MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: **Introduction To Anatomy and Physiology** **Submitted By:** **C. & K. Giermann**

Semester Course Prefix and Number: **Biol 1415** **Approval Date:** **April 2009**

Old Quarter Course Prefix and Number: **Revision Date:** **January 2010**

Number of Credits: 4 **Number of Lecture Credits: 3**

Semester(s) Offered: **Number of Lab Credits:1** **Number of Lab Hours:2**

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

Negotiated by AASC on:
(date)

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)
__X__ **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 one semester course is designed as an introduction to human anatomy and physiology for students in the Practical Nursing program and other allied health fields who have minimal background in biological science. The focus includes principles of cells, metabolism and the chemical basis of life; as well as organ systems of support and movement, integration and coordination, transport, absorption and excretion, and the human life cycle. Emphasis is on the interrelatedness and interdependency of organ systems.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): none
Reading Prerequisite: College level
Composition Prerequisite: None
Mathematics Prerequisite: None

Career Programs and Transfer Majors Accessing this Course:

Practical Nursing and those students working on improving their background knowledge prior to taking Anatomy & Physiology (Biol 2551).

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. __X__ 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:

- Demonstrate understanding of scientific theories
- Formulate and test hypotheses
- Communicate experimental findings
- Make informed judgments about science - related topics and policies
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Student Assessment Methods:

Lecture Test (Multiple Choice, Short Answer, Essay)
Practical Lab Testing
Frequent use of Classroom Assessment Techniques (eg. Minute Papers, Muddiest Point)

Use of Instructional Technology: (includes software, interactive video and other instructional technologies): May include, but are not limited to:

PowerPoint Presentation Software
Interactive Physiology Software
Ph.I.L.S. (Physiology Lab Simulation Software)
On-Line Student Study Sites (Textbook Provided)
Anatomy Revealed (Dissection Software)

Outline or Statement of Major Course Content:

Levels of Organization
Introduction to Human Anatomy and Physiology
Chemical Basis of Life
Cells & Cellular Metabolism
Tissues

Support and Movement
Skin and the Integumentary System
Skeletal System
Muscular System

Integration and Coordination
Nervous System
Somatic and Special Senses
Endocrine System

Transport
Blood
Cardiovascular System
Lymphatic System and Immunity

Absorption and Excretion
Digestion and Nutrition
Urinary System
Water, Electrolyte, and Acid-Base Balance

The Human Life Cycle
Reproductive Systems
Pregnancy, Growth, and Development

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

Lab activities may include preserved organ dissection. Students with formalin sensitivities or who are pregnant should inform their instructor.

Transfer Information: (Please list colleges/majors that accept this course in transfer.)
Non- major's 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