Human Histology
Biology 857-80 Summer 2012

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I will be online when possible M and W 10:00-12:00 am Central and certainly other times by appointment. Please contact me for times.


Class Objectives:
This is a graduate level class with the following objectives:

- Review cell structure and function in human cells
- Become familiar with the terminology and basic concepts of histology including microscopes, staining, magnification, and preparation techniques
- Learn the function and microanatomy of basic mammalian tissues types
- Be able to recognize specific tissue-level structures and cell types in the human body

Class Structure:
The class will not use microscopes, but will be based the use of images for instruction. Students will be asked to learn, and identify on tests, cell types, tissues types, and micro-anatomical structures from humans (or mammals more generally if images are taken from mammals). Lectures will be recorded that introduce the cell types, the physiology, and the function of these structures; as well as aspects of histology such as sample preparation, pathology, and genetic disorders.

Exams and Grading:
Grading in this class will be based on participation and quizzes based on class material, and a final exam.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Plagiarism Quiz (Due June 1st)</td>
<td>5 pts</td>
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<tr>
<td>Class Quizzes/Assign (20 pts * 10 quizzes)</td>
<td>200 pts</td>
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<tr>
<td>Participation (10 pts * 6 weeks)</td>
<td>60 pts</td>
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<tr>
<td>Final Exam</td>
<td>60 pts</td>
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<tr>
<td><strong>Total Possible</strong></td>
<td><strong>325 points</strong></td>
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Grades will be assigned on the standard scale adopted by the UNK Biology Department:
A (90-100%), B+ (87-89%), B (83-86%), B- (82-80%), C+ (77-79%), C (73-77%),
C- (70-72%), D+ (68-69%), D (63-67%), D- (60-62%), F (Below 60%)
Class Expectations:
Participants are expected to participate in the online discussions in class, and access additional materials I make available through our online learning system. A high speed internet connection and familiarity with image files and formats are recommended for this class. Participation is useful in this type of class, and therefore **3 original, substantive posts per week are expected** to get full participation credit for each week.

I will use the “Assignment” function in Blackboard to allow for submission of papers. This is a function not everyone uses, so learn about this in the tutorials, or ask me or other students.

You will need access to a high-speed internet connection to download the video files, or they can be requested on CD. You **need to have** Office 2000 (or later) or LibreOffice 3.5 or later on your computer. As a UNK student you qualify for very inexpensive academic pricing of Microsoft Office. I think Office 2010 is a good investment.

Withdraw (W) and Incomplete (I) Grades:
Until the conclusion of the 10th week of the semester, you may withdraw from any class and receive a grade of "W." This grade does not count toward your grade point average and merely indicates that you withdrew from (or "dropped") the class. No instructor can withdraw a student from the roster; that is, if you stop coming to class the instructor cannot withdraw you from the class. The instructor will be forced to assign you a failing ("F") grade for the class. Withdrawing from a class involves filling out a simple form that the instructor and student both sign and returning this form to the registrar’s office by the withdraw deadline.

Under very unusual circumstances, a grade of incomplete ("I") may be issued. An incomplete is not a substitute for a "W" (withdraw), and it is not a substitute for a poor or failing grade. An incomplete is issued if circumstances beyond the student’s control prevent the student from completing the required work for the class by the end of the semester (example: student is hospitalized during final exam week). If you qualify for an incomplete grade, it is expected that you will receive this grade in all your classes. An incomplete grade will give you an extension to complete outstanding work only; it is not an opportunity to "start over" in the class. All outstanding work must be completed within one year or the "I" grade automatically converts to a failing ("F") grade. An incomplete grade will be considered only during the final six weeks of the semester, after the deadline for receiving a "W" has passed.
Biology 830P-80 Histology Syllabus

This is the planned lecture schedule; there may be deviations from this schedule, but the order of lectures will be the same.

<table>
<thead>
<tr>
<th>Wk/ Date</th>
<th>Lectures</th>
<th>Readings</th>
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<tbody>
<tr>
<td>1</td>
<td>01 Histology: Introduction to class, Microscopy, Staining, Tissue Prep</td>
<td>Appendix 1, 2</td>
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<tr>
<td>May 21</td>
<td>02 Cell review, microscopes, tissue prep</td>
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<td></td>
<td>Q1: open Friday at 5:00 pm until Monday at 10 pm CST</td>
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<td>2</td>
<td>03 Mr. Simonson: Histology illustration and drawing</td>
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<td>May 28</td>
<td>04 Cell Structure and Function</td>
<td>Chap 1</td>
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<td></td>
<td>Q2 (drawing assignment), Q3, Plagiarism Quiz due Friday by 5pm CST</td>
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<td>3</td>
<td>05 Physiology review: Cell cycle and replication</td>
<td>Chap 2</td>
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<tr>
<td>June 4</td>
<td>06 Basic tissue types: Blood and Connective Tissue</td>
<td>Chap 3, 4</td>
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<td></td>
<td>Q4, Q5</td>
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<td>4</td>
<td>07 Tissues Types: Epithelial and Muscle</td>
<td>Chap 5, 6</td>
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<tr>
<td>June 11</td>
<td>08 Tissue Types: Nervous Tissues</td>
<td>Chap 7</td>
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<td></td>
<td>Q6</td>
<td></td>
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<td>5</td>
<td>09 Organ Systems: Circulatory, Skin</td>
<td>Chap 8, 9</td>
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<td>June 18</td>
<td>10 Organ Systems: Skeletal, Immune</td>
<td>Chap 10, 11</td>
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<td></td>
<td>Q7, Q8</td>
<td></td>
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<tr>
<td>6</td>
<td>11 Organ Systems: Respiratory, Oral</td>
<td>Chap 12, 13</td>
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<td>June 25</td>
<td>12 Organ Systems: Gastrointestinal, Liver and pancreas</td>
<td>Chap 14, 15</td>
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<td>Q9</td>
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<td>7</td>
<td>13 Organ Systems: Urinary, Endocrine</td>
<td>Chap 16, 17</td>
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<td>July 2</td>
<td>14 Organ Systems: Male and Female Reproductive Systems</td>
<td>Chap 18, 19</td>
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<td></td>
<td>Q10</td>
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<td>8</td>
<td>15 Organ Systems: Central Nervous System, Special Sense Organs</td>
<td>Chap 20, 21</td>
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<tr>
<td>July 9</td>
<td>Final Exam</td>
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Orientation to Albrecht Blackboard Use
Version 1.7 Summer 2012
UNK Biology Department

Introduction:
The UNK Biology Distance Master’s program has a number of faculty participating. Part of the experience and challenge of the program is that, as in other professional situations, faculty are different from each other. Different faculty have different lecture styles, different discussion board expectations, different grading priorities, and even different methods to deliver class material. I realize this might be confusing for people, but hopefully the various methods will demonstrate what works and what does not for you in your own future careers. Please read this section as I try to clarify how I use Blackboard in this class.

Please contact me with any questions; also note that the UNK e-Campus website does provide both Video Tutorials and Atomic Learning Tutorials on using Blackboard, Lotus notes, and MS Word see [this page](#).

A note about Expectations:
I approach this program with the goal of providing, as closely as possible, the level of experience I was fortunate enough to experience in my graduate career at some of the best universities in the country. This means that generally my expectations are high. I will do my best to find, present, and interpret material I think is important and appropriate for the subject area of the class. I will also do my best to explain how the process of science works including experimental design, statistical testing, writing, and thought processes. I will also work to be as available as possible, and turn around Blackboard, emails, and graded work as quickly as I can. Unfortunately I often have lots going on like everyone does. Two busy parties trying to communicate can be frustrating.

There is responsibility on your part as well to meet both the letter and spirit of assignments. It is my hope and expectation that everyone in this program is here because they enjoy biology and wish to become more knowledgeable and proficient at teaching or researching in this area.

Let me give some examples of what this means to me, based on my experience as a graduate student:

1. **Have you prepared for class?** Have you read the material, not just once but twice? Have you looked up authors, concepts, or words you were not familiar with before attending class? Do you understand how this reading fits into the discipline in general, and why it was assigned? Have you noticed the author, date, and institution of the paper in addition to the data, statistical tests, and concepts supported in the paper?

2. Before asking an entire class what a word means have you tried to look it up? Did you try to find the word from appropriate, professional, recognized sources? Wikipedia is a good place to start, but not a good place to end. **Never** use Wikipedia as a reference in a paper in this class.

3. Is the work you are turning in reflective of you as the student you are trying to be? Have you proofread the document for grammatical, factual, spelling, and formatting errors? Do you know what formatting is desired by the professor? Is this paper well-researched? Do you have all the important concepts in the paper? Is the organization of the paper clear and useful? Have you put in thought and work to figures, tables to make them clear and referenced?
Blackboard:
The Blackboard Classroom software suite is the main portal for the class work in the UNK Biology Distance Master’s program. Being familiar with this program is helpful for success in the program. To be more precise, the following components are the ones I use the most:

1. Course Documents:
   a. This is where I place pdf files and wmv files that are the lectures for classes
   b. These files should be downloaded (not streamed) for viewing or printing out
   c. Some of these files are large and should be downloaded on fast internet connections
   d. I may post other papers here as well as book sections or links to other sites I think are useful

2. Discussion Board:
   a. This section of Blackboard is how you will communicate with me and each other in the class.
   b. In my classes Discussion Board is an important part of the class experience, there are lot of points associated with participation on Discussion Board
   c. Typically (I reserve the ability to change this section if needed), each discussion board is opened Monday around 9:00 am Central Time, and closed Sunday night around 10:00 pm Central Time.
   d. Because discussion boards are important, posts will be graded.
      i. I expect at least two (2) useful postings each week and not on Sunday night.
      ii. The quality of your contribution. This is a somewhat subjective category, but the more thoughtful your comments the better the quality of discussion will be. Your comments should be at least a few sentences. Conciseness and clarity are necessary to keep the work load for this class to a reasonable level, i.e.: page long postings are discouraged. Your comments should be supported with specific details, file attachments or web sites, and should be relevant to the current topic of discussion.
      iii. How well you interact as classmates. Your responses should demonstrate that you are aware of the discussion that has been taking place. Go beyond either “agreeing” with someone or “disagreeing” with someone by stating your reasoning. But be polite and constructive in your responses to other students and myself.

3. Assignments:
   a. Many, if not all the assignments in the class will appear here, so please find this area of Blackboard
   b. There are two types of assignment functions I use most:
      i. Tests: these are timed tests, typically multiple choice tests that are available for a limited amount of time. That time frame is usually Friday at 5:00 pm to Monday at 10:00 pm Central Time. These tests are to be completed online within a time limit (e.g. 30 minutes) once started.
      ii. Papers: I use the ‘assignment function’, the name is unfortunate, but this is a link through which you can upload your documents. This system has the distinct advantage over email in that your papers go directly to a ‘space’ that is yours alone and you will see a green exclamation point in the Gradebook for the assignment when you have uploaded the document.
         1. This function also can be set to be available for a limited amount of time. Papers are typically due Mondays at 10:00 pm Central Time. Typically I post the assignments at least 1 week ahead of the deadline.

4. Gradebook:
   a. This is the area of Blackboard where grades are recorded and displayed, these are the actual grades I use, so check your grades often.
b. Note the **symbols** in Blackboard. The responsibility is yours to make sure assignments are in on time, and uploaded correctly, and that the correct file is uploaded. If the wrong file is loaded, or the file is late, penalty of at least 10% will be assessed.

   i. **Empty assignment:** this means no file has been uploaded, or test taken according to Blackboard. You **do not** want see this if you have taken a test or uploaded a file.

   ![Empty assignment example]

   ii. **Green exclamation point:** this means that Blackboard has received a file, or that a test has been taken. A file that is uploaded may still be corrupt, or a person could still have uploaded the wrong file, but whatever it is, Blackboard has it. This is fine, with the two exceptions given above, and it means I have to grade the assignment before you will see a grade. Any paper, and any tests with subjective questions (such as fill-in, short answer) will have this symbol until I graded.

   ![Green exclamation point example]

   iii. **Red exclamation point:** this symbol is **bad**. This symbol means that a file failed to upload correctly, or a test failed while being taken. This symbol means that you and I need to talk by email, phone and figure out a solution. This needs to be done **before** the due date of the assignment. If you do not contact me before the due date, late penalties will be assessed of 10% per day.

   ![Red exclamation point example]

5. **Announcements:**

   a. These are the text entries you see just below the title for the class when you enter Blackboard
b. I will post class information here, such as changes to the syllabus or answering a question that is coming up repeatedly.
c. Please check this area several times a week on your way to Discussion Board, Assignments, or Gradebook.

6. Other Features:
a. There are other features of Blackboard that I use from time to time, such as Wimba, External Links, and SafeAssignment - so please look around at the program.

7. Scientific Writing
   a. I will include documents in Blackboard/Course Documents folder to help with scientific writing.
   b. I encourage everyone to work on improving their writing skills, as I continue to work on mine. Everyone in the program should have at least some papers from primary journals from other classes or your own reading. If not, get a few from the UNK library collection that you have access to as a UNK student. Recent papers from a major journal should be read for style, voice, formatting. Such examples will show you how to build sentences, tables, figures, paragraphs, references and abstracts. Everything you need to know is there. Also, you can always ask!
Introduction:
Every institution has its rules and policies, and UNK and the Biology Department do have them. Because of the distance education situation, the degree of communication between me and you can be difficult, and misunderstandings do happen. Please keep in mind talking over the computer is not the same as face to face – several types of communication are lost. Please be patient and allow more time than you might otherwise to get the solution you need. To try to help get ahead of some questions here policies that will be in place for this class.

Policies:
1. Paper formatting: All work turned in for this class should have the following formatting
   a. Size 12 font, 1” margins all around the page, page numbers present, no right justification
   b. All text double-spaced with proper English spelling and grammar used.
   c. Tables must be labeled at the top and have captions that explain them.
   d. Figures must be labeled below and have captions that explain them.
   e. All needed citations must be (author year) format in text (including figures and tables) and fully cited at the end of the paper. See Section 2 below for more information on this.
      i. Citations are needed if textbook or lecture material is used or quoted. This is both the legal necessity and good practice for work outside the class.
      ii. Full citations should be in a References section at the end of each paper and follow these formats, reverse indented, and alphabetical by author:

Books

Computer Program

Journal Article

Website
2. Plagiarism and Cheating:
   a. Please see and complete this page - I require everyone in the class has visited this site, take the quiz and send me a completion certificate by the 5:00 pm Central Time on the second Friday of the semester. Every semester, even if you have done it before. Send a scan to the column on Blackboard, secondarily fax it to the Biology Department (call Judy for fax number). The reason? So everyone knows exactly what plagiarism is. ALL sources in anything turned in for this class must be cited, including figures and anything taken from class texts (such as copying word problems) every time they should be.
   b. Also see the UNK Student Handbook for UNK policy statement on plagiarism
   c. I consider plagiarism a scourge and a stain on science and detrimental to the progress of humanity. I will treat any plagiarism seriously including giving zeros on questions, or entire tests (which often drops a student one letter grade or more), or failing the class outright in addition to letters in the permanent files here at UNK
   d. For more information see the Graduate Outline document in the Online Master’s Blackboard Group. This group should appear at the lower right of your Blackboard login page; contact UNK Helpdesk if you do not see this group.
   e. Citation information for APA style is given at the UNK eCampus website here
   f. A quick rule: more than 3 words in a row from any source must be referenced
   g. Do not communicate with outside experts to answer tests. Tests are meant to assess your knowledge, not that of others.

3. Late work/technical difficulties:
   a. Late work will be subject to the following grade reductions:
      i. 10% reduction of grade for any work submitted after stated deadline until 24 hours after the stated deadline
      ii. A further 10% grade reduction for each 24 hour period past the stated deadline
   b. I understand that online classes demand attention to deadlines on top of those already present. However, this graduate program is not a self-paced one. This program is structured to academic terms and time frames (such as breaks) as the brick and mortar University of Nebraska system. In general I am impressed at the dedication of students in this program and hope this tradition continues.
   c. Technical difficulties are part of the reality of the online world. Given that truism, do NOT wait to submit assignments until the last minute or hour of a deadline. Both you and I cannot be responsible for failures of power, computers, computer networks, or even Blackboard. Do no procrastinate; turn assignments in early, so there is time to resubmit if there are any problems.
   d. Important: please install and run some sort of anti-virus and anti-malware software on your computer. This is for all of us in the class, so that viruses are not spread through the class:
      i. Microsoft Security Essentials
      ii. AVG (free) or similar anti-virus software, run weekly
      iii. (recommended): other maintenance software such as System Mechanic (my favorite), Symantec System Works

4. Online etiquette:
   a. Please be respectful of others in the class, and me. It is easy to be more confrontational via electronic post than in person. I understand conversations may become heated, and irony, even sarcasm may at times be used to make a point; however, please try to remain civil at all times.
   b. Posts I deem as offensive or inflammatory towards others, or me, will be removed from the discussion boards. If this becomes a continuing problem, grade reductions may result. I will keep copies of such posts.