

ANAT M01 - General Human Anatomy

FALL 2010

Syllabus and Class Schedule Moorpark College

Hours: Lecture M W 6:00 – 7:00 LMC-228
Laboratory M W 7:00 - 9:50 LMC-228
August 16, 2010 – December 15, 2010

Instructor: Dr. Mark Flannery
DrMark@LiveHealthWise.com
(805) 522-1444 Office

Texts: Lecture Human Anatomy, 5th ed, Marieb
Lab Manual Human Anatomy Laboratory Manual With Cat Dissections, 5th ed, Marieb

Supplies: 5 Scantrons (form 882-E) for lecture tests
15-17 Scantrons (form 815-E) for quizzes
Dissection Kit
Gloves (Latex or equivalent)

Website: www.LiveHealthWise.com
For Lecture, Lab and Grade Information

Course Description:

This course is an introduction to human anatomy. Students will first learn the basic language of anatomy. They will then learn to identify and describe the major structural and functional characteristics of cells, tissues, organs and organ systems of the human organism.

This course is organized into two parts: lecture (2 hours per week) and lab (6 hours per week). Participation in both parts is required to receive credit for the course. If you are not in attendance, it is difficult to participate.

The lecture portion will cover the basic characteristics of cellular anatomy, histology, organs, organ systems and the human body as a whole. Minor attention will be given to the physiology (function) of these entities, so as to better understand the nature of their structure.

The laboratory portion will emphasize a hands-on approach to the materials covered in lecture. It will entail study of prepared microscope slides, models, diagrams, and human cadavers. There will be dissection of preserved cat specimens throughout the semester.

Proper attire is essential for reasons of safety. Shoes or sandals of some type must be worn in the laboratory at all times. Beyond this requirement, what you wear is up to your best judgment. Dissection can be messy, so avoid wearing something expensive. A lab coat or scrubs are a good option to wear over your clothes or just wear old clothes you do not mind getting messy. Latex gloves are recommended, as the preservative used for the cadavers and cats has a drying effect on the skin.

Important Dates:

<u>Last day to add a class</u>	August 27, 2010
<u>Last day to drop without a "W"</u>	September 10, 2010
<u>Last day to drop WITH a "W"</u>	November 19, 2010
<u>Laboratory Practical Final Exam</u>	December 8, 2010
<u>Lecture Final Examination</u>	December 15, 2010

Attendance/Enrollment:

Anatomy M01 is a highly sought after class and is required by many students for the nursing program. Enrollment CANNOT exceed the 24 seats in the class room. Therefore, attendance is REQUIRED on the first day of class. If a student is absent on the first day he/she will be dropped immediately and the first student on the waitlist who is in attendance will take his/her place in the class. In addition, two absences during the first two weeks will also result in being dropped from the class and a waitlisted student who is present and has no absences will take his/her place in the class. NO EXCEPTIONS! An attendance record will be kept for each class meeting throughout the semester.

Lecture Information:

All lectures are available online for download and it is the student's responsibility to print the lecture material prior to coming to class. No lecture material will be provided by the instructor. All lectures are available in color and in small or large slide format. Small slide format contains 6 slides per page and large slide format contains 1 slide per page. Select lectures have associated lab slides available as well.

Examinations and Grading:

LECTURE EXAMS (4 @ 100 points each). Each exam will be based on material covered in lecture and in the assigned reading. These exams will consist of multiple-choice, fill-in, matching, short-answer and/or brief essay style questions. Your lowest score will be dropped at the end of the semester. If you miss an exam, that will count as your dropped exam. A **scantron form 882-E** is required for each exam. Paper will be provided for fill-in, matching, short-answer and/or essay style questions if necessary.

LABORATORY PRACTICUM EXAMS (4 @ 100 points each). You will be required to identify and state the function of laboratory specimens. These may include microscope slides, models, diagrams, pictures, preserved cats and cadavers. These are fill-in or multiple-choice style question exams. You will be provided with the form to write your answers on. **CORRECT SPELLING IS REQUIRED for full credit**. Incorrectly spelled answers will receive a minus ½ point. I must be able to read your answer in order to get credit. **Illegible writing will be marked as incorrect and receive no credit.** **NO MAKE-UP EXAMS WILL BE ALLOWED**, but your lowest score will be dropped.

QUIZZES (Approximately 17 @ 10 points each). There will be approximately 17 quizzes given throughout the semester. These quizzes will be given randomly and can be anytime during the lecture or lab class. Your best 10 quizzes will count towards your final lab grade (a total of 100 points). Quizzes will be either multiple choice or fill-in. You will need a **scantron form 815-E** for multiple choice quizzes and for fill-in quizzes you will be required to provide a blank sheet of paper. Since there will be at least 15 quizzes during the semester, any missed quiz will count as a dropped quiz. **NO MAKE-UP QUIZZES WILL BE ALLOWED.**

LECTURE FINAL EXAM (150 points). This will be semi-comprehensive; approximately 2/3 of the material will be drawn from material covered after the 4th lecture exam. The remaining 1/3 of the exam will be a general review of the entire course. This exam will be entirely multiple choice and will require a **scantron form 882-E**. Your final exam CANNOT be one of your dropped exams.

LABORATORY PRACTICUM FINAL EXAM (150 points). This will be semi-comprehensive; approximately 2/3 of the material will be drawn from material covered after the 4th laboratory exam. The remaining 1/3 of the exam will be a general review of the entire laboratory course. Your final lab exam **CANNOT** be one of your dropped lab exams.

GENERAL EXAM INFORMATION: At each exam, lecture, lab and quiz, you will have to write your name on both the test sheet and the scantron (No name, No credit). On lecture exams you will be required to write your test # on your scantron sheet where it says "Test No."

If time permits, tests will be reviewed in class. You may also make an appointment to review your test with the instructor. No testing materials, including scantrons and quizzes, will be returned to the student.

Test scores will usually be posted within one week of the exam. Lecture test scores are usually done first as they are scantron in nature. Scores will be posted on the website (www.LiveHealthWise.com). If you believe any score has been posted incorrectly, contact the instructor within ONE WEEK of posting to check if, in fact, an error has been made. After that, scores are final.

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 instructor of ANAT M01. **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. Don't wait until just before the last exam to see how you can improve your grade! By then it will be too late.

All course material will be destroyed 30 days following the final exam. If you have a dispute regarding the grade you received you **MUST** contact me within 30 days to the final exam so I can put your course material aside. If I do not hear from you within 30 days then all materials will be destroyed.

EXTRA CREDIT – See attached sheet for extra credit opportunities.

POINTS

Lecture exams	300	points
Lecture final	150	points
Lab exams	300	points
Lab final	150	points
Quizzes	100	points
Total	1,000	points

Your final grade will be based on your percentage of the total points (1000 points) as follows:

A =	90 – 100%	895 – 1,000+	points
B =	80 – 89%	795 – 894	points
C =	70 – 79%	695 – 794	points
D =	60 – 69%	595 – 694	points
F <	60%	594 or less	points

NOTE: YOU MUST PASS THE LAB INDEPENDENT OF THE LECTURE IN ORDER TO PASS THE CLASS. PASSING IS 60% OR BETTER. QUIZZES AND EXTRA CREDIT WILL COUNT TOWARDS YOUR LAB GRADE.

Week	Date	Lecture Topic	Reading
1	8/16 8/18	Introduction to the Human Body Organ Systems, Histology	Ch. 1 Ch. 1, 4
2	8/23 8/25	Integumentary System Skeletal Tissue, Skeleton	Ch. 5 Ch. 6, 7
3	8/30 9/1	Bones Part 1 - Axial Skeleton Bones Part 2 - Appendicular Skeleton	Ch. 7, 8 Ch. 8
4	9/6 9/8	NO CLASS – Labor Day Joints, Muscle Tissue, Review	Ch. 9, 10
5	9/13 9/15	Exam 1 (Introduction, Microscope, Histology, Integument, Skeleton) Muscular System Part 1 - Axial	Ch. 1,4-8 Ch. 11
6	9/20 9/22	Muscular System Part 2 - Appendicular (Upper Extremity) Muscular System Part 3 - Appendicular (Lower Extremity)	Ch. 11 Ch. 11
7	9/27 9/29	Review of the Muscular System <u>CLASS CANCELED</u>	Ch. 11
8	10/4 10/6	Exam 2 (Joints, Muscle Tissue, Muscular System) Circulatory System Part 1 - Blood	Ch. 9-11 Ch. 17
9	10/11 10/13	Circulatory System Part 2 - Heart Circulatory System Part 3 - Blood Vessels	Ch. 18 Ch. 19
10	10/18 10/20	Lymphatic and Immune Systems Respiratory System, Review	Ch. 20 Ch. 21
11	10/25 10/27	Exam 3 (Blood, Heart, Blood Vessels, Lymph/Immune & Respiratory) Digestive System Part 1 & Digestive System Part 2	Ch. 17-21 Ch. 22
12	11/1 11/3	Urinary System Reproductive System - Male	Ch. 23 Ch. 24
13	11/8 11/10	Reproductive System - Female Endocrine System, Review	Ch. 24 Ch. 25
14	11/15 11/17	Exam 4 (Digestive, Urinary, Reproductive, Endocrine) Nervous System Part 1 - Fundamentals of the Nervous System	Ch. 22-25 Ch. 12
15	11/22 11/24	Nervous System Part 2 - Central Nervous System (CNS) Nervous System Part 3 - Peripheral Nervous System (PNS) / Cranial Nerves	Ch. 13 Ch. 14
16	11/29 12/1	Nervous System Part 4 - Autonomic Nervous System (ANS) Special Senses	Ch. 15 Ch. 16, 14
17	12/6 12/8	Review No Lecture - LABORATORY PRACTICUM FINAL EXAM	
18	12/13 12/15	NO CLASS MEETING - FINALS WEEK LECTURE FINAL EXAM	Comprehensive + Ch. 12-16

Week	Date	Lab Activity	Exercise
1	8/16	Body Orientation	Ex. 1
	8/18	Microscope, Histology Slides	Ex. 2, 3, 5
2	8/23	Histology, Integumentary Slides	Ex. 5, 6
	8/25	Skeletal Tissue Slides; Bone Markings, Skull	Ex. 8, 9
3	8/30	Skeleton – Skull, Vertebra, Ribs	Ex. 9, 10
	9/1	Skeleton – Bones, Upper & Lower Extremity	Ex. 10
4	9/6	NO CLASS – Labor Day	
	9/8	Joints, Muscle Tissue – Models, Histology, Exam Review	Ex. 12, 13
5	9/13	Lab Exam 1 (Orientation, Microscope, Histology, Integument, Skeleton)	Ch. 1,4-8
	9/15	Muscular system (axial) - Cat Dissection, Models	Ex. 13, 14
6	9/20	Muscular system (appendicular – UE) - Cat Dissection, Models, Cadaver, Review	Ex. 14
	9/22	Muscular system (appendicular – LE) - Cat Dissection, Models, Cadaver	Ex. 14
7	9/27	Review of the Muscular System	
	9/29	<u>CLASS CANCELED</u>	
8	10/4	Lab Exam 2 (Joints, Muscle Tissue, Muscular System)	Ch. 9-11
	10/6	Blood Slides, Cat Dissection, Models, Cadaver	Ex. 22
9	10/11	Heart Dissection, Models	Ex. 23
	10/13	Blood Vessels – Cat Dissection, Cadaver, Models	Ex. 24
10	10/18	Lymphatic and Immune Systems – Cat Dissection, Cadaver, Models	Ex. 25
	10/20	Respiratory System – Models, Exam Review	Ex. 26
11	10/25	Lab Exam 3 (Blood, Heart, Blood Vessels, Lymph/Immune & Respiratory)	Ch. 17-21
	10/27	Digestive System 1 and 2 – Cat Dissection, Models, Cadaver	Ex. 27
12	11/1	Urinary System – Cat Dissection, Models, Cadaver	Ex. 28
	11/3	Reproductive System – Male - Cat Dissection, Models, Cadaver	Ex. 29
13	11/8	Reproductive System – Female - Cat Dissection, Models, Cadaver	Ex. 29
	11/10	Endocrine System – Cat Dissection, Models, Cadaver	Ex. 21
14	11/15	Lab Exam 4 (Respiratory, Digestive, Reproductive, Endocrine)	Ch. 21-25
	11/17	Fundamentals of the Nervous System	Ex. 15
15	11/22	Central Nervous System (CNS)	Ex. 16
	11/24	Peripheral Nervous System (PNS) - Cadaver, Models; Cranial Nerves	Ex. 17
16	11/29	Autonomic Nervous System (ANS) - Cadaver, Models	Ex. 17
	12/1	Special Senses – Vision, Hearing, Equilibrium, Olfaction, Taste	Ex. 16, 18-20
17	12/6	Review and Lab Cleanup	
	12/8	LABORATORY PRACTICUM FINAL EXAM – No Lecture	

Cheating:

Cheating will not be tolerated. You will receive a score of 0 on that test if you are caught cheating. Cheating is also grounds for dismissal from this class. It is very tight quarters during lab exams. **KEEP YOUR EYES ON YOUR STATION.** Don't make me think you are cheating or you will get a 0.

Miscellaneous Rules:

No food or drinks in the classroom or labs. **NOT EVEN WATER!** No cell phones may be used during class – **NOT EVEN ON VIBRATE.** If I see a phone you will be asked to leave the class. It is distracting to those who are trying to learn. Your desk and the floor in your area must be kept clean – even if you did not make the mess. This is a non-smoking campus. Smoking is only allowed in designated areas.

Getting Help:

ACCESS: Students with a disability, whether physical, learning, or psychological, who believe they will need accommodations in this class, are encouraged to contact ACCESS as soon as possible so accommodations can be set up in a timely fashion. Accommodations are based on eligibility and can only be provided if you have submitted a verification from ACCESS in the form of a Confidential Memo. The ACCESS office can be reached at (805) 378-1461 and is newly located in the LMC.

The Learning Center: Tutoring, academic materials, college strategy courses.
Located in the Learning Resources Building: 378-1556

Disclaimer:

This syllabus and course schedules represent the instructor's intentions for this course. The instructor reserves the right to modify or change any or all parts of the course schedule at his discretion to better meet the demands of time and course objectives. This may include adding or deleting assignments and/or exams or changing exam dates. These changes may alter the distribution of points and determination of final grades. I will notify you of any changes if they occur.

Department Contacts:

Kim Hoffmans, Dean of Natural Science
Division Office: LMC 103
Division Office Phone: (805) 378-1459

Norman Martin, Life Sciences Chair
Phone: (805) 378-1400 x1716

EXTRA CREDIT

Here are a few opportunities to earn extra credit points this semester. You can do each only once (i.e. you can donate blood only once, but you can donate blood and do a presentation). Additional opportunities MAY be offered throughout the semester. (DO NOT COUNT ON IT!)

Body Worlds (25 points) – Take a trip to the Body Worlds Exhibit. More information can be found at: www.BodyWorlds.com . The Body Worlds Exhibit is currently on display at the Luxor hotel in Las Vegas. **In order to get credit you must bring me your ticket stub (with your name on it) as well as a picture of you in front of the entrance to the exhibit** (before you go inside; no pictures are allowed inside).

Donate blood (10 points) – 1 to 2 times during the semester there is a mobile blood unit on campus during the day. You can also donate at your local hospital or call the Red Cross (800-448-3543) or United Blood Services (800-715-3699) for additional locations. **You MUST bring proof** of the donation. They will provide you with proof. It is your responsibility to obtain proof.

Report on Radio Interview (12 points) – One page report on one of the three radio interviews listed on the website. The radio interviews are one hour in length. The report should be one page in length. The document format should be set to 1” margins all around, 12 point Helvetica or Times Roman font type and 1 ½ line spacing. Your name is required to be at the top of the page alone with no other title information.

10 to 15 minute presentation (up to 20 points) – Give a 10 to 15 minute presentation on one of the following topics. Your presentation **must include a handout for the entire class**. You may use Power Point if you wish, but it is not necessary. You will be graded based on the completeness of your handout, the thoroughness of your presentation, your ability to answer questions and on proper time frame (10-15 minutes). You must sign up by the end of the second week. (NOTE: If you sign up for a topic and miss the presentation date you will receive **MINUS 10 POINTS**.)

- 9/1 Medical Imaging Techniques (X-Ray, Ultra Sound, Computerized Tomography, Angiography, MRI, Radionuclide Imaging, etc.)
- 9/1 Disorders of the Skin (Burns, Skin Cancers, Albinism, Dermatitis, Acne, Canker Sore, Impetigo, Pityriasis Rosea, etc.)
- 9/8 Bone Disorders (Osteoporosis vs. Osteopenia, Osteomalacia, Rickets, Paget 's disease, Osteosarcoma, Scoliosis, Avascular Necrosis, etc.)
- 9/8 Joint Disorders (Sprains/Strains, Dislocations, Torn Cartilage, Osteoarthritis, Rheumatoid Arthritis, Gout, Lyme Disease, Adhesive Capsulitis, Chondromalacia Patellae, etc.)
- 9/20 Skeletal Muscle Tissue Disorders Part 1 (Muscular Dystrophy, Myofascial Pain Syndrome, Fibromyalgia, Polymyositis, Trigger Point, etc.)
- 9/22 Skeletal Muscle Tissue Disorders Part 2 (Compartment Syndrome, Torticollis, Tennis & Golfer's Elbow, Plantar Fasciitis, Contusion, bicep tendonitis, etc.)
- 10/4 Blood Disorders (Polycythemia, Iron Anemia, Pernicious Anemia, Hemochromatosis, Sickle Cell, Leukemia, Thrombocytopenia, Hemophilia, Sepsis, etc.)

- 10/6 Heart Disorders (Coronary Artery Disease, High Cholesterol, Angina, Myocardial Infraction, Congestive Heart Failure, Endocarditis, Hypertrophic Cardiomyopathy, etc.)
- 10/11 Disorders of the Blood Vessels (Aneurysm, Deep Vein Thrombosis, Atherosclerosis, Phlebitis, Angiosarcoma, Portal Vein Hypertension, Subclavian Steal, etc.)
- 10/13 Disorders of the Lymphatic System (Chylothorax, Lymphangitis, Mononucleosis, Splenomegaly, Lymphoma, Hodgkin's disease, Non-Hodgkin's Lymphoma, etc.)
- 10/18 Autoimmune Disorders (Rheumatoid Arthritis, Multiple Sclerosis, Systemic Lupus, Hashimoto's Thyroiditis, Graves' Disease, Addison's Disease, etc.)
- 10/20 Disorders of the Respiratory System (Bronchial Asthma, Cystic Fibrosis, Chronic Obstructive Pulmonary Disease, Lung Cancer, Pneumonia, Tuberculosis, etc.)
- 11/1 Digestive Disorders Part 1 (Gastroesophageal Reflux Disease, Hiatal Hernia, Ulcers, H. Pylori Infection, Hypochlorhydria, Pyloric Stenosis, Gastritis, Gastric Stapling, etc.)
- 11/1 Digestive Disorders Part 2 (Intestinal Obstruction, Crohn's Disease, Ulcerative Colitis, Diverticulitis, Irritable Bowel Syndrome, Cystic Fibrosis of the pancreas, etc.)
- 11/3 Digestive Disorders Part 3 (Type 1 Diabetes, Type 2 Diabetes, Autoimmune Diabetes, Metabolic Syndrome or Syndrome X, Gestational Diabetes, Hypoglycemia, etc.)
- 11/3 Digestive Disorders Part 4 (Ascities, Cirrhosis of the liver, Hepatitis, Fatty Liver, Gallstones, Biliary Cirrhosis, Biliary Obstruction, etc.)
- 11/8 Disorders of the Urinary Tract (Urinary Tract Infections, Cystitis, Pyelonephritis, Renal Calculi, Polycystic Kidney Disease, Cystocele, Dialysis, etc.)
- 11/10 Reproductive System (Vasectomy, Inguinal Hernia, Benign Prostatic Hyperplasia, Pelvic Inflammatory Disease, Endometriosis, Cryptorchidism, Fibroids, etc.)
- 11/10 Endocrine Disorders (Acromegaly, Gigantism, Hypo/Hyperthyroidism, Thyroid Storm, Cushing's Disease, Addison's Disease, Diabetes Insipidus, etc.)
- 11/22 Disorders of the Nervous System (Alzheimer's, Parkinson's, Amyotrophic lateral sclerosis, Bell's Palsy, Stroke)
- 11/22 Disorders of the Nervous System (ADD/ADHD, Autism, Asperger syndrome, Dementia)

Student Agreement for Use of Human Cadavers in Anatomy and Anatomy/Physiology

Cadavers are loaned to Moorpark College through the Willed Body Program from UCI in conjunction with the UC system. As such, Moorpark College agrees to abide by rules stipulated by contract with the UC system.

In order to ensure that Moorpark College remains in agreement with the usage contract, all students taking Anatomy or Anatomy/Physiology must agree to the following:

- 1) Only registered students and instructors are allowed in the Anatomy Lab. No one else (friends, associates, family, etc...) is allowed in the room. Students are not permitted in the room without an instructor being present.
- 2) Cadavers must be treated with all possible dignity under the circumstance. This respect includes both physical dissection/manipulation of the cadaver as well as verbal or written discussion of the cadaver. All tissues dissected from the cadaver must remain within body bag with the cadaver. No cadaver or any part of a cadaver may leave the room at anytime for any reason.
- 3) There may be **NO** photography, videography or any other form of electronic or photographic reproduction of the cadavers or any other human specimens. As such, no cameras or other types of video or photographic equipment are permitted in the Anatomy Lab. Cell phones must be off and remain in a pocket, bag or purse from the time the student enters the room till they leave.
- 4) No food or drink is permitted in the Anatomy Lab at any time
- 5) The doors to the Cadaver room must remain closed at all times. Doors may not be propped or wedged open at any time. The doors will be locked when class is not in session.
- 6) All organic materials are fixed with formalin, which contains formaldehyde. **Formaldehyde is a confirmed carcinogen in humans.** As such, students must handle all organic materials with gloves to minimize the chance of skin contact. Students who are pregnant or plan on becoming pregnant should consult with their physician prior to taking the class.
The Potential Health Effects of formalin are listed in more detail below:
Eye: May cause irritation upon contact.
Skin: May be absorbed through skin, causing symptoms analogous to ingestion symptoms.
May cause skin irritation or sensitization.
Ingestion: May cause gastrointestinal irritation. May cause nausea, vomiting, diarrhea, pain in mouth/throat/stomach. May affect liver (jaundice), urinary system/kidneys (difficulty urinating, albuminuria, hematuria, anuria), blood, endocrine system, respiration (respiratory obstruction, pulmonary edema, bronchiolar obstruction), cardiovascular system (hypotension), metabolism (metabolic acidosis), eyes (retinal changes, visual field changes), and central nervous system. This product contains methanol, which may cause blindness if ingested.
Inhalation: While no conclusive evidence has been determined, prolonged exposure may induce allergic asthma.
- 7) Students must clean all bench tops & dissection equipment prior to leaving class. Students must not leave any organic tissues (human or animal) out anywhere in the class (including sinks after washing)
Students must wash hands immediately after entering as well as prior to leaving the room.

By signing this form I am acknowledging that I have been made aware of the terms of this agreement and agree to abide by the rules listed above.

Instructor's Name _____ CRN _____ Fall/Spr/Sum (circle semester), Year _____

Student's Name (Print) _____ Telephone _____

Address (street, city, zip) _____

Email address _____ Signature _____ Date _____