

ILLINOIS VALLEY COMMUNITY COLLEGE



COURSE OUTLINE

DIVISION: Natural Sciences Business

COURSE: BIO 1007

Date: October 8, 2013

Credit Hours: 4

Prerequisite(s): None

Delivery Method: **Lecture** **2 Contact Hours** (1 contact = 1 credit hour)
 Seminar **1 Contact Hours** (1 contact = 1 credit hour)
 Lab **3 Contact Hours** (2 contact = 1 credit hour)
 Clinical **0 Contact Hours** (3 contact = 1 credit hour)
 Online
 Blended

Offered: **Fall** **Spring** **Summer**

IAI Equivalent –**Only for Transfer Courses**-go to <http://www.itransfer.org>.

CATALOG DESCRIPTION:

This course involves an introductory study of the structure and function of the human body. A study of cytology, histology and five organ systems (integumentary, skeletal, muscular, nervous, and endocrine) illustrates the relationships between structures and their functions. Laboratory exercises include cat dissection, microscopy, cadaver demonstration and other materials. Lecture and/or seminar, three hours per week; lab, three hours per week.

GENERAL EDUCATION GOALS ADDRESSED

[See the last page of this form for more information.]

Upon completion of the course, the student will be able:

[Choose those goals that apply to this course.]

- To apply analytical and problem solving skills to personal, social and professional issues and situations.
- To communicate orally and in writing, socially and interpersonally.
- To develop an awareness of the contributions made to civilization by the diverse cultures of the world.
- To understand and use contemporary technology effectively and to understand its impact on the individual and society.
- To work and study effectively both individually and in collaboration with others.
- To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.
- To develop and maintain a healthy lifestyle physically, mentally, and spiritually.
- To appreciate the ongoing values of learning, self-improvement, and career planning.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals.]

Upon completion of the course, the student will be able to:

1. understand the relationships that exist between form and function with reference to the study of human anatomy and physiology.
2. relate the organ systems of the body to their specific homeostatic functions.
3. demonstrate laboratory skills in anatomical dissection and observation, especially with reference to the cat, human cadaver, microscopy, and scientific instrumentation.
4. use the content of this course to prepare for more advanced work in anatomy and physiology.

COURSE TOPICS AND CONTENT REQUIREMENTS:

1. Anatomical orientation; organizational plan of the human body; introduction to organ systems
2. Introductory chemistry as it relates to human physiology
3. Cytology
4. Histology
5. Integumentary System
6. Skeletal System
7. Muscular System
8. Nervous System
9. Endocrine System

INSTRUCTIONAL METHODS:

1. Lectures
2. Seminar and laboratory discussions

3. Laboratory exercises
4. Written evaluations in lecture and laboratory

INSTRUCTIONAL MATERIALS:

1. Visual aids (PowerPoint presentations, charts, models, tutorial CDs, display materials, human cadaver demonstrations, preserved materials), DVD, online videos
2. Compound light microscopes
3. Analytical balances
4. Personal computers
5. Document camera/ overhead projector

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

1. Text and laboratory reading assignments
2. Lecture exams
3. Laboratory practical examinations
4. Laboratory exercises
5. Participation in seminar and laboratory discussions and demonstrations
6. Advanced preparation of seminar discussion objectives
7. Assignments as appropriate. Grades will be assigned primarily on the basis of total points earned during lecture tests, laboratory practicals, quizzes, and assignments. The following grading scale will be used as a guide in determining the final letter grade for the course:

90	100% =	A
80	89% =	B
70	79% =	C
58	69% =	D
Below 58%		F

Other criteria such as class participation, demonstrated laboratory skill and attendance may also be considered in assigning a final letter grade.

OTHER REFERENCES

Required—

Text: Martini & Bartholomew: Essentials of Anatomy and Physiology, 6th edition, 2013, Pearson-Benjamin Cummings, San Francisco, CA.

Note: The text is bundled with the following:

- Interactive Physiology 10-System Suite (IP-10) CD-ROM

The website for this text is www.masteringaandp.com

Lab Manual: Wise, E. 2012. *Selected Labs for Biology 1007/1008 Anatomy & Physiology*, Customized for Illinois Valley Community College, McGraw-Hill: Dubuque, IA.

Note: The lab manual includes a Connect (with Anatomy & Physiology Revealed) online access code. McGraw-Hill Higher Education. Dubuque, IA. The customized lab manual comes with 2 years of online access to Anatomy & Physiology Revealed (APR), a virtual cadaver dissection experience.

Recommended—

Study Guide: Seiger, Charles M. *Essentials of Anatomy and Physiology*, 4th edition. Pearson Education, Inc. publishing as Pearson Benjamin Cummings, San Francisco, California.

Laboratory Atlas of Anatomy and Physiology by Eder, Kaminsky, and Bertram, Fifth edition, 2007. McGraw-Hill Higher Education, Dubuque, IA.

Krieger, Paul A. *A Visual Analogy Guide to Anatomy and Physiology*, 2009. Morton Publishing Co., Englewood, CO.

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