

First & Second Year Overview

The first year begins with Molecular Cell Biology and Genetics. The emphasis here is on making sure all our students have a firm grasp of these topics that are crucial for understanding medicine in the twenty-first century. During this course, students consider different ways in which they learn best and spend time in small-groups on problem solving exercises, as well as collaborating on group projects. Structure of the Human Body begins after our fall break and combines gross anatomy with embryology. This course expects students to spend considerable time in dissection of a human cadaver and computer-based study. The hands-on type of learning characteristic of the Structure course is part of what medical practice entails today: traditional methods supplemented and enhanced with new information technology. The second semester begins with Function of the Human Body, a course that explores human physiology through a combination of lecture, laboratory sessions, and interactive problem-based sessions. This course spans the entire second semester. In the spring, students study the building blocks of human immunology in the Host Defense course.

The break between first and second years provides students with a variety of opportunities for independent study and service. Although not required, many first year students engage in a [research](#) project or take part in one of the [Ignatian Service Immersion \(ISI\)](#) programs sponsored by University Ministry.

The second year begins with the Neuroscience course in which students learn the basic science of the human nervous system and the pathophysiology of diseases affecting the nervous system. Neuroscience is combined with Therapeutics and Pharmacology. This course spans the entire second year and coordinates information about drugs, other therapeutic modalities, and alternative medicine with the appropriate organ system being studied. From October to May, Mechanisms of Human Disease runs in parallel with Therapeutics and Pharmacology. This course emphasizes the pathophysiology of disease and considers clinical processes that affect various organ systems. An important feature of this course is the frequent small-group sessions where students meet and consider various cases that help them develop their skills in differential diagnosis and begin to consider possible treatment options. These small-group sessions have clinical faculty members as facilitators and allow students the opportunity to have a yearlong experience with a clinician, providing the opportunity for clinically relevant interaction and opportunities for informal advising and mentoring on residency and career issues. Finishing the year, students take Human Developmental Biology, a course designed to bring things together from molecules, cells, organs, and drugs and focus on the human person throughout the lifespan from conception to death. This course provides a panoramic view of pregnancy, childhood, adult years, aging, and death and dying.

At the end of the second year, students have a flexible period of time to study for USMLE Step 1 with the bulk of the class studying independently. Students set their date for the exam directly with the National Board of Medical Examiners. A passing grade on USMLE Step 1 and recorded grade on USMLE Step 2 is required for graduation.

The Patient Centered Medicine (PCM) is a three-year interdisciplinary course and one of the core experiences in developing the competencies necessary for successful practice. PCM combines lectures and small-group learning and heavily relies on a variety of experiential activities. Students practice interviewing with standardized patients in our Clinical Skills Center and gain in history taking skills by working with the patients in our hospitals and physician mentors' offices. Students follow these physician mentors on visits that allow them to see the day-to-day life of practicing physicians and work on clinical skills. Students also take time on duty with our chaplains in the Loyola University Hospital to gain perspective on the spiritual experience of patients.

- In the first year, PCM I is focused on developing communication skills with patients, especially learning how to take a good history. But a number of other topics are included that are essential for a successful career in medicine in the twenty-first century: ethics, biostatistics and epidemiology, clinical reasoning, evidence-based medicine, economics of health care, and prevention.
- In the second year, PCM II focuses on increasing skills in physical examination and introduction to clinical topics needed for clerkships.
- In the third year, PCM III takes a different format from the previous two years. PCM III meets for six to eight daylong sessions where students come together from their various clinical clerkships and participate in a forum that mimics the best practices of continuing medical education for practicing physicians. Topics include ethics and professionalism, errors in medicine, end of life