

Health
Sciences



Western
HealthSciences

3300A

**ANATOMY OF THE
HUMAN BODY –
PART II**

Course Instructor: Jeremy Roth, MSc. Clinical Anatomy

School of Health Studies
Faculty of Health Sciences

Cross-listed with KIN 322A

2013

HS 3300A

ANATOMY OF THE HUMAN BODY: A DESCRIPTION OF SYSTEMIC STRUCTURE AND FUNCTION: PART II

The prerequisite for this course is HS 2330A/B, HS 2300A/B or KIN 2222A (formerly KIN3722A). If you do not have this prerequisite (or special permission to take the course), you are not eligible to take this course and must drop it immediately in order to make room for fellow students who have the prerequisite. Taking a course without the prerequisite is not grounds for appeal.

September to December, 2013

COURSE OUTLINE

THE HUMAN BODY: A gross anatomical description of the structure and function of the human body focusing on systems responsible for maintaining the body (nervous, respiratory, digestive, urinary, endocrine), and for its continuation through the transmission of genes (reproductive system, developmental anatomy). Emphasis will be on the biological functions as they relate to the anatomical structure. The impact of disease and/or trauma to the various organ systems will be discussed and related to the relevant anatomy. Students will be tested by multiple choice exams and case material integrating function and structure.

There are 3 lecture hours per week. (**Tuesday, 8:30 am – 9:30 am and Thursday, 8:30 pm – 10:30 am; Health Sciences Building – room 40**). There will be three assessments during the course consisting of multiple-choice questions, K-type (multiple-multiple), diagrams and case studies, completed by each student during in-class examinations. In preparation for the exams, students will be provided an opportunity to complete system reviews using Sakai based practice examinations in order to assess preparedness. The assessments are designed to encourage regular review and should be used as a way to keep up with the material.

COURSE OBJECTIVE

To give each student a advanced understanding of human gross anatomy and working knowledge of the anatomical systems of the human body with particular reference to cavity systems and human development. At the end of this course each student should know the anatomical and functional issues regarding the nervous, endocrine, respiratory, digestive and urinary systems. In addition, a strong working knowledge of human reproduction and development will be attained.

COURSE ADMINISTRATION

OFFICE HOURS AND LOCATION

Thursdays 12:00pm – 2:00pm
Medical Sciences Building Rm 426

Due to the nature of the professoriate, there are times when unforeseen circumstances may prevent me from being present during scheduled office hours. I am always interested in hearing from students so feel free to contact me with some potential meetings times and I will respond with a mutually suitable date and time.

COURSE CONTACT

Course E-mail address: use the web site mail for course related questions. Anything of a sensitive nature may be addressed to the instructor's personal e-mail (jroth9@uwo.ca). Responses to inquiries via the web site email are sent to a mailbox on the web site and NOT to your personal account. Some external email services may encounter SPAM blocking or filtering. Important and timely information may not get to you if you are using another email service.

Web site address: <https://owl.uwo.ca/portal> Log onto OWL using your user name and password. You must be registered in this course to have access to the site and you must have an account established with UWO. All course-related materials are delivered through OWL.

EXAMINATIONS

The exams are in-class and 90 minutes in duration. Exams will consist of multiple-choice questions including standard and k-type questions (multiple-multiple). In addition there will be diagrams associated with some questions. The examinations are not cumulative. Please be aware that completion of the teaching material and the examination may be close together so it is important to keep up with the lectures.

MAKE-UP EXAMINATIONS

Only under exceptional circumstances will permission be granted for writing an exam on an alternate date (legitimate medical, religious or academic reasons (e.g. varsity sport athlete)). If the exam was missed due to illness, **proper documentation** must be provided to the School office (academic counselor) as soon as physically possible (see university policies below for further instruction). You must contact me, your course instructor that you have missed the exam. ***If approved, written makeup examinations will consist of short and long answer questions, case studies and image-based questions based on anatomical and clinical material from lectures.***

System Review quizzes offered through OWL **cannot be made up**. Given the flexibility in the grading scheme, missed quizzes will be assigned a zero grade and considered the one grade that is dropped.

<u>GRADING:</u>	<p>Examination 1 Thursday October 10th 8:45 – 10:15 AM Nervous and Endocrine systems</p> <p>Examination 2 Thursday November 14th 8:45 – 10:15 AM Respiratory, Digestive and Urinary systems</p> <p>Examination 3 December exam period Reproductive systems and human development</p>	<p>30%</p> <p>30%</p> <p>30%</p>	<p>Examination 1 and 2 are <u>90 minutes</u> in duration and will consist of <u>70 questions</u> and will take place in class. There will be multiple choice and K-type questions. Images will be used in the assessments. There will be questions based on the clinically relevant material reviewed in class or similar health-relevant issues. Examination 3 during the exam period will be <u>2 hours</u> in duration and consist of <u>90 questions</u>.</p>
	<p>System Reviews * (There are 5 system reviews in total; the best 4 will be used to calculate the grade. There is no opportunity to make up these reviews. A missed quiz will count as 0)</p>	<p>5%</p>	<p>OWL will be the delivery mechanism for multiple choice-based questions following each body system. This will provide an opportunity to assess preparedness and familiarity with course material. Each review will be available for a period of 72 hours after the last lecture of a particular system.</p>
	<p>Class Engagement *</p>	<p>5%</p>	<p>Active participation in the classroom will be assessed through a unique tool, Top Hat. A 70% participation rate would yield full class engagement marks. Proportional marks will be assigned for lower participation levels. Prior to each examination, Top Hat tournament quizzes will be available offering several questions to familiarize you with exam-related materials. The dates of the tournaments will be announced in class.</p>

** In cases where a student is unable or unwilling to participate using **Top Hat**, they may elect to have the 5% grade moved to the systems review portion of the course. This election must be made by October 1st and is a permanent decision. The absence of registration for **Top Hat** by October 1st will be used to determine the students electing to move their class engagement grade. The Participation grade using **Top Hat** starts with the second lecture in the course.*

ROUNDING OF GRADES

This is a practice (for example, bumping a 79 to 80%) some students request. The practice will not occur in this course. The mark attained is the mark you achieved and the mark assigned; there is no rounding to the next grade level. Such requests degrade my experience as your professor and your experience as a student. We both have an appreciation of high standards

TOP HAT

I am excited to announce this class will be using *Top Hat* online audience response system throughout the course. *Top Hat* is a web-based system that allows immediate, interactive feedback and graphical simulations, to both aid and assess understanding of the course material. *Top Hat* feedback, questions and simulations are launched on demand by the professor during class. Students can participate using their laptops, netbooks, tablets, smartphones, or cell-phones.

Top Hat questions, simulations and answers can also be reviewed by the student throughout the semester should they be made available by the professor. I anticipate utilizing a number of questions and the occasional demonstration in many lectures. Each student is expected to contribute actively to the questions and discussions. A class engagement grade of up to 5% is assigned to this contribution.

Top Hat is licensed by *student subscription, with unlimited courses per student*. (A student can access all of their courses using the system throughout the subscription term, with a single subscription.) Subscription keys are available at the university bookstore or directly on the *Top Hat* website at <https://tophat.com/>. Tutorials and technical support is available on the website once you register and login.

Questions will be asked throughout the lecture where challenging and interesting aspects of human anatomy are being discussed. This will allow an opportunity for the class to pause and consider how well a particular aspect of the material has been understood and could potentially be applied. Responses to the questions will be displayed immediately and taken up in class for discussion and clarification. There is *no specific grade per individual question*. The evaluation is delivered in the form of a participation grade for your engagement during the entirety of the course. While *Top Hat* will require your cell phone number AND student ID during the registration process, all information is used for the sole purpose of the course and to link participation (as correlated to a cell phone number or computer login) to a registered student in the course.

Please note that during the running of tournaments, the user ID is shown in the rankings. Should you wish to not be recognized in the ranking scheme, please create a user ID that does not reveal personal information (such as your name).

It is the responsibility of the student to ensure that they have registered an account with *Top Hat* and that it is current, activated and functional. Students must see their instructor if they have any concerns about whether or not they are using the technology correctly. Students must use their own login registration or cell phone. The use of somebody else's phone or login account in class constitutes a scholastic offence. The possession of a cell phone or computer belonging to another student will be interpreted as an attempt to commit a scholastic offence.

Student subscription: Can be obtained for the following durations:

\$20.00 for 4 months (1 term)

\$38.00 for 60 months (5 years)

EXPECTATIONS

You can expect me to be on time, answer your questions to the best of my ability, start class on time, and end class on time. I will arrive in the classroom 10 minutes prior to class time to field questions before the lecture. Class will begin promptly and end with sufficient time to exit the classroom and make your way to your next class. I may not know the answer to every one of your questions. I will however do my best to obtain an answer and discuss it at the next lecture.

I expect you to be on time for class, respect the instructor and your classmates when sharing an idea in class, and listen without disturbing others in class. In this course, I **encourage**, and expect, the use of cell phones or other communication devices for the purpose of interactive learning through **Top Hat**. However, incoming calls **will no be tolerated** so please set your phones to work in quiet mode. I also welcome the use of computers to take notes. I **do not condone** their use for surfing the web, social media or other non-academic use while in class. It is disrespectful to me, your instructor, and even more so to your peers sitting around you who may be distracted by your actions. Due to the large capacity of the lecture hall, it is imperative that students enter and exit the room in a timely fashion so that our class and subsequent classes can be started on time.

THE TEXTBOOK

Recommended Textbook

Tortora, G.J. and Nielsen, M.T. Principles of Human Anatomy. (12th ed.) Wiley: Hoboken, NJ. 2013.

Alternative Textbooks

Earlier editions of Tortora, G.J. and Nielsen, M.T. Principles of Human Anatomy. Wiley: Hoboken, NJ.

Supplemental Material

Should you find the material difficult, study guides such as colouring books and atlases may be of assistance. The bookstore carries a variety of books of this nature. Some possibilities include:

Krieger, P.A. A Visual Analogy Guide to Human Anatomy. (3rd ed.) Morton: Englewood, CO. 2013.

Kapit, W. and L.M. Elson. The Anatomy Coloring Book. (4th ed.) Pearson: San Francisco, CA. 2014.

Hull, K.L. Coloring Atlas of the Human Body. Lippincott Williams and Wilkins: Baltimore, MD. 2010.

LearnSmart Advantage Anatomy learning aid. McGraw-Hill Ryerson. ISBN: 9781259102295
(more on this tool in class notes)

YOU ARE NOT REQUIRED TO KNOW ALL THE DETAILS IN THE TEXT. USE THE TEXT AS A REFERENCE AND REVIEW GUIDE. CONCENTRATE ON THE MATERIAL PERTAINING TO THE LECTURES AND WEB POSTINGS, UNLESS OTHERWISE SPECIFIED (e.g. A SECTION WITHIN A CHAPTER MAY BE ASSIGNED FOR READING). MANY OF THE DIAGRAMS USED IN CLASS ARE FROM THE TEXT, SO IT WILL BE A VALUABLE TOOL. THE QUESTIONS AT THE END OF EACH CHAPTER IN THE TEXT, ARE A GOOD EXAMPLE OF THE TYPE OF MULTIPLE CHOICE QUESTIONS TO EXPECT ON THE MIDTERMS AND FINAL. AS WELL, THE MULTIPLE CHOICE QUIZZES ON THE WEB SITE ARE OLD EXAM QUESTIONS. THERE IS NO DATA BANK OF QUESTIONS IN THE LIBRARY

UNIVERSITY POLICIES

STUDENT CODE OF CONDUCT

The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at The University of Western Ontario, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed, and set out the disciplinary procedures that the University will follow. For more information, visit <http://www.uwo.ca/univsec/board/code.pdf>

ENGLISH PROFICIENCY FOR THE ASSIGNMENT OF GRADES

Visit the website <http://www.uwo.ca/univsec/handbook/exam/english.pdf>

ACCOMMODATION FOR MEDICAL ILLNESS OR NON-MEDICAL ABSENCES

http://www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf

The University recognizes that a student's ability to meet his/her academic responsibilities may, on occasion, be impaired by medical illness. Illness may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. The University further recognizes that medical situations are deeply personal and respects the need for privacy and confidentiality in these matters. However, in order to ensure fairness and consistency for all students, academic accommodation for work representing 10% or more of the student's overall grade in the course shall be granted only in those cases where there is documentation indicating that the student was seriously affected by illness and could not reasonably be expected to meet his/her academic responsibilities.

A UWO Student Medical Certificate (SMC) is required where a student is seeking academic accommodation. This documentation should be obtained at the time of the initial consultation with the physician or walk-in clinic. An SMC can be downloaded under the Medical Documentation heading of the following website: <https://studentservices.uwo.ca/secure/index.cfm>.

Documentation is required for non-medical absences where the course work missed is more than 10% of the overall grade. Students may contact their Faculty Academic Counselling Office for what documentation is needed. Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. Students must follow up with their professors and their Academic Counselling office in a timely manner. Documentation for any request for accommodation shall be submitted, as soon as possible, to the appropriate Academic Counselling Office of the student's Faculty of registration. For BHSc students, you may go to the School of Health Studies Office in HSB room 222.

SCHOLASTIC OFFENCES

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf

Additionally,

1. All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).
2. Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

SUPPORT SERVICES

There are various support services around campus and these include, but are not limited to:

1. Student Development Centre -- <http://www.sdc.uwo.ca/ssd/>
2. Student Health -- <http://www.shs.uwo.ca/student/studenthealthservices.html>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombuds Office -- <http://www.uwo.ca/ombuds/>

Health Sciences 3300A

Anatomy of the Human Body: Part II

Course Schedule – Fall 2013

Classes: Tuesday 8:30 – 9:30; Thursday 8:30 – 10:30
Health Sciences Building, room 40

One-hour class

Two-hour class

The rate of discussion of lecture material can vary from time-to-time. Please come prepared by having all of the lecture material for a given system with you in case we move ahead with material.

Date	Subject	Topic Areas	
September 10, 2013		Course Introduction and Organization	
September 12, 2013	Nervous System	Chapter 16 Chapter 17 Organization of the nervous system Cells of the nervous system Spinal nerves Spinal cord	
September 17, 2013		Chapter 18 Brain and cranial nerves	
September 19, 2013		Chapter 18 Chapter 20 Cranial nerves (continued) Ascending and descending pathways	
September 24, 2013		Chapter 20 Descending pathways (continued) Autonomic nervous system	
September 26, 2013		Endocrine System	Chapter 22 Hormones Hypothalamus and pituitary gland
October 1, 2013	Chapter 22 Hypothalamus and pituitary gland (continued) Thyroid, parathyroid, pancreas		
October 3, 2013 (Hour 1)	Chapter 22 Adrenal glands Ovaries and testes Other endocrine organs		
October 3, 2013 (Hour 2)	Respiratory System	Chapter 23 Organization of the respiratory system Nasal cavity and pharynx	
October 8, 2013		CONTENT REVIEW SESSION	
Thursday October 10, 2013 8:45 – 10:15 AM		EXAM 1: Nervous system and Endocrine System	
October 15, 2013		Chapter 23 Larynx and voice production Trachea Bronchi	
October 17, 2013 (Hour 1)		Chapter 23 Lungs and pleural cavity Respiratory division (cellular structures)	
October 17, 2013 (Hour 2)	Digestive System	Chapter 24 Alimentary canal Peritoneum	
Friday October 18, 2013 8:30 AM – 10:30 AM		EXAM 1: Make up exam (Those with documented accommodation; by permission only)	
October 22, 2013		Chapter 24 Oral cavity, Esophagus	

October 24, 2013		Chapter 24	Stomach Small intestines Large intestines Rectum and anus
October 29, 2013		Chapter 24	Accessory organs Abdominal quadrants
November 5, 2013	Urinary System	Chapter 24	Introduction to the Kidney
November 7, 2013		Chapter 25	Nephron Ureters Urinary bladder Urethra Urination
November 12, 2013	Male Reproductive System		Content Review Session
Thursday November 14, 2013 8:45 – 10:15 AM		EXAM 2: Respiratory, Digestive and Urinary systems	
November 19, 2013		Chapter 26	Male reproductive system Scrotum and testicles
November 21, 2013		Chapter 26	Reproductive system ducts Accessory glands Semen
Friday November 22, 2013 8:30 AM – 10:30 AM		EXAM 2: Make up exam (Those with documented accommodation; by permission only)	
November 26, 2013		Female Reproductive System	Chapter 26
November 28, 2013	Chapter 26		External genitalia Mammary glands
December 3, 2013	Human Development	Chapter 4	Fertilization Implantation Gastrulation
December 5, 2013		Chapter 4	Primary Germ layers Organogenesis Fetal Development Labour and parturition

December 10-21

EXAM 3: Reproductive Systems; Human Development