CEMS Program Mentor (CPM): Academic planner (in whatever format you choose) filled in. See Blackboard/Course Materials/Week 1/Assignment 1 [LO6]. |
| Week 2  Thurs. 9/10 – Wed. 9/16/20 | ***Large Class Sections: Overview of Design Projects*** *(Thursday 9/10/20)*  We will discuss this year’s course project themes and specific project challenges, which you will work on in teams for the rest of the semester. Project Partners will visit to describe their project needs and the problems that you will help them solve over the course of the semester.  ***Week 2 Small Sections: Being Part of a Team*** *(begins Friday 9/11/20)*  We will discuss the importance of team work and strategies for developing equitable, inclusive, and effective teams. Students will complete a team activity and then reflect on what worked and what didn’t work.  ***Assignment 2:*** *Individual Assignment*. Reading and discussion board post about project interests. See *Blackboard/Course Materials/Week 2* for assignment details [LO3][LO6]. |
| Week 3  Thurs. 9/17 – Wed. 9/23/20 | ***Large Class Sections: Intro to the Design Process*** *(Thursday 9/17/20)*  We will begin our conversation on the design process and describe the stages of Design Thinking that we will follow in this course. Micro-design Project topics will be revealed and students will vote on which one they would like to work on over the next two weeks (votes due by 11:59PM 9/17/20).  ***Week 3 Small Sections: Micro-design Projects I*** *(begins Friday 9/18/20)*  Students will begin working on a Micro-design Project in small groups. Micro-design projects will last two weeks and will give students practice working in teams and applying the steps of the design process before jumping into their final course design projects. Empathizing, defining, and ideation will be the focus in part 1.  ***Assignment 3***: *Individual Assignment*. Reading and Flipgrid Post on Design Thinking. See *Blackboard/Course Materials/Week 3* for details [LO1][LO3]. |
| Week 4  Thurs. 9/24 – Wed. 9/30/20 | ***Large Class Section: Conceptualizing & Evaluating Team Dynamics*** *(Thursday 9/24/20)*  We will discuss team roles and different ways of evaluating team dynamics including the identification of constructive and destructive team behaviors. CEMS Office of Student Services will visit to share information on how to get involved in UVM’s Study Abroad Program and CEMS Student Clubs (45 min).  ***Week 4 Small Sections: Micro-design Projects II*** *(begins Friday 9/25/20)*  Students will continue working on their Micro-design Projects. Prototyping will be the focus of part 2.  ***Assignment 4:*** *Individual Assignment. Project Decision – CEMS 050 Project Design & Team Questions Due 9/25/20.* See *Blackboard/Course Materials/Week 4* [LO1][LO2] |
| Week 5  Thurs. 10/1 – Wed. 10/7/20 | ***Large Class Sections: Empathizing & Research*** *(Thursday 10/1/20)*  We will discuss steps 1 and 2 of the design process: (1) Empathize and (2) Define. These steps require that you understand the human-centered need of the problem (empathize) and the constraints of the system. Unless you are already an expert in energy, resource, and health solutions, you will likely need to learn more about these topics to define the problem and begin working toward a solution. This is where research comes in. In the second part of this class, we will meet with a tutor from the [UVM Writing Center](https://www.uvm.edu/uwi/writingcenter) (30 min) who will provide resources for getting started at Howe Library and best practices for building citations and bibliographies (needed for Assignment 5 and many, many courses in CEMS!).  ***Week 5 Small Sections: MicroDesign Projects III***  Students will continue working on their MicroDesign Projects. Testing will be the focus of part 3. Individual team members must complete the [MicroDesign Debrief form](https://forms.office.com/Pages/ResponsePage.aspx?id=WHcXHGtN3EOq6zucQlYpZ5yaWKdnPQ9OnPaYsMP9nJRUQkJEUkJDMUQxQ0xTUjlGUkFZWEVPNlNHUi4u) to receive credit for this design exercise.  ***Assignment 5***  *Part 1:* Project Research & Bibliography. Compile 3-5 correctly formatted references. Due to your CPM. *Part 2:* Complete MicroDesign Debrief form*.* Both parts due by Wednesday 10/7/20 at 11:59 PM. See *Blackboard/Course Materials/Week 5/* for details [LO5][LO6]. |
| Week 6  Thurs. 10/8 – Wed. 10/14/20 | ***Large Class Sections: Qualitative and Quantitative Analysis (10/8/20)***  This week we will meet briefly at the beginning of the class period to discuss different methods of data analysis. After this meeting, students will break-out into their MicroDesign Teams to work through a simple statistics exercise using the data collected during the testing stage of the MicroDesign projects. The analysis you learn in this session can be applied in your semester projects too!  ***Week 6 Small Sections: Meet your course project team!*** *(begins Friday 10/2/20)*  Students will assemble in their course project teams for the first time to develop a team contract. If you have time, begin working on Stage 1 (Empathize).  ***Assignment 6:***Each team member submits a copy of the team contract developed during the Week 6 small section activity. Due Wed. 10/14/20 at 11:59PM. See *Blackboard/Course Materials/Week 6* |
| Week 7  Thurs. 10/15 – Wed. 10/21/20 | ***Large Class Section: Project Planning*** *(Thursday 10/15/20)*  Project planning isn’t a strict part of Design Thinking. However, it is an important and practical means of setting goals and making progress toward a solution, particularly when working in a team. We will discuss important aspects of Project Planning including goal-setting, scheduling, task-assignment, team-member roles, and tracking progress. Students will then have the time to explore provided resources and begin working on Assignment 8 (Project Planning Document) with their team.  ***Week 7 Small Sections: Define the Problem*** *(begins Friday 10/16/20)*  Students will meet in project teams to share the individual research they did on their topic (Assignment 5) and to begin drafting a problem statement (Assignment 7).  ***Assignment 7:*** Submit draft problem statement on Blackboard with references from your research OR create a FlipGrid post of one team member reading the problem statement.See Blackboard/Course Materials/Week 7/ for details [LO1 – LO5]. |
| Week 8  Thurs. 10/22 – Wed. 10/28/20 | ***Large Class Sections: Ideation and Creativity*** *(Thursday 10/22/20)*  We will meet briefly at the beginning of the class period to discuss the third step of the design process: ‘ideation’ and different techniques for promoting creativity and inclusion of many different ideas in the design process. With the remaining time, students will review the different *Ideation Techniques* that will be used in the Week 7 Small Section: Ideation Station.  ***Small Sections: Ideation Station*** *(begins Friday 10/23/2020)*  Student teams will meet and use one new *Ideation Technique* to come up with as many solutions to their Problem Statement as possible. This week is about *quanitity* of ideas. In *Ideation Continued* (Week 8), teams will select 1-3 ideas to advance to the Prototyping stage.  ***Assignment 8:*** *Team Assignment.* Complete the *Project Planning Document*. See Blackboard/Course Materials/Week 8/Assignment 8 for details (LO1, LO2, LO6). |
| Week 9  Thurs. 10/29 – Wed. 11/4/20 | ***Large Class Section: Spring 2021 Semester Planning*** *(Thursday 10/29/20)*  Members of CEMS Student Services will visit and discuss how to prepare for [Spring 2021 registration](https://www.uvm.edu/registrar/registration-schedule) including degree requirements and schedule mapping (45 min). Students may use the remaining time to begin working on their Spring 2021 schedules.  ***Small Sections: Ideation Continued*** *(begins Friday 10/30/2020)*  Teams can use this time to continue working through their project ideas and narrowing in on the one(s) they will focus on for the Prototyping stage in Week 10.  ***Assignment 9*** *Individual assignment.* At least two drafts of your spring semester schedule, including both required and elective courses due to your Academic Advisor by 11:59PM on Wednesday 11/4/2020 [LO6]. |
| Week 10  Thurs. 11/5 – Wed. 11/11/20 | ***Large Class Section: Prototyping*** *(Thursday 11/5/20)*  We will discuss the meaning of ‘Prototype’ as it relates to each of the project outcomes and walk through a few different prototyping approaches for each. An undergraduate FabLab employee (Fabber) will visit to discuss resources, projects, and employment opportunities in the Votey 242 FabLab.  ***Small Sections: Prototyping*** *(begins Friday 11/6/20)*  Students will begin the prototyping stage for their projects, applying at least one of the approaches discussed during the week 10 lecture.  ***Assignment 10:*** Discussion Board post on team ideas applied in Prototyping stage. See *Blackboard/Course Materials/Week 10/Assignment 10* for details [LO1, LO2, LO3]. |
| Week 11  Thurs. 11/12 – Wed. 11/18/20 | ***Large Class Section: Communication and Managing Feedback*** *(Thursday 11/12/20)*  We will discuss keys to successful communication and expectations around verbal and written communication in CEMS 050 and other courses. We will then discuss the importance of giving constructive feedback and being able to received feedback. Using the *Problem Statement* as an example, students will practice giving and receiving constructive written and verbal feedback.  ***Small Sections:******Prototyping Continued*** *(begins Friday 11/13/20)*  Teams will continue their prototyping work. Instructors and CPMs will be available to answer questions and give advice.  ***Assignment 11:*** Individual students complete the *Constructive Feedback Form* to reflect on their experience in the course and working within their team so far [LO2]. |
| Week 12  Thurs. 11/19 – Fri. 11/20  *Note: This is the last week we will meet in-person.* | ***Large Class Section: Pulling it All Together*** *(Thursday 11/19/20)*  We will review expectations for preparing the final deliverable (Task 6, due 12/10/20) and options for presenting your final product remotely.  ***Small Sections (REMT): Work on your project!*** *(Friday 11/20/20 ONLY)*  *Note: Tues (11/24) and Wed. (11/25) Sections A-F will meet* ***remotely*** *after Fall Recess on 12/1 and 12/2/20.* Students will have time to work with their teams on the course project (Task 6). Instructors and CPMs will be available *remotely* to answer questions and give advice.  ***Assignment 12:***Work on your project! *(No formal assignment)* |
| Week 13 | **FALL RECESS – NO CLASSES (Weds 11/25 – Friday 11/27/20)**  ***Assignment 13:*** *Individual Assignment.* Relax. Do something fun. Do something good for yourself and your health. Do something to help someone else. Try to not think about school for a few days.Reflect on all the hard work you’ve already done this semester and rest up for the final few weeks. We’re almost done! |
| Week 14  (REMT)  Thurs. 12/3 – Wed. 12/9/20 | ***Large Class Section: Inclusion, Representation, and Bias in STEM*** *(Thursday 12/3/20)*  KC Williams, Assistant Dean of Student Services in CEMS will visit to discuss issues related to inclusion, representation, and bias in the STEM (Science Technology Engineering and Mathematics) disciplines.  ***Small Sections (REMT):******Work on your project!*** *(begins Friday 12/4/20)*  Students will have time to work with their teams on the final deliverable for the course (Task 7). Instructors and CPMs will be available to answer questions and give advice.  ***Assignment 14:*** *Team Assignment.* Read/Watch guidelines for giving effective presentations and practice your final presentation with your team. |
| Week 15  (REMT)  Thurs. 12/10/20 | ***Large Class Section: Final Project Presentations*** *(Thursday 12/10/20)*  Teams will present their final projects remotely on MS Teams during the regularly scheduled large class sections this week. CEMS Faculty and CPMs will attend and provide feedback on this final deliverable for the course.  ***Small Sections (REMT)****:* No regularly scheduled meeting**.** Use this time to complete final Assignment 15.  ***Assignment 15:*** *Individual Assignment.*Complete the **CEMS Course Evaluation** and **End-of-Semester Self-Peer Reflection Survey** for this course (Both due Friday 12/11/20). |