Course Prefix and Number:       Course Title:
BIOL 2401                             Human Anatomy & Physiology I

Hill College is committed to the principal of equal opportunity in education and employment. The college does not discriminate against individuals on the basis of age, race, color, religion, sex, national origin, disability, or veteran status in the administration of its educational programs, activities, or employment policies.

Catalog Description:

BIOL 2401
Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized.

Lecture Hours: 3    Lab Hours: 3    Semester Credit Hours: 4

Prerequisites: None.

Introduction and Purpose:

This course is intended to prepare the student for further study in physical education and the allied medical Arts and to meet the general education requirements for a laboratory science.

Instructional Materials:


Customized Lab Manual

Supplies: ScanTron Testing Forms, #2 Pencil, (as required by instructor)
Objectives/Student Learning Outcomes:

These learning outcomes and course objectives will include the student demonstrating competence in the following areas:

Lecture Objectives
1. Students will be able to recognize all of the components of the Cell Theory.
2. Student will be able to demonstrate knowledge of major cellular organelles and their function.
3. Students will be able to identify and recognize differences between transport mechanisms.
4. Students will be able to demonstrate knowledge of the four basic tissues based on cell types, shapes and functions.
5. Students will be able to demonstrate knowledge of the major structural features and functions of the Integumentary, Skeletal, Muscular, and Nervous Systems.
6. Student will be able to demonstrate knowledge of proper anatomical terminology.
7. Student will be able to demonstrate knowledge of the organ systems of the body, major organs of each system, and the major functions of each system.
8. Student will be able to identify and recognize differences between basic chemistry and Biochemistry.

The students’ success in completing these objectives will be measured using a set of examinations and assignments described, in detail under the section of this syllabus headed “Method of Evaluation.”

Methods of Instruction:

This course will be taught face-to-face and by various distance learning delivery methods.

Audio-visual materials and computer-based technology will be used when appropriate. Students will be shown how to use a calculator where appropriate.

Methods of Evaluation:

Grades in this course will be based on the following evaluative criteria:
1. Major Exams (50%) – 4 will be given
2. Laboratory (30%)
3. Minor Exams/Quizzes/Homework – Daily quiz average will be substituted for the lowest major exam.
4. Final Exam (20%) – Comprehensive

Letter grades for the course will be based on the following percentages:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
</tr>
</tbody>
</table>

Course Outline:

Class policies:

Regular attendance at all class meetings is expected. Disruptions in class will not be tolerated.

Disabilities/ADA

In accordance with the requirements of the Americans with Disabilities Act (ADA) and the regulations published by the United States Department of Justice 28 C.F.R. 35.107(a), Hill College’s designated ADA coordinator, Debra Hargrove, Vice President, Human Resources and Organizational Development, shall be responsible for coordinating the College’s efforts to comply with and carry out its responsibilities under ADA. Students with disabilities requiring physical, classroom, or testing accommodations should contact Salley Schmid, Director of Counseling, at (254) 659-7651 or sschmid@hillcollege.edu

Topic Outline

PART ONE – Organization of the Body
1. The Human Body: An Orientation Ch. 1
2. Chemistry Comes Alive Ch. 2
3. Cells: The Living Units Ch. 3
4. Tissue: The Living Fabric Ch. 4

PART TWO – Covering, Support, and Movement of the Body
5. The Integumentary System Ch. 5
6. Bone and Skeletal Tissue Ch. 6
7. The Skeletal System Ch. 7
8. Joints Ch. 8
9. Muscles and Muscle Tissue Ch. 9
10. Muscular System

PART THREE – Regulation and Integration of the Body
11. Fundamentals of the Nervous System Ch. 11
12. The Central Nervous System Ch. 12
13. The Peripheral Nervous System and Reflex Activity Ch. 13
14. The Autonomic Nervous System Ch. 14
15. The Special Senses Ch. 15

Bibliography

Hole, John W., Human Anatomy and Physiology, Sixth Edition, Iowa, Wm. C. Brown, 1993


Gray, Henry, Anatomy, Descriptive and Surgical, New York, Bounty Books, 1977