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
Number of Lecture Credits: 1
Number of Lab Credits: Number of Lab Hours: Number of Studio/Demonstration/Internship Credits:

Semester(s) Offered:
Class Size:
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)
X 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.)

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: 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:**

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**Distribution:** Original – Instructional Services

**Copies:** Transfer Specialist, Originating Faculty Member, Records

**Revised:** March 2010