PHYSICS 358/ECE 403
THERMAL PHYSICS
Spring Term 2013

Professor: W. W. Duley
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http://uwaterloo.ca/physics-astronomy/people-profiles/walter-duley

Text: Classical & Statistical Thermodynamics, A. H. Carter
Prentice Hall

Supplementary text: Heat and Thermodynamics, M. W. Zemansky & R. H. Dittman Seventh or earlier editions, McGraw-Hill (out of print, but there are many used copies available).

Course outline: Carter, chapters 1 – 13 (inclusive)

Other material will be discussed in the lectures and will form part of the course


This is an introductory course in thermodynamics and thermal physics. In addition to the above topics, we will discuss the basic elements of statistical mechanics, including Maxwell-Boltzmann statistics, and the application of these concepts in the theory of electromagnetic radiation.
Notes will posted on LEARN in advance of lectures. To ensure continued access to this important information students should download these files immediately.

Assignments will be posted on LEARN approximately two weeks before their due date. These files should also be downloaded immediately.

**Assignments:** These are to be handed in by noon on the following dates. These assignments count for 25% of the final mark.

- May 23
- June 6
- June 20
- July 4
- July 18

**Midterm examination:** To be held June 24, 5:30-6:50 pm
   Location: DWE 1501

The midterm examination will count for 25% of the final mark.

The final examination will count for 50% of the final mark.
**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility.

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy #70, Student Petitions and Grievances, Section 4.  
http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. For information on categories of offenses and types of penalties, students should refer to Policy #71, Student Discipline.  
http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm

**Appeals:** Concerning a decision made under Policy #70 (Student Petitions and Grievances) (other than petitions) or Policy #71 (Student Discipline) a student may appeal the finding, the penalty, or both. A student who believes he/she has a ground for an appeal should refer to Policy #72 (Student Appeals)  
http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm

“Note for students with disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.”