

**SYLLABUS**

<i>Instructor</i>	Peter B. Sunderland Associate Professor Dept. of Fire Protection Engineering 3104 J.M. Patterson Building (301) 405-3095 pbs@umd.edu
<i>Meetings</i>	Tuesdays and Thursdays, 12:30 – 1:45 2140 Chemical Engineering Building
<i>Textbook</i>	S.R. Turns, <i>An Introduction to Combustion Concepts and Applications</i> , McGraw Hill, New York, 3 <sup>rd</sup> or 2 <sup>nd</sup> edition, \$20 – \$290 on amazon.com.
<i>Prerequisites</i>	Knowledge of thermodynamics, fluid mechanics, heat transfer, and partial differential equations.
<i>Course Content</i>	Basic principles of diffusion flames for gaseous, liquid, and solid fuels. Droplet burning, <i>B</i> number, jet combustion, boundary layer combustion, generalized methods. <i>3 credits</i> .
<i>Grading</i>	Homework..... 25% Midterm..... 30% Journal Club..... 10% Final exam..... 35%
	Announcements, documents, and grades will be posted to canvas: <a href="https://umd.instructure.com/">https://umd.instructure.com/</a>
	Homework assignments are due at the beginning of class. Late submissions will be penalized 10%. No submissions will be accepted after the beginning of the subsequent class. It is acceptable to collaborate on homework, but not to submit any work that is copied from someone else.
	Exams will be closed book with a calculator and one page of notes.
<i>UMD Course Policies</i>	Policies relevant to all UMD courses are found here: <a href="http://ugst.umd.edu/courserelatedpolicies.html">http://ugst.umd.edu/courserelatedpolicies.html</a> . Topics that are addressed include: academic integrity; student and instructor conduct; accessibility and accommodations; attendance and excused absences; grades and appeals; and copyright and intellectual property.

*Emergencies* In the event of a fire, medical, or other emergency, dial 911 on a cell phone or any campus phone. There are alarm pull stations near each stairwell entrance and building exit. In the event of an evacuation alarm, please gather your belongings and walk out of the building (do not use elevators unless you are disabled). There is a fire extinguisher in the corridor. The classroom is sprinklered.

*Calendar*

Date	Day	Event
30-Aug	Tuesday	
1-Sep	Thursday	
6-Sep	Tuesday	
8-Sep	Thursday	
13-Sep	Tuesday	HW1
15-Sep	Thursday	
20-Sep	Tuesday	
22-Sep	Thursday	
27-Sep	Tuesday	HW2
29-Sep	Thursday	
4-Oct	Tuesday	
6-Oct	Thursday	
11-Oct	Tuesday	HW3
13-Oct	Thursday	
18-Oct	Tuesday	midterm
20-Oct	Thursday	
25-Oct	Tuesday	
27-Oct	Thursday	
1-Nov	Tuesday	journal club
3-Nov	Thursday	journal club
8-Nov	Tuesday	journal club
10-Nov	Thursday	
15-Nov	Tuesday	HW4
17-Nov	Thursday	
22-Nov	Tuesday	
24-Nov	Thursday	Thanksgiving
29-Nov	Tuesday	
1-Dec	Thursday	
6-Dec	Tuesday	HW5
8-Dec	Thursday	
19-Dec	Monday	final 1:30-3:30