

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

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|--|------------------------|---|-------------------------------|
| Course Title: | Human Biology I | Submitted By: | C & K Giermann |
| Semester Course Prefix and Number: | Biol 1545 | Approval Date: | |
| Old Quarter Course Prefix and Number: | Biol 101 | Revision Date: | 2/2008 |
| Number of Credits: | 4 | Number of Lecture Credits: | 3 |
| Semester(s) Offered: | | Number of Lab Credits: | 1 |
| Class Size: | 72lec | Number of Lab Hours: | 2 |
| Negotiated by AASC on: | /24 | Number of Studio/Demonstration/Internship Credits: | |
| (date) | lab | | |

Course Purpose Code:

- 0 – Developmental Courses
- 1 – Non-transferable
- 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 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 is designed for the non-science major and is a general introduction to human biology with a structure/function approach. Major topics include cell biology, transmission genetics and anatomy and physiology of body systems.

Prerequisites and/or recommended entry skills/knowledge:

- Course Prerequisite(s): None
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 MATH 090)

Career Programs and Transfer Majors Accessing this Course:

MTC-Lab Science

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.)

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| 0. <input type="checkbox"/> None | 6. <input type="checkbox"/> The Humanities and Fine Arts |
| 1. <input type="checkbox"/> Communications | 7. <input type="checkbox"/> Human Diversity |
| 2. <input type="checkbox"/> Critical Thinking | 8. <input type="checkbox"/> Global Perspectives |
| 3. <input checked="" type="checkbox"/> Natural Sciences | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning | 10. <input type="checkbox"/> People and the Environment |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences | |

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 and/or simulation. These experimental components will develop students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.
- 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
- Presentation/Projects

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

- Lab Simulation Software (Students may have to purchase lab software).
- Tutorial Programs

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

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

Students may be required to purchase lab software and/or lab kits.

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

MTC-Biology Course

Course Outline Revision History:

Biological principles for the non-science major. Covers major concepts of cytology (including bio-molecules and cell division), organization of the body into organs, and organ systems, and transmission genetics. Systems likely to be covered include digestive, musculo-skeletal, respiratory, and cardio-vascular.

Approvals:

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

Distribution: Original – Instructional Services
Copies: Transfer Specialist, Originating Faculty Member, Records
Revised: March 2010