Summer Course 2015

*Human Anatomy (Biol 160) 4 Semester Hour Credits*

**Offered: June 13-August 8, 2015**

**Instructor:** TBA

**Course Description**

This course is designed for any student interested in entering the health professions. Human Anatomy is the integrated study of the gross and microscopic anatomy of the human body. At the end of the course students will have an understanding of the human architecture and how the microscopic and gross forms adhere to the concept of “shape/organization confers function”. This course includes eight laboratory sessions. Prerequisite: One semester of college biology. Credits are transferable, however please check with the institution you wish to transfer credits to prior to taking this course.

**Course Goals**

At the conclusion of this course, students will be able to:

- Link basic concepts of introductory biology courses and reveal how those fundamental ideas play a crucial role in understanding the body’s architecture, organization, and function
- Discuss the interdisciplinary nature of the natural sciences and how mathematics provides the foundation for Physics → Chemistry → Biology → Human Anatomy
- Identify how laws of thermodynamics and energy are crucial to the human body’s complex architecture (shape/organization)
- Recognize how anatomical “shape/organization confers function”
- Express a molecular point of view to gross anatomy and that the idea that one cell, one organelle, or even one macromolecule can have profound effects on the entire human body
- Identify the basic hierarchy, function, and different diseases emanating from each organ system within the human body

**Topics Covered**

- Anatomy Terminology and Organization
- Cellular Anatomy
- Histology
- Histology Surface Anatomy
- Integumentary System
- Skeletal System
- Articular System
- Respiratory System
- Urinary System
- Central, Autonomic and Peripheral Nervous System
- Senses
- Endocrine System
- Muscular System
- Cardiovascular System
- Circulatory/Lymphatic System
- Gastrointestinal System
- Reproductive System
Course Delivery

Lectures will be delivered asynchronously as videos recorded by faculty to be accessible by students online through Google Drive at Keck Graduate Institute at their convenience. Additional course materials including readings, grades, and assignment will be made available through the Learning Management System Sakai. Students are responsible for watching video lectures during the week at their own pace. Students are required to come to KGI on Saturdays for discussion of the week’s topic(s) as well as to participate in a 3D virtual Human Anatomy Lab using Z-Space® technology housed at KGI.

Exams and quizzes will be given electronically at the discretion of the instructor. Laboratory periods will be conducted for 4 hours on Saturday’s for 8 weeks over the summer session excluding the July 4th holiday.