Benedictine University

Informing today—Transforming tomorrow

BIOL 203A

Human Anatomy

Spring 2013

Instructor:	Dr. Robert McCarthy		
Office:	Birck 336	Time:	MW 3:00 – 4:15 pm
Phone:	630-829-6577	Place:	Birck 003
E-mail:	rmccarthy@ben.edu	Format:	Lecture
Office hours:	TR 9-11, W10-12	Prerequisite:	BIOL 197 or 198

Course objectives: This course provides an introduction to human anatomy, which is the structure of the human body. Anatomy is, at its heart, the basis of medical science. In this course, gross human anatomy will be covered from a functional, clinical, and evolutionary perspective, and will be taught using a regional approach. This course will cover the essentials of anatomy in order to provide students interested in biology, biological anthropology, medicine, and allied health professions a solid basis for further study and practice.

Learning goals: At the end of this course, you will be able to (1) use appropriate terminology to communicate information related to anatomy; (2) recognize and describe normal anatomical structures; (3) describe how anatomical structures are related to one another (the "shin bone is connected to the leg bone" part of anatomy; (4) use anatomical knowledge to predict functional consequences, and use knowledge of function to predict the features of anatomical structures; (5) explain the interrelationships within and between anatomical, functional and developmental systems of the human body; (6) synthesize ideas to make a connection between knowledge of anatomy and real-world situations, including clinical situations, and to interpret the basis of treatments and pathology; and (7) develop a conceptual framework for assimilating and understanding new information regarding anatomical structures and clinical, evolutionary, comparative, and developmental issues.

Course organization: This class is the lecture section of a 4-credit course that includes a lecture and a laboratory component. Each student must also enroll in one of the lab sections associated with this lecture (BIOL 203B or 203C). The lecture section meets twice a week on Monday and Wednesday and the lab meets once a week for ~3 hours. Please note that the lab sections meet in Birck 369. You will receive one grade for the 4-credit course, which will be based on your scores from lecture (BIOL 203A) and lab (BIOL 203B or 203C) – see the section below for more detail. Note: biology majors cannot receive credit for both BIOL 203 and BIOL 254.

Course requirements and grading: You will receive one final grade for BIOL 203 Human Anatomy. Your knowledge of the lecture material in this course will be tested via four exams, each worth 15% of your grade. Your lab grade will make up 40% of the final grade, and will be based on scores from four practical lab exams (each worth 5% of your grade), assignments (cumulatively, 10%), a

presentation (5%), and participation and attendance (5%). Grades will not be rounded up. The following grading scale will be used: A=90-100; B=80-89.9; C=70-79.9; D=60-69.9; F=<59.9.

Textbooks:

(1) Drake, Richard L. et al., 2012. *Gray's Basic Anatomy, 1e.* Churchill Livingstone Elsevier, 632 pp. ISBN-13: 978-1455710782 (required)
(2) Gilroy, Anne M. et al. (eds.), 2012. *Atlas of Anatomy, 2e.* Thieme, 704 pp. ISBN-13: 978-1604067453 (supplemental)
(3) Stern, Jack T., 2012. *Core Concepts in Anatomy, 3e.* Online e-book available at http://www.scribd.com/doc/100441727/Core-Concepts-in-Anatomy-3rd-Edition (supplemental)

Gray's Basic Anatomy 1e is required for the course, and will be used frequently throughout the semester. Students may find Thieme's *Atlas of Anatomy 2e* and *Core Concepts in Anatomy 3e* helpful during the semester, particularly in the laboratory portion of the course. If you use earlier editions of any of these books, you are solely responsible for educating yourself about the differences between editions. Lecture and lab materials, tests, and assignments will be based on the most recent editions only. In addition to reading from the above textbooks, students may be asked to access and read supplemental handouts and web pages posted on D2L (see below).

Technology:

(1) Desire2Learn (D2L): Announcements, syllabi, Powerpoint slides, lecture outlines, study guides, websites and other useful links, and grades will be posted regularly on the course's D2L site. You should be sure to access the site weekly at the minimum.
(2) E-mail: You must have access to and regularly check your university e-mail account, as I will regularly e-mail announcements and updates.
(3) Online material: At times, you will be referred to various websites for reference or important information needed for understanding a topic, as part of an assignment, or as a study aide/supplement. Lecture notes will be available at http://www.squidoo.com
(4) Tegrity: later in the semester, lecture recordings will be available on D2L.

Expectations: We have a lot of material to cover in this course and a very short amount of time to cover it. Students will be expected to (1) prepare for lecture by reading the book(s) and supplemental readings; (2) come to class on time, prepared to take notes and participate in discussions; (3) study outside of class; and (4) regularly attend labs and participate in lab activities. In order to fulfill university policy, **attendance will be taken in lecture for the first two weeks**, but not thereafter. However, students will find it difficult to do well in this course without attending lecture regularly. Attendance in lab is mandatory. Students will be expected to follow rules of common courtesy, including turning off cell phones and only using computers to look at lecture slides. Students who disrupt class will be asked to leave. Refer to the "Electronic Devices Policy" below for more information.

Advice – how to learn and study: Recent research shows that students learn best by active learning. What does this mean? First, it is important to recognize that there is a difference between studying and learning. Students who "cram" for a test may retain a relatively small amount of information for

a few hours or days, whereas students who actively learn retain information for years. Students learn best when they are engaged by the material and motivated to think about it in different ways. Part of this is my job, but it is up to you to become an "expert learner." One recent study (McGuire, 2005) suggests the following strategy:

(1) Preview material to be covered in class;
(2) Go to class – listen, take notes, participate when appropriate;
(3) Review and process class notes, as soon after class as possible;
(4) Implement intense study session
    a. For every hour spent studying, spend 2-5 minutes setting goals and planning;
    b. 45 minutes studying with FOCUS and ACTION – making study cards, running through problems, quizzing yourself or others, etc.
    c. 5 minute break, then 5 minute review;
(5) Repeat;
(6) Once per week, review the entire week's work.

The Small Print:

(1) Academic Honesty Policy (AHP): The search for truth and the dissemination of knowledge are the central missions of a university. Benedictine University pursues these missions in an environment guided by our Roman Catholic tradition and our Benedictine heritage. Integrity and honesty are therefore expected of all members of the University community, including students, faculty members, administration, and staff. Actions such as cheating, plagiarism, collusion, fabrication, forgery, falsification, destruction, multiple submission, solicitation, and misrepresentation, are violations of these expectations and constitute unacceptable behavior in the University community. The penalties for such actions can range from a private verbal warning, all the way to expulsion from the University. The University's Academic Honesty Policy is available at http://www.ben.edu/AHP and students are expected to read it.

    In the Biology department, the first infraction on an assignment/paper/quiz will result in a zero for that task. The second infraction will result in an F for the course. Dishonesty on tests/exams or specified assignments will result in an F for the course. In all cases of academic dishonesty, your faculty advisor and the Dean of Student Affairs will be notified.

(2) Americans with Disabilities Act (ADA): If you have a documented learning, psychological or physical disability, you may be eligible for reasonable academic accommodations or services. To request accommodations or services, please contact Jennifer Rigor-Golminas in the Student Success Center, 012 Krasa Student Center, (630) 829-6512. All students are expected to fulfill essential course requirements. The University will not waive any essential skill or requirement of a course or degree program.

(3) Academic Accommodations For Religious Obligations (AAFRO): A student whose religious obligation conflicts with a course requirement may request an academic accommodation from the instructor. Students must make such requests in writing by the end of the first week of class (**by 1/18/2013**).

(4) Electronic Devices Policy: One aspect of being a member of a community of scholars is to show respect for others by the way you behave. One way of showing respect for others is to do your part to create or maintain an environment that is conducive to learning. That being said, allowing your cell phone to ring in class is completely inappropriate because it distracts your classmates and thus degrades their overall classroom experience. You are expected to turn off your cell phone or set it to mute/silence BEFORE you enter class—every class. Furthermore, if you use your cell phone in any manner during class (e.g. text messaging, games, etc.), you will be dismissed from class and will forfeit any points you might have earned in the remainder of the period. If you use your cell phone in any manner during a test or quiz, you will receive a zero for that test or quiz. (This policy also applies to pagers, iPods, iPhones, Palms, BlackBerrys, PDAs, MP3 players and all other electronic communication and/or data storage devices.)

COURSE SCHEDULE

Day	Date	Lecture topic	Atlas pages[1]	Assignment[2]
M	1/14	Introduction, medical imaging, systems	-	pp. 2-8, 15-19
		Back and Spinal Cord	-	-
W	1/16	Vertebra, ligaments, joints	4-23	pp. 33-43
M	1/21	MLK Day – NO LECTURE	-	-
W	1/23	Spinal cord, PNS	38-45	pp. 49-55
M	1/28	Back muscles	24-35, 46-47	pp. 44-49
		Thorax	-	-
W	1/30	Body wall, diaphragm, lungs	50-69, 110-129	pp. 58-93
M	2/4	Mediastinum, heart	74-103	pp. 94-132
W	2/6	**EXAM CONTENT: lectures 1-6**	-	**EXAM #1**
		Abdomen	-	-
M	2/11	Abdominal wall, groin	132-147, 200-201	pp. 134-150
W	2/13	Abdominal viscera	148-191, 202-211	pp. 150-185
		Pelvis and Perineum	-	-
M	2/18	Pelvis, urogenital organs	214-239, 253-257, 262-263	pp. 208-225, 233-246
W	2/20	Male and female reproductive systems	240-253, 266-269	pp. 225-233, 246-263
		Neck	-	-
M	2/25	Neck	588-597, 604-611	pp. 516-540
W	2/27	Pharynx, larynx, tongue	574-575, 582-587, 598-603	pp. 541-560
M	3/4	**EXAM CONTENT: lectures 7-12**	-	**EXAM #2**
		Head	-	-
W	3/6	Superficial tissues of head	488-493, 514-523, 528-531	pp. 448-463
M	3/11	Skull	486-487, 568-569	pp. 416-429
W	3/13	Cranial nerves	pp. 496-513	pp. 440-446, handout
M	3/18	Spring Break	-	-
W	3/20	Spring Break	-	-
M	3/25	Brain, meninges, blood supply	524-527, 625-637	pp. 430-440
W	3/27	Face, TMJ, temporal/infratemporal fossae	494-495, 532-535, 570-571	pp. 495-516
M	4/1	Easter Monday – NO LECTURE	-	-
W	4/3	Orbit, eye, ear	536-549, 556-567	pp. 463-495
M	4/8	**EXAM CONTENT: lectures 13-18**	-	**EXAM #3**
		Upper and Lower Limbs	344-346, 358, 376-377, 444-459, 472-473	-
W	4/10	Shoulder and scapular regions	274-297, 360-361	pp. 342-355
M	4/15	Axilla, brachial plexus	348-357, 362-366	pp. 355-371
W	4/17	Arm, elbow	288-295, 302-303, 304-311, 367	pp. 371-382
M	4/22	Forearm, hand	312-343, 368-375	pp. 382-412
W	4/24	Gluteal region	394-399, 462-463	pp. 267-287
M	4/29	Thigh, knee	390-397, 400-403, 406-415, 464-465	pp. 287-307
W	5/1	Leg, foot, bipedal walking	416-443, 466-471	pp. 308-338
W	5/8	**EXAM CONTENT: lectures 19-25**	-	**EXAM #4**

[1] Pages from Thieme's *Atlas of Anatomy 2e*

[2] Readings from *Gray's Basic Anatomy 1e*