Instructor: Dr. Dan Clemens
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Textbooks:  *Principles of Human Anatomy, 13th ed.* Tortora and Nielsen (required)
*A Photographic Atlas of Histology, 2nd ed.* Leboffe (required)
Lab manual: *Human Anatomy Lab Manual*. Moore and Clemens, NVC (handed out in class)

Web page: [www.napavalley.edu/people/dclemens/Pages/BIOL218-Anatomy.aspx](http://www.napavalley.edu/people/dclemens/Pages/BIOL218-Anatomy.aspx)

### Lecture and Lab Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
<th>Text Chapters</th>
<th>Lab Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 18</td>
<td>Introduction, Levels of Organization</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Jan 23</td>
<td>Cells and Tissues, Tissues</td>
<td>2 (review), 3</td>
<td>2, 3A-C</td>
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<tr>
<td>Jan 25</td>
<td></td>
<td>3</td>
<td>3D-F, 4A-E</td>
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<tr>
<td>Jan 30</td>
<td>Integumentary System</td>
<td>5</td>
<td>4F</td>
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<tr>
<td>Feb 1</td>
<td>Skeletal Tissues</td>
<td>6</td>
<td>5</td>
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<tr>
<td>Feb 6</td>
<td>Skeletal System</td>
<td>7</td>
<td>7, 6</td>
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<tr>
<td>Feb 8</td>
<td></td>
<td>8, 9</td>
<td>6, 8</td>
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<tr>
<td>Feb 13</td>
<td><strong>LECTURE EXAM 1</strong></td>
<td>–</td>
<td>Review</td>
</tr>
<tr>
<td>Feb 15</td>
<td><strong>LAB EXAM 1 (8:15); Joints (10:00)</strong></td>
<td>9</td>
<td>Lab Exam 1</td>
</tr>
<tr>
<td>Feb 20</td>
<td>Muscle Tissue</td>
<td>10</td>
<td>9</td>
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<tr>
<td>Feb 22</td>
<td>Muscular System</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Feb 27</td>
<td>Muscular System</td>
<td>11</td>
<td>10, 11</td>
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<tr>
<td>Mar 1</td>
<td>Cardiovascular System: Heart</td>
<td>13</td>
<td>12</td>
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<tr>
<td>Mar 6</td>
<td>Blood Vessels</td>
<td>14</td>
<td>12</td>
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<tr>
<td>Mar 8</td>
<td>Lymphatic System</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Mar 13</td>
<td><strong>LECTURE EXAM 2</strong></td>
<td>–</td>
<td>12, Review</td>
</tr>
<tr>
<td>Mar 15</td>
<td><strong>LAB EXAM 2 (8:15); Nervous Tissue (10:00)</strong></td>
<td>16</td>
<td>Lab Exam 2</td>
</tr>
<tr>
<td>Mar 22</td>
<td>Brain</td>
<td>18</td>
<td>14</td>
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<tr>
<td>Mar 26-30</td>
<td><strong>SPRING BREAK 😊</strong></td>
<td></td>
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<tr>
<td>Apr 3</td>
<td>Brain</td>
<td>18</td>
<td>15</td>
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<tr>
<td>Apr 5</td>
<td>Cranial Nerves, Sensory &amp; Motor Pathways</td>
<td>18, 20 (part)</td>
<td>15</td>
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<tr>
<td>Apr 10</td>
<td>Autonomic Nervous System</td>
<td>19</td>
<td>16</td>
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<tr>
<td>Apr 12</td>
<td>Special Senses</td>
<td>21 (part)</td>
<td>17</td>
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<tr>
<td>Apr 17</td>
<td>Endocrine System</td>
<td>22</td>
<td>18</td>
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<tr>
<td>Apr 19</td>
<td><strong>LECTURE EXAM 3</strong></td>
<td>–</td>
<td>19</td>
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<tr>
<td>Apr 24</td>
<td>Respiratory System</td>
<td>23</td>
<td>20*, Review</td>
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<tr>
<td>Apr 26</td>
<td><strong>LAB EXAM 3 (8:15); Body Cavities (10:00)</strong></td>
<td>23, 24</td>
<td>Lab Exam 3</td>
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<tr>
<td>May 1</td>
<td>Digestive System</td>
<td>24</td>
<td>21</td>
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<tr>
<td>May 3</td>
<td>Digestive System, Urinary System</td>
<td>24, 26</td>
<td>22</td>
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<tr>
<td>May 8</td>
<td>Urinary System, Reproductive Systems</td>
<td>26, 27</td>
<td>23</td>
</tr>
<tr>
<td>May 10</td>
<td>Reproductive Systems</td>
<td>27</td>
<td>24</td>
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<tr>
<td>May 15</td>
<td><strong>LECTURE EXAM 4</strong></td>
<td>–</td>
<td>Lab Review</td>
</tr>
<tr>
<td>May 17</td>
<td><strong>LAB EXAM 4 (8:15); Review (10:00)</strong></td>
<td>–</td>
<td>Final Review</td>
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<tr>
<td>May 22</td>
<td><strong>FINAL EXAM</strong> (Lab 8:30, Lecture 9:45)</td>
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Note: Exam dates may be subject to change; any changes will be announced in class and on the class website.

* Lab Exercise 20 material will be covered on Lab Exam 4.
General Course Information

Course Requirements

Prerequisite: Human Biology (BIOL 105) or General Biology for biology majors (BIOL 120) or equivalent.

Course requirements include regular attendance in lectures and labs, successful completion of all exams and lab assignments, and participation in the dissection exercises. Regular attendance is essential, but you will also need to spend significant time studying outside of class in order to succeed in this course. Your best path to success is to study early and study often.

Student Learning Outcomes

1. Identify macroscopic structures of human anatomy on anatomical models and preserved specimens.
2. Identify microscopic structures and tissues using prepared histological slides.

Other Course Objectives

- Identify and describe structures of human anatomy at several levels of organization, including the subcellular, cellular, tissue, organ, and organ system levels.
- Categorize anatomical structures according to their level of organization and in relation to larger physiological systems.
- Identify the major tissue types and subtypes in prepared microscope slides, and identify specific locations in the body where each tissue is found.
- Locate gross anatomical structures on a model of the human body and on a human subject, where appropriate.
- Perform dissections and identify anatomical structures on preserved specimens including the human cadaver.
- Relate anatomical structures to function by describing normal functions for each structure and examples of anatomical changes in that occur in disease, injury or aging.

Class Webpage

The Human Anatomy class webpage contains announcements and links to course documents, the histology slide library, photographs and diagrams of anatomical models, and other useful links. The site is updated at least once a week with current course information. Students should check the webpage at least twice a week. The website address is: www.napavalley.edu/people/dclemens/Pages/BIOL218-Anatomy.aspx

Grading

Your course grade is based on your performance on the lecture exams, laboratory exams, quizzes, and lab performance which includes participation, performance on dissections, and completion of lab assignments. Grades are calculated from the percentage of total points earned as shown in the following table, but consideration may be given to overall trends in performance, such as improvement over the semester, in determining your final grade.

<table>
<thead>
<tr>
<th>Assignment/Criteria</th>
<th>Points</th>
<th>Grading Scale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Exams 1-3</td>
<td>300</td>
<td>90-100% = A</td>
</tr>
<tr>
<td>Lecture Exam 4</td>
<td>80</td>
<td>80-89% = B</td>
</tr>
<tr>
<td>Lab Exams 1-4</td>
<td>400</td>
<td>70-79% = C</td>
</tr>
<tr>
<td>Quizzes</td>
<td>~ 50</td>
<td>60-69% = D</td>
</tr>
<tr>
<td>Lab performance</td>
<td>50</td>
<td>&lt; 60% = F</td>
</tr>
<tr>
<td>Final Exam</td>
<td>120</td>
<td>~ 1,000 points</td>
</tr>
</tbody>
</table>

~ 1,000 points
Preparation for Class

Before each class meeting, review your lecture notes from the previous class meeting and look over the textbook chapter assigned for that day to become familiar with the diagrams, main topics, and key terms in bold-face type. Bring your textbook to lecture and lab each class – the diagrams and descriptions in your textbook are your best reference for the structures to be studied in lab. For the labs, review the material covered in the previous lab exercises in detail. Bring your histology atlas to lab on the days when histology exercises are scheduled.

Exams and Quizzes

Lecture Exams will be given on the dates shown on the schedule and will begin at 8:00 a.m. The exams consist of fill-in, multiple choice, true/false, and short essay questions. Exams 1-4 are non-cumulative and cover the lecture material following the previous exam. The final exam is cumulative and includes a lab component. As a rule, the lecture exams will be limited to the material covered in the lectures. Topics in the textbook that are not covered in lectures will not be included on the exams, unless a specific exception is stated in class.

Laboratory Exams will be given on the dates shown on the schedule and will start at 8:15 a.m. The lab exams consist of identification of structures on anatomical models, dissected specimens, and microscope slides. A series of stations will be set up in the classroom. You will have two minutes at each station and move from one station to the next until you complete the exam. Do not come late to lab exams, as you will not be allowed to make up missed stations or return to any station. On lab exam days, lecture will usually follow the exam after a short break. Lab exams 1-4 are non-cumulative and will cover only lab exercises done since the previous lab exam. The lab portion of the final exam is cumulative. Note that the lab will be closed the day before and the day of lab exams for setup. Any change to the lab exam schedule will be announced in class and posted on the class webpage at least two days before the exam.

Quizzes will be given from time to time during the lab periods. The quizzes generally cover the immediately preceding lab exercises. Quizzes may or may not be announced in advance. Missed quizzes cannot be made up. To prepare for quizzes, review the previous lab exercises and make sure you have mastered the previous labs’ material before each new lab.

Review of Exams

Exams will be usually be graded within one week of the exam date. Graded exams may be reviewed in class. No photographs may be taken of exams and no recording is allowed during review of any exam. All graded exams and quizzes must be returned to the instructor in class and may not be removed from the classroom. If you remove an exam or quiz from the classroom, you will receive a zero on the exam.

Make-up Exam Policy

There is no possible make-up for a missed laboratory exam because of the extensive setup time required. In exceptional circumstances, a make-up lecture exam may be arranged. To make up a lecture exam, you must contact the instructor before the exam in person or by phone or e-mail; otherwise you will not be allowed to make up the exam. It is the student’s responsibility to make arrangements with the instructor to take a make-up exam, either during the instructor’s office hours or during the last week of class prior to finals week.

Reading Assignments

The textbook chapters corresponding to each lecture are shown in the table on page 1. You should do an initial, summary review of the assigned pages before the lecture, focusing on diagrams, topic headings, and key terms in bold-faced type. After the lecture on the same day, read the assigned pages in detail to reinforce the lecture material and fill in details. Use the lecture outlines that are provided on the class webpage as a guide to what to focus on in the reading. You are not responsible for learning material in the textbook that is not covered in the class lectures unless the instructor specifically states an exception.
**Other Assignments**

You will be required to complete drawings of the histological slides studied in lab, answer the self-test questions at the end of the lab exercises, and complete additional homework exercises assigned in class and posted on the class webpage. These assignments will be checked off before you leave the lab each day and will comprise a portion of your lab performance points.

**Attendance**

Regular attendance in lectures and laboratories *for the duration of the scheduled class* is essential for success in this course. Attendance may be taken at any time during the class periods. As stated in the NVC Catalog, a student who is absent for as many times as the class meets each week (two absences) will have exhausted the provision for unavoidable absences. Further absences without the prior consent of the instructor may result in the student being dropped from the class.

**Hygiene and Safety Policies**

There is **no food or drink** allowed in the laboratory classrooms in the Life Sciences building. Any food or drink must be stored in a closed container off of the lab benches and consumed outside of the classroom. Wash your hands before handling microscopes, bones and anatomical models and after you have finished clean-up before leaving the lab. For dissection exercises, we recommend that you wear a lab coat or other protective garment to keep tissue fluids and preservative chemicals off of your skin and clothing. Always wear gloves for dissections (provided in lab) and wash your hands thoroughly after completing dissections. Be especially careful handling sharp instruments. If you are injured in lab, you must notify the instructor and you will be escorted to the Student Health Center. Safety guidelines and policies are summarized in the lab manual and will be reviewed during the first lab meeting.

**Student Conduct**

Students are expected to uphold an attitude of respect, tolerance and consideration toward their classmates and the instructor. This includes maintaining appropriate behavior, language, attire, and personal hygiene in the classroom. Inappropriate or disruptive behavior in class will not be tolerated and may result in temporary or permanent dismissal from class and referral to the Vice President of Student Services. All students are expected to abide by the NVC Code of Conduct. For more information, see Student Rights and Responsibilities under Student Services on the NVC website.

**Cell Phone, Electronic Communication and Recording Policy**

As a rule, the use of cell phones, smart phones, and other electronic communication devices is not appropriate and is not allowed during class. Cell phones, smart phones, pagers, and other similar devices should be *turned off* during class. Use of these devices during class may be considered a classroom disruption and failure to turn off the device may result in the student being dismissed from the class for the day. If there is a legitimate, urgent need to have a cell phone or messaging device turned on during class (such as for a medical, family, or child-care emergency), set the device to vibrate and step outside of the classroom to answer the call to minimize disturbance to the class.

Audio recording of lectures is permitted with the instructor’s permission for the student’s individual use only. Recorded lectures may not be transmitted or shared on line. Digital cameras or smart phones may be used to photograph lab materials only during the lab exercises, and may not be used during the lectures. *Photographing or recording is prohibited during exams or review of exams.* Use of a *cell phone, camera, or other electronic recording device during an exam is considered cheating and will be grounds for giving a zero on the exam* (see Academic Honesty below).
**Other Information**

Important dates:
February 2, 2018 – Last day to drop without a “W”
April 6, 2018 – Last day to drop with a “W”

In order to withdraw from the class, it is the student’s responsibility to drop through the WebAdvisor system by the required date. Do not assume you will be dropped if you stop attending class. If you stop attending and do not drop by the last drop date, you will receive an F in the course.

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**Students in need of an academic adjustment in the college learning environment:**

Any student who feels s/he may need an academic adjustment based on the impact of a learning disability should contact Learning Services in the Library room 1766, phone (707)256-7442. A Learning Disability Specialist will review your needs and determine appropriate accommodations.

Any student who feels s/he may need an academic adjustment based on the impact of a physical or other type of disability may schedule an appointment with a DSPS Counselor, Tyler Downie, located in Counseling Student Services 1300 building, phone (707) 256-7220 or 256-7448 for appointment.

All information and documentation is confidential. Please feel encouraged to make an appointment with me privately to discuss your specific learning needs in my class and to ensure I have received your academic adjustment letter.

**Note:** For science courses with a lab, you must meet with a DSPS Counselor or Coordinator to determine your academic adjustment and specific needs.

**Testing accommodations:**

**Lecture exams**

Students who have obtained an academic adjustment letter that specifies a distraction-reduced exam setting may take their lecture exams at the college Testing Center during the scheduled exam time (plus extended time as indicated). Please inform the instructor prior to the exam if you plan to take an exam at the Testing Center.

**Lab exams**

In Biology 218, I use Universal Design for my lab exams. This allows for all students to have extended time when being tested. *Instead of one minute per station, I am doubling the time and giving two minutes per station as extended time for all.* This should meet most students’ needs but it does not always address the needs of all students. If this does not meet the needs of your specific disability, please see a DSPS Counselor, Learning Disability Specialist or Coordinator to determine additional, appropriate academic adjustment for lab exams.

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**Academic Honesty**

**Cheating or plagiarism in any form will not be tolerated**, and will be grounds for giving a lower or failing grade on the assignment or exam in question, giving a lower course grade, and/or referring the student to the Vice President, Student Services for disciplinary action.

**Cheating** includes:

- copying from another’s test or obtaining answers from another person during the test
- submitting work previously presented in another course, if contrary to the rules in either course
- using or consulting during an examination sources or materials not authorized by the instructor
- using during an examination a cellular phone, smart phone, text messaging device, e-reader, digital camera, iPod, or any other electronic device that can store or transmit information**
- altering or interfering with grading or grading instructions
- deliberately altering or interfering with examination materials, such as lab exam setups
• sitting for an examination by a surrogate, or as a surrogate
• talking or consulting with another person (except the instructor) during an examination
• giving information to, or receiving information from, another student that provides the recipient with an undeserved advantage on an examination, such as sharing information about an exam with a student in another section, or telling a student what to expect on a make-up exam
• any other act committed by a student in the course of his or her academic work which defrauds or misrepresents, including aiding or abetting in any of the actions described above.

**Note that having on your person a cell phone or other electronic communication device during an exam will be considered use of that device and will be grounds for receiving a zero on the exam. All such devices must be turned off and stored in a closed compartment or kept with the instructor at the front of the classroom during the exam.

Plagiarism includes:

• incorporating the ideas, words, sentences, paragraphs or parts thereof, or the specific substance of another’s work, without giving due credit, and representing the product as one’s own work***
• representing another’s artistic, scholarly, or similar works as one’s own.

*** This includes copying or using the same words as another student on a written assignment, even if you were permitted to work together on the assignment. You must write in your own words. The best practice to avoid plagiarizing from another student is to never look at another student’s written work!

For further details, refer to the Napa Valley College Catalog and Board Policy on Academic Honesty.
Study Strategies for Human Anatomy

- Study early and study often.
  - keep up with the course material – *don’t get behind!*
  - repetition is essential
- Know your learning style.
  - visual? auditory? tactile?
  - develop study methods based on your learning style
- Study actively.
  - write lists of terms
  - draw and label diagrams
  - practice answering questions and solving problems repeatedly
  - test yourself
  - follow up after exams - identify areas that need improvement and work on them
- Manage your time.
  - plan enough study time: 1½ - 2 hours outside of class for every hour in class
  - shorter, more frequent study sessions are best (20-50 minutes, not more than 90 minutes at a time)
  - set appropriate priorities
- Arrange a suitable study area.
  - good lighting
  - easy access to study supplies
  - reduce noise and other distractions
- Develop a reading strategy.
  - scan the assigned chapter and lecture outline before lecture, focusing on topic headings, bold-faced terms and diagrams
  - reread the chapter in detail after lecture, using your lecture notes and outline as a guide
- Take good notes.
  - write down important terms, definitions and concepts in your notes
  - organize your notes using headings, highlighting, etc.
  - draw diagrams and label them
  - leave some space in margins to add information later
  - go over your notes with the textbook chapter within one day of the lecture and fill in gaps
- Apply effective test taking strategies.
  - read the test questions carefully and answer exactly what the questions asks for
  - budget your time appropriately
  - for fill-in questions, write out terms completely and check spelling
  - for multiple choice questions, try to think of the answer to the question first before looking at the choices, then choose the best answer
  - for essay questions, make a brief outline or bulleted list of major points before you begin writing; write clearly and concisely with appropriate detail; focus on what the question asks (no more and no less)
- Use all resources available to you.
  - use all the class time available (don’t leave early)
  - open lab periods
  - instructor office hours
  - tutors/Supplemental Instruction
  - classmates
  - computer and on-line resources