# Curriculum vitae

# Statement of Teaching Philosophy

# E105: The Science of C.S.I.

- explanations/reflections
- syllabus
- sample activity
- sample exercise
- student evaluation summary

# A550 – 551: Gross Human Anatomy

- explanations/reflections
- Fall syllabus
- Spring syllabus
- student evaluation summary
- supervisor evaluation
- peer evaluation
- student e-mail

# A560: Cell Biology & Histology

- explanation
- syllabus
- student evaluation summary
- student e-mail

# A464: Human Tissue Biology

- explanation
- syllabus
- student evaluation summary

# A215: Basic Human Anatomy

- explanations/reflections
- syllabus
- Fall 2008 student evaluation summary
- Spring 2009 student evaluation summary
- Summer 2009 student evaluation summary
- Fall 2009 student evaluation summary
- Spring 2010 student evaluation summary

# Proposed Courses:

- M100: Medicine in the Media

# Polly R. Husmann

Home: 1731 S. Highland Ave. Bloomington, IN 47401 765 993-3812 Work: Medical Sciences Program Jordan Hall 104 Bloomington, IN 47405 <u>phusmann@indiana.edu</u>

# **EDUCATION**

Ph.D.	Indiana University, Bloomington	August 2006 - present		
	Anthropology	Dissertation defense: January 2011		
	Specialty: Biological anthropo	ology		
	Advisor: Della C. Cook, Ph.D	•		
	Committee: Frederika Kaestle	, Ph.D., K. Anne Pyburn, Ph.D.,		
	Valerie D. O'Loughlin, Ph.D.			
	Dissertation: Osteoporosis Prevalence during the			
	Transition to Agriculture: the Schild and Pete Klunk			
	Mound Groups			
M.S.	Indiana University, Bloomington	May 2010		
	Medical Sciences Program			
	Specialty: Anatomy Education	1		
	Advisor: Valerie D. O'Lough	in		
	Thesis: Quantitative and Qualitative Changes in Teaching			
		Virtual Microscopy in an		
	Introductory Course in	n Human Anatomy		
B.A.	University of Notre Dame, South B	end May 2005		
	Anthropology Honors, cum laude			
	University of Notre Dame, London	May 2004		
	Study Abroad Program			

# **RESEARCH EXPERIENCE**

Graduate Researcher Spring 2009 - present Anthropology Department Indiana University Advisor: **Della C. Cook** Topic: *Prevalence of Osteoporosis with the Transition to Agriculture* 

Graduate Researcher Medical Sciences Program	Fall 2009 – present
Indiana University Advisor: <b>Valerie D. O'Loughlin</b> Topic: <i>Cadaver Use at Indiana University &amp;</i> <i>Anatomy and Physiology cour</i>	-
Graduate Researcher	Summer/Fall 2009
Medical Sciences Program	
Indiana University	_
Advisor: Valerie D. O'Loughlin/Mark W.	
Topic: Teaching Histology with Virtual Micr	oscopy
Graduate Research Assistant	Summer 2007
Department of Anthropology	
Indiana University	
Advisor: K. Anne Pyburn/Della C. Cook	
Topic: Chau Hiix Project, Belize	
Graduate Researcher	Summer 2006
Department of Anthropology	
Indiana University	
Advisor: Della C. Cook/Kevin Hunt	
Topic: Race and Sex Determination Using the	e Human Orbital Aperture
Undergraduate Research Assistant	Fall 2005 – Spring 2006
Department of Anthropology	1 0
University of Notre Dame	
Advisor: Susan G. Sheridan	
Topic: Assessing mobility patterns for the Ed Dhra' using isotopic analysis of enan	
Undergraduate Research Assistant	Summer 2005
Department of Anthropology	
University of Notre Dame	
Advisor: Ian Kuijt	
Topic: Dhra' Excavation Project, Jordan	
Undergraduate Researcher	Fall 2004 – Spring 2005
Department of Anthropology	
University of Notre Dame	
Advisor: Joanne Mack	
Topic: Test Excavation at Wise Eagle (CA-S	• •
(CA-Sis-2135) Upper Klamath River, Northe	ern California

July/August 2004

Undergraduate Research Assistant Department of Anthropology Smithsonian Institution Advisor: William W. Fitzhugh

Topic: St. Lawrence Gateways Project, Quebec

May/June 2004

Undergraduate Research Assistant Cultural Resource Management Indiana Dunes National Lakeshore Advisor: Jay Sturdevant

# **TEACHING EXPERIENCE**

Teaching Assistant	<ul> <li>Basic Human Physiology</li> <li>Medical Sciences Program</li> <li>Indiana University, Bloomington</li> <li>Leading undergraduates in the une physiological concepts, helping to answering questions, grading paper</li> </ul>	revamp the lab guide,
Teaching Assistant	<ul> <li>Basic Human Anatomy Fall 2008, Sp Medical Sciences Program Indiana University, Bloomington</li> <li>Leading undergraduates in the ide fundamental gross anatomical struprosected cadavers, answering que grading exams, leading review ses</li> </ul>	Fall 2009, Spring 2010 entification of actures, demonstrating on estions, setting up and
Teaching Assistant	<ul> <li>Human Tissue Biology</li> <li>Medical Sciences Program</li> <li>Indiana University, Bloomington</li> <li>Assisting advanced undergraduate identifying microscopic structures microscopy, answering questions, exams, leading review sessions</li> </ul>	s using traditional
Teaching Assistant	<ul> <li>Cell Biology &amp; Histology</li> <li>Medical Sciences Program</li> <li>Indiana University, Bloomington</li> <li>Leading medical students in locat microscopic structures using both microscopy, developing and carry studies employed in this course ar writing and grading exams, and leader</li> </ul>	traditional and virtual ving out the first case nswering questions,

Teaching Assistant	<ul> <li>Human Gross Anatomy</li> <li>Medical Sciences Program</li> <li>Indiana University, Bloomington</li> <li>Assisting medical students with questions, preparing and grading sessions, and completing prosect in the undergraduate anatomy later</li> </ul>	Guest Lectur dissection, ans g exams, leadir tion of one cad	ng review
Teaching Assistant	<ul> <li>Topics in Anthropology: The Science Department of Anthropology Indiana University, Bloomington</li> <li>Leading sections of undergradua discussions, grading papers and questions, giving guest lectures</li> </ul>	ntes in activitie	
Teaching Assistant	<ul> <li>Introduction to Bioanthropology</li> <li>Department of Anthropology</li> <li>Indiana University, Bloomington</li> <li>Grading undergraduate papers at student questions and generally a</li> </ul>		-
Guest Lecturer	<ul> <li>What is Archaeology?</li> <li>Local K-12 schools near</li> <li>Bloomington and Columbus, IN</li> <li>Union City and Ansonia, OH</li> <li>Explaining archaeology and its rusing interactive techniques inclin simulated digs, and powerpoint</li> </ul>	nethodologies uding acting, p	participation
Intern	<ul> <li>Frog in the Bog (or other similar progr Indiana Dunes Environmental Learning Indiana Dunes National Lakeshore</li> <li>Teaching environmental science participants ages five to sixty-five</li> </ul>	Center and related su	Fall 2005 – Spring 2006 bjects to

# PUBLICATIONS

**Husmann, P. R.** (In Progress) "Osteoporosis in an Archaeological Population: A New Method of Analysis"

**Husmann, P. R**. & Samson, D. R. (Accepted) "In the Eye of the Beholder: Sex and Race Determination using the Human Orbital Aperture" Accepted to *Journal of Forensic Sciences* October 2010

Foley, A. J. & **Husmann, P. R.** (2010) "I Assist, Therefore I Am: The Rise of the Teaching Assistant" *The Human Anatomy and Physiology Society-EDucator Newsletter* 1(3): 16 – 19.

**Husmann, P. R.**, O'Loughlin, V. D., & Braun, M. W. (2009) "Quantitative and Qualitative Changes in Teaching Histology by means of Virtual Microscopy in an Introductory Course in Human Anatomy" *Anatomical Science Education* 2(5): 218 – 226.

#### PRESENTATIONS

#### **Midwest Archaeological Conference**

Bloomington, Indiana, October 2010 Presentation – Polly R. Husmann *"Osteoporosis in an Archaeological Population: A New Method of Analysis"* 

#### **American Association of Anatomists**

Anaheim, California, April 2010 Poster – Polly R. Husmann "Death is Only the Beginning: Cadaver Use at Indiana University"

#### Edward C. Moore Symposium on Excellence in Teaching

Indianapolis, Indiana, March 2010 Poster – Polly R. Husmann, Valerie D. O'Loughlin, & Mark W. Braun *"Undergraduate Learning & Teaching with Virtual Microscopy"* 

#### American Association of Physical Anthropologists

Chicago, Illinois, April 2009 Poster – Polly R. Husmann & David R. Samson "Sex and Ancestry Determination Using the Human Orbital Aperture"

#### American Association of Physical Anthropologists

Chicago, Illinois, April 2009 Poster – David R. Samson & Polly R. Husmann "Interspecies Orbit Shape: An Analysis of the Morphological Differences of the Aperture in Hominoids"

# Indiana Academy of Sciences/Bioarchaeology and Forensic Anthropology Association

Indianapolis, Indiana, October 2007/Chicago, Illinois, November 2007 Presentation – Polly R. Husmann & Allison J. Foley *"Bioanthropological Finds at the 2007 Arachological Field Season of* 

Chau Hiix, Belize"

# **GRANTS & AWARDS**

Paul M. Harmon Research Award Medical Sciences Program, Indiana University	May 2010
Skomp Dissertation Research Grant Anthropology Department, Indiana University	April 2010
Grant-in-Aid of Doctoral Research University Graduate School, Indiana University	February 2010
Skomp Fellowship Anthropology Department, Indiana University	Fall 2006 – Spring 2007
Service to the Department Award Anthropology Department, University of Notre Dame	May 2005
ISLA Undergraduate Research Opportunities Award University of Notre Dame	Summer 2004

# **PROFESSIONAL MEMBERSHIPS**

American Association of Anatomists

Midwest Archaeological Conference, Inc.

Anthropology Graduate Student Association Vice-President of Communications (Fall 2006 – Summer 2007) Annual Symposium Committee Member (Fall 2007 – Spring 2008)

Sigma Xi

Lambda Alpha Honor Society

## REFERENCES

# Della C. Cook, Ph.D. (anthropology research)

Professor of Anthropology
Director, Osteology and Paleopathology Lab
Indiana University
Student Building 260A
Bloomington, Indiana 47405
(812) 855-6368
cook@indiana.edu

#### Valerie D. O'Loughlin, Ph.D. (anatomy education research & teaching)

Associate Professor of Anatomy Director of Undergraduate Anatomy Indiana University Jordan Hall 010A Bloomington, Indiana 47405 (812) 855-7723 vdean@indiana.edu

#### Frederika Kaestle, Ph.D. (anthropology research & teaching)

Assistant Professor of Anthropology Director, Ancient DNA Laboratory of Molecular Anthropology Indiana University Student Building 255 Bloomington, Indiana 47405 (812) 855-3164 kaestle@indiana.edu

#### Anthony L. Mescher, Ph.D. (teaching)

Professor of Anatomy and Cell Biology Indiana University Jordan Hall 202 Bloomington, Indiana 47405 (812) 855-4693 mescher@indiana.edu Anatomy is boring. It's just memorizing this structure and that feature over and over again, right? Yet, I love this subject. I am constantly astounded by the intricacy of each tendon, nerve, and artery. The manner in which it is all interconnected to produce an organism that is malleable enough to survive a wide range of environments through various trauma and disease fascinates me on a daily basis. The process of a single depolarization through to the muscle contraction of a reflex or a red blood cell from the bone marrow to the spleen is a glimpse into the course of evolution's finest points. It is this enthusiasm that I aspire to bring to the classroom every single day in hopes of assuaging my students from the opening claims. These opinions have often earned me the title of 'dork' from both my peers and my students or even better – resulted in many of my students looking up from their work to respond with "You really love your job, don't you?". Yet, these remarks are usually given, and received, with a grin that leads me to recognize that I am showing an adequate degree of enthusiasm.

My top priority in teaching is to challenge my students, whether this is with the amount of material to know in anatomy classes or by questioning perspectives in anthropology classes. As these challenges are overcome with time and drive, the students develop more confidence and more curiosity. For these goals to be achieved certain standards must be in place. They must know the exact requirements expected of them and there must be help available. Thus, I make it a priority to be accessible to the students as often as possible, including evenings and weekends, or whenever requested. I also attempt to make it incredibly apparent that I am more than willing to help out at any time via e-mail, small group settings, or one-on-one consultations. This has been most utilized by the Gross Anatomy class, composed of twenty-eight first year medical students and one graduate student, in which I assisted with the laboratory component by helping with the dissection and identification for eight cadavers. The lab exams were set-up using all of the cadavers plus skeletons, models, cross sections, and X-rays so the students had 75 - 90 seconds to answer two questions in a blank on an answer sheet. A review session was held a few days before each exam to answer questions and go over any material on which the students were unsure. Unfortunately, with that many students review sessions often became crowded and difficult to control, so students began to come to me in groups of four or five and arrange another time to come into the lab and review either in addition to or in place of the regular review session. Several students that were having trouble with the course adopted this strategy and the extra time spent in lab contributed to their grades improving five to twenty percent on the next test.

Furthermore, the challenges presented to the students are only productive if they are appropriately chosen to a level at which the students may excel and the students are able to understand them. An example of this comes from the Histology and Cell Biology classes in which I have assisted. I have

worked with two histology classes, one for medical students and one for advanced undergraduates. Both classes have approximately thirty-five students in the lab, and have lab exams similar to that for Gross Anatomy (though obviously with microscopes in place of cadavers). In both classes, many students were surprised by the difficulty of the first lab exam and specifically had problems deciphering the way the questions were worded. This caused me to develop a number of 'Self-Assessment Practice Quizzes' as well as increase the number of in-class practice questions. With these additional study tools, individual medical students were able to increase their scores by up to thirty percent. One student that worked with these tools and met with both of the instructors went from a 53% on the first exam to an 84% on the third. For the advanced undergrad class, the very next exam showed an 8% increase in the lab exam average.

Another factor to consider when demanding a lot from students is the diversity in student forms of learning and backgrounds. In The Science of CSI, a topics course with 120 students, I oversaw three discussion sections of around twenty students of various ages, majors, and backgrounds. This required the use of numerous teaching styles. Lectures were given twice a week to the entire class and the smaller sections then met once a week to discuss questions and provide more hands-on activities in statistics, osteology, DNA, and fingerprints. These were topics in which people had a good amount of interest, but different background knowledge and preconceptions. Assessment was then based on two scan-tron tests from the lectures and four short answer exercises based on the labs so that multiple learning styles could be addressed. One manner in which we attempted to combat the range of backgrounds was using real forensics cases that employed the basics. This allowed us to maintain the interest of the more advanced students while still not overwhelming those without as much previous knowledge.

One particular challenge that I have faced in pushing my students is in convincing them not to give up, especially in Basic Human Anatomy. This is a large (400+) lecture class with numerous lab sections of approximately thirty-six students with tests run similar to the Gross Anatomy exams, though fewer students are in the room at a time due to fewer cadavers (2 – already prosected by the instructors for the Gross Anatomy lab) and more models. The class is a requirement for nursing, exercise science, public health, and nutrition majors and is thus largely composed of those and related majors early in their college careers. Each semester two to three students in my section drop the course for one reason or another, usually after they get off to a rocky start. This is about the average number for the course, but I have begun attempting to recognize the at-risk students before they drop or hopefully before the first test. They are often freshman with little anatomy or biology background and tend to withdraw from their peers and the instructor as they become overwhelmed by material. I am hopeful that as I begin to identify these individuals earlier I will be better able to encourage them with the difficulty of the class.

#### E105: The Science of C.S.I.

#### Course explanation:

This was a College of Arts and Sciences topics course in Anthropology that had approximately a hundred and twenty students. The students were then separated into sections of around thirty students and I was in charge of three of these sections. The class was set up to watch a video of C.S. I. (or similar show) in lecture on Monday, discuss the correct methods of investigation in lecture on Wednesday, and then attempt these methods in lab sections held Wednesday afternoon, Thursday, or Friday. Assessment was based on two multiple choice exams and four exercises. The exams focused on lecture material that was then supplemented with a more hands-on approach in lab. The exercises were taken directly from the in-class lab activities.

My role in the course was to assist the professor as necessary including helping to prepare lab activities and exercises, submitting test questions, giving a lecture, holding reviews, having office hours to handle student questions, and managing three of the sections. Included in this portfolio are the syllabus, the in-lab activity that I had a large part in designing for the week that I lectured, the corresponding exercise that would have been turned in for credit a few weeks later, and a summary of the student evaluations.

#### **Reflections:**

This was by far the most diverse class that I have taught thus far with freshmen through seniors and biology to english to accounting majors. It also contained a number of non-traditional students and a wide range of backgrounds and interests in the material. Being the first instance in which I taught portions of a class on my own, I learned a lot from this experience (even ideas as simple as measuring a picture on paper and on a screen will often result in different numbers). I was able to develop a good rapport with the class, but this may have then lead to the belief that I was a bit of a pushover as a fairly hefty problem with cheating developed throughout the semester both in my sections and in the sections run by my co-AI (18 students in all). This then allowed us to become versed in some of the policies and procedures involved in academic misconduct.

The only consistent complaint that appeared on the student evaluations was that there was often not enough time to finish the activity. With the wide range of backgrounds present in this class, frequently a few students would get done long before some of the others. Nonetheless, in the future I would attempt to cut down the amount of material covered in the activities. I would also attempt to more directly demonstrate the cross over of the material from the in-class activities to the graded assignments since this was often a problem though it was not commented upon in the evaluations. Overall, most students greatly enjoyed the ability the get to work directly with human remains and genetic information rather than just learning the theory behind the process.

# E105: The Science of CSI: Applied Anthropology (25479)

Spring Semester 2008 MW 11:15-12:05 Ballantine Hall room 109

#### PRELIMINARY SYLLABUS

#### **Your Instructor:**

Dr. Frederika Kaestle Email: kaestle@indiana.edu departmental phone: 812-855-1041 All course materials at <u>https://oncourse.iu.edu</u>

#### Your AIs:

Larissa Collier Email: <u>lmcollie@indiana.edu</u> Sections: W 3:35 (SB060), Th 10:10 (SB060), F 10:10 (SB050) T 2:00-4:00, or by appointment Student Building room 255 855-3164

**Her Office Hours:** 

**Their Office Hours:** T 10:00-11:30, Th 11:30-1:00 Student Building room 251

M 1:30-3:00, W 3:30-5:00 Student Building room 058

#### Polly Husmann Email: <u>phusmann@indiana.edu</u> Sections: W 2:30 (SB060), Th 11:15 (SB060), F 10:10 (SB060)

# DO NOT USE THE 'MESSAGE' FUNCTION OF ONCOURSE TO CONTACT THE INSTRUCTOR OR AIS. EMAIL US DIRECTLY AT THE ABOVE ADDRESSES INSTEAD.

## Course Description:

**General Information**: Increasingly, forensic science is featured in the headlines of newspapers and lead stories on television news. Even more impressive is its presence in today's television series line-up. This course explores the science of crime scene investigation (CSI) through the examination of popular depictions of the science on television (e.g. CSI, Bones, Cold Case). The contribution of anthropological methods to criminal investigations are emphasized. Topics covered include body recovery (archaeological methods, telling human from non-human bone, historic/prehistoric or recent remains, etc.), identification of human remains (age, sex, geographic origin, height, facial reconstruction, unique attributes, etc.), analysis of skeletal trauma (both before and at death), genetic and toxicological analysis of blood and other biological evidence (e.g. semen, saliva, tears, hair), investigation of footprints and fingerprints, decomposition patterns, the history of forensics, the Body Farm, and the Innocence Project, among others.

#### By the end of this course students should be able to:

- Understand the basic science of the crime scene techniques covered, and the scientific method in general.
- Understand the common failures of forensic science.
- Explain clearly a rationale for any opinion they hold on crime scene investigation.
- Assess the accuracy of fictional portrayals of crime scene investigation

# **Required Texts:**

Myriam Nafte (2006) Flesh and Bone: An Introduction to Forensic Anthropology, 2<sup>nd</sup> edit. Durham, N.C., Carolina Academic Press.

Several additional short readings can be downloaded in PDF format from the OnCourse Website (<u>http://oncourse.iu.edu</u>). These readings may be added to the syllabus during the course of the semester.

#### Expectations

There will be two major areas in which I will assess your performance, exams and forensic science exercises. In addition, because much of the class will focus on analysis of the depiction of crime scene investigation in popular television shows, which will be played in class, regular attendance during the scheduled class period is expected. Much of the work on the exercises will take place during section meetings, so attendance of sections is also expected. If you anticipate missing significant numbers of classes or sections you should not enroll in this course. All course material can be found on the Oncourse website, including the syllabus, the schedule, the assignments, the exam review material, and the non-textbook readings. All of these items will be posted in the 'Resources' section of Oncourse. In addition, most items can be downloaded from the relevant date(s) of the 'Calendar' and/or 'Assignments' sections of Oncourse. I will deal with cheating in the strongest manner consistent with University policy.

#### 1) Exams:

<u>Midterm and Final Exam</u>. Exams will be multiple-choice, and may include visual material. Exam questions will be based on material from class lectures, videos, and exercises, and on reading assignments. Exams will be machine-graded, so bring a pencil to the exam period. You MUST contact me <u>before</u> any exam you must miss, and you will not be excused without a written and substantial excuse (personal travel plans do not qualify as substantial unless they are related to religious or other excused activities, mild illnesses such as headaches and colds also do not qualify as substantial; university-sanctioned curricular and extracurricular activities, as well as religious holidays, can be the basis of an excused absence, but you must inform me at least ONE WEEK in advance of the planned activity). If you miss an exam unexpectedly for an excused reason, you must contact me or one of the AIs AS SOON AS POSSIBLE after the exam to arrange to take a make-up exam, which will either be multiple choice or short answer/essay at my discretion. Make-up exams must be taken as soon as possible after the regularly scheduled date of the exam. 200 points total (100 points each exam) = 50% of grade

#### 2) Forensic Science Exercises.

*Four Exercises:* Throughout the semester, students will participate individually and in groups in exploring particular topics of crime scene investigation in the context of in-class and outof class exercises. These will consist of analysis of mock evidence, in-depth exploration of a particular kind of evidence, assessment of actual forensic cases, and a final crime scene analysis. Please note that I am not tolerant of plagiarism, and that IU penalties for plagiarism include expulsion. Descriptions of proper citation format and plagiarism are available on the Oncourse website for this class, and we will assume that you have read and understood these documents if you submit work in this class. Because some exercises have in-class/in-section components, you MUST contact me <u>before</u> any exercise you must miss, and you will not be excused without a written and substantial excuse (personal travel plans do not qualify as substantial unless they are related to religious or other excused activities, mild illnesses such as headaches and colds also do not qualify as substantial; university-sanctioned curricular and extracurricular activities, as well as religious holidays, can be the basis of an excused absence, but you must inform me at least ONE WEEK in advance of the planned activity). In some cases, it may be impossible to make-up a missed component of an exercise because they involve group activities and laboratory equipment and supplies that cannot remain set-up in the section rooms. Each exercise will consist of material covered across multiple sections. 200 points total (50 points each) = 50% of grade.

Grading			
Miltan Erran	25.01	100	
Midterm Exam	25%	100 pts.	
Final Exam	25%	100 pts.	
Exercise 1	12.5%%	50 pts.	
Exercise 2	12.5%%	50 pts.	
Exercise 3	12.5%%	50 pts.	
Exercise 4	12.5%%	<u>50 pts.</u>	
Total	100% 400 pts.	-	

If you run into trouble during the course of the semester (difficulty understanding the material or completing the assignments due to illness or other personal issues) I encourage you to contact one of the AIs or myself as soon as possible. If any student will require assistance or academic accommodations for a disability, please contact me after class, during office hours or by individual appointment. You must have established your eligibility for disability support services through the Office of Disabled Student Services in Franklin Hall 096, 855-7578. It is impossible to make grading accommodations retroactively after an exam has been taken or an assignment graded. After official grades have been submitted to the registrar at the end of the semester, I will not adjust grades FOR ANY REASON other than a mathematical error on my part. I do not offer extra credit assignments (although I do occasionally include extra credit questions on exams).

*Final Course Grade Calculation:* This course is graded on a modified curve. At the end of the semester, your course grade is calculated based on the total number of points you have earned during the semester. The curve will NEVER be 'harder' than the traditional grading system of 90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, <59% = F. However, I will adjust the cut-off points to make the grading system 'easier' if the class distribution warrants. In that case, you course grade will be assigned based on the standard bell-curve distribution grading system. I will calculate the course average, as well as the standard deviation (which measures the 'spread' of the bell curve) using all enrolled students' final course point totals. First, I calculate the overall ranges for each letter grade, ignoring pluses and minuses. I set the course average as the bottom of the range for a B. I add the standard deviation to the average to get the top of the range for a B. Thus, any score above that falls into the A range. Then, I set the top of the range for a C at 1% lower than the bottom of the C. To figure out the bottom range for a D is set at 1% lower than the bottom of the C. To figure out the bottom range for a D. I subtracted the standard deviation from the top of the range. Then, I set the top of the range. Then, to figure out the range. Any score below the bottom of the D range falls into the A range.

pluses and minuses, I basically give the bottom 1 percent of each grade range a minus and the top 2% of each grade range a plus, and then take a look at the resulting grades. I then adjust the plus/minus cut-offs just a bit to account for slight variation in grade distributions within each letter grade. A real-life example of how this grading method worked (Fall 2007 in my Anth B200 course) can be downloaded from Oncourse, which might clarify things if you are confused.

#### Schedule

Complete Assigned Readings BEFORE the lecture for which they are assigned. Readings are identified by their author(s), and a publication date if necessary. Non-textbook readings will be available for download from Oncourse (all will be in the 'Resources' section, and individual readings can be downloaded from the 'Calendar' section for the date on which they are assigned).

WEEK ONE M. Jan 7 Lecture 1: Class Introduction W. Jan 9 Lecture 2: The 'CSI Effect'

Section: Introductory Activities (attendance is required)

WEEK TWO M. Jan 14 In class video W. Jan 16 Lecture 3: The Scientific Method and Forensic Science (read Nafte chpt. 1) Section: The Scientific Method

WEEK THREE M. Jan 21 NO CLASSES (MLK Jr. DAY) W. Jan 23 Lecture 4: Anthropology and Forensics (read Nafte chpt. 2) Section: Basic Statistics

WEEK FOUR M. Jan 28 In class video W. Jan 30 Lecture 5: Decomposition and Taphonomy (read Nafte chpt. 3) Section: Decomp and Taphonomy

WEEK FIVE M. Feb 4 In class video W. Feb 6 Lecture 6: The Human Skeleton (read Nafte chpt. 4) Section: Skeletal Anatomy

WEEK SIX M. Feb 11 In class video. *First Exercise due in class today* W. Feb 13 Lecture 7: Age, Sex and Stature (read Nafte chpt. 5) Section: Age, Sex and Stature

WEEK SEVEN M. Feb 18 In class video W. Feb 20 Lecture 8: Race (read Nafte chpt. 5) Section: Race WEEK EIGHT M. Feb 25 In class video W. Feb 27 Lecture 9: Trauma (read Nafte chpt. 6) Section: Perimortem & Postmortem Trauma

WEEK NINE M. March 3 Lecture 10: Antemortem Skeletal Conditions. <u>Second exercise due in class today</u> W. March 5 <u>MIDTERM EXAM</u> (bring a pencil) Section: No Section This Week

SPRING RECESS

WEEK TEN M. March 17 In class video W March 19 Lecture 11: Facial Reconstruction (read Nafte chpt 7 pp. 133-140) Section: Facial Reconstruction

WEEK ELEVEN M. March 24 In class video W March 26 Lecture 12: Probability (readings TBA) Section: Probability

WEEK TWELVE M. March 31 In class video W April 2 Lecture 13: CODIS markers and mtDNA (read Nafte chpt 7 pp. 141-150) Section: CODIS

WEEK THIRTEEN M. April 7 In class video W April 9 Lecture 14: Genotype to Phenotype (readings TBA) Section: Genotype to Phenotype

WEEK FOURTEEN M. April 14 In class video. *Third exercise due in class today* W. April 16 Lecture 15: Ancestry Informative Markers (readings TBA) Section: Skomp Race Symposium

WEEK FIFTEEN M. April 21 In class video. W April 23 Lecture 16: Fingerprints and Footprints (readings TBA) Section: Fingerprints

Fourth Exercise due Monday, April 28 by 5pm.

FINAL EXAM W April 30 12:30-2:30 pm (bring a pencil)

#### Activity #5: Determining Sex & Stature\*

In this lab, you will be learning some of the techniques forensic anthropologists use to determine sex and stature of a human skeleton. Determining these characteristics of unidentified human remains can help law enforcement narrow their search of missing person's reports in an effort to match the remains with an identity. You will want to bring your textbook and a copy of the "Osteological Terminology" sheet with you for reference. Take your time progressing through the lab—do not rush.

## The Cranium

Sexual differences in the cranium stem from the fact that humans, like most other mammals, are <u>sexually dimorphic</u> (males and females look different). In the case of humans, males tend to be slightly larger than females (in other species, males can be more than twice as large as females). The increased body size of males also means that they tend to be more muscular than females, and their skeletons (including the skull) tend to have larger regions for muscle attachments.

1a. Look at the skulls (A, B, & C) in Station 1. Because sexing skeletal material can be influenced by ancestry, the skulls in this station are all of the same ancestry. Using the decision tables, below, identify the traits in the table on each of the skulls, and circle the option that best agrees with the skull's morphological trait in each case.

Skull A: Trait	Female	Male
Brow ridges	Gracile (lightly built)	Robust (heavily built)
Nuchal area of occipital	Smooth, inion hook rare	Rough with inion hook
Mastoid process	Small	Large
Mental Protuberance	Narrow and gracile	Broad and robust
Gonial angle	Not flared	Flared
<b>Overall size/robusticity</b>	Small/gracile	Large/robust

Skull B: Trait	Female	Male
Brow ridges	Gracile (lightly built)	Robust (heavily built)
Nuchal area of occipital	Smooth, inion hook rare	Rough with inion hook
Mastoid process	Small	Large
Mental Protuberance	Narrow and gracile	Broad and robust
Gonial angle	Not flared	Flared
<b>Overall size/robusticity</b>	Small/gracile	Large/robust

\*Adapted from lab activities by Dr. Karin Enstam, Sonoma State U.

Trait	Female	Male
Brow ridges	Gracile (lightly built)	Robust (heavily built)
Nuchal area of occipital	Smooth, inion hook rare	Rough with inion hook
Mastoid process	Small	Large
Mental Protuberance	Narrow and gracile	Broad and robust
Gonial angle	Not flared	Flared
<b>Overall size/robusticity</b>	Small/gracile	Large/robust

1b. Based on the traits you circled in the decision tables above, what is your assessment of the sex of:

 Skull A:
 \_\_\_\_\_\_

Skull C:

# **The Pelvis**

2a. Note the pelves on the table. Again using the decision tables below, identify the traits on each pelvis, and then circle the option that best agrees with the pelvis' morphological trait in each case.

#### **Pelvis A:**

Trait	Female	Male
Subpubic angle	Wide (greater 90°)	Narrow (less than 90°)
Greater sciatic notch	Wide	Narrow
Pelvic Inlet	Wide, circular	Narrow, heart-shaped
Preauricular sulcus (groove)	Well-developed	Rare
Shape of sacrum	Short and wide	Long and narrow
Curvature of sacrum	Straight	Curved

Pelvis B:

Trait	Female	Male
Subpubic angle	Wide (greater 90°)	Narrow (less than 90°)
Greater sciatic notch	Wide	Narrow
Pelvic Inlet	Wide, circular	Narrow, heart-shaped
Preauricular sulcus (groove)	Well-developed	Rare
Shape of sacrum	Short and wide	Long and narrow
Curvature of sacrum	Straight	Curved

**Pelvis C:** 

Trait	Female	Male
Subpubic angle	Wide (greater 90°)	Narrow (less than 90°)
Greater sciatic notch	Wide	Narrow
Pelvic Inlet	Wide, circular	Narrow, heart-shaped
Preauricular sulcus (groove)	Well-developed	Rare
Shape of sacrum	Short and wide	Long and narrow
Curvature of sacrum	Straight	Curved

2b. Based on the traits you circled in the decision tables above and what you know about sexual dimorphism in humans, what is your assessment of the sex of:

Pelvis A: \_\_\_\_\_ Pelvis B: \_\_\_\_\_

Pelvis C:\_\_\_\_\_

#### Stature Estimation

3a. As we discussed, the first technique that forensic anthropologists used to determine stature was to add the lengths of all of the bones that contribute to height. Below are the lengths (in cm) of several bones that I measured:

Bone	Total Length (cm)
Skull	12.8
C2 – L5 Vertebrae	45.8
<b>S1</b>	2.9
Tibia	39.2
Talus & Calcaneus	5.2

- Measure the femur using the osteometric board on the table and add that to the above measurements. This gives you a skeletal height of \_\_\_\_\_\_.
- To calculate the living height, you must then factor in the soft tissue (skin, fat, muscle, etc.) as follows<sup>1</sup>:

If skeletal height <153.5cm, add 10.0 cm If skeletal height 153.6 – 165.4 cm, add 10.5 cm If skeletal height >165.5 cm, add 11.5 cm

<sup>&</sup>lt;sup>1</sup> Stewart TD. 1979. Essentials of Forensic Anthropology Especially as They Developed in the United States. Springfield, IL: Charles C. Thomas.

This gives you a living height for this individual of \_\_\_\_\_\_.

3b. Use the femur measurement from 3a and measure the humerus on the table and then plug them into the equations below, which are used to calculate stature if fewer bones are present (that is, when you don't have all of the bones necessary to calculate stature as in 3a). Because it is more common in the US to list some one's height in feet and inches, here you need to convert the height you calculated in cm to feet and inches. (You will need a calculator)

To calculate height in inches: Height (cm)/2.54 = Height (in)

To calculate height in feet and inches: **Height** (in)/12 = number and remainder The first number is the number of feet.

To calculate the number of inches: **Height** (in) - (number of feet \* 12) = inchesFor example: **Height** (in) = 69

> 69/12 = 5.75 = 5 feet + some inches... 69 - (5 \* 12) = 69 - 60 = 9 inches 69 inches = 5 feet 9 inches

Equation	Ht (cm)/2.54= Ht (in)	Ht (in)/12=Ht (ft)	Height (ft & in)	Error <sup>2</sup>
3.08* Humerus + 70.45	/2.54	/12		±1.59 in.
2.38* Femur + 61.41	/2.54	/12		±1.29 in.

<u>Thought Question:</u> How do these three estimates for the same individual compare? Which do you think is the most reliable? Which is the best?

3c. The equations above are for the calculation of the stature of Caucasian males. To show the importance of sex and stature, take your measurement for the <u>femur</u> from 3a and plug it into the equations below:

Sex/Ancestry	Equation	Height (cm)	Error (cm)
European male	2.38* Femur + 61.41		±4.04
African male	2.11* Femur + 70.35		±4.04
European female	2.47* Femur + 54.74		±4.04
African female	2.28* Femur + 59.76		±4.04
Asian male	2.15* Femur + 72.57		±4.04
Hispanic male	2.44* Femur + 58.67		±4.04

<sup>&</sup>lt;sup>2</sup> White TD. 1991. Human Osteology. London: Academic Press.

- <u>Thought Question:</u> What does this indicate about the importance of knowing the ancestry and sex of skeletal material before attempting to determine stature? (e.g., Compare the heights for European and African males; remember, the femur is the same length)
- 4a. In this section, we will estimate long bone length based on the fragments that forensic anthropologists are more likely to find.

Use the sliding calipers to measure the section of the distal humerus denoted 4-6 on the drawing on the following page<sup>3</sup>:

Now, estimate the length of the humerus using the following formula:

#### <u>Length of humeral segment \* 100</u> % bone length for each segment

The percent bone length can be found on table 8 (pg. 7).

Estimated humerus length\_\_\_\_\_\_±\_\_\_\_

Now, let's try it with the proximal femur segment using segment 1-2.

Now estimate the length of the femur with the percent bone length from table 7 (pg. 7).

Estimated femur length\_\_\_\_\_\_

<sup>&</sup>lt;sup>3</sup> Steele DG, and McKern TW. 1969. A Method for Assessment of Maximum Long Bone Length and Living Stature from Fragmentary Long Bones. American Journal of Physical Anthropology 31(2):215 – 227.

STATURE ASSESSMENT FROM FRAGMENTARY LONG BONES D. Gentry Steele and Thomas W. McKern



Segment combination	Male mean percentages	Male mean s.d.	Female mean percentages	Female mean s.d.	"t" test	Combined percentages	Combined s.d.
1	16.4	1.1	15.6	1.1	3.4	16.1	1.2
2	56.1	2.5	56.7	2.6	1.7	56.3	2.6
3	19.4	2.5	19.6	2.4	0.6	19.5	2.5
4	7.9	0.7	7.9	0.7	_	7.9	0.7
1-2	72.5	2.6	72.3	2.2	0.6	72.4	2.5
2-3	75.5	1.3	76.3	1.2	3.2	75.8	1.3
3-4	27.3	2.6	27.5	2.2		27.4	2.4
1-3	91.9	0.7	91.9	0.7	_	91.9	0.7
2-4	83.5	1.1	84.1	1.1	2.6	83.6	1.1

 TABLE 7

 Per cent total lengths of segments and combinations of segments of the femur

TABLE 8

#### Per cent total lengths of segments and combinations of segments of the humerus

Segment combination	Male mean percentages	Male mean s.d.	Female mean percentages	Female mean s.d.	"t" test	Combined percentages	Combined s.d.
1	10.5	0.8	10.1	1.0	1.7	10.3	0.9
2	22.6	2.2	22.0	1.7	1.8	22.4	2.1
3	54.6	2.4	55.1	3.0	1.2	54.7	2.6
4	8.1	0.7	8.3	0.8	1.1	8.1	0.8
5	4.3	0.5	4.5	1.0	0.9	4.4	0.7
1-2	33.0	2.3	32.1	2.2	4.0	32.7	2.3
2-3	77.1	1.3	77.1	2.0		77.1	1.5
3-4	62.6	2.4	63.4	2.7	7.42	62.9	2.5
4-5	12.4	0.8	12.8	1.3	1.8	12.5	1.0
1-3	87.6	0.8	87.2	1.3	1.7	87.5	1.0
2-4	85.2	1.0	85.4	1.6	0.7	85.3	1.2
3-5	67.0	2.3	67.9	2.2	3.1	67.2	2.3
1-4	95.7	0.5	95.5	0.9	0.7	95.6	0.7
2-5	89.5	0.8	89.9	1.0	1.4	89.6	0.9

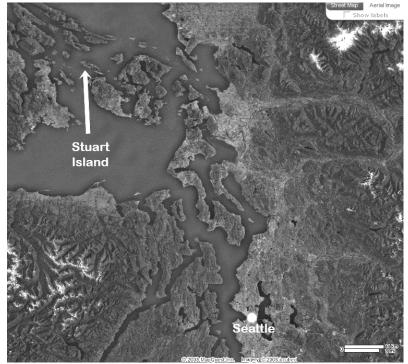
# EXERCISE TWO

Described here is a FICTIONAL case, although based on some facts. Please read the case and examine the provided evidence, and use this information, <u>as well as that from your section</u> <u>activities and lectures and course readings</u> to answer the exercise questions. To complete this exercise, you will need a ruler with CENTIMETERS, and you must print out this document in its original size. Although your section activities have been performed in groups, this exercise must be completed by you alone, without help from your classmates. Working together is prohibited and is considered cheating. This exercise is worth a total of 50 points toward your final course grade. Due IN CLASS, Monday, March 3<sup>rd</sup>.

Feel free to type your answers, and attach them as additional pages, especially if you have messy handwriting.

# Case Background:

A small group of tourists who were sea kayaking around the San Juan Islands in Puget Sound off the coast of Washington state (north of Seattle) put in for the night at Stuart Island, which is accessible only by boat (see map below). After setting up the campsite, they went about making and eating dinner. One of the group went to the beach to fetch a bucket of water for washing up the dishes, but on the way back tripped over a duffel bag lying to the side of the trail (it was getting dark and he had forgotten his flashlight). The zipper on the duffel appeared to have rusted shut, so he dragged it back to the campsite, even though it was large and heavy. Intrigued,



the group gathered round while a hole was cut in the duffel with a utility knife. A strong stench of decomposition was released immediately, causing them to pause. After some discussion regarding ruined vacations and legal responsibilities, they decided to continue to open the bag to determine what was inside. Their fears were confirmed when they identified a human body inside the bag. although it was difficult to do so because the remains had released purge fluids and decayed to such an extent that the soft tissue was very soupy, and it was only after glimpsing the exposed skull that they were

sure the remains were human. After spending an uneasy night at the campsite, the group

kayaked back to San Juan Island to notify authorities. Because the remains were in an advanced state of decomposition, little could be learned from the soft tissue, and no identification was found on the body or attached to the duffel. Therefore, the police have requested a complete forensic anthropology report. As a member of the forensic anthropology team, you have been asked to help in that assessment. Below we provide some relevant information.

Upon examination, it was determined that all of the skeletal elements are present, although there is some trauma to some of the long bones as well as the sternum. At the end of this exercise photographs of many of the skeletal elements that were recovered are provided.

**1.** First, you have been asked to determine the **sex** of this individual. As both the skull and the pelvis were recovered, you will examine both in making your determination (as you did in your 'sex and stature' section activity).

**1a.** Using the life-size photographs of the skull at the end of the exercise, identify the traits in the decision table (below) and circle the option that best agrees with the skull's morphological trait (**6 points**).

Trait	Female	Male
Brow ridges	Gracile (lightly built)	Robust (heavily built)
Nuchal area of occipital	Smooth, inion hook rare	Rough with inion hook
Mastoid process	Small	Large
Mental Protuberance	Narrow and gracile	Broad and robust
Gonial angle	Not flared	Flared
<b>Overall size/robusticity</b>	Small/gracile	Large/robust

Based on the traits you circled in the decision table above, and any other factors you noticed, what is your assessment of the sex of this individual? (1 point):

**1b.** Using the (not life-sized) photographs of the pelvis at the end of the exercise, identify the traits in the decision table (below) and circle the option that best agrees with the pelvis' morphological traits (**5 points**)

Trait	Female	Male
Subpubic angle	Wide (greater 90°)	Narrow (less than 90°)
Greater sciatic notch	Wide	Narrow
Pelvic Inlet	Wide, circular	Narrow, heart-shaped
Shape of sacrum	Short and wide	Long and narrow
Curvature of sacrum	Straight	Curved

Based on the traits you circled in the decision table above, and any other factors you noticed, what is your assessment of the sex of this individual? (1 point)?

**1c.** Based on your evaluation of the cranial and pelvic traits of this individual, what is your overall conclusion regarding the sex of this individual, and how do you justify this conclusion? **(2 points)**?

**2.** Second, you have been asked to determine the likely **ancestry** of this individual. As you know, the most reliable methods use anthroposcopic or metric examinations of the skull to determine ancestry. Use the life size photos of the skull provided at the end of this exercise to perform these analyses.

**2a**. Use the decision table below to record your anthroposcopic analysis of this individual, by *circling* the option that best agrees with the skull's morphological trait in each case (**7 points**):

Trait	European	African	Asian
Nasal root	Projecting	Flat	Flat
Nasal spine	Pronounced	Small	Small
Lower nasal border	Sharp	Indistinct (guttered)	Intermediate
Nasal aperture	Narrow	Wide	Intermediate
Prognathism	Nasal	Alveolar	Zygomatic
Vault sutures	Simple	Simple	Complex
Ascending ramus	Vertical	Slanted	Vertical

Based on the traits you circled above, and any other traits you noticed, what is your assessment of the ancestry of this individual? (1 point)

**2b.** One can also examine several metric indices to assess ancestry, including the nasal index, the cranial index, and the facial index. Use the guidelines from your 'race activity' to properly measure and calculate these indices.

The nasal index of this individual is (2 points):

The ancestry associated with this nasal index is (1 point):

The cranial index of this individual is (2 points):

Name:

The ancestry associated with this cranial index is (1 point):

The facial index of this individual is (2 points):

The ancestry associated with this facial index is (1 point):

**2c**. Based on your evaluation of the both the anthroposcopic and metric cranial traits of this individual, what is your overall conclusion regarding the ancestry of this individual, and how do you justify this conclusion? (**2 points**)?

**3.** Third, you have been asked to estimate the **stature** (height) of this individual. There are several methods to estimate stature from the skeleton, but you will provide the investigators with two estimates, while some of your other colleagues will be providing other estimates. Note that these estimates <u>require that you have determined the individual's sex and ancestry</u>, because the calculations are different for males and females and for people of difference ancestry. MAKE SURE YOU USE THE CORRECT FORMULA – if you think this individual is male, use the formula for a male, if you think this individual is a female, use the formula for a female, etc..

**3a**. It is possible to estimate an individual's height based on the measurement of one of their long bones, or even a fragment of one of their long bones. In this case, many of the long bones of this individual were broken (probably postmortem in the effort to fit the individual into the duffel bag). Therefore, you will be estimating the height based on a fragment of the proximal femur. Examine the life-size photo of the proximal femur (at the end of this exercise) and take the measurement IN CENTIMETERS between points 1 and 2 (use the "stature assessment from fragmentary long bones" diagram in your "sex and stature" activity to identify points 1 and 2).

What is the length of the femoral fragment between points 1 and 2? (1 point)

For males, this segment (between points 1 and 2) represents 16.4% of the total length of the femur. For females, this segment represents 15.6% of the total length of the femur (these figures are taken from Table 7 in your 'sex and stature' activity).

Now, estimate the length of the total femur using the following formula (2 points):

# <u>Length of femoral segment \* 100</u> = % bone length for this sex

Based on this total length of the femur, you can now estimate this individual's total height, but you must *use the proper equation for this individual's sex and ancestry*. Use the table below to determine which equation to use, then plug in the estimate of femur length that you just calculated, and estimate this individual's total height.

Sex/Ancestry	Equation	Error (cm)
European male	2.38* Femur + 61.41	±4.04
African male	2.11* Femur + 70.35	±4.04
Asian male	2.15* Femur + 72.57	±4.04
European female	2.47* Femur + 54.74	±4.04
African female	2.28* Femur + 59.76	±4.04
Asian female	No equation <sup>1</sup>	

Using the appropriate equation, your estimate of this individual's height based on your estimate of this individual's femur length is: (**2 points**):

Because it is more common in the US to list someone's height in feet and inches, convert this estimate to feet and inches (1 point):

**3b**. Another method of estimating the height so would be to add the length of all the bones that contribute to height and factor in soft tissue. Another forensic anthropologist has measured several of the skeletal elements and has recorded these data:

<sup>&</sup>lt;sup>1</sup> No equation for calculating the height of Asian women from their long bone lengths exists because there are not enough Asian women in the sample collections to reliably determine these equations. If you are confident that this individual is an Asian woman, use the Asian male equation to estimate her height, but this is something that would need to be noted in a final forensic report.

Name:

Bone	Total Length (cm)
Skull	
C2 – L5 Vertebrae	48.3
<b>S1</b>	2.7
Femur	
Tibia	37.7
Talus & Calcaneus	4.9

# First, *fill in your estimate of the femur length from question 3a in the appropriate blank space in this table.*

Now, you must determine the height of the skull. Using the side (lateral) photo of the skull, measure the height of the skull IN CENTIMETERS. How do you do this? Looking back at your 'race activity, use the 'craniometric points, lateral view' diagram to identify the correct anatomical landmarks, and measure from the condylion to the top of the skull – the vertex – in a straight, vertical line, as depicted in the line labeled 'apex' on the diagram. This is the 'total length' of the skull. *Fill this number in the appropriate blanks space in table above* (**2 points**).

Now, add up all of these numbers to give you a total skeletal height of (1 point):

To calculate the living height, you must then factor in the soft tissue (skin, fat, muscle, etc.) appropriately, as described in your 'sex and stature' activity. Add in the appropriate number of centimeters of soft tissue. This gives you a living height for this individual of (**2 points**):

Because it is more common in the US to list someone's height in feet and inches, convert this estimate to feet and inches (1 point):

**3c.** Based on your estimates of stature for this individual calculated from both the femur fragment and the total skeletal height, what is your overall conclusion regarding the stature of this individual, and how do you justify this conclusion? (**2 points**)?

**4.** In addition to estimating sex, stature and ancestry, the investigators have asked you to look at some **trauma** they observed on the sternum. Photographs (not life- size) showing both an anterior and a posterior view of the sternum are provided. After you have examined these photographs, you conclude that this trauma was caused by a projectile.

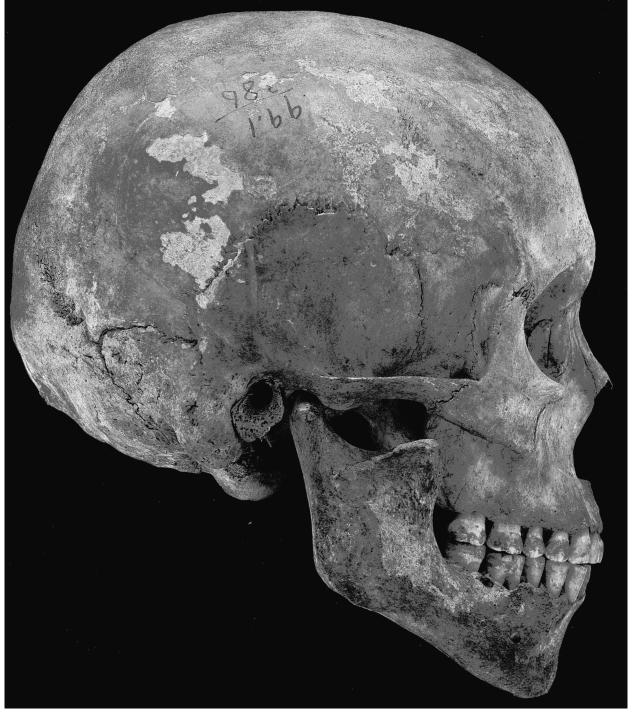
Based on the appearance of this trauma, do you believe that this trauma is antemortem, perimortem, or postmortem? (1 point)

Look closely at these photographs to determine *which side shows beveling* – the anterior or the posterior. Based on this information (and any other information you note), was this individual shot from the front or from the back? (**1 point**)?

Frontal View of Skull (life size):



# Lateral View of Skull (life size):



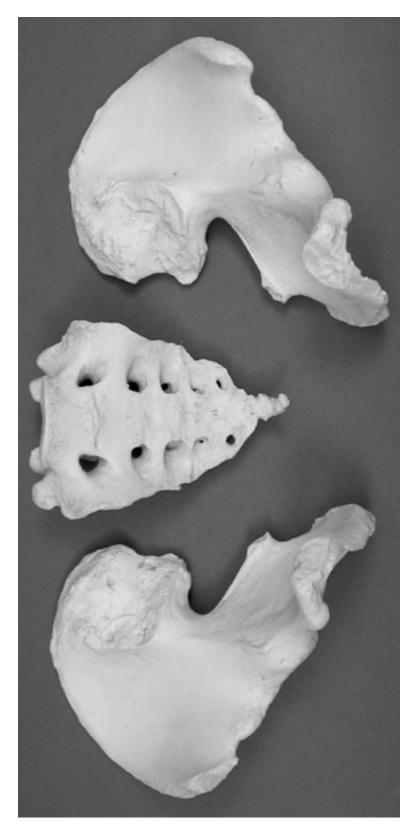
# see next page for close-up of cranial sutures

Close-up (no life size) of cranial sutures:



Name:\_\_\_\_\_

Disarticulated Pelvis:



# Articulated Pelvis (two views):





# Proximal Left Femur (life size):





Sternum (anterior view – sometimes called a ventral view):

Sternum (posterior view – sometimes called a dorsal view):



# E105: CSI student evaluations:

Category	SA	А	U	D	SD	Mean
	(4)	(3)	(2)	(1)	(0)	
Overall, I would rate this instructor as outstanding.	60%	34%	6%	-	-	3.55
My instructor is knowledgeable on course topics.	57%	42%	2%			3.55
My instructor treats students with respect.	74%	26%	-	-	-	3.74
My instructor shows genuine interest in students.	75%	25%				3.75
My instructor makes me feel free to ask questions in class.	68%	32%	-	-	-	3.68
The instructor promotes an atmosphere conducive to learning.	57%	42%	2%	-	-	3.55

Strengths:

- "She is well prepared and knows what she is talking about."
- "Will help you work through anything!"
- "She did a great job with explanations and instructions for the exercises."
- "Fun, personable had a relaxed environment, always approachable"
- "Polly explains material very clearly and teaches new material easily."
- "Polly is very knowledgable and personable. She helps us understand the material and exercises, and is very friendly."
- "Polly was very helpful and pleasant!"
- "She realized when people did not understand and as such, helped when necessary. She explained the material clearly and in a manner that all could understand."
- "Polly was great. Always really helpful and I wasn't afraid to ask questions."
- "Polly is a great instructor. She is completely competent and extremely enjoyable to be around. She explains the material well and is easy to approach. It seems like she has a good rapport with all of the students. I was impressed that she took the time to remember all of our names."

#### Improvements:

- "not making it so repetitive"
- "Activity length was too long sometimes."
- "I think the activities for discussion were sometimes too long and there wasn't enough time to explain the material clearly."
- "More time for activities"

#### A550 – 551: Gross Human Anatomy

#### Course explanation:

This is a first year medical school course that involves both a lecture and a lab component including regional dissection. The class usually consists of twenty-eight medical students plus up to five graduate students and meets on Tuesday/Thursday afternoons (one hour lecture, two hour lab). Assessment is based on three lecture exams and three lab exams each semester plus a nationwide shelf exam at the end of the year. Lecture exams consist of multiple choice, short answer, and perhaps one essay question while lab exams are based on identification. Minor points are also earned by two current literature reviews in the fall and a mini-exam and dissection grade in the spring semester.

My main role in A550 - 1 was to answer questions that arise from and assist students with their lab dissections and identifications. The lab consists of eight tables with roughly four students per table. There are also occasional x-ray, cross section, and fetal demonstrations. Included in this portfolio are the syllabi for both fall (550) and spring (551) semesters plus evaluations from my supervisor, my co-AI, and the students. There is also an additional unsolicited e-mail sent by a student (used with permission).

#### **Reflections:**

This is the class about which I was the most excited to teach. It was my first medical school course and my first smaller class to instruct. It was an incredibly rewarding experience and, while it did end up taking more time both for preparation and working with students than I had originally expected (perhaps at least in part due to my own interest and enjoyment of the experience), I hope that I get the chance to work with another medical anatomy class in the future. It is one class for which I am continually learning and being pushed to know more by the students involved and for that challenge I am grateful.

The student evaluations for this course were extraordinarily positive. The majority of comments were incredibly complimentary and I was very glad to know that I was on the right track and that my work was appreciated. The only concerns that were listed were both issues with which I agree. The first deals with my relationship with the class. Being the first year-long class that I had taught and a group of students with which I also participated in other classes, I did become quite close to the group of students involved. While this did not result in problems in this particular case (of which I am aware), I am conscious that it could have and hope to establish a few more boundaries in the future. The other concern listed had to do with 'controversial structures' (i.e. minority human variants). These were sometimes identified differently by members of the teaching staff (two professors, two A.I.s). While this did not affect testing since we were all involved in that process, I am positive that it was still confusing at times for the students.

# **GROSS HUMAN ANATOMY (A550) Fall 2008**

<u>Course Director and Lecturer</u>: Dr. Valerie Dean O'Loughlin (VDO) 010A Jordan Hall 855-7723 vdean@indiana.edu

Laboratory Director: Mr. Jim Heersma Classroom Building 126 855-0948 jheersma@indiana.edu

Guest Lecturer Dr. Mark Braun (MB)

<u>Classrooms</u>: Lecture - Jordan Hall 009 Laboratory – Jordan Hall 312

#### Required Texts:

Lecturer: Dr. Alison French Doubleday (AD) 002 Jordan Hall 856-1063 almfrenc@indiana.edu

Assistant Laboratory Director: Mr. Jim Knowlton Jordan Hall 003 855-9742 jrknowlt@indiana.edu

<u>Associate Instructors</u>: Polly Husmann (graduate student) phusmann@indiana.edu

Jen Pasko (M.D. student) jpasko@iupui.edu

- 1. <u>Essential Clinical Anatomy</u>, Keith Moore and Anne Agur, Lippincott Williams & Wilkins, Baltimore, 2007, Third Edition.
- 2. <u>Langman's Medical Embryology</u>, T.W. Sadler, Lippincott Williams & Wilkins, Baltimore, 2006, Tenth Edition.
- 3. <u>Grant's Dissector</u>, P.W. Tank, Lippincott Williams & Wilkins, Baltimore, 2008, Fourteenth Edition.
- 4. <u>Bates' Guide to Physical Examination and History Taking</u>, Lynn Bickley and Peter Szilagyi, Lippincott, Philadelphia, 2007, Ninth Edition.
- 5. <u>Grant's Atlas of Anatomy</u>, Anne Agur and Art Dalley, Lippincott Williams and Wilkins, Baltimore, 2008, Twelfth Edition. (**ONE PER LAB TABLE**)

## Course Website URL: http://www.indiana.edu/~anat550

The course website contains copies of the lecture and lab syllabi, contact information, and anatomical and clinically related web links. It also contains multiple embryology animations developed in part by Valerie O'Loughlin – the url for this site is: http://www.indiana.edu/~anat550/embryo\_main

# Course Description:

This course examines the gross anatomy of the human. Developmental anatomy and regional anatomy of the back, thorax, abdomen, pelvis and perineum are examined. Cadaver-based dissection labs accompany lecture topics.

## Learning Goals:

- 1. You will learn the anatomy vocabulary necessary to communicate effectively as a physician.
- 2. You will develop an understanding of the three-dimensionality of the body, and the relationships of body structures. This understanding is essential for interpreting medical images such as (CTs, MRI, etc.).
- 3. You will learn the surface and deep anatomy that is necessary to perform and understand a physical examination of a patient.
- 4. You will develop a better understanding of anatomical "hot spots" and why these anatomical areas are clinically relevant.
- 5. You will understand the origin of anatomical structure (embryology) and the basis for developmental abnormalities (birth defects).
- 6. You will develop an appreciation for human variation.
- 7. You will learn what information is essential in a typical autopsy report, and you will complete your first autopsy report based on the dissection of your donor.

#### **Examinations:**

- S Three (3) Lecture Exams will range in value from 90 points to 140 points. These exams will include multiple choice questions, matching questions, 4X questions, and short answer/essay questions. The lecture instructors will provide a copy of last year's exams for study purposes. In addition, sample lecture questions may be found in your A550 Course Guide (distributed on the 1<sup>st</sup> day of class).
- S Three (3) Lab Exams take place in the Gross Anatomy lab. Exam questions ask for the correct identification of pinned anatomical structures on cadavers, MRIs, bones and cross sections.
- S There are two (2) Anatomy Literature Reports due during the semester. The student does a literature search based on an anatomical topic of his/her choice. A literature report form must be filled out (forms are found in your A550 Course Guide) and the student turns in the form with a copy of the article he/she researched.

3 Lecture Exams	330 points
3 Lab Exams	260 points
2 Current Anatomy Literature Reports	<u>10 points</u>
Semester TOTAL	600 points

## **Evaluation and Grading Policies:**

The following evaluation criteria are used for evaluation and grades:

- 1. The Indiana University School of Medicine evaluation program guidelines:<br/>Honors (H)10-20% of the classHigh Pass (HP)30-50% of the classPass (P)40-60% of the classFail (F)0-5% of the class
- Comparison to performances of previous classes: The class mean (A550 and A551) for previous classes has ranged from 79% to 86%. For graduate students, one standard deviation from the mean is approximately a B. In the past, the cutoff line between Pass and Fail has been 70% (about 2 standard deviations from the mean). Graduate students will receive letter grades: A, B, C, D or F.
- 3. Class distribution curves are taken into consideration when determining the exact cutoff line between grades.
- 4. All Medical Students will be required to take a comprehensive shelf exam (in the form of a final exam) at the end of the spring semester. There is no pass-fail requirement for the exam, but the exam will count 20% of your total grade. Graduate students do not need to take the comprehensive shelf exam.

Competencies Assessed in Gross Anatomy:

- A. <u>Effective Communication</u> is evaluated by: (1) requiring two Web/Medline searches on topic of choice in gross anatomy or human embryology and submission of an annotated bibliography. (See sample of Anatomy/Embryology Literature Report) and (2) examining oral communication on a one-to-one basis as students interact with each other and respond to faculty questions in the laboratory.
- B. <u>*Life-long Learning*</u> is addressed by: (1) completing two written Anatomy/Embryology Literature Reports and (2) describing new imaging techniques that are in development.
- C. <u>Self-awareness, Self-care, and Personal Growth</u> are assessed by completing a questionnaire examining the student's attitude toward the donors (cadavers). (See sample of Gross Anatomy Laboratory Experience Questionnaire).
- D. <u>Professionalism and Role Recognition</u> are evaluated by (1) observing students' attitudes regarding teamwork in their dissection groups, (2) completion of the individual limb dissection, and (3) completing the Gross Anatomy Laboratory Experience Questionnaire.
- E. <u>Basic Clinical Skills</u> are assessed by (1) learning to evaluate x-rays, CT scans, MR images and integrating these radiological techniques with anatomical structure and (2) completing a *Donor Report* (autopsy report) based on the dissection of your donor. The *Donor Report* can be downloaded from the A550 website.

## Study Tips:

- 1. We strongly encourage you to study together and work in groups when preparing for both lecture and lab. Discuss complex topics and quiz each other. Working in a group will allow all involved to better understand the material and help clarify any misconceptions.
- 2. Make sure you examine and study ALL of the bodies in the gross lab. As you will learn, variation is considerable and structures can look completely different in different bodies.
- 3. Do NOT try to "cram" for the exams. Lecture exams ask you not only to identify material, but to apply and synthesize your knowledge. Instead, try to study a little bit every day.
- 4. If you have questions, or aren't doing as well as you'd like, <u>please see one of the</u> <u>instructors right away</u>! We want you to succeed and we are here to help. However, we do not know if you need help unless you come and speak with us!

# Good luck!!!

# GROSS HUMAN ANATOMY (A550): Lecture Schedule - Fall 2008

<u>DATE</u>	<u>AREA</u> <u>LEC</u>	TURER		<u>IGNMENT IN</u> ORE (M) OR SADLER (S)
8/19 Tu	Introduction Medical Imaging	VDO	M:	43-47
8/21 Th	Intro to Systems Anatomy (2 lectures)	VDO	M:	2-43
8/26 Tu	Embryology I (2 lectures)	VDO	S:	3-5, 11-43, 45-53
8/29 Th	Back, Suboccipital Triangle, and Vertebral Column	AD	M: S:	271-291, 299-311 140-142
9/02 Tu	Embryology II (2 lectures)	VDO	S:	55-63, 67-87, 293-295
9/04 Th	Spinal Cord and Spinal Nerves	AD	M:	30-37, 291-299
9/09 Tu	Autonomic Nervous System	VDO	M:	34-43, 184
9/11 Th	Embryology III (2 lectures) Introduction to Autopsy (1 lecture)	VDO MB	S:	89-110, 111-122
9/16 Tu	Thoracic Wall	AD	M: S:	49-69 153-158
9/18 Th	Abdominal Wall	AD	M: S:	117-137, 185-89 253-255
9/23 Tu	Mediastinum	AD	M: S:	80-82, 101-113 195-196
9/25 Th	EXAMINATION (140 point	s)	5.	175-176
9/30 Tu	Lungs	AD	M: S:	70-81 195-201
10/02 Th	Lungs (cont.)/Heart * 1st literature search due!	AD	M:	82-95
10/06-10/0	7 <u>FALL BREAK</u>			
10/09 Th	Heart (cont.)/Embryology of Heart	AD	M: S:	95-103 159-175

# **GROSS HUMAN ANATOMY (A550): Lecture Schedule - Fall 2008**

DATE	AREA LECT	<u>FURER</u>		<u>GNMENT IN</u> DRE (M) OR SADLER (S)
10/11 Tu	Embryology of Heart (cont.)	AD	S:	175-185, 189-194
10/16 Th	Embryology of the Heart (cont.)/ Introduction to GI Tract	AD	M:	118-119, 135-142
10/21 Tu	Embryology of the GI Tract	AD	S:	151-3, 203-223, 226
10/23 Th	GI Tract I	AD	M:	142-152, 159-163
10/28 Tu	GI Tract II	AD	M:	152-159, 163-173
10/30 Th	GI Tract III	AD	M: S:	173-174, 180-184 186-187
11/04 Tu	EXAMINATION (100 points	)		
11/06 Th	Posterior Abdominal Wall; Kidneys and Ureters	VDO	M:	190-201, 174-180
11/11 Tu	Intro To Pelvis and Perineum (Pelvic Diaphragm & Sacral Plexus	VDO	M:	203-220
	(Fervice Diaphragin & Sacrar Fiexus Development of Urogenital System (Kidney and Ureter)	),	S:	229-239
11/13 Th	Perineum: Anal & Urogenital Triangles	VDO	M:	244-270
11/18 Tu	Development of Genital System; Autonomic Innervation of Perineum And Pelvis	VDO 1	S: M:	239-256 218-220
11/20 Th	Pelvis; Urinary Bladder; Male Internal Genital Organs * <b>2nd literature search due!</b>	VDO	M:	210-218, 220-235
11/25 Tu	Pelvis; Female Internal Genital Organs	VDO	M:	235-244

## 11/26-11/30 THANKSGIVING BREAK!!

# To be scheduled <u>FINAL EXAMINATION</u> (90 points) Posterior Abdominal Wall, Perineum, Pelvis, Integrated Questions

# **GROSS HUMAN ANATOMY (A550): Laboratory Schedule - Fall 2008**

# DATE

# ASSIGNMENT IN GRANT (14th ED)

(both lecturers will be present in all anatomy labs)

<u>AREA</u>

8/19 Tu	Introduction	1-4 (and A550 course guide)
8/21 Th	Systems Anatomy	Go to A215 Lab (CCB 122)
8/26 Tu	Embryology I (Early development)	Bring Sadler text to class
8/28 Th	Superficial Back	5-11
9/02 Tu	Deep Back, Back of Neck	12-15
9/04 Th	Deep Back, Back of Neck (con't) Introduction to Medical Imaging	12-15
9/09 Tu	Spinal Cord	15-18 (CHECK WITH INSTRUCTOR BEFORE REMOVING MUSCLES)
9/11 Th	NO LAB	BEFORE REMOVING MUSCLES)
9/16 Tu	Body Wall (Thorax)	54-59
9/18 Th	Body Wall (Abdomen)	78-87
9/23 Tu	Body Wall (Abdomen)	78-87
9/25 Th	EXAMINATION (60 points) (Including osteology of the vertebral column	n & thoracic cage)
9/30 Tu	Pleural Cavity, Lungs	59-63
10/02 Th	Mediastinum, Heart I	64-69
10/06-10/07	FALL BREAK	
10/09 Th	Heart II	67-73
10/14 Tu	Superior and Posterior Mediastinum	73-77
10/16 Th	Body wall (Abdomen), Peritoneal Cavity	87-91

# **GROSS HUMAN ANATOMY (A550): Laboratory Schedule - Fall 2008**

DATE	AREA ASSIGNMENT IN	GRANT (14th ED)
10/21 5		01.07
10/21 Tu	Celiac Trunk, Spleen, Liver, Gallbladder	91-96
10/23 Th	Mesenteric Vessels and Intestines	96-101
10/28 Tu	Duodenum, Pancreas and Hepatic Portal Vein	101-105 <u>do not remove gi tract</u>
10/30 Th	Duodenum, Pancreas and Hepatic Portal Vein (continued)	101-105 <u>do not remove gi tract</u>
11/04 Tu	EXAMINATION (100 points)	
11/06 Th	Posterior Abdominal Wall	103-109
11/11 Tu	Posterior Abdominal Wall Spermatic Cord, Testis	109-112 117-119
11/13 Th	Perineum, Anal Triangle	113-117 <u>do not disarticulate</u> <u>hip bone</u>
11/18 Tu	Male Urogenital Triangle Female Urogenital Triangle	119-124 133-137
11/20 Th	Male Pelvis Female Pelvis	124-133 137-147 <u>do not do the hemisection</u> <u>do not mobilize lower extremity</u>
11/25 Tu	Male Pelvis (con=t) Female Pelvis (con't)	124-133 137-147
11/26-11/30	THANKSGIVING BREAK!!	

# FINAL EXAMINATION (100 points) (Including Osteology of the Pelvis) To be scheduled

# GROSS HUMAN ANATOMY (A551) Spring 2009

<u>Course Director and Lecturer</u>: Dr. Valerie Dean O'Loughlin (VDO) 010A Jordan Hall 855-7723 vdean@indiana.edu

<u>Laboratory Director</u>: Mr. Jim Heersma, B.A. 002 Jordan Hall 855-0948 jheersma@indiana.edu

Associate Instructors: Polly Husmann phusmann@indiana.edu

<u>Classrooms</u>: Lecture - Jordan Hall 009 Lecturer: Dr. Alison French Doubleday (AD) 002 Jordan Hall 856-1063 almfrenc@indiana.edu

Assistant Laboratory Director: Mr. Jim Knowlton 002 Jordan Hall 855-0948 jrknowlt@indiana.edu

Jen Pasko jpasko@iupui.edu

Laboratory – Jordan Hall 312

Required Texts:

- 1. <u>Essential Clinical Anatomy</u>, Keith Moore and Anne Agur, Lippincott Williams & Wilkins, Baltimore, 2007, Third Edition.
- 2. <u>Langman's Medical Embryology</u>, T.W. Sadler, Lippincott Williams & Wilkins, Baltimore, 2006, Tenth Edition.
- 3. <u>Grant's Dissector</u>, P.W. Tank, Lippincott Williams & Wilkins, Baltimore, 2005, Thirteenth Edition.
- 4. <u>Bates' Guide to Physical Examination and History Taking</u>, Lynn Bickley and Peter Szilagyi, Lippincott, Philadelphia, 2007, Ninth Edition.
- 5. <u>Grant's Atlas of Anatomy</u>, Anne M.R. Agur, Lippincott Williams and Wilkins, Baltimore, 2005, Eleventh Edition. (**ONE PER LAB TABLE**)

#### Course Website URL: http://www.indiana.edu/~anat550

The course website contains copies of the lecture and lab syllabi, contact information, and anatomical and clinically related web links. It also contains multiple embryology animations developed in part by Valerie O'Loughlin. You may access the embryology animations directly at: http://www.indiana.edu/~anat550/embryo\_main

#### Course Description:

This course examines the gross anatomy of the human. Developmental anatomy and regional anatomy of the head, neck and limbs are examined. Cadaver-based dissection labs accompany lecture topics.

#### Learning Goals:

- 1. You will learn the anatomy vocabulary necessary to communicate effectively as a physician.
- 2. You will develop an understanding of the three-dimensionality of the body, and the relationships of body structures.
- 3. You will learn the surface and deep anatomy that is necessary to perform and understand a physical examination of a patient.
- 4. You will develop a better understanding of anatomical "hot spots" and why these anatomical areas are clinically relevant.
- 5. You will understand the origin of anatomical structure (embryology) and the basis for developmental abnormalities (birth defects).
- 6. You will learn to appreciate human variation.
- 7. You will learn what information is essential in a typical autopsy report, and you will complete your first autopsy report based on the dissection of your donor.

#### Examinations

Three (3) **Lecture Exams** will range in value from 80 to 100 points. These exams will include multiple choice questions, matching questions, 4X questions, and short answer/essay questions. The lecture instructors will provide a copy of last year's exams for study purposes. In addition, sample lecture questions may be found in your A550 Course Guide (distributed on the 1<sup>st</sup> day of class). There is a mini-exam during the Limbs Section.

Three (3) **Lab Exams** take place in the Gross Anatomy lab. Exams will range in value from 80 to 100 points. Exam questions ask for the correct identification of pinned anatomical structures on cadavers, MRIs, bones and cross sections. Your limb dissection will be graded.

One (1) **Comprehensive Shelf Exam** will be given during finals week. Only medical students need to take this exam, and this exam is worth 20% of your total grade (300 points).

One (1) **Dissection Grade** will be given on 4/9 for complete dissection of the upper and lower limbs. Students will work in pairs to dissect one lower limb and one upper limb, and the pair of students will receive the same dissection grade. Note: <u>an incomplete dissection will be given 0</u> <u>points!</u> Dissections are graded based on being complete and all structures listed in the dissector being adequately located and identified.

Finally, there is a *Gross Anatomy Laboratory Experience Questionnaire* due on 4/14. The form can be found in your A550 Course Guide.

#### Competencies Assessed in Gross Anatomy (A550 & A551)

- A. <u>Effective Communication</u> is evaluated by: (1) requiring two Web/Medline searches on topic of choice in gross anatomy or human embryology and submission of an annotated bibliography. (See sample of Anatomy/Embryology Literature Report) and (2) examining oral communication on a one-to-one basis as students interact with each other and respond to faculty questions in the laboratory.
- B. <u>Life-long Learning</u> is addressed by: (1) completing two written Anatomy/Embryology Literature Reports and
- C. <u>Self-awareness, Self-care, and Personal Growth</u> are assessed by completing a questionnaire examining the student's attitude toward the donors (cadavers). (See sample of Gross Anatomy Laboratory Experience Questionnaire).
- D. <u>Professionalism and Role Recognition</u> are evaluated by (1) observing students' attitudes regarding teamwork in their dissection groups, (2) completion of the individual limb dissection, and (3) completing the Gross Anatomy Laboratory Experience Questionnaire.
- E. <u>Basic Clinical Skills</u> are assessed by (1) learning to evaluate x-rays, CT scans, MR images and integrating these radiological techniques with anatomical structure and (2) completing a *Donor Report* (autopsy report) based on the dissection of your donor. The *Donor Report* can be downloaded from the A550 website.
- F. <u>Using Science to Guide Diagnosis mgmt. etc.</u> is addressed by (1) exposure to lectures and completion of laboratory dissections and (2) completion of *Donor Report*.

#### **Evaluation and Grading Policies:**

1. The Indiana University School of Medicine evaluation program guidelines:

Honors (H)	10-20% of the class
High Pass (HP)	30-50% of the class
Pass (P)	40-60% of the class
Fail (F)	0-5% of the class

- 2. Comparison to performances of previous classes: The class mean (A550 and A551) for previous classes is approximately 84% (range: 79% to 86%). For graduate students, one standard deviation from the mean is approximately a B. In the past, the cutoff line between Pass and Fail has been at or very near 70% (about 2 standard deviations from the mean). Graduate students will receive letter grades: A, B, C, D or F.
- 3. All Medical Students will be required to pass a comprehensive statewide exam (in the form of a final exam). There is no pass-fail requirement for the exam, but the exam will count as 20% of your total grade. Graduate students do not need to take the comprehensive statewide exam.

#### A551 POINT DISTRIBUTION: (600 POINTS TOTAL)

3 LECTURE EXAMS (90 + 80 + 100) LECTURE MINI EXAM (30) 3 LABORATORY EXAMS (90 + 80 + 100) DISSECTION GRADE (30)	= = =	270 30 270 30
FIRST SEMESTER (A550) SECOND SEMESTER(A551) Comprehensive shelf exam Total points	= = =	600 POINTS 600 POINTS <u>300 POINTS</u> 1500 POINTS

# GROSS HUMAN ANATOMY (A551) Lecture Schedule Spring 2009

<b>DATE</b>	<u>TOPIC</u>	READING ASSSIGNMENT IN MOORE & AGUR LEC'	<u>FURER</u>
1/06	Introduction to Head & Neck, Skull and the Cranial Nerves: Face; Cutaneous Branches of CN V; Parotid Gland and CN VII and CN IX	514-524 (634-660; Read pertinent sections related to each lecture)	VDO
1/08	Scalp; Cranial Fossae; Meninges; Skull Dural Venous Sinuses	492-508	VDO
1/13	Embryology of the Head & Neck - Pharyngeal Arches; Development of the Skull (1.5 hour lecture)	Sadler Chapter 16 (257-283)	VDO
1/15	Introduction to the Neck; Fascia of the Neck Posterior of the Neck; CN XI	584-594	VDO
1/20	Triangles of the Neck; Cervical Plexus; Deep structures of the Neck	594-611	VDO
1/22	Temporal and Infratemporal Fossa; CN V <sup>3</sup> ; Muscles of Mastication; Temporomandibular Joint	539-547	AD
1/27	Sympathetic Innervation and Lymphatics	35-43; 523; 606-608; 627-630	VD
	of the Head and Neck, Integrating Material Learned thus far		0
1/29	EXAMINATION ((90 POINTS)		
2/03	Orbit I, Extraocular Muscles; CN III; CN IV; CN VI; CN V <sup>1</sup>	524-525; 532-539	VDO
2/05	Orbit II; Eyelids, Lacrimal Apparatus, Eyeball; CN II	525-532	VDO
2/10	Pharynx; Soft Palate; Tonsils, Pharyngeal plexus	620-629; 549-553	VDO
2/12	Nose; Paranasal Sinuses; CN I; Hard Palate, Pterygopalatine Fossa	560-568	VDO

<b>DATE</b>	<u>TOPIC</u>	<u>READING ASSIGNMENT IN MOORE &amp; AGUR</u>	<u>LECTURER</u>
2/17	Oral Region; Tongue; Sublingual Region	547-549; 553-560	AD
2/19	Larynx	611-620	VDO
2/24	Ear; Review of Cranial Nerves	568-582; 634-660	VDO
2/26	Introduction to the Extremities; Development of the Limbs	313-332, 401-416, 426-429 Sadler Chapter 9 (132-139) Chapter 10 (146-149)	AD
3/03	EXAMINATION (Orbit to Ear/cranial r (80 points)	nerves)	
3/05	Lumbosacral Plexus, Gluteal Region	340-355	AD
3/10	Thigh, Popliteal Fossa	332-340, 343-347, 355-356	AD
3/12	Leg	356-366	AD
	SPRING BREAK: MARCH 14-22		
3/24	Foot	366-376, 395-7	AD
3/26	Lecture Mini-Exam (30 points) Intro to limbs thru foot		
3/26	Scapula and Deltoid Region, Brachial Plexus	417-423, 429-435	AD
3/31	Axilla, Arm, Cubital Fossa	423-425, 436-442	AD
4/02	Forearm	442-456	AD
4/07	Wrist and Hand	456-470	AD
4/09	Shoulder & Hip Joints	376-381, 471-477	AD
4/14*	Elbow Joints, Knee Joints/Ankle, Foot, Wrist Joints ( <b>DOUBLE LECTURE</b> )	380-395, 398-9, 477-489	AD
1/16	I IMRS I ECTURE EXAM (100 points)		

4/16 LIMBS LECTURE EXAM (100 points)

#### COMPREHENSIVE ANATOMY SHELF EXAM (300 points) - TO BE ARRANGED

#### \*DENOTES THE DATE THE 'GROSS ANATOMY EXPERIENCE QUESTIONNAIRE' IS DUE.

## GROSS HUMAN ANATOMY (A551) LABORATORY SCHEDULE: SPRING 2009

DATE	<u>TOPIC</u>	READING ASSIGNMENT IN DISSECTOR	<u>PRIMARY</u> LECTURER
1/06	Face; CN V	150-156 (Do <u>NOT</u> dissect eyelid or orbit	VDO
1/08	Scalp; Parotid Region; CN VII	156-157,184-185	VDO
1/13	Opening of the Skull; Meninges Removal of Brain; Dural Venous Sinuses; Cranial Fossae	158-163, 164-168	VDO
1/15	Posterior and Anterior Triangles of the Neck	174-177	VDO
1/20	Carotid Triangle; Submandibular Triangle, Submental Triangle; Thyroid and Parathyroid Glands	178-181 (leave larynx attached)	VDO
1/22	Temporal and Infratemporal Regions; Temporomandibular Joint	185-189	AD
1/27	Craniovertebral Joints; Prevertebral and Lateral Visceral Regions; Root of Neck	181-183; 189-192 (Do <b>NOT</b> disarticulate head)	VDO
1/29	EXAMINATION (90 POINTS)		
2/03	Orbit I	168-170; 171-174	VDO
2/05	Orbit II; Accessory Visual Apparatus; Dissection of Eyeball (Human & Bovine)	170-171; 173-174	VDO
2/10	Removal and Bisection of Head; Pharynx	191-195	VDO
2/12	Nasal Cavities and Sinuses	194-198	VDO
2/17	Sphenopalatine Foramen; Pterygopalatine Fossa; Palate; Tonsils and Pharyngeal Wall	198-202	VDO
2/19	Oral Cavities and Tongue; Sublingual Region	202-205	VDO
2/24	Larynx; Middle Ear	205-210	VDO
2/26	Superficial veins and nerves of the Limbs	122-125, 15-17	AD
3/03	EXAMINATION (orbit to ear) (80 POIN	TS)	

<b>DATE</b>	<u>TOPIC</u>	READING ASSIGNMENT IN DISSECTOR	<u>PRIMARY</u> <u>LECTURER</u>
3/05	Anterior and Medial Thigh; Gluteal Region	125-130	AD
3/10	Gluteal Region, Posterior Thigh	130-134	
3/12	Popliteal Fossa, Posterior Leg	134-137, 140-142	AD
	SPRING BREAK: MARCH 14-22		
3/24	Anterior and Lateral Compartments of the Leg; Dorsum and Sole of Foot	137-139, 142-144	AD
3/26	Scapular Region; Axilla; Brachial Plexus	17-22	AD
3/31	Arm and Cubital Fossa	22-26	AD
4/02	Flexor and Extensor Compartments of the Forearm	26-30, 35-36	AD
4/07	Palm of the Hand	30-35	AD
4/09*	Hip Joint and Shoulder Joint	145-146, 37-39 (Dissection of the joints in <b>ONE</b> upper or <b>ONE</b> lower extremity per table only)	AD
4/14	Knee, Ankle, Elbow Joints	146-148, 39 (1 hour lab)	AD
4/16	FINAL LAB EXAMINATION (100 PC	DINTS)	
		ND CHECK OUT TOOLS AND TA UP NEEDS TO SCHEDULE A TIMI	

HEERSMA.

\*DENOTES DISSECTION GRADE TO DATE. DO NOT DISSECT JOINTS UNTIL DISSECTION IS GRADED (30 POINTS)

DISSECTIONS WILL BE GRADED THE AFTERNOON OF 4/09, DURING THE LAB.

# A550 – 551 student evaluations:

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	84%	16%	-	-	-	4.84
My instructor presented information	80.77%	19.23%	-	-	-	4.81
in a clear and organized manner.						
My instructor welcomed questions	88.46%	11.54%	-	-	-	4.88
from students and responded						
appropriately.						
My instructor developed an	73.08%	26.92%	-	-	-	4.73
atmosphere of respect and trust in the						
classroom.						
My instructor cleared up points of	80.77%	15.38%	3.85%	-	-	4.77
confusion for me.						

#### Strengths:

- "Polly was always willing to answer questions in and outside of class. I liked that she not only showed what a structure was but why/how she came to that conclusion which really helped me learn the material."
- "Took a lot of time and dedication to explain material; very patient; very well prepared, enjoy being up in lab"
- "Polly definitely knows her stuff. I can't count the times she's cleared up a daunting mess of nerves and vessels for me."
- "Knew everything for lab, was pretty much available 24/7"
- "Great attitude and willingness to come to lab outside of scheduled time"
- "Polly was always willing and eager to help. She was a fantastic AI."
- "She was incredibly knowledgeable and always prepared for our labs. I loved it."
- "Instructor was extremely helpful in learning the material. Instructor put in a considerable amount of time out of class hours. Instructor was creative in coming up with multiple ways to approach and learn the material."
- "OUTSTANDING! Very clear and concise!"
- "Polly was the best AI I've ever had not only does she know <u>everything</u> about anatomy, but she came into lab on her own time on numerous occasions to help us study. Her commitment was so far above and beyond she even came up the night before exams and during some lunches. I learned so much from Polly <u>thank you!!"</u>
- "As a lab AI, Polly was extremely helpful and was always willing to meet with us even outside of our normal lab times in order to assist and oversee our dissections. We were <u>extremely</u> fortunate to have her as our lab AI this year."

Improvements:

- "Maybe a little too close to the class"
- "Communication with other instructors regarding controversial structures should be improved."

April 8, 2009

It is my sincere pleasure to write this letter on behalf of Polly Husmann. I first met Polly while I was working as an associate instructor for a gross anatomy lab in which Polly was a student. Even as a student, Polly demonstrated many characteristics of an excellent teacher. For example, I was immediately struck by Polly's cheerful, positive attitude and by her willingness to assist other students with their studies. One of Polly's best qualities is her infectious excitement for learning. Polly displays a genuine enthusiasm for her field and for science, in general. In addition, she possesses the unique ability to extend this feeling and encourage scientific curiosity in others. The challenge of a difficult course like gross anatomy motivated Polly to discover new ways to approach and, ultimately, master the material. As a student, Polly set a positive example for her peers and gently nudged them to explore course material in more detail. As a teacher, Polly has refined these skills and is actively involved in encouraging students and helping them discover new techniques to achieve success in her classes.

Polly is currently an associate instructor for several undergraduate human anatomy lab sections at Indiana University. In addition, she is one of two associate instructors for the same gross anatomy lab in which we initially met. Her professional and friendly demeanor simultaneously puts students at ease and inspires their trust in her knowledge and abilities. Students find Polly to be very approachable and she readily makes herself available to students if they need extra assistance outside of class hours. Polly puts an incredible amount of time and effort into her role as a teacher. Although much of this time is spent assisting students in a "hands on" manner, Polly also invests quite a bit of effort into planning and preparing class activities for specific anatomy labs and she consistently comes up with new and interesting ways to evaluate students ' understanding of core concepts. Although Polly occasionally exhibits a tendency to take on an overwhelming workload and spread herself a bit too thin, she has become adept at prioritizing and making effective use of her time and resources. In spite of her many other obligations as a graduate student, Polly's students can always depend on her to be available when they need her.

Polly's commitment to her students clearly has an effect on their success in anatomy lab. I have personally heard several undergraduates, as well as medical students, comment on the ways in which Polly has helped them improve their performance. In part, this is due to the fact that Polly recognizes that individuals approach learning in different ways. Polly is always willing to explore different learning techniques with students in order to determine how that particular individual can best accomplish his or her academic goals. This open approach to teaching and learning has also impacted other instructors who teach with Polly. In fact, a few of Polly's co-instructors have commented on how much they enjoy and appreciate working with her. Just as Polly encouraged and challenged her fellow students, she continues to be a positive role model to her peers and colleagues. I know that I could not ask for a better associate instructor in our gross anatomy lab. Polly is reliable, professional, courteous and amiable. I have complete confidence in her abilities and know that our students are receiving quality instruction and succeeding in the class because of her efforts. I look forward to working with Polly as a colleague in future years and I am excited about the contributions she will make to education as her career progresses.

Sincerely,

Alison French Doubleday, Ph.D. Lecturer of Anatomy and Cell Biology Medical Sciences Program Indiana University Bloomington IN (812) 856-1063 (voice) (812) 855-4436 (fax) almfrenc@indiana.edu To whom it may concern:

I feel pleased and honored to have the opportunity to write this letter on behalf of Polly Husmann. I first met Polly last year as a fellow classmate, and this year we both are Associate Instructors for the Gross Anatomy lab for the first year medical students. In this time I not only have been able to witness Polly 's hard work inside the classroom, but also her dedication to others and her general enthusiasm for teaching. I am constantly in awe of her vast amount of knowledge and the ease in which she is able to communicate it to others. Polly's heart for anatomy and teaching is visible to all. Polly is approachable and makes herself available to help students outside of class hours. She comes in on weekends and provides outside sources for students who might be struggling. As a peer, I look at Polly and am enamored by her professionalism, reliability, and passion for teaching.

My experience teaching with Polly throughout the past year can be summed up into no other word but delightful. She genuinely cares about her students and their success inside and outside the classroom. I believe one of the best attributes of a teacher is their ability to try new things and to be open to change, which Polly has successfully accomplished. Being a medical student myself, I look at Polly and realize what a phenomenal asset she would have been to my medical education. Polly Husmann is a class act, a brilliant woman, and someone who I know will be enriching minds for years to come.

Sincerely,

Jennifer Pasko



# RE: thank you

2 messages

#### , David C 🗖

Fri, Apr 17, 2009 at 11:10 AM

To: Polly Husmann <phusmann@umail.iu.edu>

Hey Polly,

Thank you for being the bestest AI ever. I mean it. I have no idea how anybody can manage learning all of these structures of the human body, and you believe in it so much that it rubbed off on me. I couldn't have made it without your help. I came back from a 61 in Anatomy, and now it looks like I have a 68, which is a pass if the score holds on the final. The way in which you went above and beyond your AI duties to help us review was amazing. You were always willing to make room in your schedule for us. Your demeanor was businesslike in a good way. I kind of think of you as a big sister or something, but if that creeps you out then negate this sentence. Anyway, you are one of those rare high-quality people that doesn't complain, works hard, and treats people like you want to be treated. Thanks for the inspiration,

David

IU School of Medicine,

Bloomington, Indiana 47401

From: Polly Husmann [phusmann@umail.iu.edu] Sent: Thursday, January 22, 2009 7:49 PM

Subject:

P.S. If anyone needs another copy of the old dissector lists, send me an e-mail and I can send them to you.

Polly Husmann <phusmann@umail.iu.edu>

To: **To:** , David C'

David,

Thanks for your e-mail. It really means a lot to me and I'm glad to hear that you've been able to improve your grade so much! That's awesome. I'm glad that you'll get to make your own decision at the end of the year and I'm sure I'll continue to see you around either way. Good luck on the shelf exam!

~Polly [Quoted text hidden] Fri, Apr 17, 2009 at 1:00 PM

Polly Husmann <phusmann@umail.iu.edu>

#### A560: Cell Biology & Histology

#### Course explanation:

This is a course that I taught in the fall of 2009. It included thirty-three first year medical students and three first year graduate students in Anatomy Education. It met on Tuesday and Thursday mornings (one hour lecture, two hour lab) and assessment was based on three lecture exams, three lab exams, and a comprehensive statewide final, though an extra credit case study write-up was later added. The lecture exams are multiple choice while the lab exams are focused on identification with perhaps a few application questions.

My role consisted of a short (15 - 20 minute) introduction followed by circulating and managing questions. In addition, writing and grading the lab exams are part of the requirements. As the course progressed, I also added a day of case based learning that I organized and developed.

#### Reflections:

This class caused more anxiety than any of my previous teaching assignments. The students seemed to have a good deal more difficulty with the material than I had anticipated and were quite vocal about it. I attempted to assuage these issues by adding a day of case based learning with an extra credit write and by posting a number of practice quizzes before each exam, since many of them seemed to be confused by the wording of the test. These activities helped for many of the students, but I was never able to achieve the level of comfort that I have had in front of my other classes.

After looking at the evaluations, I have perhaps learned something about the personality of classes and the difference that those personalities can make. Though I had felt for the majority of the semester that that students and I were having some minor conflicts, it would appear that this is not the case. The evaluations were the best I have ever received and the comments were overwhelmingly positive.

# Cell Biology & Histology (A560)

# Fall 2009

Location: Lectures and Laboratories in Jordan Hall 001

Course Director: Anthony L. Mescher, Ph.D., Prof. of Anatomy & Cell Biology Jordan Hall 202 (office), JH 201 (lab) <u>mescher@indiana.edu</u> Office phone 855-4693; Home phone 336-8261 Office Hours: M and W, 1:00-4:00 or by appt. <u>anytime</u>

- Lectures: Dr. Mescher or John Foley, Ph.D., Assoc. Prof. of Anatomy & Cell Biology JH 101, 855-3189 jgfoley@indiana.edu
- Lab Instructors: Anthony Mescher or John Foley Sue Childress, JH 201A; 855-4164, <u>scrichar@indiana.edu</u> Polly Husmann, Assoc. Instructor, <u>phusmann@indiana.edu</u> Office hours to be determined

# Books:

# Required:

# Wheater's Functional Histology, 5th ed., B. Young et al. (2006)

You will need Wheater in every lab session for use as an atlas and for access to the figures referred to in the Lab Guide.

# A560 Lab Guide 2009, A.L. Mescher (2009)

Bring this book to every lab also. It is written to provide a step-by-step guide to study of the microscope slides, both actual and virtual, that you will be required to examine, study, and understand in each laboratory session following that day's lecture and discussion.

## **Recommended:**

*Histology and Cell Biology: An Introduction to Pathology*, 2<sup>nd</sup> ed., A. L. Kierszenbaum (2007). Kierszenbaum gives an excellent alternative presentation of cell biology and histology, emphasizing important molecular aspects of histology and the medical importance of the material.

*Mosby's Ace Histology and Cell Biology*, E.R. Burns, M.D. Cave (2002) Burns and Cave is a very concise summary of the most important aspects of cell biology and histology. It provides more complete coverage than Wheater of the molecular aspects of the material. The practice exams here and on the CD-ROM will provide excellent preparation for the comprehensive final exam of USMLE Step 1-type questions.

#### **Course Objectives:**

The general objectives of the course include providing the student with:

1. the basis for recognizing with the microscope the characteristic structural features of the cells, tissues, and organs of the body,

2. the ability to associate these microscopic features with their specific functional significance in cells, tissues, and organs (thus providing the structural basis for physiology), and

3. the structural framework for studies in pathology and other investigations of abnormal tissue. <u>Specific</u> objectives for each topic are listed with each lab in the *Laboratory Guide*. Lecture and lab examinations will assess the student's achievement of these objectives.

#### Examinations:

There will be three lecture and three visual exams, and a comprehensive final exam given throughout the IUSM statewide covering fundamental aspects of all the material, conceptual and visual. Each of the lecture and visual exams is worth 100 points and the comprehensive final is worth 150 points (determining 20% of the final grade). Note that all the examinations are cumulative in the sense that understanding the histology of organ systems studied later in the course depends heavily on basic concepts learned earlier. Note too that the final exam is a 2-hour standardized test obtained from the National Board of Medical Examiners and consists of "clinically based" questions covering both written and visual material and integrating cell biology / histology with other basic sciences.

## Grading:

Medical students will receive grades of H (likely 10-20% of the students), HP (30-50%), P (40-60%), or F (very few). Graduate students will have an alternative final exam and will receive standard grades (A, B, etc.). Students have different learning styles and specialties. If histological concepts or understanding laboratory slides are difficult to master despite a reasonable effort, see the Course Director or other instructor for suggestions. We want you to learn the material and succeed!

## Competencies included in the course:

During this course each medical student will also be assessed regarding their level of achievement in the Competencies listed below. See handout on the IUSM Undergraduate Competencies for information as to what is expected for Level 1 achievement in these Competencies.

1. Effective Communication (This can involve all forms of communication between student and instructors, but especially important are lab discussions.)

4. Lifelong Learning (Knowledge gained in this and other first-year courses will form the basis of your evolving understanding of medical problems.)

8. Problem Solving (This will be based primarily on progress and eventual mastery of materials in the course's lab, aided by discussions with instructors.)

9. Professionalism & Role Recognition (This will involve patterns of behavior toward instructors and other students in the classroom and laboratory settings.)

# A560 Lecture & Lab Schedule 2009

DATE	TOPIC OF LECTURE & LAB	INSTRUCTOR	WHEATER
T 8/18	Intro; Techniques; Cell signaling cell death (2 lecture Cytoskeleton; nucleus & cell cycle (2 lectures)	s) JGF	Ch. 1 & Appendix
R 8/20		JGF	Ch 1 & 2
T 8/25	Secretion; membranes; organelles (2 lectures)	JGF	Ch 1 & 2
R 8/27	Epithelia and glands	JGF	Ch 5
T 9/1	Connective tissues	JGF	Ch 4
R 9/3	Cartilage & bone	JGF	Ch 10
T 9/8	Bone formation & joints	JGF	Ch 10
R 9/10	Blood cells & hemopoiesis	JGF	Ch 3
T 9/15 R 9/17	FIRST LECTURE AND LAB EXAMS (through joints) Muscle tissue	JGF	Ch 6
T 9/22	Cardiovascular system	JGF	Ch 8
R 9/24	Nerve tissue	ALM	Ch 7
T 9/29	Special sense organs	ALM	Ch 7, 20, 21
R 10/1	Immune system & lymphoid organs I	ALM	Ch 11
T 10/6 R 10/8	FALL BREAK Immune system & lymphoid organs II	ALM	Ch 11
T 10/13	Skin	ALM	Ch 9
R 10/15	Respiratory system	ALM	Ch 12
<b>T 10/20</b>	SECOND LECTURE AND LAB EXAMS (through Ski	n)	Ch 13 & 14
R 10/22	Upper gastrointestinal tract	ALM	
T 10/27	Lower gastrointestinal tract	ALM	Ch 14
R 10/29	Digestive glands	ALM	Ch 15
T 11/3	Urinary system	ALM	Ch 16
R 11/5	Neuroendocrine system	ALM	Ch 17
T 11/10	Endocrine system	ALM	Ch 17
R 11/12	Male reproductive system	ALM	Ch 18
T 11/17	Female reproductive system I	ALM	Ch 19
R 11/19	Female reproductive system II	ALM	Ch 19

#### **T 11/24** R 11/26 THIRD LECTURE AND LAB EXAMS THANKSGIVING

Comprehensive Statewide Final Cell Biology & Histology Exam: Week of 11/28, day and time to be announced

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	82.86%	14.29%	2.86%	-	-	4.80
My instructor presented information	85.71%	14.29%	-	-	-	4.86
in a clear and organized manner.						
My instructor welcomed questions	94.29%	5.71%	-	-	-	4.94
from students and responded						
appropriately.						
My instructor developed an	91.43%	8.57%	-	-	-	4.91
atmosphere of respect and trust in the						
classroom.						
My instructor cleared up points of	77.14%	22.86%	-	-	-	4.77
confusion for me.						

## A560: Cell Biology & Histology student evaluations

Strengths:

- Polly was very supportive and encouraging throughout the course, and always made herself and resources very accessible.
- She was an awesome AI. Highy organized and about as helpful as one can get. We all love Polly! Very respectful and helpful.
- Polly was well organized and well prepared each class. She was also always available for questions.
- The practice quizzes were great. Lab powerpoints were also very useful. The instructor was great about always answering questions and helping us. I could tell she wanted to help us succeed in the class.
- <u>Always</u> well prepared and confident in her understanding of the material. Whe she didn't know, she didn't pretend to know, which I respect.
- Polly was such a great teacher! I don't know how I would have survived without her lab intros. They were indispensible for me in this class & I appreciate the time she took to put them together. She explained things clearly & helped me detect subtle differences in structures.
- Polly did a great job. Her intros were very clear and she was well prepared. I especially like the quizzes throughout the semester. They were a good tool in class and while studying for exams.
- Polly was <u>amazing</u> her pre-lecture slides were always <u>very</u> helpful & she would even go above her responsibility & make <u>very helpful</u> practice quizzes for us. I found this class to be difficult but she was definitely helpful when I was confused.

Improvements:

- I would suggest slowing down a little on the lab intros. They are usually completed in 5-10 minutes and they should take around 20.
- To improve, I think it would be very helpful to have a slide from your powerpoint up during the entire lab, that could clarify difficult points, features, or just explain where and what to look for. (e.g. a slide showing the differences in tubules for the kidney lab.

Hi Polly,

I just wanted to say thank you for teaching our Histology class this semester. Without you, I couldn't have pulled through after a rough start, and I truly appreciate that. You will be so great wherever you go next, and we were very lucky to have you for our first year of medical school!

Thank you again—and have a great holiday!

Sincerely,





## A464: Human Tissue Biology

#### Course explanation:

This is the advanced histology course for undergraduates. It is mostly composed of juniors and seniors that are continuing on to graduate, medical, dental, or optometry school. The lecture has over a hundred students that are then broken down into four labs of around thirty-two students. The lab is run exactly like A560: Cell Biology & Histology and covers much of the same material. Assessment is based on four lecture exams and four lab exams. Lecture exams are all multiple choice and lab exams are mostly identification.

My role for this course was one of four lab instructors. I still gave short introductions and then circulated for questions as in A560. I still had a hand in writing, setting up, and grading the exams, however, now this was in coordination with other instructors. While this does minimize the number of questions that a single individual is required to write or the number of times that he/she needs to help set up, I remain undecided on whether or not the amount of total work required is actually diminished.

#### Reflections:

I greatly enjoyed teaching this class. Since I had just taught the medical course the semester before, I was very familiar with the equipment and quite comfortable with the material. In addition, most of my students were already accepted into the postgraduate institution of their choice by midterms. This meant that the attitude of the class was quite relaxed, yet most students still saw the value in the material as it would help the in their first year as medical/dental/graduate students. Evaluations reflected this outlook well.

# Human Tissue Biology (A464) Spring Semester 2010

Lectures: Tuesday and Thrusday, 9:05 – 9:55, Chemistry 033

**Labs:** Tuesday and Thursday, 10:10 - 12:05, 12:10 - 2:05, 2:10 - 4:05, 4:10 - 6:05, all in Jordan Hall 001

Instructors:	Dr. Anth	ony L. Mescher	Dr. Alison Doubleday			
	Office: J	ordan Hall 202	Office: Jordan Hall 002			
	855-4692	3	856-1063			
mescher@indiana.edu		almfrenc@indiana.edu				
	Office h	ours: T, Th 10-12:00, 1-4:00	Office hours: TBA			
Associate Instr	uctors:	Polly Husmann (phusmann	<u>(@indiana.edu</u> ) 10:10 lab			

Associate instructors: Polly Husmann (<u>prusmann@indiana.edu</u>) 10:10 lab Jenny Eastwood (<u>jvanduse@indiana.edu</u>) 12:10 & 2:10 labs Todd DeJulio (<u>tdejulio@indiana.edu</u>) 4:10 lab

**Books required:** Junqueira's Basic Histology, 12<sup>th</sup> edition, Anthony L. Mescher Human Tissue Biology: Laboratory Guide, 2010, Anthony L. Mescher

#### E-library reserves: <u>http://ereserves.indiana.edu/eres/coursepage.aspx?cid=1228</u> (Password is "tissue")

#### Learning objectives:

At the end of this course students will be able (1) to recognize and describe the characteristic microscopic features of the major cells, tissues, and organs of the human body, (2) to analyze the physiological (functional) significance of these cell and tissue features and state how the functions relate to structure, (3) to describe basic aspects of development, repair, and regeneration in certain tissues, and (4) to describe certain specific problems of tissue biology associated with certain important human diseases. Specific Objectives for each laboratory are also provided in the Laboratory Guide. Maximal success in reaching these Learning Objectives will be achieved by (1) regular attendance of lectures and labs and (2) preparation for the day's topic by prior completion of the assigned readings from the texts and material on electronic reserves.

#### **Examinations:**

How well you have mastered the Learning Objectives will be assessed with four exams on lecture material and four on lab material. To help you integrate lecture material with the slides studied in the lab, the lecture and lab exams for a set of topics will normally be given on the same day. **Each exam will be worth 100 points.** Lecture exams will consist of various types of short answer questions, primarily multiple-choice, but possibly also matching, fillin the blanks, etc. Lab exams will have 50 short answer questions based on specimens viewed by light microscopy or electron microscopy. The average of all eight exams will determine your grade for the course. The average on all the exams last year was approximately 80%, which was equivalent to a final grade of B. **Please feel free to consult the Instructors, AI, or UTAs to discuss the material. We want to help you do your best.** 

# Human Tissue Biology (A464) Schedule for Lecture / Laboratory Topics and Exams Chapters are assigned readings from Junqueira

# Dort I.

Tues. 1/12	Introduction to course and microscopic methods used to study tissues Chapter 1
Thurs. 1/14	Cytoplasmic components: structures and functions Chapter 2
Tues. 1/19	Nucleus, cell division and cell death Chapter 3
Thurs. 1/21	Cell junctions; features and types of epithelia Chapter 4
Tues. 1/26	Secretory epithelia and glands Chapter 4
Thurs. 1/28	Extracellular matrix and types of connective tissue Chapters 5 & 6
Tues. 2/2	Muscle Chapter 10
Thurs. 2/4	FIRST LECTURE AND LAB EXAMS
<b>Thurs. 2/4</b> <b>Part II:</b> Tues. 2/9	FIRST LECTURE AND LAB EXAMS Blood cells and their formation Chapters 12 & 13
Part II:	Blood cells and their formation
<b>Part II:</b> Tues. 2/9	Blood cells and their formation <b>Chapters 12 &amp; 13</b> Heart and circulatory system
<b>Part II:</b> Tues. 2/9 Thurs. 2/11	Blood cells and their formation <b>Chapters 12 &amp; 13</b> Heart and circulatory system <b>Chapter 11</b> Immune (lymphatic) system
<b>Part II:</b> Tues. 2/9 Thurs. 2/11 Tues. 2/16	Blood cells and their formation <b>Chapters 12 &amp; 13</b> Heart and circulatory system <b>Chapter 11</b> Immune (lymphatic) system <b>Chapter 14</b> Central nervous system
<b>Part II:</b> Tues. 2/9 Thurs. 2/11 Tues. 2/16 Thurs. 2/18	Blood cells and their formation <b>Chapters 12 &amp; 13</b> Heart and circulatory system <b>Chapter 11</b> Immune (lymphatic) system <b>Chapter 14</b> Central nervous system <b>Chapter 9</b> Peripheral nervous system

Chapter 23 (Eye)

Thurs. 3/4	Skin Chapter 18
Tues. 3/9	SECOND LECTURE AND LAB EXAMS
<b>Part III:</b> Thurs. 3/11	Cartilage and bone Chapters 7 & 8
3/13 - 3/20	Spring Break! Have a good one!!
Tues. 3/23	Bone formation Chapter 8 (pp. 128 – 33)
Thurs. 3/25	Teeth and tooth formation Chapter 15 (pp. 254 – 59)
Tues. 3/30	Digestive tract, Part 1 Chapter 15 (pp. 249 – 59)
Thurs. 4/1	Digestive tract, Part 2 Chapter 15 (pp. 259 – 280)
Tues. 4/6	Digestive organs: Glands, liver and gall bladder <b>Chapter 16</b>
Thurs. 4/8	THIRD LECTURE AND LAB EXAMS
<b>Part IV:</b> Tues. 4/13	Respiratory System Chapter 17
Thurs. 4/15	Urinary system Chapter 19
Tues. 4/20	Endocrine system Chapter 20
Thurs. 4/22	Male reproductive system Chapter 21
Tues. 4/27	Female reproductive system, Part 1 Chapter 22 (pp. 388 – 95)
Thurs. 4/29	Female reproductive system, Part 2 Chapter 22 (pp. 395 – 411) Note: FOURTH <u>LAB</u> EXAM will happen today.

Tues. 5/4, 10:15 AM FOURTH <u>LECTURE</u> EXAM (AS PER University Schedule, but only one hour)

## A464: Human Tissue Biology evaluations

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	86.36%	13.64%	-	-	-	4.86
My instructor presented information in	82.61%	17.39%	-	-	-	4.83
a clear and organized manner.						
My instructor welcomed questions	86.96%	13.04%	-	-	-	4.87
from students and responded						
appropriately.						
My instructor developed an atmosphere	81.82%	18.18%	-	-	-	4.82
of respect and trust in the classroom.						
My instructor cleared up points of	81.82%	18.18%	-	-	-	4.82
confusion for me.						

Strengths:

- <u>Very</u> knowledgeable, very helpful, very nice
- Polly did a great job of posting practice quizzes and lab demos. She was a great help whenever needed. She did great and was very helpful.
- Very knowledgeable about the topic and helpful!
- She explained things clearly.
- Polly was helpful, patient, respectful, knowledgeable, nice
- She was a great teacher overall. I would definitely take a class of hers again and she should/could teach big lectures as the primary instructor. She's great.
- She was always there to answer questions, and always happy to take the time to explain things multiple times.
- Very friendly and easy to understand
- Polly really explained that material clearly and gave several examples of characteristics to distinguish different tissues, which REALLY helped me when preparing for the exams. She did an excellent job at clearing up any questions I had.
- She answered any questions I had and explained the material well.
- I thought the practice quizzes and example questions were very effective. It would have been good to have them from the start. I enjoyed the class and thought the lab was very effective.
- She has a good way of presenting material so we can remember it. Practice questions were awesome.
- Polly did a very good job explaining the material and preparing the powerpoints for lab. The extra quizzes before the lab exams were good.
- She was very helpful in lab and prepared slides and practice questions to help us learn.

Improvements:

- Nothing. Although there should be a larger break between lecture and lab tests.
- Intros a little slow, wasn't as clear about what we would have to know/not.

## A215: Basic Human Anatomy

#### Course explanation:

This is an undergraduate course that is required for all nursing and health, physical education, and recreation (includes exercise science, kinesiology, athletic training, etc.) students. This is a five credit hour course that meets for lectures on Monday, Wednesday, and Friday as well as two lab meetings a week (Monday/Wednesday or Tuesday/Thursday). Assessment is based on four multiple choice lecture exams and four lab exams based on identification. The course involves over four hundred students that are then separated into lab sections of approximately thirty-six students. This results in twelve lab sections each semester and two sections during the second summer session (late June – early August) each year, which are all overseen by a lab director. I was involved in one section during the 2008 fall semester and the 2009 spring semester. I am also scheduled to teach one during the summer and fall 2009 semesters.

Teaching a lab section for A215 involves a fifteen to twenty minute introduction Powerpoint (one is provided for you, but they are often not the best) each lab day (split between two AIs) followed by answering questions and demonstrating structures on one of two (male and female) prosected cadavers. We are also expected to help set-up and grade lab exams, proctor lecture exams, and hold review sessions. Included in this portfolio are the syllabus and student evaluation summaries from fall 2008 and spring 2009 semesters.

#### Fall 2008 reflections:

I found my first semester of teaching A215 to be incredibly frustrating. This is a different type of teaching environment than any others in which I have worked. With so many sections, each is attempted to be standardized though this is incredibly difficult to accomplish. In addition, learning to teach for a test that I have not been involved is making is a skill that I have found extremely difficult. It is my experience that this often results in students missing points due to differences in terminology or confusion between the manner in which material was taught and the manner in which it is tested. With additional practice, however, this has become much less of an issue. Furthermore, it helped demonstrate to me the importance of advocating for your students when those situations occur due to the teaching methods employed.

The overall impression that I received from the student evaluations for fall 2008 was that a little slower and louder is always beneficial and some new Powerpoints may be in order. With this in mind, I have redone another five or six presentations for this semester's (spring 2009) A215 section in the hopes of improving that aspect of the lab section. In addition, I have attempted to spend more time quizzing students to make sure that they understand the material and are not just zoning out even if the introductions do take a little more time.

#### Spring 2009 reflections:

Overall, the second semester of teaching A215 seemed to go much more smoothly than the first. By around the second exam I began to realize that I was definitely more comfortable teaching to exams made by the course director now that I had a better understanding of what would be on them and how the questions would be asked (not to say that we agreed perfectly on everything, but still improvement was occurring). This semester also demonstrated to me the personality differences that can exist between two classes that are made up of largely the same demographics. My first semester

with A215 was a much more outspoken group of students, while this semester was a good deal more quiet. This caused me some concern at the beginning of the semester that we were not getting through to them or that they simply didn't like us, but the grades and student evaluations would come to show that this was not the case.

For the most part, I was very happy with this semester's student evaluations. The students appear to be responding well to the powerpoints that I had made and are encouraging me to continue to make more. In addition, most of the comments on being able to hear the presentations had disappeared. This leaves the main concern of slowing down, which continues to be a struggle with this amount of material and having some students that learn better from other approaches than just lecturing. Nonetheless, this will remain as one of the primary concerns for the summer and fall sections. Furthermore, adding in some supplementary review either at the end of the introduction or during the days just before a test (or perhaps both) is another area that I would like to explore.

#### Summer 2009 reflections:

Teaching A215 in the summer was somewhat different from the previous two semesters both in scheduling and in demographics. In the summer A215 lab meets Monday through Thursday for eight weeks. This means the material is presented even more quickly than it is during the regular school year, which makes the class even more difficult. Fortunately, the difference in demographics helps with this not becoming an insurmountable obstacle. During the summer, the students are a little more experienced with the idea of college and this is shown in how they prepare for and perform during the class. The nice weather still makes it difficult for students to stay in class the entire time, but many of them have developed the necessary study habits to do well in the course.

While my averages did go down a bit during this session, I think this may have been the result of the individuals in the class as was also evident in the comments provided. Even though the evals were still distributed during the lab time, there were many fewer comments than the previous two semesters. This may be personality differences or it may also be due wanting to be done with it either to get back to the material that is coming at you even more quickly or to be done with the class for the day. Nonetheless, I was happy to see fewer people commenting about my speed during the intros. I'll have to wait and see if that is confirmed with more comments (or lack thereof) during the regular semester.

#### Fall 2009 reflections:

This semester was a different experience, yet again. While I am becoming incredibly comfortable with the material, this was the first time that I had taught with another AI that had never taught anything before. She was a grad student from Taiwan who does research in bone cancers and had taken A215 over the summer, but was not incredibly comfortable with the material or being in front of a crowd. This gave me an opportunity to see what mentoring might be like. Overall, it was an enjoyable experience and, by the end of the semester, she was doing quite well.

I found the evaluations from this class to be incredibly frustrating. It seems that for everything that students thought I was doing well, another student would then write that I had not done that well. For example, some students would say that I was always willing to help and another student states that I need to be more eager to assist. Some commented that they liked the 'tricks' or hints I would give them to help remember things while another states that I never did that like some other AIs do. I'm fairly confident that I taught similar 'tricks' to everyone during the introductions, but perhaps I need to be more explicit

# A215 BASIC HUMAN ANATOMY SYLLABUS OF INFORMATION AND POLICIES SPRING 2009

#### **COURSE DIRECTOR:**

Dr. Steve Dougherty Jordan Hall 003 855-9742 or 855-0616 Email: <u>gdougher@indiana.edu</u> Office hours: By appointment

# COURSE COORDINATOR and LABORATORY DIRECTOR:

Mr. Jim Heersma Classroom Building 126 855-0948 Email: <u>jheersma@indiana.edu</u> Office hours: By appointment

# ASSISTANT LABORATORY DIRECTOR:

Mr. Jim Knowlton Jordan Hall 003 855-9742 Email: jrknowlt@indiana.edu Office hours: By appointment

## LAB ASSOCIATE INSTRUCTORS:

LECTURE UTA: Wendi Robinson Email: <u>wmrobins@indiana.edu</u> Office hours: To Be Announced

LAB UTA: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# **ANATOMY OFFICE:**

Jordan Hall 104 855-0616

## **TEXTBOOKS:**

<u>Human Anatomy</u>, Michael McKinley and Valerie Dean O'Loughlin, 2nd Edition, 2008 <u>A215 Laboratory and Study Guide</u>, Fall 2008

COURSE WEBSITE URL: http://www.indiana.edu/~anat215/

#### **QUESTIONS** – Whom to contact:

Contact ASSOCIATE INSTRUCTORS (AI's) about: -questions over lab material -lab exam questions or scoring Contact the LAB DIRECTOR about -rescheduling (or making up missed) lab exams -posted exam scores and grades -unresolved lab problems or questions Contact the LAB DIRECTOR (or the ASSISTANT LAB DIRECTOR) about: -rescheduling labs due to conflicts -making up missed labs -questions over lab material Contact the COURSE DIRECTOR about: -rescheduling lecture exams; making up missed lecture exams -questions about lecture material -lecture exam questions -withdrawals and incompletes

# **COURSE DESCRIPTION:**

This course presents a systemic approach to the study of the human body. Lecture presentation begins with an introduction of anatomical terminology and an overview of cellular processes and tissue classification. Students then learn the gross and microscopic anatomy of the following systems: integumentary, skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary, and reproductive. The laboratory component of the course generally parallels and reinforces lecture concepts through the use of models, histological slides, skeletal materials and cadaver demonstration. Lectures meet three times weekly. Students also attend two 2-hour labs per week.

# LEARNING GOALS AND OBJECTIVES:

## to understand the hierarchy of structural organization:

- describe the different levels of structural organization
- to become familiar with anatomical and medical terminology:
- dissect out the individual components of a term to determine its meaning

# to understand the relationship between cellular structures and function:

- relate the anatomical construct to the primary function of cellular structures
- identify (by light microscopy or by description) specific cellular types and their functions
- describe and identify (by light microscopy) the stages of cell division

# to develop an understanding of different tissue types and their intimate relationships:

- relate the functioning of different cellular types to the human system in which they are located
- demonstrate the understanding of how cells are organized to form specific tissue types
- describe the structure, location, and function of specific tissue types
- identify these tissues by description or by light microscopy

# to know the structure of the integumentary system:

- identify (by light microscopy or by description) the different tissues and structures comprising the skin
- describe the organization of the skin

# to identify and understand the interplay of the components of the skeletal system:

- describe the associated structures of a given bone
- identify the microscopic organization of bone tissue either by description or by microscopy
- identify bones on models or as preserved specimens
- describe the processes of bone growth and repair

# to know the structure of and the movement at an articulation:

- describe the generic structure of a synovial joint
- relate the movement at an articulation to its anatomical construct
- demonstrate the understanding of the differences between the fibrous, cartilaginous, and synovial joints

## to understand the action and anatomy of a skeletal muscle:

- discuss the gross structure of the skeletal muscle
- discuss the microscopic structure of the skeletal muscle cell
- describe (briefly) the physiology of muscle contraction
- identify the microscopic components of a muscle cell
- identify on models or on the cadaver the major muscles of the body
- describe the action(s) of the major muscles of the body

# to demonstrate knowledge of the external and internal anatomy of the nervous system:

- identify similarities and differences between the structural components of the nervous system
- identify the microscopic components of the nervous system
- relate nervous system structures to their basic function

# to demonstrate knowledge of the endocrine system and to relate it to the nervous system as a means by which it directs the functioning of the human body:

- identify the components of the endocrine system on models or preserved specimens
- identify the microscopic anatomy of endocrine organs
- discuss the functional importance of the major endocrine organs

# to identify the components of the circulatory system, including blood, arteries, veins, and the heart:

- demonstrate the ability to trace the flow of blood through the heart
- identify on models or preserved specimens the major arterial and venous branches in the human body
- describe the anatomy of a blood vessel wall

• identify by description or by light microscopy the blood cells and describe their primary function to demonstrate knowledge of the lymphatic system:

- identify by description or by light microscopy the organs of the lymphatic system
- describe the primary function of the major lymphatic organs
- identify on models or preserved specimens the major organs of the lymphatic system

to demonstrate knowledge of the anatomy of the respiratory, digestive, and urinary systems:

- identify by description or by light microscopy the major organs of these systems
- describe (briefly) the primary function of the major organs of these systems
- identify on models or preserved specimens the major organs of these systems
- complete a blood flow pathway through the kidney
- complete a urine flow pathway from the kidney to the exterior of the body
- complete an air flow pathway through the respiratory system
- describe the anatomy of the major organs of each of these systems

# to know the male and female reproductive anatomy:

- identify by description or by light microscopy the major organs of the reproductive systems
- describe (briefly) the primary function of the major organs of the reproductive systems
- identify on models or preserved specimens the major organs of the reproductive systems
- describe the anatomy of the major organs of the reproductive systems
- complete a flow diagram of sperm movement from the seminiferous tubule to the exterior of the body
- relate the process of follicle development to the anatomy of the ovary
- discuss the process of sperm development

# **ALL STUDENTS:**

We'd like everyone strive for excellence, so we want to make you aware of a unique opportunity. The Student Academic Center offers a semester-long, one-credit, pass/fail course that can help you do well in this class and others. The course, Education X156, **College and Life Long Learning**, teaches a wide range of useful skills, including how to manage time, take effective notes, how to do well on essay tests, and how to succeed during finals week. The course is a series of workshops that meet every Tuesday 7:00–8:00 PM (at Teter Academic Support Center, TE F258) or every Wednesday 7:00-8:00 PM (in Ballantine Hall, BH 231), and one-hour individual sessions with graduate A.I.s and honor undergraduates are scheduled every week to help you get the most out of the material. For more information about these courses, or other services the Student Academic Center has to offer, visit their website at: <a href="http://www.indiana.edu/~sac/">http://www.indiana.edu/~sac/</a>.

# WITHDRAWALS AND INCOMPLETES:

We will adhere to University policies. Under Indiana University policies:

- "A grade of Incomplete (I) may be given only when the work of the course is substantially completed and when the student's work is of passing quality." (*Indiana University Bulletin, College of Arts & Sciences*). If a student is given an incomplete, the existing exam grades remain "on the books" for the student and the student may make up only the material he/she had to miss.
- Any student with a grade of I on record for A215 may remove that grade <u>ONLY</u> by arrangement with the current course instructor; <u>re-registration</u> for A215 by any such student <u>to remove an I is invalid</u>.
- If your dean permits you to withdraw after the date for an automatic **W**, the course director will give you a **W** (if your grade is **D** or better) or an **F** (if your grade at that point is an **F**).

## EXAMS:

Each lab or lecture exam will deal only with the material covered since the last exam (see schedules). Exams, including the final, are <u>not</u> cumulative.

Note the dates and times of the lecture exams. The first three are given at <u>4:40 on Friday afternoons</u> since that is the only reasonable time when we can have enough large lecture rooms at the same time and without conflicts with other scheduled classes you may have. <u>There will not be a lecture on the Friday of an exam</u>. This time period will be used for reviewing lecture material. The course director will be in the classroom during that time to answer your questions.

<u>Please note the date and time of the fourth exam</u> during final exam week. <u>Make sure that you do not have</u> <u>other final exams scheduled for that time</u>; <u>we will NOT reschedule your fourth A215 exam</u> because another of your exams is scheduled at the same time!

Lecture exam rooms are assigned by lab section. Unless later changes are announced, <u>you MUST take</u> lecture exams with your lab section as follows:

•	Lab Sections 5101-02, 5104 (MW 10:15 am, 12:15 & 4:15 pm)	Morrison 007
•	Lab Sections 5103, 5108-10 (MW 2:15 pm; TR 10:00 am, 12:00 noon & 2:00 pm)	Woodburn 100
•	Lab Sections 5105-06 (MW 6:15 & 8:15 pm)	Jordan 124
•	Lab Sections 5107, 5111, 13658 (TR 8:00 am, 4:00 & 6:00 pm)	Fine Arts 015

One of your AI's will be present in the exam room, and you will give your finished exam directly to your AI.

### EXAM RESULTS AND GRADES:

- Grading: I. The lecture contribution to the grade will be determined based on the following point total:
   400 points: Four 100-point exams will be given. These will be one-hour, 50 questions, 2 points per question, multiple-choice exams. (Lecture exams are not returned to students.)
  - II. The <u>laboratory contribution</u> to the grade will be determined based on the following point total: 400 points: Four 100-point exams will be given. These exams will be less than one hour, with 40 questions at 2 points per question. The point total (out of 80) will be multiplied by a factor of 1.25 in order to make the test worth 100 points. The test will be fill-in-the-blank identification with questions on microscopic observation, models and/or preserved specimens. (Answer sheets will be returned to students in lab.)

Total Points = 800 (50% from lecture and 50% from lab)

At <u>EACH exam</u>, lecture <u>and</u> lab, you will have to enter in pencil both your name and your 10-digit Indiana University ID# on a standardized exam scan sheet to permit recording of your score for that exam. <u>If you fail to</u> <u>enter ("bubble in") your ID# correctly at an exam</u>, your score for that exam will be reduced by 2 points (out of the 100 possible) because your error has considerably slowed the recording and posting of scores for the whole class! Therefore, be sure you know your ID# and enter it carefully at each exam.

The correct answers for all tests will be posted in or near the laboratory. If you have any question about the answer to an exam question, bring it to the attention of the Course Director (if a lecture exam) or the AI (if a lab exam) within <u>ONE WEEK</u> after the grades are posted. After that, your score is final.

Scores for each exam will be posted on the Anatomy A215 web page (http://:www.indiana.edu/~anat215/). If you believe any score is posted incorrectly, contact the Lab Director within **ONE WEEK** of posting to check if, in fact, an error has been made. After that, scores are final.

After each exam, a cumulative grade scale (the sum of all lab and lecture exam cut-offs to date) will also be posted, indicating your standing at that point. The grade scale determining <u>final</u> course grades will <u>not</u> be higher than the cumulative scale out of 800 possible points ("projected" below) after all 8 exams. Thus, final grades are directly related to exam "grades," but <u>a grade is **NOT** recorded for you for each exam, only a score</u>! Grade ranges are:

For Exams	Grade	"Projected" Final Grade Scale
97.0 - 100 points	A+	776.0 - 800.0 points
93.0 - 96.9 points	А	744.0 – 775.9 points
90.0 - 92.9 points	A	720.0 – 743.9 points
87.0 - 89.9 points	B+	696.0 – 719.9 points
83.0 - 86.9 points	В	664.0 – 695.9 points
80.0 - 82.9 points	B	_ 640.0 - 663.9 points
77.0 - 79.9 points	C+	616.0 - 639.9 points
73.0 - 76.9 points	С	584.0 – 615.9 points
70.0 - 72.9 points	_ C	560.0 – 583.9 points
67.0 - 69.9 points	D+	536.0 - 559.0 points
63.0 - 66.9 points	D	504.0 - 535.9 points
60.0 - 62.9 points	_ D	480.0 – 503.9 points
00.0 - 59.9 points	F	000.0 – 479.9 points

<u>Actual scores used as final grade cut-offs</u> will depend on the distribution of final point totals and <u>will NOT</u> <u>be known until all exams have been taken</u>. They may be lower than the projected final grade scale, but you should <u>assume they won't change</u>!

Final course grades are assigned objectively and without regard to a student's academic standing or to the requirements of other departments or programs. It is each student's responsibility to see that she or he is safely above any minimum requirements that may apply. Appeals regarding a student's failure to meet such requirements should be directed to the department or program that demands them and not to the staff of A215. No extra credit projects to raise a final grade will be accepted.

If, on your first lecture or lab exam, you get a grade lower than you need in the course, do something about it right away. The rest of the exams will not be easier. Go over your exam carefully to see why you missed the questions. Do this after every exam, but especially if your score is less than expected. Your A.I.s, the lab director and the course director are willing to help you. Also contact the Student Academic Center if you have difficulties studying or test-taking. Don't wait until just before the last exam to see how you can improve your grade!

If you have a learning disability that justifies your taking of lecture and/or lab exams under special conditions, and you wish to do so, the Course Director and or/Lab Director must have documentation of this from the I.U. Office of Disability Services for Students (855-7578) by one week before the first such exam.

### **RESCHEDULING OF LECTURE (LAB) EXAMS DUE TO CONFLICT OR EMERGENCIES:**

#### **Documentation:**

We will consider rescheduling an examination for a student **ONLY** if the student provides documentation written by an official (e.g. coach, physician, clergy, etc.) on official letterhead. The reason for the absence must be given although details (e.g. exact nature of the illness) need not be stated. The course director will decide whether the request justifies rescheduling of a lecture exam, the lab director of a lab exam.

If the student knows ahead of time that there will be a conflict with a lecture exam, the documentation must be in the course director's hands by 11:00 a.m. on the Friday **ONE WEEK** before the exam. The student will be advised the following Monday if he/she will be allowed to reschedule the exam. In case of a lab exam conflict, the lab director must have the documentation at least **ONE WEEK** in advance of the exam in question.

The following are reasons for which rescheduling of an exam will be considered:

- Conflict with participation in a scheduled university academic function, performance or competition (varsity level).
- Exam missed due to conflict with a recognized religious observance for related university policies and procedures, see: <u>http://www.indiana.edu/~deanfac/holidays.html</u>.
- Exam missed due to personal emergency or illness. (NOTE: A letter from the Student Health Office is **NOT** sufficient since they only state you were there. You will need to provide documentation on official letterhead giving information as to why you were unable to take the exam. The letterhead is needed in order to verify the documentation.)
- Exam missed due to emergency of a serious nature (i.e. death or sudden/serious injury or illness) in the immediate family, defined as parent, sibling, child or grandparent.

A student who has <u>missed</u> a lecture or lab <u>exam</u> for either of these last two reasons must <u>contact</u> respectively, the course director or the lab director <u>AS SOON AS POSSIBLE</u> after the scheduled exam time. Exams missed for any other reason cannot be made up and a grade of "F" (zero points) will be recorded. Any student may contact the "Student Advocate Office" if the student feels that her/his reason for missing an exam is justified but not covered in these guidelines.

<u>Make-up lecture examinations</u> will be **ESSAY** format (that is, written, NOT multiple choice). The reason for the essay format is so that students will not have the unfair advantage of using another student's experiences on the original test as a way to improve their own performance. The make-up will be given no later than the **Thursday morning following** the missed exam. If possible, all students will take the test at the same time. The exact time will be set for each exam to avoid conflicts.

The nature and time of rescheduled or make-up <u>lab exams</u> will depend on the type of conflict or emergency, and must be arranged with the lab director.

**IMPORTANT:** <u>Students who are late for their lab exam without a valid excuse (see above) will NOT</u> <u>be permitted to take or make up the exam</u>, so be sure you know your scheduled time for each lab exam and are not late!

#### **LECTURE:**

All questions on the lecture exams will deal with material covered in lecture. Thus, it is to your advantage to attend lectures. There will also be a variety of important announcements that you must not miss.

You will understand the material much better during lecture if you read the pages indicated on your schedule. In particular, study the figures in the book; they are generally very good and will help you understand the material. You might consider bringing your book to class since many diagrams used in lecture are taken from the text.

Lecture outlines and individual grade information may be accessed on the World Wide Web. In order to access your A215 grades from the WWW page, you must have a valid I.U. network I.D. The URL is: <a href="http://www.indiana.edu/~anat215/">http://www.indiana.edu/~anat215/</a>.

Please note that the lecture outlines DO NOT contain all of the information presented in lecture. Lecture exams routinely have questions on material that is NOT found in the outlines but, rather, was presented verbally in class. Therefore, we stress again, it is to your benefit to attend lectures.

**<u>NOTE</u>**: To avoid disruption of lectures or exams, cell phones, IPODs, MP-3 players, recording devices, etc. must be turned off before you enter the lecture hall or exam rooms, and may not be used there at any time while class or an exam is going on.

#### SAMPLE LECTURE TEST QUESTIONS:

Computer-graded multiple-choice tests will be used for the lecture exams, so read and follow the instructions on the exam. For each question <u>READ THE QUESTION AND CHOICES CAREFULLY</u>! Examples are given below to illustrate the question format. (\* = correct response). <u>OLD A215 EXAMS WILL NOT BE MADE AVAILABLE.</u>

Which muscle flexes the elbow joint?

- a. triceps brachii
- b. anconeus
- c. supraspinatus
- \*d. biceps brachii
- e. deltoid

Which of the following statements concerning mitotic division is FALSE?

- a. telophase follows anaphase
- b. metaphase follows prophase
- \*c. DNA replication occurs during prophase
- d. daughter cells have the same chromosome number as the parent cell
- e. chromosomes move apart during anaphase

## LABORATORY:

#### Attendance:

Attendance is taken at each meeting of lab. Students enrolled in A215 who miss the first two meetings of lab may lose their space in A215 or be assigned a different lab section.

Except for exams, attendance does not itself count toward your grade or absence against it. What you gain by attending is the opportunity to learn on the materials over which you'll be tested.

As a rule, you may attend <u>only</u> the lab section to which you have been assigned. <u>HOWEVER</u>, if you know in advance about a <u>conflict</u> with your lab on a particular day, <u>contact the lab director IN ADVANCE</u> to make other arrangements. If you <u>miss your lab</u> on a particular day for reasons beyond your control, <u>contact the lab director AS</u> <u>SOON AS POSSIBLE</u> to make other arrangements. You cannot make up missed lab time in any other conditions or manner.

#### **Instructors:**

In each lab section, there will be two Associate Instructors (AIs) and one Undergraduate Teaching Assistant (UTA) to assist you in learning and understanding assigned topics and in following the basic instructions in the lab guide.

#### **Materials:**

Be sure to treat all materials in the lab carefully. <u>None</u> of the materials may be removed from the lab. An inventory is taken after each lab section and materials that have been taken will be missed immediately.

Several reference materials for lab (as well as lecture) will be available on reserve in the Life Sciences Library, Jordan Hall, A304. You may access the reserves material electronically at the following URL: <u>http://ereserves.indiana.edu/eres/coursepage.aspx?cid=1260</u>. The password to use is "anatomy" (lower case, no quotation marks around the word).

In addition, photos of some (but not all) of the lab models may be found on our Virtual Lab website, which may be accessed at <u>http://www.indiana.edu/~anat215</u> by clicking the button "virtual lab". Please note that the Virtual Lab should be used as a study aid only and not as a substitute for attending your regular lab sessions.

#### Exams:

The practical exams in all lab sections will be comparable and (unless exceptions are announced in lab) will cover only material presented in the lab guide.

#### Extra Time:

If (optional) 50-minute "open lab" times are to be held on Thursday night and Friday of a particular week, as noted on the Lab Schedule, they will be <u>announced in lecture</u> on the Monday of that week.

Only one (optional) two-hour review session per exam for each lab section will be arranged on the weekend before that exam (see the Lab Schedule). You should, therefore, make full use of your regular lab time. Do not plan to leave town on the weekend before a lab exam if you want to be assured of being able to attend a review session.

# Precaution:

The chemicals used in the preservation of the cadavers, as used in A215 lab, have not been shown to be harmful to individuals, but precautions should still be followed. Because embryos and fetuses are especially sensitive to a variety of chemicals, we advise pregnant students to contact their physicians about the advisability of rescheduling this class for a later semester.

## Some Lab Policies:

- You will use computers in the lab extensively, but you may use them <u>only</u> for A215-related purposes; they are NOT for personal use or for other class work.
- Just as in lecture, to avoid disruption of labs or lab exams, cell phones, IPODs, MP-3 players, recording devices, etc. must be turned off before you enter the laboratory, and may not be used there at any time. **Moreover, taking photographs of any sort in the lab is not permitted.**
- Because we want students to be comfortable over a 2-hour lab period, we permit you to consume drinks (water, soft drinks, fruit drinks) and small snacks in the lab. However, we will suspend this privilege if it is abused, that is, we expect students to act responsibly and to leave behind no trace of such consumption.
- The Lab Guide Introduction summarizes other policies which will be explained in lab.

## TUTORS:

The names and contact information of qualified tutors will be listed on the Anatomy A215 website (click on 'additional links' button and then click on the 'list of tutors' link). In addition, the Anatomy office will have this same list. Some tutors are graduate or medical students in our program. All have a good background to tutor course material. Tutors may **not** accompany you to lab.

# ACADEMIC MISCONDUCT:

This includes, of course, cheating: "A student must not use or attempt to use unauthorized assistance, materials, information, or study aids in any academic exercise..." It also includes interference: "A student must not steal, change, destroy, or impede another student's work" (*Code of Student Rights, Responsibilities and Conduct.*) Therefore, do not remove or damage any of the materials in the laboratory. We adhere to the University's guidelines for penalties and procedures (e.g. notifying the Dean of Students).

## **EVALUATIONS**:

Later in the semester, you will have the opportunity to evaluate the A.I.'s, the laboratory, the course director and the course. This information will be used to improve our teaching skills and the course. Please mention what you like about the course as well as areas where improvements can be made.

# LAST, BUT NOT LEAST:

**Keep this syllabus handy** for later reference if you have a question or problem. If you lose it, you may print off a copy from the A215 website (http://www.indiana.edu/~anat215/).

The large size of this class does <u>not</u> alter the fact that EACH OF YOU deserves individual attention. It <u>does</u> require that YOU, INDIVIDUALLY, take the initiative and ask for individual attention as soon as you have a question, problem, or complaint.

# **GOOD LUCK!**

# A215 - BASIC HUMAN ANATOMY LECTURE SCHEDULE **SPRING 2009**

Lecture Time and Place: M. W. F. - 9:05 AM - 9:55 AM; Woodburn Hall, Room 100. Required text: <u>Human Anatomy</u>, Michael McKinley and Valerie Dean O'Loughlin, 2<sup>nd</sup> edition, 2008 Note the following dates for lecture exams: Friday afternoons at 4:40 PM - February 6, March 6, and April 3. Reviews are held during lecture time on exam days. Final Exam: Tuesday, May 5, 5:30PM-6:30PM. **TOTAL POSSIBLE LECTURE POINTS: 400** (100 pts. per exam)

<u><b>DATE</b></u> 01/12 01/14	TOPIC Introduction Cell	<u>СНАРТ</u> 1 2	<b>(ER</b> (pages) (2-16) (23-46)
01/16	Cell Division	2, 3	(46-49), (56-58)
01/19 01/21 01/23	<b>No Classes - Martin Luther King Jr. Day</b> Tissues I Tissues II	4 4	(81-95) (95-112)
01/26 01/28 01/30	Integumentary System Bone I Bone II	5 6 6	(119-134) (146-155) (155-160)
02/02 02/04 02/06	Articulations Myology Review	9 10	(251-263) (288-301)
02/06	EXAM I: Introduction through Articulations		
02/09* 02/11 02/13	Muscles of Head, Neck & Trunk Muscles of Upper Limb Muscles of Lower Limb	11 12 12	(321-327, 330-349) (353-374) (374-392)
02/16 02/18 02/20	Nervous System I: General Nervous System II: General Nervous System III: Spinal Cord	14 14, 15, 1 16	(414-425) 16 (428-434), (442-444), (511-512) (485-491)
02/23 02/25 02/27	Nervous System IV: Brain Stem & Cerebellum Nervous System V: Forebrain & Receptors Nervous System VI: Eye	15 15, 19 11, 19	(446-452, 463-468) (452-463), (560-562, 564-567) (328-330), (571-578)
03/02 03/04 03/06 02/06	Nervous System VII: Ear Nervous System VIII: Cranial Nerves Review	19 15	(584-598) (470-479)
03/06	EXAM II: Myology through Nervous System V		
00/00		40	(101 500)
03/09 03/11** 03/13	Nervous System IX: Spinal Nerves Nervous System X: Autonomic N.S. Circulatory System I: Blood	16 18 21	(491-508) (538-550) (636-651)
03/11**	Nervous System X: Autonomic N.S.	18	(538-550)
03/11** 03/13	Nervous System X: Autonomic N.S. Circulatory System I: Blood	18	(538-550)
03/11** 03/13 03/14-03/22 03/23 03/25 03/27 03/30 04/01 04/03	Nervous System X: Autonomic N.S. Circulatory System I: Blood SPRING BREAK Circulatory System II: Vessels Circulatory System III: Heart Lymphatic System Respiratory System I Respiratory System II Review	18 21 23 22 24 25 25	(538-550) (636-651) (682-689) (655-671)
03/11** 03/13 03/14-03/22 03/23 03/25 03/27 03/30 04/01	Nervous System X: Autonomic N.S. Circulatory System I: Blood SPRING BREAK Circulatory System II: Vessels Circulatory System III: Heart Lymphatic System Respiratory System I Respiratory System II	18 21 23 22 24 25 25	(538-550) (636-651) (682-689) (655-671) (723-739) (746-755) (755-763)
03/11** 03/13 03/14-03/22 03/23 03/25 03/27 03/30 04/01 04/03	Nervous System X: Autonomic N.S. Circulatory System I: Blood SPRING BREAK Circulatory System II: Vessels Circulatory System III: Heart Lymphatic System Respiratory System I Respiratory System II Review	18 21 23 22 24 25 25	(538-550) (636-651) (682-689) (655-671) (723-739) (746-755)
03/11** 03/13 03/14-03/22 03/23 03/25 03/27 03/30 04/01 04/03 04/03 04/03 04/06 04/08	Nervous System X: Autonomic N.S. Circulatory System I: Blood SPRING BREAK Circulatory System II: Vessels Circulatory System III: Heart Lymphatic System Respiratory System I Respiratory System II Review EXAM III: Nervous System VI through Respiratory Digestive System I Digestive System II	18 21 23 22 24 25 25 II 26 26	(538-550) (636-651) (682-689) (655-671) (723-739) (746-755) (755-763) (777-790) (790-800)
03/11** 03/13 03/14-03/22 03/23 03/25 03/27 03/30 04/01 04/03 04/03 04/06 04/08 04/10 04/13 04/15	Nervous System X: Autonomic N.S. Circulatory System I: Blood SPRING BREAK Circulatory System II: Vessels Circulatory System III: Heart Lymphatic System Respiratory System I Respiratory System II Review EXAM III: Nervous System VI through Respiratory Digestive System I Digestive System II Digestive System II Digestive System III Endocrine System	18 21 23 22 24 25 25 <b>II</b> 26 26 26 26 26 20 27	(538-550) (636-651) (682-689) (655-671) (723-739) (746-755) (755-763) (777-790) (790-800) (800-805) (604-628) (814-825)
03/11** 03/13 03/14-03/22 03/23 03/25 03/27 03/30 04/01 04/03 04/03 04/06 04/08 04/10 04/13 04/15 04/17 04/20 04/22	Nervous System X: Autonomic N.S. Circulatory System I: Blood SPRING BREAK Circulatory System II: Vessels Circulatory System III: Heart Lymphatic System Respiratory System I Respiratory System II Review EXAM III: Nervous System VI through Respiratory Digestive System I Digestive System II Digestive System II Digestive System III Endocrine System Urinary System I Urinary System II Reproductive System I: Male Reproductive System II: Male	18 21 22 24 25 25 <b>II</b> 26 26 26 26 20 27 27 27 28 28	(538-550) (636-651) (632-689) (655-671) (723-739) (746-755) (755-763) (790-800) (800-805) (604-628) (814-825) (825-830) (857-862) (862-866)

#### 05/05 (Tuesday) FINAL EXAM: Digestive I through Reproductive Sys. V (5:30PM - 6:30PM)

Last day to apply for Pass/Fail Option: Monday, February 9 <u>Last day to withdraw with an automatic grade of W</u>: Wednesday, March 11 \*\*

# A215, BASIC HUMAN ANATOMY, SPRING 2009 <u>LABORATORY</u> SCHEDULE <u>CLASSROOM BUILDING</u>, Room <u>122</u>

You will need both the Lab Guide <u>AND</u> your textbook in lab! (Also recommended but not required: <u>Color Atlas of Histology</u> by Gartner and Hiatt.) Each day's Lab Guide assignment is in parentheses on this schedule. <u>You may attend ONLY the lab section to which you've been assigned; contact the Lab Director about exceptions, conflicts or absences:</u> 855-0948 or jheersma@indiana.edu. Exams are given during your regular lab time; **bring a pencil!** Exam re-scheduling or make-up policies are on pp. 5-6. **TOTAL POSSIBLE POINTS ON LAB EXAMS: 400** 

<u>WEE</u>	<u>K DATES</u>	MONDAY/TUESDAY	WEDNESDAY/THURSDAY	(FRIDAY-SUNDAY)
1	1/12 - 1/18	Introduction; Cell (Introduction; Ch. 1)	Introduction; Skeletal System: Skull – <u>day 1</u> (Introduction; Ch. 4 I - II.B)	
2	1/19 - 1/25	Martin Luther King Jr. Holiday, 1/19 <u>NO lab Mon.</u> , 1/19, <u>OR Tues.</u> , 1/20	Epithelial & Connective Tissues (Ch. 2)	(Thur. night & Fri. " <u>Open</u> <u>Labs</u> ": <u>To be announced</u> !)
3	1/26 - 2/01	Skel. Syst.: Skull – <u>day 2</u> , Axial; Upper Limb (Ch. 4 II.A-C, III.A)	Integumentary System; Skeletal System: Histology (Ch. 3; Ch. 4 V)	(Thur. night & Fri. " <u>Open</u> <u>Labs</u> ": <u>To be announced</u> !)
4	2/02 - 2/08	Skeletal System: Lower Limb, Articulations (Ch. 4 III.B, IV)	Review	[ <u>Friday, 2/6, 4:40pm</u> : <u>LECTURE Exam I</u> ] <u>LAB REVIEWS</u> to be scheduled <u>Fri. 6:00pm</u> - <u>Sun. 8:45pm</u>
5	2/09* - 2/15	LAB EXAM I: 100 POINTS (Introduction; Ch. 1-4)	Muscular System: Head, Neck, & Trunk; Histology (Ch. 5 I, II, IV)	
6	2/16 - 2/22	Musc. Syst.: Head/Neck/Trunk-2; Nervous Syst.: CNS-1 (Ch. 5 II; Ch. 6 I, II.A.1-2, II.B.1)	Muscular System: Limbs-1; Nervous Syst.: CNS-2, Histology (Ch. 5 III; Ch. 6 II.A.3, II.B.2, IV)	(Thur. night & Fri. " <u>Open</u> <u>Labs</u> ": <u>To be announced</u> !)
7	2/23 - 3/01	Muscular System: Limbs-2 (Ch. 5 III)	Nervous System: CNS-3/Brain (Ch. 6 I, II.C)	LAB REVIEWS to be scheduled Thur. 8:00pm - Sun. 11:00pm
8	3/02 - 3/08	Review	LAB EXAM II: 100 POINTS (Ch. 5; Ch. 6 II, IV)	[ <u>Friday, 3/6, 4:40pm</u> : <u>LECTURE Exam II</u> ]
9	3/09 - 3/15	Nervous: Eye & Ear (Ch. 6 I, V)	** Nervous System: Cranial Nerves; Circulatory System: Vessels-1 (Ch. 6 III.A; Ch. 7 I, III)	
	3/16 - 3/22	SPRING BREAK (begins Saturday, Mar	ch 14, <u>AFTER LAST CLASS</u> )	
10	3/23 - 3/29	Nervous System: Spinal Nerves; Circulatory System: Vessels-2 (Ch. 6 III.B; Ch. 7 III)	Circulatory System: Heart (Ch. 7 II)	(Thur. night & Fri. " <u>Open</u> <u>Labs</u> ": <u>To be announced</u> !)
11	3/30 - 4/05	Circulatory System: Lymphatic System; Histology (Ch. 7 IV, V)	Respiratory System: Gross Structures & Histology (Ch. 8)	[Fri. 4/3, 4:40pm: LECTURE Exam III ] LAB REVIEWS to be scheduled Fri. 6:00pm - Sun. 11:00pm
12	4/06 - 4/12	Review	LAB EXAM III: 100 POINTS (Ch. 6 III, V; Ch. 7-8)	
13	4/13 - 4/19 Diges	stive System-1: Histology (Ch. 9 I, VI)	Digestive Syst2: Gross Structures Urinary System-1: Gross Str's. (Ch. 9 I-V; Ch. 10 I-III)	
14	4/20 - 4/26	Urinary System-2: Histology Reproductive Syst1: Histology (Ch. 10 IV; Ch. 11 I, II.D, III.D)	Reproductive System-2: Gross Structures (Ch. 11 I, II.A-C, III.A-C)	LAB REVIEWS to be scheduled Thur. 8:00pm - Sun. 11:00pm
15	4/27 - 5/03	Review	LAB EXAM IV: 100 POINTS (Ch. 9-11)	
		* Last day to apply for Pass/Fail Option:	Monday, February 9	

\* Last day to apply for Pass/Fail Option: Monday, February 9

\*\* Last day to withdraw with an automatic grade of W: Wednesday, March 11

# A215 Fall 2008 student evaluations:

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	64%	28%	8%	-	-	4.56
My instructor presented information in	60%	36%	4%	-	-	4.56
a clear and organized manner.						
My instructor welcomed questions	83.33%	16.67%	-	-	-	4.83
from students and responded						
appropriately.						
My instructor developed an atmosphere	83.33%	16.67%	-	-	-	4.83
of respect and trust in the classroom.						
My instructor cleared up points of	75%	25%	-	-	-	4.75
confusion for me.						

Strengths:

- "She was especially helpful with the cadavers and she knew what she was doing since she was the one who dissected these cadavers."
- "I liked how she tried to make the environment fun for us so we wouldn't feel so overwhelmed by all the material."
- "I liked the fact that you seemed to love what you do."
- "Always a good attitude and very kind and compassionate to us students. Very helpful. Thank you!"
- "Ability to relate and understand tough topics. Able to explain in an understandable manner."
- "She is very friendly and took time to get to know us as individuals."
- "I liked Polly's ability to teach the material in a way we could understand. She always gave helpful hints and clues on how to remember things too. Overall, I think Polly was a great A.I.!"
- "Polly was very easy to talk to, and to ask questions. She always tried to make things fun, and gave us interesting ways to remember information."

- "Have more visuals in the introduction."
- "Use good pictures on the slide show so we can use them to study."
- "She could work on slower delivery of info (is only thing I could think of)."
- "Slow down a little bit, make sure everyone is on board."
- "I wish she spent more time on the intro and not just getting through it as fast as possible."
- "Slow down while teaching new material."
- "Just slow down on intros, its not just Polly....it was every instructor."
- "Slow down and label powerpoints."

# A215 Spring 2009 student evaluations:

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	68.97%	27.59%	3.45%	-	-	4.66
My instructor presented information	66.67%	33.33%	-	-	-	4.67
in a clear and organized manner.						
My instructor welcomed questions	90%	10%	-	-	-	4.90
from students and responded						
appropriately.						
My instructor developed an	76.67%	20%	3.33%	-	-	4.73
atmosphere of respect and trust in the						
classroom.						
My instructor cleared up points of	73.33%	26.67%	-	-	-	4.73
confusion for me.						

Strengths:

- "She always seemed to know exactly what she was talking about."
- "Great job at putting things into a clearer image."
- "I like that she clearly pointed out things I didn't understand and put things to my understanding level."
- "She would ask if I needed help even if I didn't raise my hand maybe because I looked confused."
- "She always went out of her way to prepare for the course. She even made her own presentations to further explain the material."
- "She was very nice and understanding. She tried every possible way to make us, the students, understand."
- "I could relate well to her. She acted like us. Meaning she didn't talk down to us. She made me feel equal to her. She tried to get to know each student."
- "Polly presented information very clearly. She really tried to help the students learn and understand concepts."
- "Polly is always prepared for class, knows the material thoroughly, enjoys the topics, has a friendly personality, and she always is ready to help anyone in need."
- "Polly was very helpful with saying little tricks to remember terms."
- "She was nice and funny and she didn't try and teach like we should already know the material. She explained well."
- "I liked the way Polly answers questions...I had a lot of them! And she gave me explanations that I understood."

- "Slow down the presentations"
- "Review test material more thoroughly."
- "Slow down, and review material right after it is presented."
- "I would suggest walking around the room more to seem more available for questions."
- "Maybe on the lab presentation slides to label things on the slide so that upon first looking at the picture one could see where the part of whatever is."

# A215 Summer 2009 student evaluations:

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	52.38%	47.62%	-	-	-	4.52
My instructor presented information	57.14%	42.86%	-	-	-	4.57
in a clear and organized manner.						
My instructor welcomed questions	76.19%	23.81%	-	-	-	4.76
from students and responded						
appropriately.						
My instructor developed an	71.43%	28.57%	-	-	-	4.71
atmosphere of respect and trust in the						
classroom.						
My instructor cleared up points of	71.43%	28.57%	-	-	-	4.71
confusion for me.						

Strengths:

- Polly welcomed questions and always gave accurate answers. She also gave some memorization techniques.
- Polly always welcomed questions and answered them in a way that encouraged students instead of making them feel ignorant.
- I liked the fact that Polly was very straight forward and got to the point.
- Polly was very helpful and very willing to answer questions. She's very knowledgable.
- She was very knowledgeable about subjects.
- Clear voice and confident. Gave good examples.
- The acronyms she used to help remember things
- Made class fun; presented material very well/clearly
- Well prepared
- She was nice, and always answered questions clearly
- Always willing to help
- She knew the material.

- The material was presented very quickly. I could barely write down the information before we were on to the next slide, sometimes.
- Seemed partial to certain students
- Should teach lectures together instead of individually it would be more interactive

# A215 Fall 2009 student evaluations:

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	62.07%	27.59%	10.34%	-	-	4.52
My instructor presented	68.97%	24.14%	3.45%	3.45%	-	4.59
information in a clear and						
organized manner.						
My instructor welcomed questions	75.86%	20.69%	3.45%	-	-	4.72
from students and responded						
appropriately.						
My instructor developed an	75.86%	20.69%	3.45%	-	-	4.72
atmosphere of respect and trust in						
the classroom.						
My instructor cleared up points of	72.41%	20.69%	6.90%	-	-	4.66
confusion for me.						

Strengths:

- Her preparedness for each class and <u>always</u> willing to help/answer questions.
- She really knew the information and was always giving good helpful tips.
- She was very good at reading discussion and knew what she was talking about.
- I really liked how this instructor presented the material in a way that way easy for me to understand
- I liked that she was very helpful and funny. She always found a way to make it fun.
- She always took the time to go over anything troubling me during class, and actually showed an interest in me doing well.
- Always helped me when I had questions. The material was presented in a clear manner and she knew what she was talking about.
- I mostly liked how she presented the material, especially the material on the cadavers She also seemed to have a deep background as well so she was able to answer pretty much any ? we had.
- Polly taught me several tricks to help memorize the material and always cleared up confusion for me.
- For supplementary material, Polly made and posted her own powerpoints.

- She didn't help outside of lecture too much. She made me feel like "I should know this." Made me feel stupid for asking. Other instructors I was around helped me out more.
- She didn't give examples or little helpful hints about stuff to help us remember. Once at a lab review, one of the AIs were going over the cadavers and using helpful words and hints to help us remember better and that was very helpful but Polly doesn't do that.
- Ask the class more questions so you know if they understand everything.

# A215 Spring 2010 student evaluations:

Category	SA	А	U	D	SD	Mean
	(5)	(4)	(3)	(2)	(1)	
Overall, I rate this instructor as:	80.00%	16.67%	3.33%	-	-	4.77
My instructor presented information	76.67%	23.33%	-	-	-	4.77
in a clear and organized manner.						
My instructor welcomed questions	83.33%	10.00%	6.67%	-	-	4.77
from students and responded						
appropriately.						
My instructor developed an	86.67%	13.33%	-	-	-	4.87
atmosphere of respect and trust in the						
classroom.						
My instructor cleared up points of	83.33%	13.33%	3.33%	-	-	4.80
confusion for me.						

Strengths:

- Polly was always quick to clarify things on the donor, histology, and models. She is passionate about this course and it shows. She helped teach me the material with tricks and mnemonic devices. She was great!
- I love her nifty mnemonics she taught us, which helped me attain the material. She was patient, very knowledgeable about the material. I appreciate her professionalism.
- Very nice, can tell she enjoys teaching.
- Polly was an excellent lab instructor. I came into the class feeling a little intimidated, but Polly's easy-going attitude made me feel comfortable asking questions or for help.
- Polly was a wonderful teacher and there was not anything that I would say I did not like about her. She knew what she was talking about, cleared up any confusion I had, and presented the information clearly and in a way I could comprehend.
- Polly was very knowledgeable of the information. Any questions I had, she knew and was very helpful in clearing up things that confused me.
- Polly was a fantastic instructor. She knew the material very well, and could easily explain the information she went over in class.
- I was easy to relate to her and she honestly tried her hardest to make sure we understand the material covered in
- I liked how Polly was so enthusiastic about everything. She always came to class happy and ready to help us every morning.
- Polly is very easygoing which made it easy for me to approach her to ask questions. She seemed very knowledgeable of the material as well. Good job!

- I felt as if everytime I asked her a question, it was very annoying to her tha I was confused or didn't know the answer.
- Be more confident/assertive.
- Being more open and friendly when it comes to dealing with students. I feel that sometimes her experience made it hard for her to relate to undergrad student in an effective way.

# M100: Medicine in the Media

TH 11:15 – 12:30 JH 009A

## **INSTRUCTOR:**

Polly Husmann (765) 993-3812 <u>phusmann@indiana.edu</u> Office Hours: MW 2:30 - 4 pm or by appt.

# **COURSE DESCRIPTION:**

In this class, there are two overarching goals.



The first objective is to retain knowledge of the basic anatomical systems and recognize some of the wellknown diseases that are presented in the media via television, books, movies, magazines, or commercials. The further objective is to use this information to critique these portrayals and begin to assess why they are presented in this way. We will use recent media and those from a few years back to evaluate change over time as well as discuss the emphases that different media or specific shows/periodicals employ.

# **TEXT:**

In addition to the newspaper and magazine articles listed in the schedule, there is a customized textbook for the systemic anatomy that should be purchased from the bookstore.



# **ASSESSMENT:**

Participation: 90 points Weekly quizzes: 160 points Midterm: 100 points Paper: 150 points <u>Final: 100 points</u> Total: 600 points

Participation – the participation grade will be based largely on the Friday discussion sections and depend on attendance to all classes, preparation, and valuable input to the conversation

Weekly quizzes – will be given every Thursday based on the previous classes's material. Each quiz is worth ten points and consists of two multiple choice and short answer questions.

Midterm & Final – these will be multiple choice and short answer tests based mainly on the lecture material for the systems and diseases (from Tuesday lectures). HOWEVER, there will also be at least one

question from each television episode plot included. These could be straight questions about the episode or how the episode relates to the material presented in class.

Paper -A 5 - 8 page double-spaced paper will be due by the end of week 14. There are two options for this paper:

- Find two episodes of different television shows that deal with the same disease. Give a brief description of each and then compare their representations of the material to each other and to real life. Explain why you believe these discrepancies exist. Support your statements with material from class and other sources.
- 2) Watch a movie or read a book outside of the class syllabus and give a description of the way that it handles at least two aspects of medicine. Compare their representations to real life. Discuss differences and similarities and why you believe they exist. Support your statements with material from the class and other sources.

A proposal for your paper is due by the beginning of week 8 for approval. More information on the paper to come as class progresses...

# **ACADEMIC HONESTY:**

The following is taken directly from the IU Code of Student Responsibility (Part II: Student Responsibilities – Academic Misconduct), SO YOU SHOULD ALREADY KNOW IT. Thus, all violations will be dealt with in the strongest manner possible:

# Cheating

Cheating is considered to be an attempt to use or provide unauthorized assistance, materials, information, or study aids in any form and in any academic exercise or environment.

- A student must not use external assistance on any "in-class" or "take-home" examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices.
- b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare work, without advance authorization from the instructor to whom the work is being submitted.

- c. A student must not use materials from a commercial term paper company; files of papers prepared by other persons, or submit documents found on the Internet. A student must not collaborate with other persons on a particular project and submit a copy of a written report that is represented explicitly or implicitly as the student's individual work.
- d. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork.
- e. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images.
- f. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom he work is being submitted.
- g. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.

# <u>Plagiarism</u>

Plagiarism is defined as presenting someone else's work, including the work of other students, as one's own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered "common knowledge" may differ from course to course.

- a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.
- b. A student must give credit to the originality of others and acknowledge indebtedness whenever:
  - 1. Directly quoting another person's actual words, whether oral or written;
  - 2. Using another person's ideas, opinions, or theories;
  - 3. Paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
  - 4. Borrowing facts, statistics, or illustrative material; or
  - 5. Offering materials assembled or collected by others in the form of projects or collections without acknowledgment.

# Facilitating Academic Dishonesty

A student must not intentionally or knowingly help or attempt to help



another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.

# **SCHEDULE:**

	Tuesday (anatomic	Thursday	Please read the listed materials BEFORE Tuesday's
	lecture)	(movie/TV	class
		episode)*	
1	Intro to Med. Ed.	ER s8e7	
2	Skeletal system	MASH	Harding A (2009) Moderate Drinking may Help Build
		s5e17	Bone Density. Yahoo! News.
3	Muscular system	Scrubs s3e8	Kolata G (2008) More Than an Exercise in Vanity.
			New York Times.
4	Heart	ER s9e2	Kahn J (2007) Mending Broken Hearts. National
			Geographic.
5	Circulatory system	Scrubs	Morgan J (2003) Madden's Game Plan Beats Vascular
		s3e16	Disease. USA Today.
6	Brain	Grey's	Brain by Robin Cook (published by New American
		s2e12	Library 1999)
7	Nervous system	House	Brain by Robin Cook (continued)
		s3e14	
8	Reproductive system	House	Find and bring in an article day! Or (2009) Renowned
	(Paper proposal due)	s1e16	Hoo-Ha Doctor Wins Nobel Prize For Medical
			Advancements Down There. The Onion.
9	Midterm	Patch	Patch Adams discussion
		Adams**	
10	Heart attack	ER s1e3	(1950) A Question of the Heart. TIME.
11	Cancer	Grey's s3e8	Begley S (2008) We Fought CancerAnd Cancer
			Won. Newsweek.
12	Stroke	House	My Stroke of Insight by Jill Taylor (published by
		s1e20	Penguin Group 2006)
13	Syphilis	Grey's s1e9	STD Fact Sheets: Syphilis. Cosmopolitan.
14	Osteoporosis	House	(2001) Millions of Women have Undetected Bone
		s1e12	Loss. USA Today.
			(***Paper due today***)
15	Alzheimer's	Grey's s2e3	Begley S (2008) Alzheimer's: Still Barking Up the
			Wrong Tree? Newsweek.
16	Multiple sclerosis	PrP s1e6	Brody JE (2008) From Multiple Sclerosis, a
			Multiplicity of Challenges. New York Times.

\*If it is necessary to miss a class on Thursday, these will be available on reserve in the library. \*\*On this date, class will NOT meet at the regular time. Instead, we will meet from 6-8pm and pizza will be provided.

Final - TBA

