KILGORE COLLEGE  
BIOLOGY DEPARTMENT  
Biology 2402 Syllabus

COURSE: Biology 2402  
(4-3-4)

TITLE: Human Anatomy and Physiology II

CATALOG DESCRIPTION: Continuation of BIOL 2401 covering the remainder of the systems of the human body

CREDIT HOURS: Four (4)

PREREQUISITE: "C" or better in BIOL 2401. The student must have passed all sections of the THEA test and/or completed all reading, writing, and math requirements. Laboratory fee $35. F, Sp, Su (2607075103).

INSTRUCTOR: Lynn McCutchen  
Laney Mobley  
Leon Wooten

COURSE RATIONALE: This course meets the requirements for the first half of the Human Anatomy and Physiology requirement for the associate degree allied health programs, bachelor degree programs in nursing, and kinesiology. Biol. 2401 and Biol. 2402 must be taken in sequence.

EVALUATION: LECTURE = 50% of final (transcript) grade

LECTURE GRADE: AVERAGE OF 6-7 GRADES.
4 MAJORS
**1 QUIZ GRADE AVERAGE
1-2X FINAL EXAM (The final Exam will be a departmental multiple choice comprehensive exam on a date set by the Registrar.)

Human Anatomy and Physiology Society Exam (administered at the discretion of the individual instructors)

LABORATORY = 50% of final (transcript) grade

LAB GRADE: Average of 4 grades.
3 Practical Exams
**1 QUIZ GRADE Average (given as determined by instructor)

CLASSROOM POLICIES:
Some classroom polices vary by instructor
All instructors require that the students:
A. Bring writing paper, a pencil or pen, and your textbook to each class.
B. NOT read novels, other textbooks, school newspapers, etc. in class. TURN OFF CELL PHONES, ETC.
C. BE ON TIME!!! After three tardies each additional tardy will count as an absence.
D. Not miss lecture exams. Make-up day for missed exams will be at the end of the semester.
E. Daily grades cannot be made up except by special permission from the instructor.
F. Anyone caught cheating on any work for this class will be immediately dropped from the course with an F.
G. If you come to lecture/lab to take a quiz, and then leave, you will not receive a grade for the quiz.
H. Only instructor approved electronic equipment is allowed in lecture or lab. All other electronic equipment must be turned off and out of sight and reach.
I. Do not bring children to class (lecture or lab)

DROP DATE:
Drop date determined by the Registrar and is listed in the current Kilgore College Calendar.

Revised: 06/28/10
KILGORE COLLEGE
BIOLOGY DEPARTMENT
Biology 2402 Syllabus

DISCLAIMER:
Your instructor reserves the right to make modifications in content and schedules as necessary to promote the best education possible within prevailing conditions affecting this course.

COMMON COURSE OUTCOMES:

A. Students will practice and apply scientific terminology as it applies to the human body.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final exam.  EEO: (B, D)

B. Students will demonstrate knowledge of the concept of homeostasis and apply it to the anatomy and physiology of the human body.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination.  EEO: (B, D)

C. Students will demonstrate basic atomic theory and apply this knowledge to the inorganic and organic molecules of the human body.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination.  EEO: (B, D)

D. Students will practice and apply knowledge of chemistry to explain the major biochemical pathways involved in energy flow throughout the human body.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination.  EEO: (B, D)

E. Students will explain cell theory and apply this theory to the functioning of the various systems of the human body.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination.  EEO: (A, B, D)
F. Students will apply cell theory to the basic processes of membrane structure and exchange, mitosis, meiosis, and protein synthesis.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination. EEO: (A, B, D)

G. Students will display knowledge of basic tissue structure and relate the relationship between structure and function of the various tissues.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination. EEO: (B, D)

H. Students will demonstrate a basic knowledge of the anatomy and physiology of, and explain the relationship between, the nervous, cardiovascular, lymphatic and immune, respiratory, and digestive systems.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination. EEO: (A, B, C, D)

I. Students will compare and contrast basic functions of the above systems and changes associated with disease processes and drug actions/interactions involving the above systems.
Activities: Text and lab manual readings, class lecture and discussions, laboratory exercises and discussions, and web site activities.
Assessment: Majors, practicals, quizzes, online web assignments, final examination. EEO: (A, B, C, D)

Exemplary Educational Objectives (EO) are in the Faculty Handbook or on the Kilgore College web-site.

Schedule of classes and/or labs: Three clock hours per week for lecture and four clock hours per week for laboratory. Schedules included below.
KILGORE COLLEGE
BIOLOGY DEPARTMENT
Biology 2402 Syllabus
Tentative Lecture Schedule

Nervous Tissue
Nerve Histology and Physiology
The Spinal Cord and the Spinal Nerves
The Brain and Cranial Nerves

Unit Lecture Exam I
The Sensory, Motor, and Integrative Systems
The Autonomic Nervous System
The Special Senses

Unit Lecture Exam II
The Cardiovascular System: The Blood
The Cardiovascular System: The Heart
The Cardiovascular System: Blood Vessels and Hemodynamics

Unit Lecture Exam III
The Lymphatic System, Nonspecific Resistance to Disease and Immunity
The Respiratory System
The Digestive System
Metabolism

Unit Lecture Exam IV

Departmental Comprehensive Multiple Choice Final Exam
<table>
<thead>
<tr>
<th>Exercise</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Histology of Nervous Tissue</td>
</tr>
<tr>
<td>21</td>
<td>Begin Spinal Cord and Spinal Nerves</td>
</tr>
<tr>
<td>19</td>
<td>Gross Anatomy of the Brain and Cranial Nerves</td>
</tr>
<tr>
<td>20</td>
<td>Electroencephalography, CNS Review</td>
</tr>
<tr>
<td>22</td>
<td>Human Reflex Physiology</td>
</tr>
<tr>
<td>23</td>
<td>General Sensation</td>
</tr>
<tr>
<td>23</td>
<td>General Sensation</td>
</tr>
<tr>
<td>24, 25, 26</td>
<td>Anatomy of the Special Senses</td>
</tr>
<tr>
<td>24</td>
<td>Special Senses: Vision</td>
</tr>
<tr>
<td></td>
<td><strong>Practical #1 over the above material</strong></td>
</tr>
<tr>
<td>25</td>
<td>Special Senses: Hearing and Equilibrium</td>
</tr>
<tr>
<td>26</td>
<td>Special Senses: Taste and Olfaction</td>
</tr>
<tr>
<td>29</td>
<td>Blood</td>
</tr>
<tr>
<td>29</td>
<td>Blood</td>
</tr>
<tr>
<td>30</td>
<td>Anatomy of the Heart</td>
</tr>
<tr>
<td>31</td>
<td>Conduction System of the Heart and Electrocardiography</td>
</tr>
<tr>
<td>32</td>
<td>Anatomy of Blood Vessels</td>
</tr>
<tr>
<td>32</td>
<td>Anatomy of Blood Vessels</td>
</tr>
<tr>
<td></td>
<td><strong>Practical #2 over the above material after Practical 1</strong></td>
</tr>
<tr>
<td>34</td>
<td>Human Cardiovascular Physiology – Blood Pressure and Pulse Determination</td>
</tr>
<tr>
<td>35</td>
<td>Lymphatic System</td>
</tr>
<tr>
<td>36</td>
<td>Anatomy of the Respiratory System</td>
</tr>
<tr>
<td>37</td>
<td>Respiratory System Physiology</td>
</tr>
<tr>
<td>38</td>
<td>Anatomy of the Digestive System</td>
</tr>
<tr>
<td>39A</td>
<td>Chemical Breakdown of Foodstuffs: Enzymatic Action</td>
</tr>
<tr>
<td>38</td>
<td>Anatomy of the Digestive System</td>
</tr>
<tr>
<td></td>
<td><strong>Practical #3 over the material after Practical 2</strong></td>
</tr>
</tbody>
</table>