




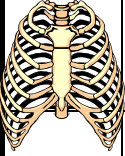













Human Anatomy (Biol 2320) Schedule of Classes, Spring 2018






<u>Week</u>	<u>Day</u>	<u>Subject</u>	<u>Reading in Booklet</u>	<u>Corresponding Reading in Text</u>
1 	Mon, Jan 8	Brief Introduction (read the syllabus!) and A First Look at Anatomy	1-13	1-22
	Wed, Jan 10	A First Look at Anatomy	1-13	1-22
	Fri, Jan 12	Integumentary System Optional Review Session at 3:30 PM in BNR 102	14-27 -----	50, 118-145 -----
	Mon-Fri	“Exploring the Reproductive System #1” at Canvas Site	307-309	840-842
	Mon-Fri	Laboratory #1: Introduction and Videos (no lab points, but questions in upcoming lab quiz and final)	337-339	-----
2 	Mon, Jan 15	HOLIDAY 	-----	-----
	Wed, Jan 17	Integumentary System	14-27	50, 118-145
	Fri, Jan 19	Cartilage and Bone Connective Tissue Optional Review Session at 3:30 PM in BNR 102	28-40 -----	146-172 -----
	Mon-Fri	“Exploring the Reproductive System #” at Canvas Site	310-313	842-849
	Mon-Fri	NO LABS THIS WEEK	-----	-----
3 	Mon, Jan 22	Cartilage and Bone Connective Tissue	28-40	146-172
	Wed, Jan 24	Axial Skeleton: Skull	41-55	173-203
	Fri, Jan 26	Axial Skeleton: Skull Optional Review Session at 3:30 PM in BNR 102	41-55 -----	173-203 -----
	Mon-Fri	“Exploring the Reproductive System #3” at Canvas Site	314-318	849-852
	Mon-Fri	Laboratory #2: Examination of Axial Skeleton (10 lab points possible)	340-343	174-214
4 	Mon, Jan 29	EXAM #1 (Last day to drop without notation on transcript)	-----	-----
	Wed, Jan 31	Axial Skeleton: Vertebral Column	56-66	204-219
	Fri, Feb 2	Axial Skeleton: Vertebral Column Optional Review Session at 3:30 PM in BNR 102	56-66 -----	204-219 -----
	Mon-Fri	“Exploring the Reproductive System #4” at Canvas Site	319-320	851-853
	Mon-Fri	Laboratory #3: Examination of Appendicular Skeleton (10 lab points possible)	344-346	222-245

5	Mon, Feb 5	Appendicular Skeleton: Pectoral Girdle and Upper Limbs	67-73	220-231
	Wed, Feb 7	Appendicular Skeleton: Pelvic Girdle and Lower Limbs	74-83	113, 230-251
	Fri, Feb 9	Articulations: General Features Optional Review Session at 3:30 PM in BNR 102	84-96 -----	252-265 -----
	Mon-Fri	“Exploring the Reproductive System #5” at Canvas Site	321	853-854
	Mon-Fri	Lab Review Session for Quiz #1 (no lab points possible)	-----	-----
6	Mon, Feb 12	Articulations: General Features 	84-96	252-265
	Wed, Feb 14	Articulations: Selected Articulations	97-109	114, 265-286
	Fri, Feb 16	Articulations: Selected Articulations Optional Review Session at 3:30 PM in BNR 102	97-109 -----	114, 265-286 -----
	Tues-Fri	“Exploring the Reproductive System #6” at Canvas Site	322	854-855
	Tues-Fri	LAB QUIZ #1	-----	-----
7	Mon, Feb 19	HOLIDAY*	-----	-----
	Tues, Feb 20	EXAM #2 (*Attend classes, labs, and office hours as if it were Monday!)	----- -----	----- -----
	Wed, Feb 21	Muscle Tissue and Organization	110-119	288-292, 306-310, 312, 316
	Fri, Feb 23	Axial Muscles Optional Review Session at 3:30 PM in BNR 102	120-126 -----	300, 321-351 -----
	Mon-Fri	“Exploring the Reproductive System #7” at Canvas Site	323	855
	Mon-Fri	Laboratory #4: Examination of Muscles of Upper Body (10 lab points possible)	347-348	261-264, 321-374
8	Mon, Feb 26	Appendicular Muscles	127-139	352-394
	Wed, Feb 28	Appendicular Muscles	127-139	352-394
	Fri, Mar 2	Nervous Tissue Optional Review Session at 3:30 PM in BNR 102	140-144 -----	413-436 -----
	Mon-Fri	“Exploring the Reproductive System #8” at Canvas Site	324	855,858
	Mon-Fri	Laboratory #5: Examination of Muscles of Lower Body and Suturing of Skin (10 lab points possible)	349-353	375-390
9	Mon, Mar 5	SPRING BREAK	-----	-----
	Wed, Mar 7	SPRING BREAK	-----	-----
	Fri, Mar 9	SPRING BREAK	-----	-----
	Mon-Fri	SPRING BREAK (No Labs) 	-----	-----
10	Mon, Mar 12	Brain	145-166	437-470, 524, 531-

				532
	Wed, Mar 14	Brain	145-166	437-470, 524, 531-532
	Fri, Mar 16	Cranial Nerves Optional Review Session at 3:30 PM in BNR 102	167-179 -----	471-483 -----
	Mon-Fri	“Exploring the Reproductive System #9” at Canvas Site	325-326	859-861
	Mon-Fri	Laboratory #6: Articulations and Circulatory System (10 lab points possible)	354-359	265-281, 655-721
11	Mon, Mar 19	EXAM #3	-----	-----
	Wed, Mar 21	Cranial Nerves	167-179	471-483
	Thur, Mar 22	Last day to drop with a “W” on transcript	-----	-----
	Fri, Mar 23	Spinal Cord and Spinal Nerves Optional Review Session at 3:30 PM in BNR 102	180-191 -----	484-515 -----
	Mon-Fri	“Exploring the Reproductive System #10” at Canvas Site	327-328	861-862
	Mon-Fri	Laboratory #7: Examination of Respiratory Digestive, Reproductive, Urinary, and Nervous Systems (10 lab points possible)	360-363	Pages cited in notes
12	Mon, Mar 26	Spinal Cord and Spinal Nerves	180-191	484-515
	Wed, Mar 28	Heart	192-209	654-680
	Fri, Mar 30	Heart Optional Review Session at 3:30 PM in BNR 102	192-209 -----	654-680 -----
	Mon-Fri	“Exploring the Reproductive System #11” at Canvas Site	329	862
	Mon-Fri	Lab Review Session for Quiz #2 (no lab points possible)	-----	-----

13	Mon, Apr 2	Vessels and Circulation #1	210-222	681-710
	Wed, Apr 4	Vessels and Circulation #2	223-225	691-721
	Fri, Apr 6	Vessels and Circulation #2 Optional Review Session at 3:30 PM in BNR 102	223-235 -----	691-721 -----
	Mon-Fri	“Exploring the Reproductive System #12” at Canvas Site	330-331	864-866
	Mon-Fri	LAB QUIZ #2	-----	-----
14	Mon, Apr 9	EXAM #4	-----	-----
	Wed, Apr 11	Lymphatic System	236-246	722-744
	Fri, Apr 13	Respiratory System Optional Review Session at 3:30 PM in BNR 102	247-265 -----	745-776 -----
	Mon-Fri	Exploring the Reproductive System #13 at	332	866-867

		Canvas Site		
	Mon-Fri	Laboratory #8: Examination of Surface Anatomy and Student Evaluations of TAs/UAs (10 lab points possible)	364-368	395-412
15	Mon, Apr 16	Respiratory System	247-265	745-776
	Wed, Apr 18	Digestive System #1	266-277	777-795
	Fri, Apr 20	Digestive System #1 Optional Review Session at 3:30 PM in BNR 102	-----	-----
	Mon-Fri	“Exploring the Reproductive System #14” at Canvas Site	333-334	867-870
	Mon-Fri	Laboratory #9: Examination of Cranial Nerves (10 lab points possible). Confirm with your TA your points earned to date in lab!	369-373	471-479
16	Mon, Apr 23	Digestive System #2	278-293	795-814
	Wed, Apr 25	Digestive System #2	278-293	795-814
	Fri, Apr 27	Urinary System Optional Review Session At 3:30 PM in BNR 102	294-306 -----	815-839 -----
	Mon-Fri	“Exploring the Reproductive System #15” at Canvas Site	335-336	870-876
	Mon-Fri	Laboratory #10: Videos on Joint Replacement (no lab points, but questions on Final Exam)	374	-----
17	Friday, May 4	Comprehensive Final Exam 7:30-9:20 AM in the morning!	-----	-----

**Human Anatomy
Biol 2320 (4 credits)
Spring 2018**

- A. Instructor: Dr. Andy Anderson** (Please call me Andy!)
- Address: Biology Department
VSB 231
Utah State University
Logan, UT 84322-5305
- Phone: 797-1913 (If I'm not in, leave a message on my voice mail.)
- E-mail: andy.anderson@usu.edu (this personal email gets messages to me much faster that when students contact me through Canvas, so use this personal email)
- B. Teaching Assistants (TAs), Undergraduate Aides (UAs), and Supplemental Instructor (SI):**
- There are numerous TAs and volunteer undergraduate lab aides assigned to this course. Their names and office hours will be provided during the first days of class.

2. A Supplemental Instructor (SI) has been employed by USU to help students in this class with regular meetings throughout each week.
3. Historically, students who utilize the TAs, UAs, and SI faithfully earn higher grades!

C. Meeting times:

1. **Lecture** (Index # 10388) – This class meets on Mondays, Wednesdays, and Fridays for 50 minutes of lecture from 8:30-9:20 AM in BNR 102. There is an optional review session every Friday at 3:30 PM in BNR 102.
2. **Laboratory** – There are 15 laboratory offerings which meet in **BNR 320** at the times indicated below. Students are **required** to sign up for **one** laboratory section per week. Please go to the laboratory you regularly attend! **Don't move around!** If you do need to attend a different lab on a particular week, you will need to email me personally for permission (this is because you are now earning points in the labs and they need to be recorded by your TA!).

Index #	Section	Day	Time
10389	501	Monday	09:30 am – 11:20 am
10390	502	Monday	11:30 am – 01:20 pm
10391	503	Monday	01:30 pm – 03:20 pm
10392	504	Monday	03:30 pm – 05:20 pm
10393	505	Monday	05:30 pm – 07:20 pm
10394	506	Monday	07:30 pm – 09:20 pm
10395	507	Wednesday	09:30 am – 11:20 am
10396	508	Wednesday	11:30 am – 01:20 pm
10397	509	Wednesday	01:30 pm – 03:20 pm
10398	510	Wednesday	03:30 pm – 05:20 pm
10399	511	Wednesday	05:30 pm – 07:20 pm
10400	512	Wednesday	07:30 pm – 09:20 pm
10401	513	Friday	09:30 am – 11:20 am
10402	514	Friday	11:30 am – 01:20 pm
10403	515	Friday	01:30 pm – 03:20 pm

D. Required Materials for Biol 2320:

1. “Human Anatomy”- **4rd edition**, 2015, by McKinley, O’Loughlin, Pennefather-O’Brian, and Harris. This text is available at the USU Bookstore.
 - a. This text comes with VERY useful OPTIONAL on-line resources. When you purchase your new text there will be “Connect” codes packaged in the book that will allow you access to these resources when you go to the web site
<http://connect.mheducation.com/class/a-anderson-smartstart-course>
2. Course booklets (2 volumes) which contain all needed outlines and an example first exam. These booklets can be bought from the **USU Bookstore**.
3. ¾ length lab coat (these are available from the USU Bookstore).

E. Optional Materials for Biol 2320:

1. Optional “Connect” feature of textbook cited above
2. I *used* to recommend that students buy a medical dictionary, but *now* most students can simply use their smart phones to look things up.

NOTE: It is recommended (but not required) that students have one other anatomy text available for study. An extra text will often serve to clarify points which are confusing, or reinforce those which are considered important. At the request of previous students, I will list a few good books you could order from Amazon.com if you have more money than you know what to do with:

- a. "Atlas of Human Anatomy" by Frank Netter.
- b. "McMinn's color Atlas of Human Anatomy" by Abrams, Hutchings, and Marks.

F. Course Booklets:

1. For each lecture in this course (and for the "Exploring the Reproductive System" presentations) the student is provided with an outline of the subjects to be discussed that day. These outlines are designed to guide your participation during the lectures and also to guide you in your reading of the textbook. These outlines typically have articles attached on which you will be tested. All of these outlines and articles have been collected into course booklets (course readers) for your use.
 - a. If there is information in your textbook that is not mentioned in class, or not mentioned in the course booklet, it will not be on the exam.
 - 1) You are encouraged to read supplemental information in your text, but you will only be tested on what is cited in the booklet or in our class discussions.
 - 2) Note that the booklet often requires you to read Clinical Views in the text (i.e. - *Read the clinical view on pages 18-19 about medical imaging procedures*)

G. Lectures and Images at Canvas site

1. The audio recording of the lectures and review sessions, and the images used, will be available on the Internet shortly after the lectures and reviews are over. You can access them by going to the CANVAS site for this course. The lectures and images from the last time this course was taught (spring 2017) will be there as well.
2. "**Exploring the Reproductive System" at Canvas site**
 - a. There are 15 required "Exploring the Reproductive System" presentations at the Canvas site.
 - b. You are required to listen to one of these very short presentations every week of the semester (except for Spring Break).
 - c. The notes for these "Exploring the Reproductive System" presentations are in your booklet of lecture notes.
 - d. Questions from these "Exploring the Reproductive System" presentations, the notes, and the supplemental readings for each will appear on your regular exams and on your Final Exam.
 - e. You must listen to one of these "Exploring the Reproductive System" presentations every week, and read the designated supplemental readings, to be prepared for your exams.

H. Unacceptable Classroom Behavior

Since a significant goal of this class is to prepare each of you for your upcoming exams, then behavior that disrupts the classroom environment will be discouraged.

1. Once class has started, **cell phones should be silenced** and no ring tones, conversations, or text messaging are permitted.
2. Once class has started, **talking or whispering among students is strongly discouraged**. If you need to talk, please leave the class and conduct your conversation outside. If students persist in talking among themselves during class they will be invited to my office and given a

- written warning. If they persist in talking after this warning, they will be asked to leave the room so other students can benefit from the limited amount of class time available.
3. Use of laptop computers in class is acceptable, provided it is utilized for notes or materials used in this class. **It is not acceptable to use your computer in class for recreational purposes or for doing work for a different class.** When you come to this class it is expected that you will focus your attention on this class and not engage in computer activities that detract from the classroom experience or that will distract your classmates. If the problem persists, you will be requested to cease your computer activities.

I. Examinations and Two Lab Quizzes for Biol 2320

1. There will be four 50-minute exams of 100 points each and a 110-minute comprehensive final exam (over everything except articles used in earlier exams) worth 200 points. The lecture notes, **class discussions**, the “Reproduction Revealed” presentations, handouts, laboratories, and occasional articles distributed in class will be used to formulate exam questions.
2. **There will be two lab quizzes (50 points each) presented in the laboratory that will be prepared and administered by the TAs/UAs.**
3. Students will have the score on their lowest 50-minute exam dropped. Their grade will be calculated using the remaining 50-minute exams, the lab quizzes, and the final. (If you miss a 50-minute exam, that is the one which will be dropped).
4. An example first exam is included at the back of this syllabus. While the questions will be different this year, the style will be exactly the same (multiple choice, fill-in-the-blank, two-part story questions, and essay questions).
5. Those students who have difficulty with the example first exam and example questions in the book should see the instructor **as soon as possible** to arrange free tutoring with the TAs, SI, and UAs.
6. Those students who (“heaven forbid!”) score less than 70% on the first two exams **should seriously seek intensive tutoring or drop the class.**
7. The letter grade is based on the percentage of total points earned on the three highest 50-minute exams (100 points each), the two lab quizzes (50 points each), the points earned in lab for the pre-lab quizzes and attendance (80 points possible) as cited below, and the comprehensive final exam (200 points). **THERE IS NO EXTRA CREDIT OR SPECIAL PROJECTS TO IMPROVE YOUR GRADE.**

J. Points Earned in Lab for Pre-Lab Quizzes and Attendance for Biol 2320 (80 points possible)

1. A recent feature of this course is the ability of students to earn 5 points for a pre-lab quiz at the start of each of the 8 active labs and an additional 5 points for attendance.
2. The pre-lab quiz will be 5 questions over the lab that is to be done that day and it will start at 3 minutes after the scheduled lab starting time! It will only last for about 5 minutes.
 - a. This pre-lab quiz accomplishes two things: it insures you are to your lab on time and it makes the TAs and UAs happy because you have looked over the lab before arriving and ready to answer the pre-lab questions.

- 1) If a student arrives in the lab too late to take the pre-lab quiz, they will NOT be allowed to take the pre-lab quiz. Remember one of the purposes for this pre-lab quiz is to have student arrive on-time!
- b. **Each TA** in each of the respective labs will create 5 straightforward questions for the students to answer, print up this pre-lab quiz before lab, score it, and keep a record of points earned (5 points per pre-lab quiz) to be turned into to me at the end of the semester.
 - 1) The scored pre-lab quizzes can be returned to the students at the next lab.
3. **Each UA** will take attendance (worth 5 points) at some point in the lab (usually after one hour) and give that list to the **TA** for recording.
 - a. So, the **TA** will be keeping a permanent record of the points earned from the pre-lab quiz and from attendance (with the help of the UA).

K. Grading Chart

Actual Points Earned	Percentage of Total Points Earned	Grade
629-680	93-100	A
609-628	90-92	A-
581-608	86-89	B+
561-580	83-85	B
541-560	80-82	B-
513-540	76-79	C+
493-512	73-75	C
473-492	70-72	C-
445-472	66-69	D+
405-444	60-65	D
404 or less	59 or less	F

8. Up until the last office hours of the semester (usually the week before finals) you are invited to see me, or the TAs, to view the exam keys and debate your scores. **After my last office hour I will only discuss the final exam with you, not your scores on earlier tests or quizzes.**

L. Course Goals:

1. The main goal of this course is to give students a basic understanding and working knowledge of the structure of their own bodies. Numerous medical examples, and a few athletic stories, will be provided to illustrate the importance of the systems presented.
2. It is expected that upon successful completion of this course students will be able to effectively apply the knowledge gained in more advanced courses, in their careers, and in their daily lives.

M. Student's Responsibilities:

1. The student is expected to attend all lectures and laboratories (take the pre-lab quizzes and stay to do the work), take supplemental notes, read the assigned readings, refer to suggested references as needed and achieve a cumulative score of greater than 75% on the exams.

2. In the event there is some difficulty, it is the **student's responsibility** to contact the instructor, TAs, SI, or UAs for advice or assistance. Free tutoring is available with the TAs and UAs during their published office hours.

N. Instructor's Responsibilities:

1. The instructor is expected to attend all lectures, read the assigned reading, present supplemental articles, and prepare examinations which are fair and representative of the material covered. The instructor will also be available at posted office hours to answer **specific** student questions and provide needed assistance.

O. Teaching Assistants', Undergraduate Aides' Responsibilities:

1. Typically there are numerous departmental TAs and UAs assigned to this course each semester. These TAs and UAs will come to the lectures as needed so that they will be qualified tutors for each of your exams. Some of the UAs will attend the review sessions each week where the students are quizzed by the UAs with questions the UAs have prepared. The TAs and UAs will assist the instructor in writing the lecture exams and lab quizzes. The TAs and UAs will correct and score the exams promptly after they are taken by the students. The TAs and UAs will have published office hours to provide help to interested students. The TAs will have the answer keys after each exam for use in advising students (students may NOT write anything down! No writing, recording instruments, or cell phones in your hands! **If a TA or UA fails to show up at his/her office hour, please let me know!** This is part of their assignment to me and many of the UAs are getting academic credit for their work.
2. The TAs and UAs are also expected to attend their individual laboratories, have all the necessary materials available (including a printed pre-lab quiz for the active labs) and be knowledgeable about the scheduled lab exercises. The TAs and UAs will write and administer two lab quizzes, administer the pre-lab quizzes, and record attendance. After correcting these quizzes they will turn them in to Andy for grade recording and posting.

P. Supplemental Instructor's (SI) Responsibilities:

1. USU has hired an undergraduate student to serve as an SI to assist you in getting a good grade in this challenging course. The SI will have regular meetings throughout the week and will have prepared practice questions of the same style as you may expect on your upcoming exams and quizzes. The end-of-the-semester data I am provided by the SI program clearly reveals it improves the performance of most of those students who participate.

Q. Library References:

1. A copy of the course textbook "Human Anatomy", 4th edition, by McKinley, O'Loughlin, Pennefather-O'Brien, and Harris is on reserve at the Media Collections.
2. Check the subject index in the Library to find additional useful books on anatomy and physiology.

R. Below you will find a University statement on Academic Honesty.

1. **DO NOT REMOVE ANY EXAMINATION MATERIALS FROM THE CLASSROOM OR LABORATORY ON EXAM DAYS!**
2. **DO NOT COPY OR REMOVE ANY EXAMINATION MATERIAL FROM THE TEACHING ASSISTANTS' OR SI'S OFFICES!**
3. If you fail to follow these rules, I will make every effort to subject the offender to the disciplinary procedures designated by the University.

Honor Pledge

Students will be held accountable to the Honor Pledge which they have agreed to: “I pledge, on my honor, to conduct myself with the foremost level of academic integrity.”

Academic Dishonesty

The Instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University’s Student Code:

Acts of academic dishonesty include but are not limited to:

1. Cheating: (1) using or attempting to use or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity, including working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually”; (2) depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work; (4) acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission; (5) continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity; (6) submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or (7) engaging in any form of research fraud.
2. Falsification: altering or fabricating any information or citation in an academic exercise or activity.
3. Plagiarism: representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

Full text of the Student Code available at available at available at <http://www.usu.edu/studentservices/pdf/StudentCode.pdf>:

S. Students with Disabilities

1. Students with physical, sensory, emotional or medical impairments may be eligible for reasonable accommodations in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, 797-2444, 797-0740 TTY, or toll free at 1-800-259-2966. Please contact the DRC as early in the semester as possible. Alternate format materials (Braille, large print or digital) are available with advance notice.

T. University policy on withdrawals and incomplete grades.

1. I direct your attention to the current USU policy on dropping courses and incomplete grades in the on-line Catalog, under Registration.
 - a. You will note that “incomplete grades” are only given for conditions beyond the students’ control and not due to poor performance. A student who receives an incomplete must retain all the scores they earned up to the date of the incomplete and later will **ONLY** be allowed to finish the remaining quizzes or exams.

U. Notice on lab fees (\$90)

1. As part of your registration for this class you were required to pay a “lab fee” of \$90.00. This fee is used by me to buy cadavers (currently \$1,950 each) and lab supplies (bags, labels,

markers, models, containers, preservative chemicals, etc). All of your lab fees are used to enhance your learning opportunities in this course and to help your TAs, UAs, and your instructor, to hopefully make it easier for you to succeed in this challenging subject.

V. Laboratory Safety

1. After death bodies will begin to decompose and bacteria, mold and fungi can begin to grow on tissue. In order to slow down these events, bodies are treated in a process called “embalming.” Embalming involves injecting specific fluids into the arteries (often the carotid artery) where they will spread through the arteries, capillaries and veins to the organs and tissues of the body, aiding in preservation. The primary embalming chemical is formaldehyde. Formaldehyde functions by cross-linking proteins. It is toxic and a known carcinogen, meaning there is evidence that exposure to this chemical can increase susceptibility to cancer. Cadavers arrive at our lab with formaldehyde perfused within the cadaver. While in our lab, cadavers will be regularly doused with a wetting solution. Wetting solutions can contain toxic chemicals meant to inhibit microbial growth on the cadavers. Cadavers are placed on specially designed tables with built in ventilation that vacuums away fumes and odors, thus minimizing exposure. Besides specialized venting, exposure to toxic chemicals in the laboratory is minimized by the use of protective clothing.

The following use of personal protective gear is expected of anyone entering and participating in the laboratory:

- Fully closed shoes that protect the entire foot
- Nitrile gloves, which prevent toxic chemicals from reaching your skin
- $\frac{3}{4}$ length lab coat that is fastened shut (these are for sale in the USU Bookstore)
- All gloves are disposed of in the trash cans after removal.
- Wash your hands before you leave the laboratory with the soap and water provided in the lab.

If for any reason you feel hot or faint, it is important to tell someone and sit down on the floor (or lie down) immediately! If instead you try to walk out of the lab you risk passing out and suffering a bad fall onto a hard floor!

Although data is inconclusive, exposure to the chemicals while participating in the lab (more so if one is participating in active dissections) may be harmful to a developing fetus. Therefore, it is advisable to pregnant women (especially in the first trimester) or those who plan on becoming pregnant during the semester to consider this issue when determining the timing of taking the class. If the course must be taken at this time, please discuss options with the Instructor. If there are concerns regarding this issue that the Instructor cannot answer, please contact Rachel Curry in USU's Environmental Health and Safety Office (435-797-2892, rachel.curry@usu.edu), or seek advice from your obstetrician.

2. **NEW rules for personal protection in the Cadaver Laboratory (BNR 320)!**
 - a. The entire university has adopted a NEW safety protocol for all student laboratories. The **minimum** required protection to enter and participate in this laboratory is:
 - 1) Fully closed shoes
 - 4) $\frac{3}{4}$ length lab coat that is fastened shut (these are for sale in the USU Bookstore)
 - 5) Nitrile gloves (provided in the lab)

- b. If you do not have this minimum required protection, you will NOT be allowed to enter or participate (no exceptions for ANY time you are in the lab!).
 - 1) I realize that for some labs you merely have a quiz or watch a video. However, the University policy is for entering a lab, regardless if the lab is active or not, because of the hazardous chemicals in the lab.
 - a) The nitrile gloves will need to be worn during active labs.
- c. Additional protective gear, such as goggles, face shields, or face masks may be provided depending upon the lab activity. I do not anticipate that at this time in Human Anatomy.

General Information for Interested Students Biol 2010

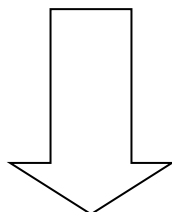
Some students may be interested in taking further courses with me. This sheet will provide that information.

A. Courses Taught by D. Andy Anderson

- 1. Fall Semester 2018
 - a. Elementary Microbiology (Biol 2060) 4 credits
 - b. Human Dissection (Biol 4000) 1 credit
- 2. Spring Semester 2019
 - a. Human Anatomy (Biol 2320) 4 credits
 - b. Bioethics (Biol 3100) 3 credits
 - c. Advanced Human Physiology (Biol 4600) 5 credits
- 3. Others
 - a. Independent Study (Biol 3760) 1-2 credits – available every semester
 - 1) Students earn credit by writing a term paper on a mutually agreed topic.
 - b. Teaching Internship (Biol 4710) 1 credit – available every semester
 - 1) This credit is available to students who wish to volunteer as a UA in a class they have previously excelled in. (Grade of “B” or better)

B. Other Courses of Interest

- 1. Emergency Medical Technician (EMT)
 - a. Contact Bridgerland Applied Technology College at 435-753-6780 for information.
- 2. MCAT Prep Course (Biol 1030), 1 credit of pass/fail. This preparation course is only taught in spring by two successful premed students.
- 3. DAT Prep Course (Biol 1040), 1 credit of pass/fail. This preparation course is only taught in spring by two successful pre-dent students.
- 5. Biology Prehealth Programs Orientation (Biol 1750), 1 credit, fall semester. This course is designed to allow students to meet and listen to a wide variety of healthcare professionals so they can perhaps choose a career for their own future.



**Student Performance
On Exams and Quizzes in Biol 2320
During the Last Ten Years**

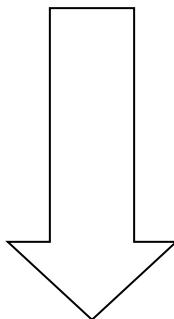
Average Quiz Scores (50 pts)

Average Exam Scores (100 pts)

Year	Semester	#1	#2		#1	#2	#3	#4	Final
2017	Summer	37.3	38.0		78.2	73.7	69.0	81.7	75.8
2017	Spring	36.7	33.5		75.0	71.7	64.4	63.5	74.7
2016	Summer	32.6	32.1		72.3	65.0	62.8	65.5	67.0
2016	Spring	36.9	37.7		70.2	70.2	63.1	63.5	70.5
2015	Summer	37.3	38.9		74.2	71.9	61.8	74.7	72.3
2015	Spring	40.3	31.7		71.4	75.3	61.3	59.8	68.0
2014	Summer	40.8	41.3		75.4	74.0	61.8	---*	69.4
2014	Spring	40.1	34.8		72.3	74.3	60.7	61.6	64.2
2013	Summer	36.3	36.5		72.8	72.2	58.2	----*	68.4
2013	Spring	38.0	37.1		67.6	73.2	66.9	66.0	69.2
2012	Summer	40.8	38.6		70.9	71.6	61.6	----*	72.6
2012	Spring	42.0	39.6		70.0	76.9	71.6	65.9	72.8
2011	Summer	38.2	35.9		72.5	64.6	58.0	70.9	70.0
2011	Spring	40.3	36.4		67.7	74.8	72.2	63.8	67.8
2010	Summer	40.3	36.5		74.8	72.5	66.6	76.6	75.8
2010	Spring	38.8	33.7		70.0	73.8	69.0	64.9	71.4
2009	Summer	39.9	41.2		66.3	71.5	64.3	70.1	74.4
2009	Spring	38.3	37.5		73.9	76.3	57.7	67.9	72.2
2008	Summer	N/A	N/A		N/A	N/A	N/A	N/A	N/A
2008	Spring	38.8	36.6		72.5	78.0	55.1	68.4	72.8
Average		38.6	36.7		72.0	72.7	63.5	67.8	71.0

Students often do poorly on Exam #3 because it is shortly after spring break and they lose their regular study habits. *Don't make this mistake!*

*The summer sessions were shortened from 2012-2014 to 6.5 weeks, so there was no time for an Exam #4.



Student Final Grades in Previous Ten Years of Human Anatomy (Biol 2320)

Semester	Year	Position	Points	Grade	Semester	Year	Position	Points	Grade
Spring	2017	High	658.5#	A	Summer	2017	High	659.0#	A
Spring	2017	Low	155	F	Summer	2017	Low	341	F
Spring	2017	Average	507.8	C	Summer	2017	Average	536.8	B-
Spring	2016	High	670.0#	A	Summer	2016	High	648.5#	A
Spring	2016	Low	192.0	F	Summer	2016	Low	129.0	F
Spring	2016	Average	520.9	C+	Summer	2016	Average	471.6	C-
Spring	2015	High	666.0#	A	Summer	2015	High	635.5#	A
Spring	2015	Low	169.5	F	Summer	2015	Low	241.0	F
Spring	2015	Average	501.9	C	Summer	2015	Average	516.3	C+
Spring	2014	High	669.5#	A	Summer	2014	High	545.5#	A
Spring	2014	Low	213.0	F	Summer	2014	Low	260.3	F
Spring	2014	Average	497.4	C	Summer	2014	Average	433.8	C+
Spring	2013	High	596.0	A	Summer	2013	High	481.0*	A
Spring	2013	Low	140.0	F	Summer	2013	Low	119.0	F
Spring	2013	Average	446.0	C	Summer	2013	Average	363.4	C
Spring	2012	High	580.5	A	Summer	2012	High	484.5*	A
Spring	2012	Low	240.0	F	Summer	2012	Low	81.0	F
Spring	2012	Average	462.7	C+	Summer	2012	Average	377.0	C
Spring	2011	High	581.5	A	Summer	2011	High	573.5	A
Spring	2011	Low	140.0	F	Summer	2011	Low	96.5	F
Spring	2011	Average	445.1	C	Summer	2011	Average	436.8	C
Spring	2010	High	595.5	A	Summer	2010	High	567.5	A
Spring	2010	Low	132.0	F	Summer	2010	Low	251.0	F
Spring	2010	Average	451.5	C	Summer	2010	Average	478.3	B-
Spring	2009	High	591.0	A	Summer	2009	High	577.5	A
Spring	2009	Low	164.5	F	Summer	2009	Low	194.0	F
Spring	2009	Average	453.2	C+	Summer	2009	Average	460.2	C+
Spring	2008	High	581.0	A	Summer	2008	High	N/A	N/A
Spring	2008	Low	189.0	F	Summer	2008	Low	N/A	N/A
Spring	2008	Average	451.4	C	Summer	2008	Average	N/A	N/A

* The summer semesters were shortened to 6.5 weeks from 2012 to 2014, so there was not time for an Exam #4 and only a total of 500 points were possible rather than the previous 600 points.

Starting in 2014 students could now earn up to 80 points for pre-lab quizzes and attendance in the labs.