ANATOMY OF THE HUMAN BODY:

A DESCRIPTION OF SYSTEMIC STRUCTURE & FUNCTION

**PART II** 

**HS 3300B** 

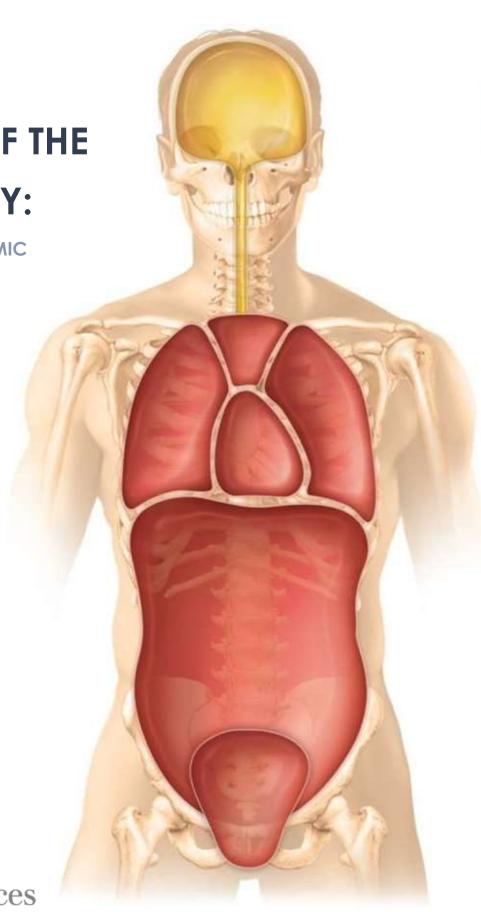
**KIN 3222B** 

**COURSE INSTRUCTOR** 

**OLEKSIY ZAIKA** 

**TERM** 

**WINTER 2018** 



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

### HS3300B/KIN3222B

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.

#### **COURSE OUTLINE**

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 examinations 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 to assess preparedness. The assessments are designed to encourage regular review and should be used as an advantage in keeping up with the material. To assess application of learned material, there will be a clinical case writing assignment that will be distributed to the students during the term.

#### **COURSE OBJECTIVE**

To give each student an 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

# Thursdays 10:30-12:30 (OR by appointment)

I am always interested in hearing from students about any questions they have about the content or the nature in which the course is taught. If you are not available during the scheduled office hours, please contact me with your available times and I will make sure that we can find a time to meet.

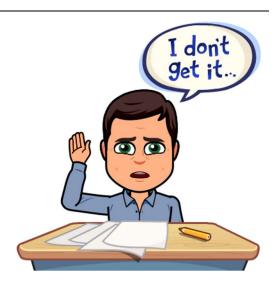
#### **COURSE CONTACT**

For general questions about course content please use the owl web mail to communicate with me. This will allow for more organized communication method for topics relating to the course.

Web site address: <a href="https://owl.uwo.ca/portal">https://owl.uwo.ca/portal</a>

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.

For any <u>questions of sensitive nature</u>, please email me at my personal email at <u>ozaika@uwo.ca</u>. Please use your UWO email address to ensure that your email doesn't get filtered by the university's SPAM filter.



## **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**

EVADA 4	25%	EVANA 4 I EVANA 2 00 - 1 - 1 - 1 - 1	
		EXAM 1 and EXAM 2 are 90 minutes in	
Tuesday, February 6 <sup>th</sup> , 2018		duration and will consist of <b>70 questions</b> . There	
9:45 – 11:15 AM		will be multiple choice and K-type questions.	
<ul> <li>Nervous System</li> </ul>		Images will be used in the assessments. There	
<ul> <li>Endocrine System</li> </ul>		will be questions based on the clinically	
EXAM 2	25%	relevant material reviewed in class or similar	
Tuesday, March 13 <sup>th</sup> , 2018		health-relevant issues.	
<u>9:45 – 11:15 AM</u>			
<ul> <li>Respiratory System</li> </ul>		<b>EXAM 3</b> during the December exam	
<ul> <li>Digestive System</li> </ul>		period is <b>120 minutes</b> in duration and will	
Urinary System		consist of <b>100 questions</b> .	
EXAM 3	30%		
April Exam Period			
Reproductive System			
Human Development			
System OWL Reviews	5%	OWL will be the delivery mechanism for	
System OWE Reviews	370	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 <b>available</b>	
		for a period of 84 hours.	
Case Study	12%	A <b>2-page writing assignment</b> that gives you the opportunity	
case study	12/0	to convey a clinical anatomy-based case with a lay audience.	
		This is an opportunity to practice simplifying complex ideas	
		and exercising concise, scientific writing. <b>Grading rubric is</b>	
		<b>posted on the assignment page</b> , and is essential to a good	
Double in a big in	20/	grade.	
Participation	3%	Active participation in the classroom will be assessed	
		through a personal response system, iClicker REEF. A 70%	
		participation rate will yield full participation marks.	
		Proportional marks will be assigned for lower participation	
		levels.	

# **ROUNDING OF GRADES**

This is a practice (for example, bumping a 79 to 80%) some students request. The practice <u>will not occur</u> in this course. The mark attained is the mark you achieved and the mark assigned; there is no rounding to the next grade level.

#### **OWL REVIEWS**

There will be a total of 6 reviews that will be available on OWL during their respective units. The timed quizzes will be open for 3.5 days (refer to table for dates), closing at midnight on the last day. It is encouraged that your complete the quizzes individually and use them as review for the upcoming examination. **Each review is worth 1% of your final grade**, and your lowest quiz score dropped (Best 5 quizzes x 1% = 5%). Use this opportunity to obtain the best grade you can. **Quiz deadlines are final and no late submissions will be accepted**. If you miss the deadline, you will be given a grade of 0 for that quiz, however, if you complete all 6, it will be dropped at the end of the term. This is an opportunity to review material and easily boost your grade in the course.

Quiz	Topics	Date
1 Nervous System		12:00 PM (01/18) - 11:59 PM (01/21)
2 Endocrine System		12:00 PM (01/30) - 11:59 PM (02/02)
<b>3</b> Respiratory System		12:00 PM (02/13) - 11:59 PM (02/16)
4 Digestive System 12:00 PM (03/		12:00 PM (03/01) - 11:59 PM (03/04)
5 Urinary System 12:00		12:00 PM (03/08) - 11:59 PM (03/11)
6 Reproductive System		12:00 PM (03/27) - 11:59 PM (03/30)

#### **CASE STUDY**

This assignment provides you with an opportunity to exercise your research and writing skills in the sciences, especially pertaining to independently obtaining new information and simplifying it for an audience. You will use the basic knowledge obtained in this course to explain a unique case study of your choice in the realm of the anatomical unit which you have been assigned.

You will be required to write a 2-page journal article explaining a clinical anatomy-based case study for an academic audience with no previous exposure to anatomy. The most successful submissions will contain focused ideas that are effectively explained in lay terms to a wide audience using language and terms learned in class in order to educate and entertain. Feel free to get creative with this assignment, as long as you maintain within the boundaries of the rubric. It cannot be stated enough the importance of consulting the grading rubric available to you prior to commencing this assignment.

Deadlines vary by unit assigned, therefore, it is CRUCIAL that you are aware what unit you are responsible for and the deadlines that are associated with that unit. Please consult the clinical case page on OWL for further instructions, deadlines and rubric.

#### **PARTICIPATION**

This class will have many opportunities to participate throughout the semester with the use of electronic polling and gamification. We will be using iClicker REEF technology to communicate in class. You will need a laptop or a cellphone to be able to participate. Please consult the iClicker page for further instructions. A participation rate of 70% will yield full marks, with a proportional grade awarded for anything below. As this grade is awarded purely for participation in class polling, there will be no grade attached to the accuracy of your answers.

#### THE TEXTBOOK

#### **Recommended Textbook**

Tortora, G.J. and Nielsen, M.T. <u>Principles of Human Anatomy</u>. (13th ed.) Wiley: Hoboken, NJ. 2015.

#### **Alternative Textbooks**

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

# PRINCIPLES OF HUMAN ANATOMY Designed Street load Thomas General Street load Thomas

# **Supplemental Material**

Should you find the material difficult, study guides such as colouring books and atlases may be of assistance. The bookstore caries 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.

#### **CLASS 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 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. 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.

#### **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 <a href="http://www.uwo.ca/univsec/pdf/board/code.pdf">http://www.uwo.ca/univsec/pdf/board/code.pdf</a>

# **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: <a href="http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf">http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf</a>

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,

- 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 (<a href="http://www.turnitin.com">http://www.turnitin.com</a>)
- 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 -- <a href="http://www.sdc.uwo.ca/">http://www.sdc.uwo.ca/</a>
- 2. Student Health http://www.uwo.ca/health/services/students/index.html
- 3. Registrar's Office -- <a href="http://www.registrar.uwo.ca/">http://www.registrar.uwo.ca/</a>
- 4. Ombuds Office -- <a href="http://www.uwo.ca/ombuds/">http://www.uwo.ca/ombuds/</a>

# **SEMESTER SCHEDULE**

		<b>61</b> .	T- ·			
Date	Unit	Chapter	Topics			
		16,18	Course Overview			
			Organization of the Nervous System			
09-Jan	ons		Brain			
11-Jan	Nervous System	18	Cranial Nerves			
	Σý	17,20	Spinal Cord			
16-Jan			Ascending and Descending Pathways			
18-Jan		21	21 Autonomic System			
		22	Hormones			
			Hypothalamus & Pituitary			
23-Jan	Endocrine System		Thyroid and Parathyroid			
25-Jan	」		Adrenal Glands and Pancreas			
	ndocrine System	22	Ovaries & Testes			
30-Jan	ш		Lymphatics			
01-Feb			Content Review			
06-Feb			EXAM 1			
			Organization of the Respiratory System			
		23	Nasal Cavity			
08-Feb	sspirato System		Pharynx			
	pira /st		Larynx			
	Respiratory System	23	Trachea and Bronchi			
			Lungs and Pleural Cavity			
13-Feb			Alimentary Canal			
15-Feb		24	Oral Cavity, Esophagus			
20-Feb	ø)		Spring Reading Week			
22-Feb	Digestive System					
	ges yst	24	Stomach			
	_		Intestines			
27-Feb			Rectum and Anus			
01-Mar		24 Accessory Organs				
		25 25 25	Kidney			
00.11	ary em		Nephron			
06-Mar	Urinary System		Ureters			
08-Mar	Jά	25	Urethra and Urination			
13-Mar			EXAM 2			
	و 15-Mar	26	Male Reproductive System			
20-Mar	.≩ 26		Accessory Glands and Semen			
22-Mar	odu šter	26	Female Reproductive System			
	<u> </u>		Ovaries, Uterus and Vagina			
		26	External Genitalia			
27-Mar			Mammary Glands			
			Fertilization			
29-Mar	9-Mar		Implantation			
	29-Mar 03-Apr 05-Apr 10-Apr		Fetal Development			
03-Apr	Human ⁄elopmo	4 Labour				
05-Apr	H eve	- Current Research in Anatomy				
10-Apr	Δ	Content Review				
TBD		EXAM 3				