MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: **Pathophysiology** **Submitted By:** **C & K Giermann**

Semester Course Prefix and Number: **Biol 2415** **Approval Date:** **March 2008**

Old Quarter Course Prefix and Number: **Revision Date:**

Number of Credits: **3** **Number of Lecture Credits:** **3**

Semester(s) Offered: **Number of Lab Credits:** **Number of Lab Hours:**

Class Size: **30** **Number of Studio/Demonstration/Internship Credits:**

(Must be approved by AASC or SGC)

Course Purpose Code:

_____ **0 –** Developmental Courses
_____ **1 –** Non-transferable, General Education
_____ **2 –** Technical course related to career programs
_____ **3 –** College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
__XX__ **4 –** Other college course not considered a part of general education (MNTC) (e.g. computer science, health, physical education)
_____ **5 –** Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.
_____ **9 –** Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:

This course provides a more in-depth study of human physiology, the resulting abnormal functioning of diseased organs, and integration of systems to compensate for the disease and to maintain homeostasis. Major topics include pathophysiological studies of cardiopulmonary, gastrointestinal, reproductive, renal, immunological, endocrine, and neurological disruptions.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s):	Biol 2551 & 2552 (or instructor consent).
Reading Prerequisite:	College Level Reading
Composition Prerequisite:	None
Mathematics Prerequisite:	Placement by CPT score or a grade of C or better Math 0091 (pr previous Math 090).

Career Programs and Transfer Majors Accessing this Course:
Nursing

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:
(Notes: No more than two goals may be met by any one course. Curriculum Committee review and the Chief Academic Officer's approval are required.)

0. __X__ None
1. _____ Communications
2. _____ Critical Thinking
3. _____ Natural Sciences
4. _____ Mathematical/Logical Reasoning
5. _____ History and the Social and Behavioral Sciences
6. _____ The Humanities and Fine Arts
7. _____ Human Diversity
8. _____ Global Perspectives
9. _____ Ethical and Civic Responsibility
10. _____ People and the Environment

Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will be able to:

1. Explain the physiology behind and the compensation for a loss of homeostasis in the organs/organs systems covered in the course.

2. Appropriately use the terminology of pathophysiology

3. Apply concepts related to the biology of diseases and to predict symptoms of selected diseases

4. Connect concepts to new information about diseases

5. Research, cite, and communicate information about diseases.

Student Assessment Methods:

Quizzes
Tests
Discussions
Research papers/projects

Use of Instructional Technology: (includes software, interactive video and other instructional technologies):

Course may be offered on-line.

Outline or Statement of Major Course Content:

1) Cell injury/inflammation/fever/healing
2) Diseases of Immunity and Neoplasia
3) Blood/Cardiac/Vascular Disorders
4) Respiratory and Renal Pathophysiology
5) Gastrointestinal/Hepatobiliary/Pancreatic Pathophysiology
6) Endocrine/Reproductive Pathophysiology
7) Neurological Pathophysiology

Additional Special Information: (special fees, directives on hazardous materials, etc.)

Students may be required to purchase course software.

Transfer Information: (Please list colleges/majors that accept this course in transfer.)
Lake Superior College, Minneapolis CTC

Approvals:

Body	Representative Signatures	Date
Curriculum Committee		
Faculty Association		
Academic Affairs Standards Committee		
Chief Academic Officer		

Distribution: Original – Administrative Office
Copies: Curriculum Committee Chair, AASC Chair, Transfer Specialist, Originating Faculty Member, Scheduler, Records, Student Services, Learning Center, Library
Revised: October 2006