

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Human Physiology I
Semester Course Prefix and Number: BIOL 2451
Old Quarter Course Prefix and Number:

Submitted By: C. Giermann
Approval Date: 2/2003
Revision Date:

Number of Credits: 1
Semester(s) Offered:
Class Size:
Number of Lecture Credits: 1
Number of Lab Credits:
Number of Studio/Demonstration/Internship Credits:

Negotiated by AASC on:
(date)

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 will offer students who are co-enrolled in Biology 2551 (Anatomy & Physiology I) a more thorough examination of the physiological topics covered through small group discussions, computer-based physiology simulations, and case studies. The examination of the physiologic processes will be primarily through clinical applications, making this course ideal for those students interested in a career in the health field. Students must be co-enrolled in A & P 1.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): Co-Requisites BIOL 2551
Reading Prerequisite: College Level Reading/Computer Skills Helpful
Composition Prerequisite:
Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:

Recommended for students co-enrolled in BIOL 2551 who intend to pursue a health career or take advanced studies in anatomy or 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.)

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| 0. <input checked="" 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 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 be able to:
analyze physiologic processes and relate anatomical abnormalities and/or biochemical abnormalities of human tissues and organs with human pathology/diseases. Topics covered will coincide with those discussed in Anatomy and Physiology 1.

Student Assessment Methods:

Assessment will be primarily through 2-3 page papers and 1 page case study analyses.

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

PhysioEx/CyberEd/MediaPhys: Physiology Software
PowerPoint

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

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

Course Outline Revision History:

Outline of the major course content:

Topics covered will include diseases of the musculo-skeletal system, nervous systems, integumentary system and may include (but are not limited to the following):

Cystic Fibrosis/Long QT Deafness
Blood-Brain Barrier
MELSA/ALD/Tay-Sachs
Hypercholesteremia
PKU
Dermatitis/Skin Cancer/Hair Loss/Acne
Osteoporosis/Fractures
Arthritis/Bursitis/Joint Replacement
Myasthenia Gravis/BOTOX/TMJ
Multiple Sclerosis/ALS/Drugs
Spinal Cord Injuries/Cerebral Palsy
CVA./Parkinson's Disease/Sleep Disorders

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
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