



Western
HealthSciences

Health Sciences 3300B
Kinesiology 3222B

ANATOMY OF THE HUMAN BODY – PART II

Course Instructor: Daniel Belliveau, Ph.D.

School of Health Studies
Faculty of Health Sciences

Courses are cross-listed

2017

HS 3300B / KIN 3222B

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/B. 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.

January to April 2017

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, 9:30 am – 11:30 am and Thursday, 9:30 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 OWL 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

Health Sciences Building, room 221
Ext. 88235
Friday 10:00 – 12:00 (OR by appointment)

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 including questions about course content. Anything of a sensitive nature may be addressed to the instructor's personal e-mail (dbellive@uwo.ca). Use your UWO email address—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.

GRADING:	Examination 1 Tuesday February 7th 9:45 – 11:15 AM Nervous and Endocrine systems	30%	<i>Examinations 1 and 2 are 90 minutes in duration and will consist of 70 questions. 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.</i>
	Examination 2 Tuesday March 14th 9:45 AM – 11:15 AM Respiratory, Digestive and Urinary systems	30%	
	Examination 3 April exam period Reproductive systems and human development	30%	
	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)	4%	<i>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 <i>review will be available for a period of 48 hours after the last lecture</i> of a particular system.</i>
	Class Engagement *	4%	<i>Active participation in the classroom will be assessed through the personal response system, Top Hat. A 70% participation rate would yield full class engagement marks. Proportional marks will be assigned for lower participation levels.</i>
	Learning Enhancement *	2%	<i>An opportunity will be available for students to practice and test their anatomical knowledge through Peerwise (https://peerwise.cs.auckland.ac.nz/) Peerwise offers students an opportunity to enhance their learning. Full learning enhancement marks are granted to students who create 10 questions and answer 20 peer-created questions.</i>

* *In cases where a student is unable or unwilling to participate using **Top Hat** or **Peerwise**, they may elect to have the 6% grade moved to the systems review portion of the course. This election must be made by February 6th and is a permanent decision. The absence of registration for **Top Hat** or use of **Peerwise** by February 6th will indicate the student's election to move their class engagement grade. No further indication is required of the student.*

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.

CLASS ENGAGEMENT with 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 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 (through text messaging).

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 4% 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 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 *TopHat online 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.

LEARNING ENHANCEMENT with PEERWISE

This term we will be using PeerWise as a place for you to create, share and evaluate assessment questions with your classmates. Start by visiting PeerWise here:

http://peerwise.cs.auckland.ac.nz/at/?uwo_ca

If you have not used PeerWise before, just click the "Registration" link and follow the prompts. All you need to do is choose a *user name* and a *password* for your PeerWise account.

If you have used PeerWise before, simply log in and then select "Join course" from the Home menu.

To access our course, "HS3300_KIN3222 (Term 2 2017)", you will need to enter two pieces of information:

- 1) Course ID = _____
- 2) Identifier = **Please enter your identifier for this course (student ID)**

More information about using Peerwise can be found on OWL.

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. (13th ed.) Wiley: Hoboken, NJ. 2015.

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. 2015.

Kapit, W. and L.M. Elson. The Anatomy Coloring Book. (4th ed.) Pearson: San Francisco, CA. 2015.

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

Western Libraries

Available through an institutional license, Western has an excellent collection of educational materials for the study of anatomy. Follow this link for access to *atlases*, *multimedia* and *websites*:

<http://guides.lib.uwo.ca/anatomy>

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 AN ESSENTIAL 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 FROM 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/pdf/board/code.pdf> .

ENGLISH PROFICIENCY FOR THE ASSIGNMENT OF GRADES

Visit the website http://www.uwo.ca/univsec/pdf/academic_policies/exam/english.pdf

ACCOMMODATION FOR MEDICAL ILLNESS OR NON-MEDICAL ABSENCES

<http://www.westerncalendar.uwo.ca/2016/pg117.html>

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: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf 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/pdf/academic_policies/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/>
2. Student Health – <http://www.uwo.ca/health/services/students/index.html>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombuds Office -- <http://www.uwo.ca/ombuds/>

Health Sciences 3300B

Kinesiology 3222B

Anatomy of the Human Body: Part II

Course Schedule – Winter 2017

Classes: Tuesday 9:30 – 11:30; Thursday 9:30 – 10:30
Health Sciences Building, room 40

Two-hour class

One-hour class

To be best prepared for class, I recommend that you review and have ready, notes for an entire organ system.

Date	Subject	Topic Areas	
January 5, 2017	Nervous System	Chapter 16 Course Introduction and Organization Organization of the nervous system	
January 10, 2017		Chapter 16 Chapter 17 Cells of the nervous system Spinal cord Spinal nerves	
January 12, 2017		Chapter 18 Brain and cranial nerves Cranial nerves (continued)	
January 17, 2017		Chapter 20 Ascending and descending pathways	
January 19, 2017		Chapter 21 Autonomic nervous system OWL quiz 1: 9 PM (1/19) – 9 PM (1/21)	
January 24, 2017	Endocrine System	Chapter 22 Hormones Hypothalamus and pituitary gland Thyroid, parathyroid	
January 26, 2017		Chapter 22 Adrenal glands, pancreas	
January 31, 2017 (Hour 1)		Chapter 22 Ovaries and testes Other endocrine organs OWL quiz 2: 9 PM (1/31) – 9 PM (2/2)	
January 31, 2017 (Hour 2)	Respiratory System	Chapter 23 Organization of the respiratory system Nasal cavity and pharynx	
February 2, 2017		CONTENT REVIEW SESSION	
Tuesday February 7, 2017 9:45 – 11:15 AM		EXAM 1	Nervous system and Endocrine System
February 9, 2017		Chapter 23 Larynx and voice production Trachea Bronchi	
Friday February 17, 2017 9:45 AM – 11:15 AM		EXAM 1: Make up exam (Those with documented accommodation; by permission only)	
February 14, 2017 (Hour 1)		Chapter 23 Lungs and pleural cavity Respiratory division (cellular structures) OWL quiz 3: 9 PM (2/14) – 9 PM (2/16)	

February 14, 2017 (Hour 2)	Digestive System	Chapter 24	Alimentary canal Peritoneum
February 16, 2017		Chapter 24	Oral cavity, Esophagus
February 20-24		READING WEEK	
February 28, 2017		Chapter 24	Stomach Small intestines Large intestines Rectum and anus
March 2, 2017		Chapter 24	Accessory organs Abdominal quadrants OWL quiz 4: 9 PM (3/2) – 9 PM (3/4)
Put exam 2 here? March 7, 2017	Urinary System	Chapter 25	Introduction to the Kidney Nephron Ureters Urinary bladder
March 9, 2017		Chapter 25	Uretha Urination OWL quiz 5: 9 PM (3/9) – 9 PM (3/11)
Tuesday March 14, 2017 9:45 – 11:15 AM	Male Reproductive System	EXAM 2	Respiratory, Digestive and Urinary systems
March 16, 2017		Chapter 26	Male reproductive system Scrotum and testicles ONLINE LECTURE
March 21, 2017		Chapter 26	Reproductive system ducts Accessory glands Semen
Friday March 24, 2017 8:45 AM – 10:15 AM		EXAM 2: Make up exam (Those with documented accommodation; by permission only)	
March 23, 2017	Female Reproductive System	Chapter 26	Female Reproductive system
March 28, 2017		Chapter 26	Ovaries, uterus and vagina External genitalia Mammary glands
March 30, 2017	Human Development	Chapter 4	Fertilization Implantation Gastrulation
April 4, 2017		Chapter 4	Primary Germ layers Organogenesis Fetal Development Labour and parturition
April 6, 2017		CONTENT REVIEW SESSION	

April 9 – 30, 2017

EXAM 3

Reproductive Systems; Human Development