General information

Anatomy is an enjoyable topic that is not conceptually difficult, however, from a time commitment perspective it is rigorous. It requires a considerable amount of memory work, coupled with the ability to use the memorized knowledge to solve problems and synthesize answers (national studies have shown that you learn more new vocabulary in an anatomy course than you do in a semester foreign language course). **Work on the course daily, do not get behind, and you can succeed and have a rewarding learning experience.**

Lectures

This anatomy course incorporates a wide array of pedagogy, from excellent lecture-oriented instruction and pre-lecture movies, to problem-based learning, interactive discussions, and dynamic hands-on collaborative labs. Throughout the course students create their own textbook that is specific to the course of study. For this reason, students who attentively participate in lecture sessions have a distinct advantage. All lecture examinations are based on the material covered in lecture/discussions, with all material being equally important and fair game. If for any reason you miss lecture, you should acquire the missed lecture notes from a classmate and read the assigned material from the textbook that accompanies the course.

Books and Software

**REQUIRED MATERIALS**

The anatomy course pack includes the following: (the suggested retail price is $150.00)

*Human Anatomy Lecture Manual*, 6th edition by Mark Nielsen — invaluable outline of all lectures containing the illustrations used in lecture; course would be very difficult without it. As you add notes to this book in class you will be building a customized textbook.

*Human Anatomy Workbook and Study Guide*, 6th edition by Mark Nielsen — this book contains information and exercises to help you succeed in the course. If you use it daily, you will be well prepared for the examinations in the course. It also contains a model of the pelvis/perineum that you will build to help you better understand this region and earn points toward your lab score.

Web access to download two software programs:

**Human Anatomy Interactive Atlas** by Shawn Miller and Mark Nielsen — this program contains interactive photos of cadavers that will help you prepare for the lab quizzes and the lab practical examinations. It is designed to allow you to interactively quiz yourself as you study your anatomy. All laboratory quizzes are visual quizzes based on this software.

**Human Anatomy Interactive Flashcards** by Mark Nielsen, Jamey Garbett, and Shawn Miller — this program contains anatomy flashcards that correspond to the material covered in many of the lectures. This is a valuable tool to help you review and study course material.

Textbook resource pack includes the following: (On-line from John Wiley for $110.00)

**Principles of Human Anatomy** and WileyPlus Web Link, 14th edition by Jerry Tortora and Mark Nielsen. This is the on-line textbook resource and web-link that will contain the weekly homework assignments. It is an excellent textbook and a powerful resource to reinforce material covered in lecture and laboratory. The on-line site called WileyPlus has lots of features to help you learn anatomy.

**Real Anatomy** by Mark Nielsen and Shawn Miller — is a web-based program that is part of the WileyPlus site and it allows you to dissect a cadaver on your computer while rotating it in three-dimensional space. It contains over two thousand cadaver images that can be studied, labeled, and rotated. It essentially allows you to take the lab home with you as you study and prepare for labs. You have access to this along with many other great learning aids via WileyPlus. Numerous assignments will require you to use this software throughout the semester.

**Concept Lectures** by Mark Nielsen — is also included with WileyPlus. This series of twenty lectures supplement the lectures in the course and are assigned watching prior to numerous lectures throughout the course.

Homework Assignments and a Plethora of Study Aids — this extensive website is where you will do weekly homework assignments and it also gives you access to many learning tools and study aids in addition to all that is listed above.

Website based materials: (free)

**Human Anatomy Lab Manual**, 6th edition by Mark Nielsen — this book is available on the anatomy website (http://courses.biology.utah.edu/nielsen) and contains all the information you will need as you prepare for the labs. It will guide your study in preparing for lab quizzes. It will provide optional exercises to use with **Real Anatomy** to help you get the most from your laboratory experience. It will provide lists of structures you will study in the lab and help you in your preparation for the final practical exam in the laboratory.

**Human Anatomy Lecture Presentations** by Mark Nielsen — the Lecture Presentations (visuals) that you see every day in lecture are all available on the course website to be viewed outside of class time. This will allow you to either preview or review the visuals that accompany the course lectures.
Materials
Obtain good quality colored pencils in pure or bright colors (e.g., red, blue, and green). Anatomy is a visual subject and in lecture I will use color presentations that correspond to the illustrations in the lecture manual. It will be to your advantage to color-code drawings that you encounter in the lecture manual. Colored pencils will also be REQUIRED for drawings on examinations; it is your responsibility to have them.

Office Hours
During my posted office hours I will be in my office and you are welcome to come by and ask questions. If this is not a convenient time in your schedule, then you can make an appointment with me and visit me during a time that is more convenient. Also, some of the laboratory teaching assistants will hold office hours in the Biology Building atrium as the semester gets under way. I will announce the TA office hours during the semester. I encourage you to take advantage of these office hour times to get your questions answered and to study anatomy. Cadaver study is reserved for lab hours and special review sessions only. Don’t ever be afraid to come and talk to me, my door is always open. One of the most important DON’TS in this class is — DON’T BE AFRAID TO ASK QUESTIONS! That is how you learn.

Reviews
Certain fridays throughout the semester I will conduct a review section during the regular class hour time. This is an optional review session for anyone who wants to come and ask questions. See the Lecture Schedule for these Friday review dates. In addition to reviews, supplemental instruction sections led by an anatomy staff member will be held three times each week. The supplemental instruction schedule will be announced the second week of the semester.

Examinations
All examinations are announced in advance (see University of Utah Class Schedules Fall 2019) and ALL ARE REQUIRED. The three midterm lecture examinations will cover specific parts of the course; the final lecture examination covers material since the third midterm plus has a comprehensive component. In addition, there will be weekly quizzes in the lab sections and a final comprehensive practical examination in the laboratory. Mark these dates on your calendar. Midterm coverage is as follows:

- First midterm: 75 points covers histology through the digestive system
- Second midterm: 75 points covers nervous system through genital system anatomy
- Third midterm: 75 points covers anatomy of pelvis through superior limb anatomy
- Final exam: 100 points of coverage, 60 points on inferior limb through head and neck anatomy; the other 40 points of the exam will be comprehensively distributed over any material covered throughout the semester.
- Laboratory: 150 points (see below for point breakdown)
- Weekly homework: 150 points (10 points each week). These are open book assignments that are done on-line with the WileyPlus website. They are intended to help you keep up on the course material as you reinforce the knowledge covered during the week. They are due each Sunday by 11:00 PM and late assignments will receive no credit. NO EXCEPTIONS.

Evaluation of Student Performance
To pass this course, you must achieve a cumulative average of 45% or more on the following:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12%</td>
<td>Midterm Exam I - 75 points</td>
</tr>
<tr>
<td>12%</td>
<td>Midterm Exam II - 75 points</td>
</tr>
<tr>
<td>12%</td>
<td>Midterm Exam III - 75 points</td>
</tr>
<tr>
<td>16%</td>
<td>Final Exam - 100 points - 60 pts new material, 40 pts comprehensive</td>
</tr>
<tr>
<td>24%</td>
<td>Laboratory Grade - 150 points:</td>
</tr>
<tr>
<td></td>
<td>11 lab quizzes @ 5 points each = 55 points</td>
</tr>
<tr>
<td></td>
<td>Pelvic model = 5 points</td>
</tr>
<tr>
<td></td>
<td>Practical quizzes during lab sessions = 20 points total</td>
</tr>
<tr>
<td></td>
<td>Final practical examination = 70 points</td>
</tr>
<tr>
<td>24%</td>
<td>Weekly homework 150 points</td>
</tr>
<tr>
<td></td>
<td>15 question sets @ 10 points each</td>
</tr>
</tbody>
</table>

Total points possible = 625

The grading breakdown, based on the 625 points possible, is as follows:

- >90% A
- 88.5—89.9 A-
- 84.5—88.4 B+
- 80.0—84.4 B
- 77.5—79.9 B-
- 70.0—77.4 C+
- 60.0—69.9 C
- 50.0—59.9 C-
- 45.0—49.9 D
- <45.0 E

All grades are final. There is no opportunity to change your grade after you have completed the course. If you have been accepted into a professional program and your entry depends on passing this course, then you must achieve the necessary grade. Under no condition will make-up work or exam re-takes be given.

Accommodations Policy
I do not grant content accommodation requests as the course content fulfills legitimate pedagogical goals.