

Biology 402, Spring 2015

Introduction to Pathology

Required Texts/Supplies: PowerPoint and text files provided by instructor on BlackBoard. Computer to review virtual slides and take exams

Course Description: An introductory exploration of pathology as a medical discipline. This includes study of disease and disease mechanisms via an introduction to general pathology topics (cell degeneration, necrosis, disturbances of growth, disturbances of blood flow, inflammation, neoplasia) and organ system-specific response to injury.

Pathology is the study of disease and therefore this class is intended to be an introduction to the study of disease in a systematic manner. We will group topics for study into 2 categories: general pathology and systemic pathology.

General pathology involves the study of disease mechanisms at the basic levels of biology; we will explore this during the first half of the course. The principles learned in general pathology will be used to understand the unique ways each system reacts to injury in **systemic pathology**, which we will explore the second half of the course. Students will also have an opportunity to develop their medical vocabulary; terms they will continue to use in medicine and throughout their professional careers.

Course Objectives:

1. To define pathology as a medical discipline and introduce students to its scope.
2. To learn basic cellular and systemic responses to injury.
3. To recognize and learn how specific organ systems respond to injury.
4. To recognize basic gross and microscopic abnormalities in diseased tissues.
5. To learn and use the language of medicine.

Course Evaluation Procedures: Student acquisition of the competencies listed in the course objectives will be evaluated with four 50 point examinations consisting of a combination of fill-in-the-blank questions, multiple-choice questions, matching questions, ordering questions and identification of lesions in photographs. In addition, there will be assignments throughout the semester (approximately 1 per week) worth 15-20 points. So about half of the points for the course will come from homework and half from exams.

Exams and Grading: Any information that is discussed in lecture, generated from assigned cases or covered in reading assignments is fair game for all examinations. **Thus, all examinations are comprehensive.**

All examinations will be administered in Blackboard Learn and will be administered in a suitable room at Vet Med (most likely room 2532 or 1226). You will need your computer to take the exam at Vet Med. You must start and end examinations on time as indicated by the instructor and complete the exam in one sitting. You may not use any notes or electronic devices (including cell phones) during the exam. Additional instructions for each examination will be given by the instructor at the time of the examination.

Dates for examinations are listed in the schedule on the previous page. I expect everyone to take the exams when they are scheduled. If you are not able to take an examination on the scheduled date due to an acceptable excuse (such as the funeral of a close relative or an illness), you must notify the instructor prior to the exam date and we will decide on an optional plan. If you do not take an examination on the date it is given and are not able to give us prior notification, (because of an emergency), you must notify me within 48 hours or receive a score of 0. If the instructor decides that a make-up examination is warranted, it will be an oral &/or written examination at the discretion of the instructor.

Homework assignments/quizzes will typically be completed outside of class in BlackBoard Learn.

Points for the course will be derived from a combination of 3 exams, a final exam and homework assignments and will total about 400 points. These will be administered in Blackboard Learn. Grades can be monitored in Blackboard and will be assigned based on the percentage scheme listed below.

Total Points:Comprehensive Examinations & assignments

3 exams	+/- 150 points
10-12 assignments	+/- 200 points
Final exam	+/- 50 points
Total points	+/- 400 points

Tentative Grading Scale:

A	93-100%
A-	90-93%
B+	87-90%
B	83-87%
B-	80-83%
C+	77-80%
C	73-77%
C-	70-73%
D+	67-70%
D	63-67%
D-	60-63%
F	0-60%

Note: This is a tentative grading scale and may be lowered at the discretion of the instructor.

Teaching Style and Class Format: Cooperative interaction utilizing lectures and problem/case study. It is expected that you read your assignment prior to class and show up and be ready to work in class. Follow the schedule so that you will know what subject is being covered in the next class period.

Policy for Accommodating Students with Learning Disabilities: Students with special needs are advised to refer to ISU policy for accommodating students with learning disabilities. After reading the policy, any student requiring special consideration is strongly urged to meet with the instructor-in-charge of the course before the end of the second week of class. You must have the appropriate current documents from the university office before any accommodations are considered.

Class Behavior: Everyone in this class is expected to act in a professional manner. That means you show up on time ready to learn. Respect for all is important. Therefore, when someone is addressing the class, you are expected to be quiet and listen. **Do not use electronic devices such as MP3 players, cellular phones, radios, iPods, etc. in class.** These things are an annoyance to everyone else in the class, so leave them off. Inappropriate use of computers in class is a distraction, **SO you are expected to use your computer only for this class' activities.**

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Class Schedule

Date	Day	Lecture #	Subject	Reading from Notes
1/13	T	1	Orientation / What is Pathology?	General Pathology
1/15	Th	2	What does a Pathologist do? / Tools	Notes
1/20	T	3	General Pathology topics / Cell Injury	Cell Injury
1/22	Th	4	Cell Injury	
1/27	T	5	Cell Adaptation	
1/29	Th	6	Cell & Tissue death	
2/3	T	7	Pigments & Amyloid	
2/5	Th	8	Congenital Diseases	Congenital Defects
2/10	T		Exam # 1 (at Vet Med)	
2/12	Th	9	Vascular changes & Hemorrhage	Circulation
2/17	T	10	Hemostasis & Thrombosis	
2/19	Th	11	Inflammation	
2/24	T	12	Inflammation	Inflammation
2/26	Th	13	Inflammation	
3/3	T	14	Neoplasia & Carcinogenesis	Neoplasia
3/5	Th	15	Neoplasia & Carcinogenesis	
3/10	T		Exam # 2 (at Vet Med)	
3/12	Th	16	Genetic Diseases	
3/16 – 3/20			Spring Break	
3/24	T	17	Cardiovascular system	Systemic Pathology
		Haynes		
3/26	Th	18	Cardiovascular system	Notes
3/31	T	19	Respiratory system	
4/2	Th	20	Respiratory system	
4/7	T	21	Nervous system	
4/9	Th	22	Nervous system	
4/14	T		Exam # 3 (CV, Respiratory & Nervous Systems) (at Vet Med)	
4/16	Th	23	Eye	
4/21	T	24	Eye	
4/23	Th	25	Urinary system	
4/28	T	26	Urinary system	
4/30	Th	27	Bones & Joints	
5/4 - 5/8			Final (Eye, Urinary, Bones, Joints, Comprehensive) (at Vet Med)	