

# MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

## Course Outline

Course Title: Human Biology II

Submitted By: C & K  
Giermann

Semester Course Prefix and Number: BIOL 2425

Approval Date: March 2008

Old Quarter Course Prefix and Number:

Revision Date:

Number of Credits: 4

Number of Lecture Credits: 3

Semester(s) Offered:

Number of Lab Credits:1 Number of Lab Hours:2

Class Size: 72

Number of Studio/Demonstration/Internship Credits:

Negotiated by AASC on:  
(date) lec/  
24

lab

### 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)
- 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, the second in a two course non-science major's sequence, continues the introduction to the Human Body through a structure and systems approach. The course will include a review of cell biology with a more in-depth look into the structure and function of DNA. The course continues with the study of anatomy and physiology of additional organ systems not previously covered in Human Biology I. Molecular genetics is a focus and the organ systems covered include the urinary, reproductive, and nervous systems.

### Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): Biol 1545 (Human Biology I)  
Reading Prerequisite: College Level Reading  
Composition Prerequisite: None  
Mathematics Prerequisite: Placement by CPT score or a grade of C or better in MATH 0091 (or previous course MATH 090)

### Career Programs and Transfer Majors Accessing this Course:

Intended for allied health fields and Mesabi Range students needing more preparation for advanced biology courses (such as Anatomy & Physiology).

### 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.  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 improve their understanding of natural science principles and of the methods of scientific inquiry. As a basis for lifelong learning, students need to know the vocabulary of science and to realize that while a set of principles has been developed through the work of previous scientists, ongoing scientific inquiry and new knowledge will bring changes in some of the ways scientists view the world. By studying the problems that engage today's scientists, students learn to appreciate the importance of science in their lives and to understand the value of a scientific perspective.

***Students will be able to:***

- a. demonstrate understanding of scientific theories.
- b. formulate and test hypotheses by performing laboratory experimentation and/or simulation.
- c. communicate their experimental findings, analyses, and interpretations both orally and in writing.
- d. evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

**Student Assessment Methods:**

- Quizzes
- Tests-lecture and lab
- Assignments
- Lab reports
- Presentations/Projects

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

Lab Simulation Software  
Tutorial Programs

At a minimum, this course will have an on-line component and may be offered fully on-line.

**Outline or Statement of Major Course Content:**

Biological principles for the non-science major. Reviews major concepts of cytology (Molecular genetics including replication and protein synthesis), anatomy and physiology of the urinary, reproductive, and nervous systems (including senses) and an introduction to immunology (time-permitting).

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

On-line offerings will require the purchase of a lab kit.

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

Central Lakes College-Nursing AD degree  
Biology Elective

**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