

CELL BIOLOGY/ NEUROSCIENCE-MD (CBN)

CBN 111 Medical Gross Anatomy 9 cr

Lectures by the faculty stress clinically important aspects of anatomy, utilizing both systemic and regional approaches. Student groups of four dissect the entire human body. Prosections and computer programs are available to augment information learned in the laboratory. The lecture and laboratory material is reinforced through physician- presented correlation conferences. Additionally, the students are required to complete a computer program in radiological anatomy.

CBN 112 Medical Histology 8 cr

The main objective is to teach the microscopic structure and functional anatomy of cells, tissues, and organs of the human body through lectures, laboratories, slides, demonstrations, and examinations. The course provides the student the opportunity to gain information and experience in the science of microscopic structure and to learn essential basic terminology for use and expansion in future courses.

CBN 112R Medical Histology 8 cr

Summer make-up course in Medical Histology at an LCME approved medical school.

CBN 113 Developmental Anatomy 3 cr

The course presents a synopsis of human development and related information. Clinically related topics are emphasized while normal development is closely correlated with the systemic lectures given in the gross anatomy course

CBN 114 Neuroanatomy 4 cr

The course consists of both laboratory and lecture material. Emphasis is given to the functional neurobiology of the human central nervous system. In addition to basic anatomical systems, considerable time is given to the delineation of the anatomical bases of human CNS dysfunction.

CBN 215 Medical Neuroscience 9 cr

This course is an organ-based multi-disciplinary course combining neuroanatomy, neuropathology, and neurophysiology to provide an integrated approach to neuroscience. The final exam is a mini-board from the National Board of Medical Examiners; students are charged a fee to purchase this exam.

CBN 400 Cell Biol & Neuro Externship 4 cr

To be determined.

CBN 401 Adv Gross Anatomy I - Longitu 1-4 cr

Each student is responsible for completing the dissection and study of the anatomy of the upper and lower extremities and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and anomalous, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

CBN 402 Adv Gross Anatomy II - Longitu 1-4 cr

Each student is responsible for completing the dissection and study of the anatomy of the thorax, abdomen, and pelvis, and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and abnormal, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

CBN 403 Adv Gross Anatomy III-Longitu 1-4 cr

Each student is responsible for completing the dissection and study of the anatomy of the head and neck, and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and abnormal, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

CBN 404 Adv Neuroanatomy-Longitu 1-4 cr

The course will consist of three phases: (1) a review of the topographic and internal anatomy of the nervous system; (2) discussions by the faculty concerning current research of interest in neuroanatomy; (3) discussions of functional and clinical neuroanatomy and areas of special interest.

CBN 405 Research Assistantship 1-4 cr

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum; or extremities.

CBN 406 Teach Asst-Histology 1-4 cr

Participants will assist the faculty in teaching histology laboratories either pertaining to tissues (4 weeks) or organ systems (4 weeks, or 8 weeks for both). The student will be mentored by one of the listed faculty who will assume responsibility for the final evaluation of the student.

CBN 407 Teach Assistantship - Anatomy 1-4 cr

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum or extremities.

CBN 501 Medical Gross Anatomy 8 cr

A course consisting of lectures and laboratory experience stressing the more important aspects of human morphology using both systemic and regional approaches supplemented by introductory radiological features.

CBN 510 Medical Histology 7 cr

A study of the structure and function of cells, tissues and organs which includes lectures, demonstrations, and individual laboratory study of slides.

CBN 511 Medical Neuroanatomy 6 cr

This course consists of lectures and laboratories stressing the important aspects of the structures of the central nervous system and emphasizing the functional aspects which relate to human disease.

CBN 513 Developmental Anatomy 2 cr

A course which presents a synopsis of human development and related information. Clinically related topics are emphasized while normal development is closely correlated with the systemic lectures given in the gross anatomy course

CBN 516 Cell Biol-Neurosci Lit Reports 1 cr

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at the "state of the art" in both methods and theory in the discipline to develop critical review skills in reviewing the literature. Student presentation is required to receive credit.

CBN 517 Dir St - Cell Bio Neuroscience 1-6 cr

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a research proposal.

CBN 590 Sp Top - 1-3 cr

This course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussion (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

CBN 610 Molecular-Cellular Neuroscienc 2 cr

A course which requires students to read and evaluate critically the contemporary literature dealing with the cellular and molecular mechanisms of neural function.

CBN 612 Cytoskeleton-Membranes 2 cr

This course requires students to read, present, and evaluate critically the modern literature on cytoskeleton and membrane structure, interactions, and function.

CBN 614 Gene Expr- Reg- Repair- Ther 2 cr

This course requires students to read, present, and evaluate critically the modern literature on gene expression and regulation, repair and therapy.

CBN 615 Molecular-Cellular Development 2 cr

This course examines embryonic development in animal systems. The focus is on the protein and molecular interactions that regulate the development of animal embryos. The course consists of lectures and written exams. Students are required to read from an assigned text and from the primary literature.

CBN 616 Cell Biol-Neurosci Resrch Sem 1 cr

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

CBN 799 Research Dissertation 1-6 cr

Independent research by the student under the sponsorship of the graduate faculty. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.