### PTH - PATHOLOGY

#### PTH 7080 Special Topics in Pathology Cr. 1-15

Frontier areas in experimental pathology and clinical laboratory sciences. Format may be lecture, laboratory, or discussion; topics to be announced in Schedule of Classes. Offered Every Term.

Restriction(s): Enrollment is limited to Graduate level students.

#### Repeatable for 20 Credits

#### PTH 7085 Critical Review of Scientific Publications Cr. 1

For Ph.D. students in biomedical fields. Current experimental approaches in medical research. Offered Every Term.

**Restriction(s):** Enrollment is limited to students with a major in Pathology; enrollment limited to students in the PhD in Medicine program; enrollment is limited to Graduate level students.

#### Repeatable for 5 Credits

#### PTH 7090 Signal Transduction and Cell Growth Regulation Cr. 3

Signal transduction pathways, both cellular and molecular, and their alterations in cancer. Journal articles and instructor handouts used; emphasis on relationship to disease process. Offered Every Other Winter.

Prerequisites: IBS 7015 with a minimum grade of C

Restriction(s): Enrollment is limited to Graduate level students.

#### PTH 7130 Neuropathology Cr. 2

Offered Yearly.

Prerequisites: PTH 7000 with a minimum grade of C

Restriction(s): Enrollment is limited to Graduate level students.

#### PTH 7150 Pathology of Respiratory Tract Cr. 2

Offered Yearly.

Prerequisites: PTH 7000 with a minimum grade of C

Restriction(s): Enrollment is limited to Graduate level students.

#### PTH 7180 Cardiovascular Pathology Cr. 2

Gross, microscopic and submicroscopic anatomy and pathophysiology of cardiovascular disease, both human and experimental. Offered Yearly.

Prerequisites: PTH 7000 with a minimum grade of C

Restriction(s): Enrollment is limited to Graduate level students.

#### PTH 7330 Pathology of the Kidney Cr. 2

Techniques of preparing renal biopsies for light and electron microscopy and immunofluorescent studies; ultrastructure of normal kidney; physiology of kidney - acute and chronic renal failure; glomerular disease; pyelonephritis; vascular disease; and acute tubular necrosis and renal transplantation. Offered Yearly.

Prerequisites: PTH 7000 with a minimum grade of C

Restriction(s): Enrollment is limited to Graduate level students.

#### PTH 7890 Seminar Cr. 1

Offered Yearly.

**Restriction(s):** Enrollment is limited to students with a major in Pathology; enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Philosophy degree.

#### Repeatable for 25 Credits

#### PTH 8000 Current Topics in Tumor Metastasis Cr. 3

Advances in research on key aspects of tumor metastasis; emphasis on molecular mechanisms, tumor invasion, angiogenesis, and organ-specific tumor metastasis. Offered Fall.

Prerequisites: IBS 7015 with a minimum grade of C

Restriction(s): Enrollment is limited to Graduate level students.

#### PTH 8010 Molecular Biology of Diabetes and Obesity Cr. 2

Basic principles and current research topics in the etiology and pathology of diabetes; diabetic complications and obesity. Offered Every Other Fall.

Prerequisites: IBS 7015 with a minimum grade of C

**Restriction(s):** Enrollment limited to students with a class of Applicant Masters, Candidate Masters or Doctoral Candidate; enrollment is limited to Graduate level students.

#### PTH 9990 Pre-Doctoral Candidacy Research Cr. 1-8

Research in preparation for doctoral dissertation. Offered Yearly. **Restriction(s):** Enrollment is limited to Graduate level students. **Repeatable for 12 Credits** 

### PTH 9991 Doctoral Candidate Status I: Dissertation Research and

Direction Cr. 7.5

Offered Yearly.

Restriction(s): Enrollment is limited to Graduate level students.

## PTH 9992 Doctoral Candidate Status II: Dissertation Research and Direction Cr. 7.5

Offered Yearly.

Prerequisite: PTH 9991 with a minimum grade of S

**Restriction(s):** Enrollment is limited to Graduate level students.

## PTH 9993 Doctoral Candidate Status III: Dissertation Research and Direction Cr. 7.5

Offered Yearly.

Prerequisite: PTH 9992 with a minimum grade of S

Restriction(s): Enrollment is limited to Graduate level students.

### PTH 9994 Doctoral Candidate Status IV: Dissertation Research and

Direction Cr. 7.5

Offered Yearly.

Prerequisite: PTH 9993 with a minimum grade of S

Restriction(s): Enrollment is limited to Graduate level students.

# PTH 9995 Candidate Maintenance Status: Doctoral Dissertation Research and Direction Cr. 0

Offered Yearly

Restriction(s): Enrollment is limited to Graduate level students.

Fees: \$434.8

Repeatable for 0 Credits