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.