

# ANATOMY & CELL BIOLOGY (ACB)

<b>ACB 604 Forensic Science I</b>	<b>3 Credit hours</b>	
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 620 Gross Anatomy/Embryology</b>	<b>8 Credit hours</b>	
A course centered about dissection of the human body in the laboratory. Lectures are designed to guide the student and stimulate him toward independent effort.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 621 Gross Anat/Embryology I</b>	<b>2 Credit hours</b>	
Morphology of the upper and lower limbs with dissection.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 622 Gross Anat/Embryology II</b>	<b>3 Credit hours</b>	
Morphology of the head and neck, thorax, and abdomen.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 624 Micro Anat &amp; Ultrastruct</b>	<b>4 Credit hours</b>	
An in-depth study of the microanatomy and fine structure of human tissues, specifically designed for graduate students through special laboratories, lectures, and seminars.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 626 Adv Histological Tech</b>	<b>4 Credit hours</b>	
Advanced theories and techniques of tissue preparation, straining, and histochemistry.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 628 Anatomy of Nervous System</b>	<b>4 Credit hours</b>	
The gross and fine structure of the nervous system is correlated with function at each level of the spinal cord and brain. Lectures are supplemented in the laboratory by the study of microscopic sections and gross sections of the spinal cord, brain stem and whole brain.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 629 Microscopic Anat Part I</b>	<b>1 Credit hour</b>	
The basic tissue types of the human body will be examined at the light and electron microscopic level.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 630 Microscopic Anat Part II</b>	<b>3 Credit hours</b>	
The organ systems of the human body will be examined at the light and electron microscopic level.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 632 Prin Mammalian Develop</b>	<b>3 Credit hours</b>	
A lecture course designed to present the salient features of normal human development so that students will have a basis for comprehending normal adult anatomic relations and variations, and a basis for interpreting congenital pathologic conditions.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 633 Neuroanatomy I</b>	<b>2 Credit hours</b>	
To study the essential organization of the cerebrum and spinal cord, blood supply, the spinal ascending and descending pathways, and clinically related disorders.		
<b>Pre-req:</b> BMS 600.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 634 Neuroanatomy II</b>	<b>2 Credit hours</b>	
To study the functional organization and neurological disorders associated with the brainstem, thalamus, hypothalamus, cerebellum, basal ganglia, limbic system, and cerebral cortex.		
<b>Pre-req:</b> ACB 633.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 639 Neuroanatomy Res Tech</b>	<b>3 Credit hours</b>	
Class participants will be exposed to state-of-the-art neuroanatomy research techniques while in the laboratories of neuroanatomy faculty.		
<b>Grade Mode:</b> Credit/No Credit Grade Only		
<b>ACB 640 Current Topics Cell Biol</b>	<b>1-3 Credit hours</b>	
Students carry out a guided comprehensive review of the Literature on a current research topic. The topic is selected by agreement of the student and faculty member.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 641 Electron Microscopy</b>	<b>3 Credit hours</b>	
The theory and practice of transmission electron microscopy (TEM). Sample preparation, TEM operation, darkroom work, manuscript preparation, and an individualized research project. (PR: Consent of instructor)		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 643 Ind Research Electron Micro</b>	<b>3 Credit hours</b>	
An advanced exploration of the newest information on cellular signalling pathways. Special emphasis will be placed on current literature in following signal transduction from the plasma membrane to the nucleus. PR: BMS 600 or Equivalent		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 650 Research Cell Processes</b>	<b>1-4 Credit hours</b>	
Provides the student with an introduction to research in cellular biology and neurobiology. The educational program is arranged in consultation with an individual faculty member. (PR: BMS 600 or equivalent).		
<b>Attributes:</b> Thesis		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 655 Digital Video Imaging</b>	<b>3 Credit hours</b>	
An in-depth study of the theory and practice of fluorescence and confocal microscopy, intracellular ion measurements and immunocytochemistry. Working with instructor (two-four hours per week of lectures, laboratories, and individual discussions), the student will become familiar with aspects of research conducted in the laboratory and select an individualized research project.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 660 Current Topics Neurobiology</b>	<b>1-3 Credit hours</b>	
Students carry out a guided comprehensive review of the Literature on a current research topic. The topic is selected by agreement of the student and faculty member. Prerequisite: Consent of instructor.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 675 Special Topics</b>	<b>1-4 Credit hours</b>	
Present course material on special areas of research or topics which are not routinely covered in existing courses.		
<b>Grade Mode:</b> Normal Grading Mode		
<b>ACB 676 Special Topics</b>	<b>1-4 Credit hours</b>	
Present course material on special areas of research or topics which are not routinely covered in existing courses.		
<b>Grade Mode:</b> Normal Grading Mode		

**ACB 677 Special Topics 1-4 Credit hours**

Present course material on special areas of research or topics which are not routinely covered in existing courses.

**Grade Mode:** Normal Grading Mode

**ACB 720 Gross Anat & Embryology 8 Credit hours**

**Grade Mode:** Normal Grading Mode

**ACB 724 Micro Anat & Ultrastruct 4 Credit hours**

**Grade Mode:** Normal Grading Mode

**ACB 725 Structural Basis Med Prac 1-18 Credit hours**

This course will consist primarily of laboratory dissection following initial orientation lectures. This will provide experience in human dissection that is currently not available in the prosection-based Gross Anatomy and Embryology course.

**Grade Mode:** Pass/Fail Grading Mode

**ACB 728 Neuroanatomy 4 Credit hours**

**Grade Mode:** Normal Grading Mode

**ACB 780 Elective Special Projects 1 Credit hour**

**Grade Mode:** Normal Grading Mode

**ACB 785 Independent Study 1-15 Credit hours**

**Grade Mode:** Credit/No Credit Grade Only

**ACB 801 Clinical Microanatomy 1-18 Credit hours**

Elective for fourth-year medical students to review medical histology slides of normal tissues.

**Grade Mode:** Normal Grading Mode

**ACB 810 Current Topics Cell Bio 1-18 Credit hours**

Students carry out a guided comprehensive review of the literature on a current research topic. The topic is selected by agreement of the student and the faculty member.

**Grade Mode:** Normal Grading Mode

**ACB 813 Surgical Anatomy 1-18 Credit hours**

**Grade Mode:** Pass/Fail Grading Mode

**ACB 820 Res Cellular Processes 1-18 Credit hours**

Provides the student with an introduction to research in cellular biology and neurosciences. The educational program is arranged in consultation with an individual faculty member.

**Grade Mode:** Normal Grading Mode