

## PATHOLOGY (PATH)

### Courses

#### **PATH 6000. Biomedical Research Design. 1 Credit.**

Covers the anatomy of research: what it is made of; and the physiology of research: how it works. Introduces techniques and strategies of research design, implementation, and interpretation. Provides basic tools needed to understand how research in pathology is conducted.

#### **PATH 6070. Molecular Pathology. 3 Credits.**

Covers mechanisms of disease, molecular biology and genetics, diagnostic molecular pathology, as well as principles, tools and applications in research of molecular pathogenesis. Prerequisite: PATH 6000.

#### **PATH 6080. Pathology Journal Club. 1 Credit.**

Develops ability to read and present findings communicated in peer-reviewed research articles at the level necessary to formulate and plan independent research. Co-requisites: PATH 6000, PATH 6030; or Instructor permission.

#### **PATH 6090. Pathology Grand Rounds. 1 Credit.**

Develops ability to prepare and deliver research presentations/Grand Rounds, and to participate in Grand Rounds discussion by critically reading related literature. Builds on the reading skills developed in PATH 6080. Prerequisites: PATH 6000, PATH 6030, PATH 6080; or Instructor permission.

#### **PATH 6100. Genomic Med & Cytogenetics. 2 Credits.**

Covers the basic concepts of genomic medicine and cytogenetics and their clinical applications, procedures and techniques of molecular and cytogenetic testing, and management of a clinical laboratory. Focuses on diagnostic molecular and cytogenetic testing applicable to malignancies, constitutional disorders, and pharmacogenomics. Prerequisite: PATH 6300 or Instructor permission; experience in either clinical or anatomic pathology required.

#### **PATH 6250. Genetics for Clinicians. 3 Credits.**

Provides an overview of contemporary human genetics and genomics with application to clinical practice. Cross-listed with: GRNS 6250.

#### **PATH 6280. Techniques in Microscopy. 3 Credits.**

Introduces many of the microscopy systems and techniques available in the Microscopy Imaging Center core facility in the Larner College of Medicine at UVM.

#### **PATH 6300. Pathology Rotations. 3-9 Credits.**

Laboratory practicum for Pathology Master's students. Engages students in clinical and anatomic pathology laboratory rotations under supervision of attending physicians and senior residents in the University of Vermont Medical Center Pathology Department.

#### **PATH 6310. Pathology Clinical Practice. 1 Credit.**

An opportunity to become familiar with how pathologists work in a team with other clinicians to solve difficult problems in clinical practice. Prerequisite: PATH 6000.

#### **PATH 6391. Master's Thesis Research. 1-18 Credits.**

Research for the Master's Thesis.

#### **PATH 6990. Special Topics. 1-18 Credits.**

Special Topics in Pathology. Prerequisites: Immunology desirable; Department permission.

#### **PATH 6991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **PATH 6993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **PATH 6995. Graduate Independent Research. 1-18 Credits.**

Graduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.