

ME419. Heat transfer

Victor Yakhot

Syllabus. Fall 2010 .

09/02. Introduction. (Chapters 1.1-1.10)

09/7-9. Introduction to conduction. (2.1-2.7) **HW 1-128,2-136,2-140, 2-142 , 2-141**

09/14-21. Steady conduction. (3.1-3.7) **HW 3-48, 3-59, 3-114,3-123, 3-171**

09/23-28. ; Transient Conduction; (4.1-4.1) **HW 4-22,-4-27,4-41,4-49**

09/30 Numerical methods (5.1-5.1) No HW.

10/5. Test covering Chpts 1-5.

10/7 Introduction to convection (6.1-6.11) **HW 6-45;**

10/12. Monday schedule.

10/14-19. External flows. (7.1-7.3), **HW 7.22,7.29,7.43.**

10/21-26 - Internal flows, (8.1-8.6) **HW 8.43, 8.70.**

10/28 - **Design Project Assignment.**

11/2. Heat Exchangers; (11.1-11.6), **HW 11-57,11.124-11-135**

11/4-9 - Natural convection, (9.1-6.6) **No HW.**

11/11. Lab. 2.

bf 11/16, **Test 2.**

bf 11/18-23, 12/2-7), Radiation, (12.1-12.4, 13.1-13.6), **HW 13-14,13-30,13-34,13-35 11/24-28** (Holiday)//

Books.

1. Y. Cengel, **Heat Transfer and Mass Transfer.**