

ME 3360/5360: HEAT TRANSFER

Instructor: Professor Scott K. Thomas, Ph.D., (937) 775-5142, Room 124 Russ Engineering Center
scott.thomas@wright.edu

Course Homepage: <http://cecs.wright.edu/people/faculty/sthomas/heattransfer.html>

Class Hours: MWF 10:10 to 11:05 a.m., Room 153 Russ

Office Hours: MWF 9:00 to 10:00 a.m., or by appointment, Room 124 Russ Engineering Center

Text: Y. Cengel and A. Ghajar, *Heat and Mass Transfer: Fundamentals and Applications*, McGraw-Hill.

Reference Texts: See Dunbar Library:

F. P. Incropera and D. P. DeWitt, *Fundamentals of Heat and Mass Transfer*, Wiley.

J. P. Holman, *Heat Transfer*, McGraw-Hill.

M. N. Ozisik, *Basic Heat Transfer*, McGraw-Hill.

D. Pitts and L. Sissom, *Schaum's Outlines: Heat Transfer*, McGraw-Hill.

A. Mills, *Basic Heat & Mass Transfer*, Prentice Hall.

Problem Sets: Use Handouts for the Problem Sets, which are due as indicated in the Course Schedule below. Each homework assignment will be submitted as a single PDF file using the Dropbox feature within Pilot. Late homework assignments will not be accepted by the Dropbox feature within Pilot or by the instructor.

Homework Handouts:

<http://cecs.wright.edu/people/faculty/sthomas/heattransferhandouts.html>

Homework Solutions:

<http://cecs.wright.edu/people/faculty/sthomas/heattransferhomeworksolutions.html>

Mid-Term Quizzes: Mid-term quizzes are scheduled as indicated in the Course Schedule below. Quizzes will not be rescheduled for any individual for any reason. If you miss a quiz, the weight of that quiz will be placed onto the final exam. If you take a quiz, you can choose to not have it graded. Simply take the bluebook with you as you exit the room. If you take your quiz with you, the weight of that quiz will be placed onto the final exam. If you submit a bluebook for me to grade, I will grade it, and you will receive the grade.

Previous Exams:

<http://cecs.wright.edu/people/faculty/sthomas/heattransferpreviousexams.html>

Final Exam: The final exam is scheduled as indicated in the Course Schedule below. The final exam will not be rescheduled for any individual for any reason. You cannot miss the final exam. If you miss the final exam, you will receive a FAILING GRADE for the class.

Previous Final Exams:

<http://cecs.wright.edu/people/faculty/sthomas/heattransferpreviousexams.html>

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Items that ARE allowed during quizzes and the final exam:

- Bound textbook
- Calculator that does not have electronic communication capabilities
- Instructor-supplied paper
- Pen or pencil
- Eraser

Items that ARE NOT allowed during quizzes and the final exam:

- Cell phones or other electronic communication devices or methods
- The electronic version of the book
- Photocopies of the bound textbook
- Print-outs of the electronic version of the book
- Extra sheets of paper of any kind

I reserve the right to move any individual to another seat at any time during mid-term quizzes and the final exam.

Student Conduct During Mid-Term Quizzes and the Final Exam:

- If you have a cellphone or other electronic communication device out during a mid-term quiz, YOU WILL RECEIVE A ZERO FOR THE MID-TERM QUIZ.
- If you decide to share your work with someone else during a mid-term quiz, BOTH PEOPLE WILL RECEIVE ZEROES FOR THE MID-TERM QUIZ.
- If you have a cellphone or other electronic communication device out during the final exam, YOU WILL RECEIVE A FAILING GRADE FOR THE CLASS.
- If you decide to share your work with someone else during the final exam, BOTH PEOPLE WILL RECEIVE A FAILING GRADE FOR THE CLASS.

Each type of incident outlined above will be referred to the Office of Community Standards and Student Conduct as a case of academic dishonesty.

Academic Integrity Standards:

<http://www.wright.edu/community-standards-and-student-conduct/code-of-student-conduct/academic-integrity>

Course Grade: 10% Problem Sets, 20% Quiz 1, 20% Quiz 2, 20% Quiz 3, 30% Final Exam.

A: 100 to 90, B: 89 to 80, C: 79 to 70, D: 69 to 60, F: < 60

Class Period	Date	Subject	Chapter	Homework Due Date
1	1/14	Introduction and Basic Concepts	1	
2	1/16	Introduction and Basic Concepts	1	
3	1/18	Introduction and Basic Concepts	1	
4	1/21	MLK Day Holiday		
5	1/23	Heat Conduction Equation	2	Chapter 1
6	1/25	Heat Conduction Equation	2	
7	1/28	Heat Conduction Equation	2	
8	1/30	Classes Cancelled due to Weather		
9	2/1	Classes Cancelled due to Weather		
10	2/4	Heat Conduction Equation	2	
11	2/6	Mid-Term Quiz 1	1,2	Chapter 2
12	2/8	Steady Heat Conduction	3	
13	2/11	Steady Heat Conduction	3	
14	2/13	Steady Heat Conduction	3	
15	2/15	Steady Heat Conduction	3	Chapter 3a
16	2/18	Transient Heat Conduction	4	
17	2/20	Transient Heat Conduction	4	
18	2/22	Transient Heat Conduction	4	Chapter 3b
19	2/25	Transient Heat Conduction	4	
20	2/27	Transient Heat Conduction	4	
21	3/1	Mid-Term Quiz 2	3,4	Chapter 4
22	3/4	Spring Break: University Closed		
23	3/6	Spring Break: University Closed		
24	3/8	Spring Break: University Closed		
25	3/11	Fundamentals of Convection	6	
26	3/13	Fundamentals of Convection	6	
27	3/15	Fundamentals of Convection	6	
28	3/18	Fundamentals of Convection	6	
29	3/20	External Forced Convection	7	Chapter 6
30	3/22	External Forced Convection	7	
31	3/25	External Forced Convection	7	
32	3/27	External Forced Convection	7	
33	3/29	Internal Forced Convection	8	Chapter 7
34	4/1	Internal Forced Convection	8	
35	4/3	Internal Forced Convection	8	
36	4/5	Mid-Term Quiz 3	6,7,8	Chapter 8
37	4/8	Fundamentals of Thermal Radiation	12	
38	4/10	Fundamentals of Thermal Radiation	12	
39	4/12	Fundamentals of Thermal Radiation	12	
40	4/15	Radiation Heat Transfer	13	
41	4/17	Radiation Heat Transfer	13	
42	4/19	Radiation Heat Transfer	13	Chapter 12
43	4/22	Radiation Heat Transfer	13	
44	4/24	Radiation Heat Transfer	13	
45	4/26	Radiation Heat Transfer	13	
46	5/1	Final Exam: 10:15 a.m. to 12:15 p.m.	ALL	Chapter 13