

# Syllabus

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<b>Lecture:</b>	TR 1230–1345 or 1400–1515 UTEB 175
<b>TAs:</b>	Mr. Numad Cheema <a href="mailto:numad.cheema@uconn.edu">numad.cheema@uconn.edu</a> Mr. Gregory Grasso <a href="mailto:gregory.grasso@uconn.edu">gregory.grasso@uconn.edu</a> Mr. Justin Hufnagel <a href="mailto:justin.hufnagel@uconn.edu">justin.hufnagel@uconn.edu</a> Ms. Kalie Pasqualicchio <a href="mailto:kalie.pasqualicchio@uconn.edu">kalie.pasqualicchio@uconn.edu</a>
<b>Office Hours:</b>	Prof. Weber    W 0930–1030 Mr. Cheema    TR 1100–1230 Mr. Grasso    M 1645–1815, R 1700–1830 Mr. Hufnagel    MW 1030–1200 Ms. Pasqualicchio    TR 930–1100
<b>Course Text:</b>	Fundamentals of Engineering Thermodynamics, Eighth Edition, by Moran, Shapiro, Boettner, and Bailey.

**Course Objectives:** ME 2233 is the first in a two-part series at UConn on one of the most central subjects in Engineering. As we will see, thermodynamics touches almost every part of engineering, not to mention chemistry, biology, and physics. As such, it is imperative that you develop a strong understanding of the fundamental concepts presented in this course. We will consider as many of these concepts as possible through the lens of practical examples. Therefore, it is also very important that you develop a strong sense of *how* to solve the problems presented in this class. The ABET course syllabus for ME 2233 is available at <http://www.engr.uconn.edu/me/cms/images/prod/pdf/me2233thermodynamicprinciples.pdf> and can provide you with further information about the objectives of this course. This document will also be linked from the HuskyCT site.

**HuskyCT:** Go to <https://huskyct.uconn.edu>. After logging in, you can access all of the information for this course. On HuskyCT I will post lecture notes, homework assignments, and quizzes. I will also post further reading for your information. In addition, you can retrieve your grade information for specific assignments.

**Gradescope:** All of your homework will be handed in on Gradescope, and all your grades will also be posted there. The site is available at <https://gradescope.com>.

**Jupyter Notebooks:** We will use Jupyter Notebooks in this class to help solve homework problems. Go to <https://me2233.uconn.edu> and sign in with your NetID and password. We will cover more about how to use the Notebooks in class.

**General Policies:**

1. My office is listed at the top of this syllabus. If you stop by without an appointment, it is unlikely that I will be available to help, due to other responsibilities. Therefore, if you need to meet outside of class, please email to set up a meeting.
2. When you email me, send email to [bryan.weber@uconn.edu](mailto:bryan.weber@uconn.edu) and include in the subject the text "[ME 2233]" (without the quotes, but with the brackets). If you send email to a different account or without "[ME 2233]" in the subject, I may not see it in a timely manner. In addition, email sent after 6PM may not get a response until the next day.
3. Late assignments will be assigned a penalty based on the time they are turned in relative to the original due date. Assignments handed in between 0–24 hours late will have a penalty of 10% of the maximum score; 24–48 hours late will have a penalty of 30% of the maximum score; 48–72 hours late will have a penalty of 50% of the maximum score; more than 72 hours late will not be accepted. Thus, if a 50 point assignment is due at 1200 on Wednesday, and you hand it in at 1500 on Thursday, there will be a penalty of 15 points (50 points \* 30%) subtracted from your grade (with a lower limit at zero). These penalties can be avoided by requesting an extension, detailed below.
4. Requests for extensions on assignments will only be granted in extenuating circumstances that have been explained at least **24 hours** in advance of the due date. Please request extensions via email and attach a copy of my approval to the assignment when you turn it in.
5. In cases where more than one solution is presented on a homework or exam problem, the one with the most errors will be the one that is graded.
6. My preference is that no cell phones or electronic devices should be used when class is in session, unless we are using them for class. Electronic devices are generally a distraction for you and your classmates. Please set your phone to silent (not vibrate). If you receive a call that is a true emergency, please step out to take it. The third time anyone's phone rings, I will answer it; if it is an emergency, I will happily return the phone to you. The same policy applies to me—if I forget to silence my phone and it rings, a student will be allowed to answer!
7. If you have any special needs related to a disability, qualified and certified by the Center for Students with Disabilities, you must notify the instructor, so that arrangements may be made to accommodate such a disability. Policies for the Center for Disabilities can be found at: <http://www.csd.uconn.edu>

**Grading System:**

		Lecture Quizzes	35%		
		Homeworks	25%		
		Exams	30%		
		Pre-Quiz	2%		
		Post-Quiz	2%		
		Participation	4%		
		Total	100%		
Letter Grade	Percent	Letter Grade	Percent	Letter Grade	Percent
		A	93 – 100	A-	90 – 92
B+	87 – 89	B	83 – 86	B-	80 – 82
C+	77 – 79	C	73 – 76	C-	70 – 72
D+	67 – 69	D	63 – 66	D-	60 – 62
F	≤ 59				

#### Academic Integrity:

It is expected that all students will maintain the highest level of academic integrity and honesty throughout this course. The Academic Integrity policy of the University of Connecticut can be found in The Student Code, Appendix A available online at <http://community.uconn.edu/the-student-code-appendix-a/>. Cheating, copying, or plagiarism on the homework or any of the exams is unacceptable and will be dealt with appropriately. **This includes but is not limited to a failing grade on the assignment, exam, or in the course.**

Most instances of cheating are blatantly obvious, such as copying from your neighbor's exam, but some are more subtle. My rule is: Any occasion where you hand in work that is not entirely your own is considered academic dishonesty. Please include the name of your favorite dinosaur on your first assignment. In this course, you are permitted to work on the homework problems with your classmates. However, it is recommended that you make an effort to do the problems individually before discussing them with a classmate so that you can fix the concepts in your head. If you work with your classmates on the homework, each of you must perform the calculations for every problem independently; one student plugging the numbers into their calculator and telling everyone else the answer is considered cheating. The work and final presentation that you turn in must be yours!

#### Schedule:

- There will be quizzes and lecture videos assigned for each class on Google (links on HuskyCT). This will cover most of the material for the class, so it is very important that you watch every video and complete each quiz.
- There will be approximately weekly homework assignments posted on HuskyCT and to be handed in on Gradescope. The homework assignments are your chance to practice problem solving techniques that you will use on the exams, so it is important for you to complete each assignment fully.

- There will be three exams. Details to come when the exams get closer.

**Tentative Schedule of Topics:**

Topics	Reading Material
Introduction and Systems	1.1–1.9
Energy, Work, Heat, & Cycles	2.1–2.7
States & Properties	3.1–3.10
<b>Exam 1</b>	
Ideal Gas Law	3.11–3.15
Control Volume Analysis	4.1–4.11
<b>Exam 2</b>	
The Second Law of Thermodynamics	5.1–5.11
Entropy & Efficiency	6.1–6.13
<b>Thanksgiving Break: Nov. 18–24</b>	
Exergy Analysis	7.1–7.7
<b>Exam 3: Date TBD</b>	