

MEGR 3111 Thermodynamics I

Professor:	J. M. Hill	
Office:	269 Duke Centennial Hall	
Hours:	Monday and Wednesday: 4:00 – 5:00 Tuesday and Thursday: 1:00 – 2:00 Other Times by Appointment	
Textbook:	<i>Fundamentals of Engineering Thermodynamics</i> , 8th Edition*, Moran and Shapiro, Wiley	
Website:	http://webpages.uncc.edu/~hill	
Grading:	3 tests @ 20%	60%
	Weekly 2-minute theory quizzes	8%
	Homework and problem-solution quizzes	12%
	Final Exam	20%

Course Outline

Chapter	Topic
1	Fundamental Concepts
2	Energy and the First Law
3	Properties of substances, ideal gas equation of state
4	The first law for a control volume
5	The second law of thermodynamics
6	Entropy, device efficiencies
7	Exergy (availability), reversible work, irreversibility

Selected topics from other chapters will be presented as time allows.

Course Policy

Homework will be assigned in class, typically one problem per class, and will be due via Canvas before the next class. Due date and time will appear on Canvas. No hard copy or late submissions will be accepted for any reason.

Other than calculators and computers used for note taking, the use of electronic devices (cell phones, mp3 players, iPods, etc.) is not allowed. **Do not have your cell phones on your desks during class. Absolutely no texting is allowed.**

Academic Integrity

Students have the responsibility to know and observe the requirements of the UNCC Code of Student Academic Integrity (<https://legal.uncc.edu/policies/up-406#ch5>). This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty.

Calculator Policy

The only calculators allowed for use on tests, quizzes, or on the final exam are those listed on the National Council of Examiners for Engineering and Surveying (NCEES) site at <https://ncees.org/exams/calculator/>. These are the same calculators allowed on the FE exam.

* You may use any edition of the text. However, I will frequently refer to figures and tables in the book. If you are using an edition other than the one I'm using, it's up to you to locate the appropriate pages in the book. Homework will not be assigned from the book.