Instructor: Murad Sarsour  
Office: Science Annex 458  
Email: msar@gsu.edu  
Phone: 404-413-6077 (office)

Class hours and location:  
MW @ 12:30 - 1:45 PM, in Aderhold Learning Center 306

Office hours:  
MW @ 11:00 AM - 12:00 PM or by appointment

Online Information:  
http://www.physics.gsu.edu/Sarsour/teaching/phy3850_spring19/

Course Objectives: The primary objectives of the course are for students to develop understanding of fundamental physical principles. The focus will be on conceptual understanding and developing skills to apply basic principles to actual problem solving. Lectures will include examples of how to approach problems; students are expected to spend as much as possible of their own time on problems, tests, etc…

Prerequisites: Phys 2212K and Math 2215 with grades of C or higher.

Textbook: Daniel V. Schroeder, Introduction to Thermal Physics, Addison-Wesley-Longman, 2000

Grading scheme:

<table>
<thead>
<tr>
<th>Category</th>
<th>Grade Percentage</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>30%</td>
<td>Listed on HW sheets*</td>
</tr>
<tr>
<td>First Exam</td>
<td>20%</td>
<td>02/20/2019</td>
</tr>
<tr>
<td>Second Exam</td>
<td>20%</td>
<td>04/03/2019</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
<td>05/06/2019</td>
</tr>
</tbody>
</table>

*the homework will be posted on the class website

Course Plan: The plan is to cover as much as possible of the following:

- Chapter 1: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6
- Chapter 2: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6
- Chapter 3: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6
- Chapter 4: 4.1, 4.2
- Chapter 5: 5.1, 5.2, 5.3
- Chapter 6: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7
- Chapter 7: 7.1, 7.2, 7.3, 7.4, 7.5, 7.6
Detailed homework guidelines:

- **GENERAL.** One homework will be assigned every two weeks (approximately).
- **TIMING.** You will have one week for doing your HW. The HW due time is at the end of a given class and must be delivered in class.
- **LATE HW POLICY.** No late HW will be accepted.
- **HW GRADING RULES.** On the scale 0 to 4 each question will be graded according to:
  
  0: not attempted;
  1: attempted but mostly wrong;
  2: started and continued correctly but unable to finish;
  3: unable to realize the result is wrong or wrong result due to mistake(s) somewhere despite calculations looking “ok” on the first glance.
  4: flawless (or nearly flawless) calculations including units (!).

  A similar break-up scheme will be adopted for exam grading.

  Sloppy and unclear writing as well as omission of units will decrease your score.

- **WORKING ON YOUR HW.** You can work with your classmates on homework assignments, but you must write your solutions on your own. Please remember acknowledging your work with others. Plagiarism will be penalized. You must write out your assignments in a clear and coherent manner.

**Honor code:** It is the responsibility of the students to abide by the GSU academic honesty policy [https://insidelaw.gsu.edu/honor-code/](https://insidelaw.gsu.edu/honor-code/)

**Disclaimer:** The course syllabus provides a general plan for the course, deviations may be necessary.

**ADA statement:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Please advise the instructor if you have a documented disability that needs to be accommodated.