BANNER COURSE MODIFICATION FORM

This form changes course information in Banner Catalog. Changes to the Schedule are the responsibility of the departments with guidance from the Registrar. Please refer to the Curriculum Guidelines, Policies, and Procedures for courses designated as General Studies, Multicultural, and Senior Experience.

COURSE PREFIX & NUMBER: BIO 2310

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<th>Grade Mode</th>
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<tr>
<td>Desired Listing:</td>
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<td>Effective Term:</td>
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Banner Enforced Pre/corequisite(s) and Restrictions (e.g., class standing, majors only, non-majors)

| Present Listing:    |
| Desired Listing:    |
| Effective Term:     |

Banner Enforced Prerequisite(s)

| Present Listing:    | none                   |
| Desired Listing:    | BIO 1080 and 1090      |
| Effective Term:     | Summer 2015            |

Banner Enforced Corequisite(s)

| Present Listing:    |
| Desired Listing:    |
| Effective Term:     |

This list of pre/corequisite(s), restrictions, and/or corequisite(s) must be the same list or a subset of the official course prerequisites and/or corequisites listed in the Catalog. It may not contain courses or requirements that are not included in the official Catalog listing of prerequisites and/or corequisites.

APPROVALS:

Department Chair OR Program Director: Ford Lux

Dean OR Associate Dean: [Signature] [Date]

AVPASA or Designee: [Signature] [Date]

Revised 6.26.13
REGULAR COURSE SYLLABUS

School of: Letters, Arts and Sciences
Department: Biology
CIP Code: 26.0706
Prefix & Course Number: BIO 2310  Crosslisted With*: ____
Course Title: Human Anatomy and Physiology I (3+3)
Check All That Apply:  Required for Major: _  Required for Minor: __ Specified Elective: X
                          Required for Concentration: ___  Elective: ___  Service Course: X
Credit Hours: 4 (3+3)
Total Contact Hours per semester (assuming 15-16 week semester):
  Lecture 45  Lab 45  Internship ___  Practicum ___  Other (please specify type and hours): ___
Schedule Type(s): 6,B  Grading Mode(s): L
Variable Topics Courses (list restrictions, including the maximum number of hours that can be earned**):
** NOTE: This information must be included in the course description.
Restrictions (Variable Topics Course): ___
Prerequisite(s): BIO 1080 and BIO 1090 or permission of instructor.
Corequisite(s): ___
Prerequisite(s) or Corequisite(s): ___
Banner Enforced:
  Prerequisite(s): BIO 1080 and BIO 1090
  Corequisite(s): ___
  Prerequisite(s) or Corequisite(s): ___
Catalog Course Description:
This is the first of two courses addressing the structure and function of the human body. Topics include tissues, anatomy, the musculoskeletal system and neurophysiology. Course content and class level are designed for allied health science students and for human performance, sport and leisure studies majors.

APPROVED:

Department Chair/Institute Director  Date

Dean  Date

Associate VP, Academic Affairs  Date

*If crosslisted, attach completed Course Crosslisting Agreement Form
BIO 2310

Required Reading and Other Materials will be equivalent to:

Specific (Measurable) Student Behavioral Learning Objectives (format: 1, a, i, ii, etc.):
Upon completion of this course the student should be able to:

Lecture:
1. Define common anatomical terms and understand the various levels of organization in the body.
2. Explain the components and functions of the skeletal system.
3. Explain structure and function of principal joints.
4. Explain the relationship between bones and muscles in producing movements of the body.
5. Explain the histological characteristics of neurons.
6. Describe neuron types and their functions.
7. Describe structure and function of skeletal muscle fibers, skeletal muscle tissues, and whole muscle.
8. Describe similarities and differences of smooth, cardiac and skeletal muscle tissues
9. Describe organization of nervous system.
10. Describe functions of brain regions.
11. Describe autonomic controls.
12. Explain function of the eye.
14. Describe taste, touch, olfactory, pressure and thermosensory mechanisms.

Laboratory
1. Show skills in dissection procedures.
2. Identify bones and major surface feature of the human skeleton.
3. Identify major skeletal muscles by name, attachment and function.
4. Identify principal parts of central and peripheral nervous systems.

Detailed Outline of Course Content (Major Topics and Subtopics) or Outline of Field Experience/Internship (experience, responsibilities and supervision) (format: I, A, 1, a, etc.):

I. Lecture Content (taught with lectures, chalkboards, PowerPoint, transparencies and/or handouts.)
   A. Introduction to basic anatomy
   B. Skeletal morphology
      1. Microanatomy of bone and cartilage
      2. Bone Physiology
      3. Functional anatomy of the human skeleton
   C. Arthrology - Structure, function and classification of joints
   D. Muscular System
      1. Physiology of muscle contraction
      2. Survey of human muscular system
      3. Analysis of bone muscle systems
   E. Neurophysiology
      1. General design and functional divisions of the nervous system
      2. Membrane potentials
      3. Action potentials and neuronal functions
      4. Anatomy and Physiology of the spinal cord and spinal nerves
      5. Anatomy and physiology of the brain and cranial nerves
      6. Sensory and motor physiology
BIO 2310

II. Laboratory Content (taught with diagrams, laboratory manual, specimens and computers.)
   A. Tissues
   B. Human Skeleton (identification of bones and surface markings)
   C. Muscular System (dissection and identification of cat muscles)
   D. Central and Peripheral Nervous Systems (cat dissection and sheep brain)
   E. Sensory and Motor Physiology

Evaluation of Student Performance (format: 1, a, i, ii, etc.):

Students will be evaluated on the basis of:
1. Two or more lecture examinations
2. Two or more laboratory tests
3. A final examination