

THREE RIVERS COMMUNITY COLLEGE  
COURSE OUTLINE

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Course Number/Title: MEC K274 Heat Transfer

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Lecture 2 hrs      Laboratory 0 hrs      Credit 2 hrs      Contact 2 hrs

Course Description: This course will include one and two dimension flow, principles of convection, conduction, and radiation. Steady state conditions will be investigated.

Method: Lecture, homework, and tests

Text: Heat Transfer, Holman, 9<sup>th</sup> Edition, McGraw Hill

Prerequisites: PHY-K115;MAT-K254;MEC-K272 Co-Requisites: MEC-K275

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COURSE TOPICS/CONTENT

	HOURS
1. STEADY STATE CONDUCTION	5
2. STEADY STATE FREE CONVECTION	5
3. STEADY STATE FORCED CONVECTION	4
4. BOILING	4
5. CONDENSATION	4
6. RADIATION	4
7. OVERALL HEAT TRANSFER AND APPLICATION	4
TOTAL HOURS	30

Date: February 12, 2008

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Program Coordinator: Robert Lantz

Department Chairperson: Tony Benoit

Continuation Sheet No 2 of 2

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Measurable Objectives

A reasonable understanding of the principles of heat transfer,  
especially as it applies to power plants.