

**MEGR 3210**  
**Automotive Power Plants**

Professor:	J. M. Hill	
Office:	269 Duke Centennial Hall	
Hours:	Tuesday, Thursday: 2:00 – 3:00 Other Times by Appointment	
Textbook	W. W. Pulkrabek, Engineering Fundamentals of the Internal Combustion Engine, 2 <sup>nd</sup> Edition, Pearson Prentice Hall	
Website:	<a href="http://webpages.uncc.edu/~hill">http://webpages.uncc.edu/~hill</a>	
Grading:	3 tests @ 21%	63%
	Homework and quizzes	16%
	Final Exam	21%

**Course Outline**

Chapter	Topic
1	Engine classification, components, and basic processes
2	Engine parameters and operating characteristics
3	Air standard and air/fuel cycles
4	Fuels
5	Fuel delivery systems
6	Combustion chamber flows and characteristics
7	Combustion
8	Exhaust flows
10	Heat transfer in engines
11	Friction and lubrication

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

**Course Policy**

Typically, homework will be assigned each class and will be collected at the beginning of the next class. Homework will not be accepted after the solution has been presented on the board.

If a test or quiz is missed because of illness or emergency, **a grade of zero will be recorded unless the absence is excused by the office of the Dean of Students.** If a test is to be missed, I must receive notification prior to the scheduled time of the test.

Other than calculators, the use of electronic devices (computers\*, cell phones, mp3 players, iPods, etc.) is not allowed. **Absolutely no texting during class.**

**Academic Integrity**

Students have the responsibility to know and observe the requirements of the UNCC Code of Student Academic Integrity (<http://legal.uncc.edu/policies/up-407>). This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty.

Students are encouraged to work together in formulating a plan for the solution of homework problems, but each student must do his or her own work for the actual solution that is submitted for a grade. Copying of homework will be considered an honor code violation.

\* If you use an iPad or other tablet for note taking, discuss this with me.