

# HUMAN AND COMPARATIVE ANATOMY, SPRING 2009

## BL 406/407, LECTURE & LABORATORY SYLLABUS

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**Meeting Time and Place:** Lecture—Monday, Wednesday, and Friday 12:30-1:20pm in SCI 204 or 1:30pm-2:20pm in SCI 207; Laboratory— Monday 4:00pm-5:15pm and Tuesday 1:45–6:00 pm in SCI 204

**Instructor:** Michael Ghedotti, 225 Science Building, (303) 458-4091, e-mail: [mghedott@regis.edu](mailto:mghedott@regis.edu) (Office hours will be announced in class.)

### Required Lecture & Laboratory Books & Materials:

- | Deluliis, G. & D. Pulerà. 2006. *The Dissection of Vertebrates, A Laboratory Manual*. Academic Press.
- | McKiney, M. & V. D. O’Loughlin. 2008. *Human Anatomy, 2<sup>nd</sup> Edition*. McGraw Hill.
- | Ghedotti, M. J. 2009. BL 406-407 Human & Comparative Anatomy Lecture & Laboratory Manual.
- | Laboratory Notebook (graph paper or blank paper in sewn binding) - recommended

**Regis Bulletin Course Description:** A rigorous organ-system-based course in human anatomy that also places human anatomical structure into its evolutionary and developmental context. Includes a general overview of anatomical variation among vertebrates. Teaches anatomy as an active biological discipline. Co-Requisite(s): BL 407. Prerequisite(s): BL 260 and BL 262. Note: Pre-Nursing or pre-Physical Therapy students should take BL 274 to meet the requirements for these programs.

**Course Goals:** This course seeks to provide students with both a solid knowledge of human anatomy, and an understanding of that anatomy as a biological phenomenon *clearly connected to the rest of biology*. Anatomy can be learned as a simple memorization of names of parts, to allow communication and clinical facility. However, anatomy as a *biological discipline* is not a static list of terminology, and anatomy is only truly understood when the evolutionary and developmental context is understood. It is hoped that a more full understanding of human anatomy in its comparative and embryological context will help students not only to remember anatomical terminology, but also to be able to deal with novel anatomical material and anatomical abnormalities as would an anatomist.

**Course Objectives:** Students should be able to...

1. propose, design, and execute a simple comparative anatomical study that correctly tests a clear hypothesis.
2. write/construct a clear, concise, and accurate scientific poster.
3. define the major terms used in human anatomy, embryology, and comparative anatomy.
4. explain the major organizing concepts in human anatomy, embryology, and comparative anatomy.
5. recognize anatomical and histological structures as discussed in class.
6. recognize the the conceptual connection between anatomy and the rest of biology, both generally as a scientific discipline and more specifically as a subdiscipline based on the subdisciplines of developmental and evolutionary biology.

### Grading:

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LECTURE—Your grade for the 3 SH lecture portion of the course will be determined as follows:

Quiz 1, Root Word/Phylo. Quiz.....	2%
Comprehensive Gen. Quizzes (2 lowest dropped, 4 @ 2% each)....	8%
Exam 1 .....	15%
Comprehensive Exam 2.....	20%
Comprehensive Exam 3.....	25%
Comprehensive Final Exam .....	30%
<hr/> Total	<hr/> 100%

**Quizzes:** Students will take the first quiz that cannot be dropped. The content of this first quiz is mostly revealed in this syllabus. In addition to the first quiz, students will take six general comprehensive quizzes. The **four highest** of these general quizzes will comprise the student’s grade for the general quizzes (the lowest 2 dropped).

**Lecture Examinations:** Exams ensure encourage students to synthesize and learn the course material Exams also are the primary means of assessment of this learning. All examinations are comprehensive. However, every exam will emphasize material since the last exam. Examinations 1-3 may **NOT** be taken after their scheduled dates. If exams 1-3 are missed because of an excused absence and an excused absence form is filled out, then the missed exam will be averaged out of the student’s grade.

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LABORATORY—Your grade for the 2 SH laboratory portion of the course will be determined based on the following:

Natural History Museum Assignment.....	2%
Tissue Presentation .....	5%
Independent Research Project Laboratory Notebook .....	3%
Independent Research Intro. + Lit. Cit. ....	5%
Independent Research Project Poster .....	20%
Laboratory Examination 1 .....	15%
Comprehensive Laboratory Examination 2.....	15%
Comprehensive Final Exam .....	35%
<hr/> Total	<hr/> 100%

**Tissue Presentation:** This assignment seeks to help students to learn basic tissue material in a creative way. This grade is based on a group presentation given on a category of tissues.

**Natural History Museum Assignment:** This assignment will require students to attend the Denver Museum of Nature and Science and to answer questions about specific exhibits on human anatomy and skeletal vertebrate anatomy. Students may do this either during a scheduled Saturday class trip or on her/his own.

**Independent Research Project:** Students complete an independent research project on comparative vertebrate anatomy and present the results in the form of a scientific poster. The introduction with an associated literature cited section will be due earlier in the semester. The introduction may **NOT** be turned in after the scheduled due date, and will be averaged out of the student’s grade if the absence is excused and an excused absence form is completed.

**Examinations:** Students take two examinations during the semester lasting 60-90 minutes and a final examination lasting 120 minutes for the laboratory. These exams will include “practical stations” and one or two free response questions. The mid-semester examinations may **NOT** be taken after their scheduled dates, and will be averaged out of the student’s grade if the absence is excused and an excused absence form is filled out.

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**Grading Scale**—The percent grading scale for both lab and lecture will be as follows. (I retain the right to lower the grade boundaries of the final class grades based on overall class performance. In no instance will any student be given a higher grade independent of the grade scale applied to the class as a whole.)

A = 100–92.50	B- = 82.49–79.50	D+ = 69.49–66.50
A- = 92.49–89.50	C+ = 79.49–76.50	D = 66.49–62.50
B+ = 89.49–86.50	C = 76.49–72.50	D- = 62.49–59.50
B = 86.49–82.50	C- = 72.49–69.50	F = <59.49

**Late Assignments:** No assignments will be accepted late. Excused assignments will be averaged out.

**Possible Grading Inaccuracies:** If you think that an answer you gave on a test or quiz was graded in error, please bring this to your instructor’s attention. Wait at least one day (a “cooling off” period) and resubmit the assignment to your instructor with a brief written explanation.

**Parental Contact with the Instructor:** Please bring any problems or concerns you have to the instructor directly. Because of *federal* privacy laws your instructor can discuss your grades or attendance with your parent/guardian *only* if you have signed a waiver on file in the Dean’s office. Your instructor *will not* discuss your course grades with your parents without informing you, and **your instructor will disclose the nature and content of any discussion with your parent to you.**

**Disability Statement:** If you have a documented disability requiring academic adjustments for this class, please contact Disability Services (303-458-4941, disability@regis.edu). Disability Services will help determine appropriate, reasonable accommodations. Discuss your accommodation request with your instructor.

**Inappropriate Academic Conduct:** Inappropriate academic conduct includes copying assignments, plagiarism, and falsifying data as well as cheating on exams. If inappropriate academic conduct occurs, the consequences will be severe, *likely* resulting in **failure of the course** (grade = F) and minimally will result in a 0% score on the assignment/quiz/exam. The level of punishment between these extremes is at the discretion of the instructor based on the severity of the offense.

**Schedule and anticipated lecture topics:** The dates given for exams and quizzes are fixed. However, the dates for lecture topics are estimates and may change as the semester progresses.

## JANUARY/FEBRUARY/MARCH

Monday	Tuesday	Wednesday	Thurs.	Friday
<b>12</b> 12:30- Intro. to Human & Comparative Anatomy 4:00- <b>Anatomy Overview</b>	<b>13 Lab 1</b> <b>Human Anat. Overview &amp; Anat.-Terms</b> M.&O.: 6-22	<b>14</b> Basic Vertebrate Structure D.&P.: 1-8	<b>15</b>	<b>16</b> <b>Anatomical Vocabulary Exercise</b>
<b>19</b> Martin Luther King Jr. Day	<b>20 Lab 2</b> <b>Vertebrate Diversity Overview</b> D.&P.: 1-8	<b>21</b> Phylo/Rt.Wd. <b>Quiz</b> Vertebrate Diversity Exercise D.&P.: 1-8	<b>22</b>	<b>23</b> Cell Structure & Tissues M.&O.: 80-117
<b>26</b> 12:30 Tissues 4:00- <b>Tissue Overview</b> M.&O.: 80-117	<b>27 Lab 3</b> <b>Tissue Presentations</b>	<b>28 Comp. Quiz 2</b> Development I M.&O.:61-77	<b>29</b>	<b>30</b> Development II M.&O.: 61-77
<b>2</b> 12:30- Development III 4:00- <b>Early Development Overview: Zygote-Gastrula</b>	<b>3 Lab 4</b> <b>Human &amp; Vertebrate Embryology</b> Lecture Exam Review	<b>4</b> <b>LECTURE EXAM 1</b>	<b>5</b>	<b>6</b> Coelom & Mesenteries M.&O.: 13-16, 65-67
<b>9</b> 12:30- Digestive System I M.&O.: 777-809 4:00- <b>LAB EXAM 1</b>	<b>10 Lab 5</b> <b>Digestive System &amp; Coelomic Viscera</b>	<b>11</b> Digestive System II M.&O.: 777-809	<b>12</b>	<b>13</b> Circulatory System I: Blood & Devel. M.&O.: 636-648, 713-717
<b>16</b> 12:30- Circulatory Devel. M.&O.: 636-648, 713-717 4:00- <b>Intro. to Human Heart</b>	<b>17 Lab 6</b> <b>Circulatory System I: Heart &amp; Aortic Arches</b> Discuss Proj. Hypoth.	<b>18 Comp. Quiz 3</b> The Heart M.&O.: 654-656, 658-666, 675-677	<b>19</b>	<b>20</b> Vascular System I M.&O.: 682-713
<b>23</b> 12:30- Vascular System II M.&O.: 682-726 4:00- <b>Human Vasculature</b>	<b>24 Lab 7</b> <b>Circulatory System II: Lymphatic and Cardiovascular</b>	<b>25</b> <b>COMPREHENSIVE LECTURE EXAM 2</b>	<b>26</b>	<b>27</b> Respiratory System M.&O.: 771-772, 745-763
<b>2</b> <b>SPRING BREAK</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>9</b> 12:30 - Respiratory System M.&O.: 771-772, 745-763 4:00- <b>Respiratory System</b>	<b>10 Project Intro. Due</b> <b>Lab 8</b> <b>Integument &amp; Teeth</b> M.&O.: 118-141; 781-783	<b>11 Comp. Quiz 4</b> Introduction to the Skeleton M.&O.: 145-161	<b>12</b>	<b>13</b> Skull I M.&O.: 172-199
<b>16</b> 12:30 - Skull II M.&O.: 172-199 4:00- <b>Skull III</b>	<b>17</b> <b>Lab 9</b> <b>The Skeletal System I</b>	<b>18 Comp. Quiz 5</b> Vert.& Appendicular Skeleton M.&O.: 202-215, 219-245	<b>19</b>	<b>20</b> The Appendicular Skeleton M.&O.: 219-245
<b>23</b> 12:30 - Human Articulations M.&O.: 251-258; 266-278 4:00- <b>LAB EXAM 2</b>	<b>24</b> <b>Lab 10</b> <b>The Skeletal System II</b>	<b>25</b> <b>COMPREHENSIVE LECTURE EXAM 3</b>	<b>26</b>	<b>27</b> <b>Musc. System I</b> M.&O.: 287-289, 315-316 Deadline to meet with Instructor about I.P. Intro.



## MARCH/APRIL

Monday	Tues.	Wednesday	Thurs.	Friday
<b>30</b> 12:30 - Muscular System II M.&O.: 321-337 4:00- <b>Head/Neck Muscles</b>	<b>31</b> <b>Lab 11</b> <b>Muscular System I &amp; External Anatomy</b>	<b>1</b> Muscular System III M.&O.: 353-391	<b>2</b>	<b>3</b> Neural Tissues & Neurodevelopment M.&O.: 414-425, 432-434
<b>6</b> 12:30 - Central Nerv. Syst. M.&O.: 438-454, 485-491 4:00- <b>The Brain</b>	<b>7</b> "Meat" Due <b>Lab 12</b> <b>Muscular System II</b> (celebrating vertebrates)	<b>8</b> <b>Comp. Quiz 6</b> Peripheral N.S. I M.&O.: 470-479, 491-508	<b>9</b>	<b>10</b> <b>Good Friday</b>
<b>13</b> 12:30 - Peripheral N.S. II M.&O.: 470-479, 491-508 4:00- <b>Peripheral N.S.</b>	<b>14</b> <b>Lab 13</b> Senses M.&O.: 560-598 <b>Nervous and Sensory Systems</b>	<b>15</b> <b>Comp. Quiz 7</b> Endocrine System M.&O.: 470-479, 491-508	<b>16</b>	<b>17</b> Urinary System & Osmoregulation M.&O.: 831-834, 814-830
<b>20</b> 12:30 – Repro.System I M.&O.: 868-871, 839-844, 848-860, 862-866 4:00- <b>Urinary and Repro.</b>	<b>21</b> <b>Lab 14</b> <b>POSTER SESSION</b>	<b>22</b> Repro.System II M.&O.: 868-871, 839-844, 848-860, 862-866	<b>23</b>	<b>24</b> Conclusion, Discussion, & Review

**FINAL LECTURE EXAMINATION 12:30PM MWF SECTION – 8:00AM WEDNESDAY APRIL 29TH, SCI 204.**

**FINAL LECTURE EXAMINATION 1:30PM MWF SECTION - 10:10AM WEDNESDAY APRIL 29TH, SCI 207.**

**FINAL LABORATORY EXAMINATION - 8:00AM THURSDAY APRIL 30TH, SCI 204.**

**Respect for Equipment and Furnishings:** It is expected that students, as would any scientist, will show respect for the equipment, furniture, and materials in the laboratory. Vandalism or other intentional damage/destruction of equipment, laboratory benches, or other Regis property in laboratory will minimally result in *failure of the course* (grade = F) and the student will be held financially responsible for the cost of professional repairs or restoration.

**Cellular Phones & Blackberries:** Turn them off during the class period.

**Attendance:** There is no direct penalty for missing a 50-minute class period. However, we will conduct some lab activities during this time. Laboratory period attendance is required. Non-emergency appointments (e.g., routine check-ups) are not acceptable excuses for missing lecture or laboratory.

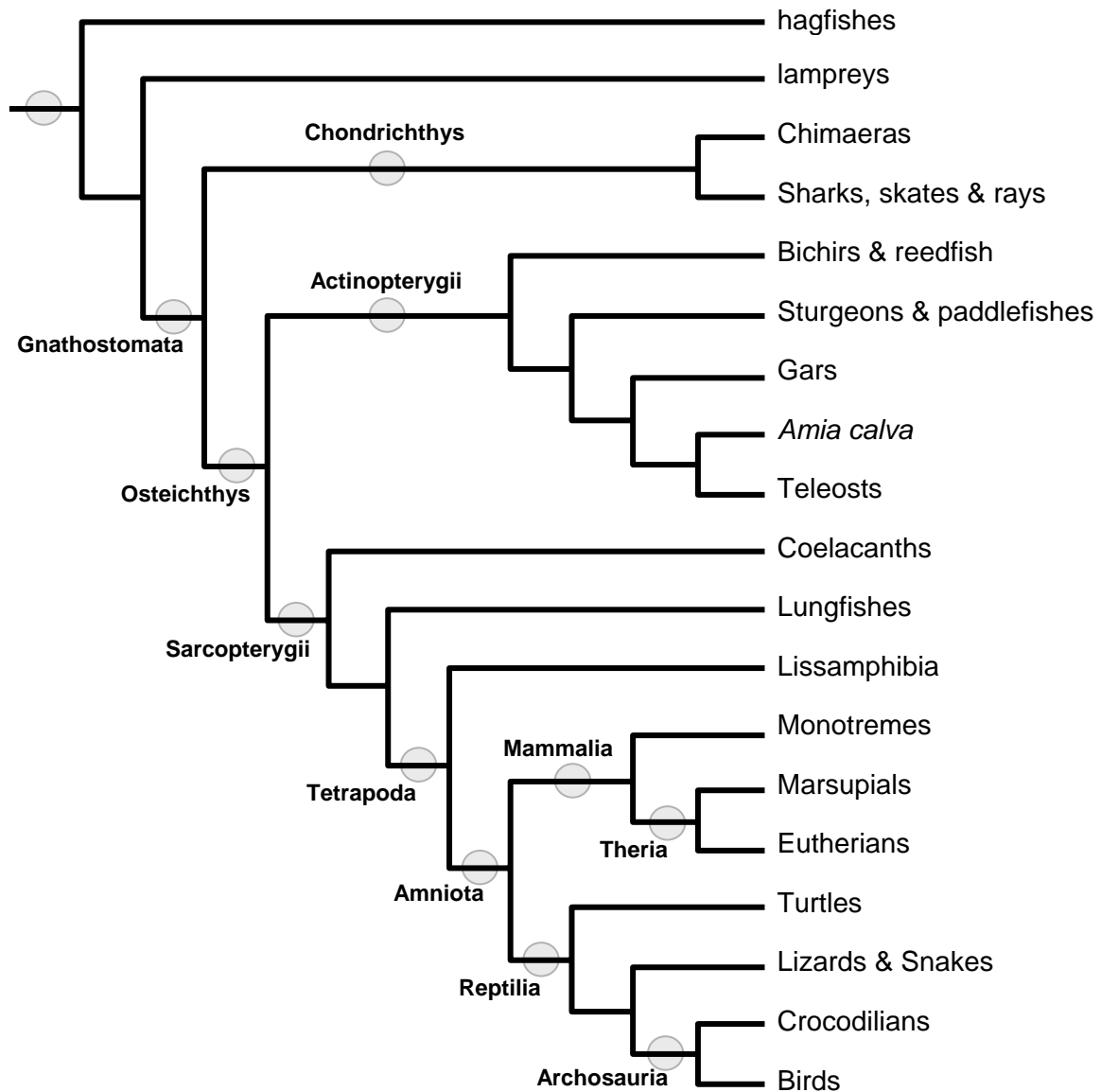
- **Three (3) unexcused absences** from a laboratory period (there are 2 per week) will cause your **final laboratory grade to be lowered one (1) full letter grade** (eg., a B+ to a C+).
- Each additional absence beyond two will result in a full letter grade reduction.

**Excused Absence:** Serious illness documented with a note from a health care provider (*not* a regularly scheduled appointment), a death in the family, and NCAA athletic competition are reasons for excused absences. Most assignments missed for an excused absence will be averaged out of your grade after a completed **excused assignment form** with attached documentation has been turned in and verified. A final exam or final Poster missed for an excused absence will be rescheduled.

**Absence for Athletic Competition:** If you are a member of an *official Regis forensic or NCAA athletic team* (NOT an intramural team) and must miss a quiz or exam for a competition, you **MUST** present the instructor with an official schedule provided by your coach (with the days to be missed highlighted) during the first week of the semester, and notify the instructor in writing using the excused absence form a week in advance of the exam or assignment that is to be missed. If you follow this procedure, your missed examination, assignment, or poster introduction *will be averaged out of your grade*. Failure to notify the instructor as outlined above means that an absence is UNEXCUSED and you will receive a grade of 0% for any missed work.

***This syllabus outlines the policies and procedures that will govern this course. It is expected that you have read and understand all that is included herein.***

**PHYLOGENY OF VERTEBRATES TO BE USED IN THIS COURSE**  
**MEMORIZE THIS FOR THE FIRST QUIZ**



**In class quiz 1 will ask you the following, exactly as phrased below.**

**Phylogeny:** Use the back of this page to sketch the cladogram illustrating the best hypothesis of relationships among craniates given to you in class. Use the following higher taxonomic names to identify groups on the cladogram once you have drawn it: Vertebrata, Gnathostomata, Chondrichthys, Osteichthys, Actinopterygii, Sarcopterygii, Tetrapoda, Amniota, Mammalia, Theria, Reptilia, & Archosauria.

**IMPORTANT WORD ROOTS USED IN THIS COURSE**  
**(MOST, BUT NOT ALL, OF THESE WILL BE ON QUIZ 1)**

**NUMBER**

mono = one  
uni = one  
bi = two  
di / diplo = two  
tri = three  
tetra = four  
penta = five  
poly = many

**COLOR**

albi = white  
leuco = white  
negra = black  
erythro = red  
rhodo = red  
cyan = blue

**POSITION**

ante = before  
ecto = outside  
en = inside  
endo = inside  
epi = surface, covering  
exo = outside  
extra = outside  
hyper = above  
hypo = below, low  
inter = between  
intra = within  
medi = middle  
meso = middle  
meta = among, near  
necro = dead  
neo = new  
para = alongside  
per = through  
peri = around  
post = after  
pre = before  
retro = behind  
sub = below, under  
supra / super = above  
sur = on

**CONDITION**

a / an = no, not  
ambi / amphi = both  
ante = before  
auto = self  
basi = base, at the base  
bio = life  
clast = broken  
contra = against  
dys = abnormal, difficult  
eu = true  
hemi = part, half  
hetero = different  
holo = whole, entire  
homo / homeo = same  
macro = big  
mega = big  
micro = small  
oligo = few  
pseudo = false  
scler = hard  
semi = half, part  
steno = narrow  
topo = position

**GENERAL NOUNS**

angi / angio = vessel  
arthro = joint  
blast = cell (young)  
coel = space, cavity  
corona = crown  
cyst = bladder, chamber  
cyt / cyto = cell (mature)  
fenestra = window  
foramen / foramina =  
hole/s  
fossa = a depression  
lepid / lepis = scale  
lith / litho = stone  
lysis = break apart  
pter / ptero = fin or wing  
sarc = flesh  
saur = lizard  
soma / somat = body  
stom = mouth

**TISSUE NOUNS**

chondr = cartilage  
hemo / hemato = blood  
lipo = fat  
myo = muscle  
osse = bone  
osteo = bone

**ANATOMY NOUNS**

brach = arm  
branch = gill  
cardi / card = heart  
cephal = head  
colo / coli = colon  
cuti = skin  
dactyl = finger  
dent = teeth  
derm / dermat = skin  
enter = intestine  
gastr = stomach  
gnath = jaw  
gustat = taste  
hepat = liver  
nephr = of the kidney  
man = hand  
neur = of the nervous  
system  
odon / odont = teeth  
olfact = smell  
opti = eye  
opt / optha = eye  
oto = ear  
phleb = vein  
pneum / pno = lung  
pulm = lung  
reno = of the kidney  
vas = vessel

**SUFFIXES**

-algia = painful condition  
-centesis = tap, drain  
-clast = to break  
-ectomy = to cut out  
-genesis / -genetic =  
origin, production  
-issimus = greatest  
-itis = inflammation of  
-ology = study of  
-oma = tumor  
-oscopy = to look with a  
lens  
-osis = condition of  
-otomy = to cut out  
-pathy = disease  
-penia = deficiency  
-plegia = paralysis  
-rrhage = burst forth  
-stomy = cut a new  
opening

**DIMINUTIVE  
SUFFIXES "little"**

-ula / -ulum / -ulus  
-ella / -ellum / -ellus  
-olus / -ola / -olum

## INDEPENDENT PROJECT – *GETTING STARTED*

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This project will involve your exploration of some anatomical feature of vertebrates and a poster presentation that reports your results. This project is *not a literature review* and will require both examination of anatomical descriptions in scientific literature and anatomical investigation of vertebrate specimens available to you in the laboratory.

To begin you should ***select an anatomical structure*** in which you have some interest. You may choose any structure that is feasible to study within the limits of the facilities available at Regis and which is not explored in significant detail in lecture or laboratory. Paying some attention to function (or at least function as inferred from anatomical structure) will likely be important. The functional connection is be very important for structures such as muscles for which function can be clearly inferred from structure. You **MUST** clear your choice of structure with your instructor. No two groups of students may study the same structure.

Once you have selected your structure, you must ***propose an evolutionary hypothesis that you will test***. Your hypothesis or question should be based on your knowledge of vertebrate relationships and anatomy. Keep in mind that your hypothesis can suggest that a structure will vary based solely upon function, based solely upon ancestry, or based upon some combination of the two. Your hypothesis can be very general to start. However, it is expected that after some examination of specimens you will a refine your hypothesis.

With any scientific study you must look into what already exists in the published literature. *The best place for you to start will be your lecture textbooks (and possibly your lab materials)*. If your structure is not mentioned, then read about any associated structures. It is assumed that you have read and fully understand the pertinent sections of the textbook.

You should also examine your structure win a few specimens in the laboratory. This will allow you to determine how easy your structure will be to study and what in particular you will be documenting (shape, connections, structure, etc.) and if you will be quantitatively assessing anything.

## INDEPENDENT PROJECT POSTER - *INTRODUCTION ASSIGNMENT*

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The Introduction is to be completed **INDEPENDENTLY** by the students working on the same project. Students may share the same academic sources and should have the same hypothesis, but each student must write his or her own Introductions. The final poster will have only one Introduction, likely a combination fo the Introductions prepared by the two contributing students.

You must complete the **Introduction** section that you will use for your independent project poster. In regular double spaced text, it should not exceed four pages in length. You must provide background based on academic research (i.e., library research) to understand your study. The Introduction should include at least five (5) in-text citations of ***academic sources*** (*excluding* your textbooks) in APA, CBE/CSE, or some othe instructor-approved biological source. See the Section on citing sources in text in *Writing Papers in the Biological Sciences, Fourth Edition*.

***The background presented should clearly lead to, contextualize, and explain the hypothesis.*** (e.g., A hypothesis stating that a certain type of structure will correlate with diet should be preceded by background both on the structure and on the range of diet among vertebrates.) You must also ***clearly state*** the hypothesis or hypotheses that you are testing. The reasoning (based on academic research) that led you to propose the hypothesis or hypotheses must be apparent. See the Section on writing an Introduction for Lab Reports and Research Papers in *Writing Papers in the Biological Sciences, Fourth Edition*.

A **Literature Cited** section also must be included providing full citations for all works cited in the text of the introduction. See the Section on preparing the Literature Cited section in *Writing Papers in the Biological Sciences, Fourth Edition*.

## **TISSUE PRESENTATION**

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This presentation project is designed to involve students more directly in learning the structural characteristics, composition, and function of basic tissue types. Traditionally, students have found this material to be somewhat dry because it is more abstract with respect to familiar structures (i.e., learning about epithelia rather than the heart). This exercise is designed to involve students more directly and substantially in the teaching and learning of this material. It also affords an opportunity to tap into student creativity.

Students are randomly placed into four groups. Each group will develop a 40-minute, interactive presentation to the class to teach all the other students in the class the structural characteristics, composition, and function of basic tissue types of either epithelia or connective tissues.

The tissues to be included in the presentation are:

### Epithelia

- Simple squamous epithelium
- Simple cuboidal epithelium
- Simple columnar epithelium (nonciliated and ciliated)
- Stratified squamous epithelium (keratinized and non-keratinized)
- Stratified cuboidal epithelium
- Pseudostratified columnar epithelium
- Transitional epithelium

### Connective Tissues

- Areolar connective tissue
- Adipose tissue
- Dense regular connective tissue
- Dense irregular connective tissue
- Elastic connective tissue
- Hyaline cartilage
- Fibrocartilage
- Elastic cartilage
- Bone
- Blood

Your group needs to develop a presentation that effectively teaches the class the

- structural characteristics,
- composition,
- function, and
- location in a human

of each of your tissues.

You need to design an innovative way to teach the class. Remember that the goal is for students to develop familiarity with the tissues and remember the four things above. Consider developing a sing along, a cooking show where food represents tissue structures, interpretive dance, etc. You MAY use Power Point. However, you MAY NOT use ANY text in any Power Point slides. Remember that you will have only 40 minutes, but your presentation may be shorter than this.

Your grade will be based upon instructor assessment of (1) correct knowledge conveyed, (2) clear an genuine attempt to teach the class, and (3) creativity. Both the performance of the whole group and individual performance will be used to assign the grade. Each student will also need to submit a paragraph explaining exactly what each individual contributed to the group's presentation (preparation & implementation).

**BL 406/407 EXCUSED ASSIGNMENT FORM**

Student Name: \_\_\_\_\_ Date of absence: \_\_\_\_\_

This form must be filled out to have any score averaged out of a student's grade due to an excused absence. Final Exams or the independent project missed for an excused absence must be re-scheduled and will not be averaged out of a student's grade.

**A photocopy of documentation of the absence, such as a note from a health care provider or a photocopy of a funeral card/program, must be stapled to this form for it to be accepted.** The instructor reserves the right to follow up with the Office of Student Life or other sources to verify excused absences (e.g., faxing a health provider's note back to the office and asking the office to verify its authenticity).

If this form is not received by the final exam the missed exam quiz or assignment will be graded as a 0%.

This form is for the following assignment (circle one):

Lec. Examination 1 – Feb.	Root Word/Phylo. Quiz 1	Poster Introduction (Lab)
Lec. Examination 2 – Feb.	Lecture Quiz 2**	Museum Assignment (Lab)
Lec. Examination 3 – March	Lecture Quiz 3**	Lab. session _____
Final Lecture Exam.*	Lecture Quiz 4**	*A final exam (lecture or lab.) or poster missed for an excused absence must be re-scheduled or a grade of "I" given. These will not be averaged out of a student's grade.
	Lecture Quiz 5**	
Lab Examination 1 – Feb.	Lecture Quiz 6**	**Two general quizzes may be dropped, thus none may be averaged out unless three (3) have been missed for excused reasons.
Lab Examination 2 – March	Lecture Quiz 7**	
Final Lab. Exam.*	Independent Project	
Tissue Presentation (Lab)	Poster* (Lab)	

This excused absence if for the following reason (circle one):

Illness	NCAA Game	Serious Injury of a Close Relative or Friend
Serious Injury	Death of a Close Relative or Friend	Other
Documentation of illness or serious injury requires a note or photocopy of a note from a certified health care provider.	Documentation of a death would include a photocopy of a funeral card, memorial program, or other document with the deceased's name.	Documentation of these will vary. Please discuss appropriate documentation with your instructor

Include a **brief** explanation of the reason for the excused absence below.

I the undersigned certify that this was an excused absence of the nature indicated above and request that the indicated assignment be treated as resulting from an excused absence.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_