

Tentative Syllabus
Concepts in Pathology–Mechanisms of Disease (VP 450)
Spring Semester 2003

January 21, 2003

- Hours: 1 Unit of credit
- Time: Tuesdays and Thursdays 11-1, VDL Conference Room
- Format: Lecture/Discussion (1.5-2 hours of lecture led by the instructor; 1.5-2 hours of student-led discussion of one to three papers dealing with the specific topic)
- Emphasis: Basic underlying biochemical and molecular responses of cells to disruption of homeostasis
- Required: Read one to three papers a week and be prepared to discuss them; leadership of at least two discussion sessions; 10-page paper on a topic selected by student and related to a topic discussed in the course; a 30-minute presentation on a topic selected by the student.
- Grading: 20 points --Regular attendance and participation/leadership during discussion sessions; 40 points – paper; 40 points – presentation..
- Instructors: See below. Course Coordinator: Dr. Matt Wallig, Department of Veterinary Pathobiology and Veterinary Diagnostic Laboratory, 2623 VMBSB, 244-0138/6393, m-wallig@uiuc.edu

Tentative Topics to be covered:

1. Morphologic Manifestations of Cell Injury & Cell Death
Instructor: Wallig
2. Biochemical Mechanisms of Cell Death – Oncotic Necrosis
Instructor: Wallig
3. Biochemical Mechanisms of Cell Death – Apoptotic Necrosis
Instructor: Wallig
4. Glutathione in Health and Disease
Instructor: Wallig
5. Cellular Antioxidant Defense Mechanisms
Instructor: Docampo, VP

6. Viral Mechanisms of Oncogenesis
Instructor: Scherba, VP/VDL
7. Chemical Carcinogenesis
Instructor: Wallig
8. The Cell Cycle in Carcinogenesis
Instructor: Kitchell, VCM
9. Criteria for Diagnosing Benign vs. Malignant Neoplasms
Instructor: Kitchell
10. The Biology of Mast Cell Tumors
Instructor: Fan, VCM
11. Pancreatic Pathophysiology
Instructor: Wallig
12. The Response of the Bone Marrow to Disease
Instructor: Messick, VP
13. Cellular Detoxification Mechanisms and Implications for Cancer
Instructor: Wallig

The exact week in which each topic will be covered is yet to be determined. A final schedule will be given to students as soon as the guest speakers are scheduled.