# Anatomy 2221/9501/9524: Functional Human Anatomy for Kin, PT, OT

# **ANAT 2221, Kinesiology:**

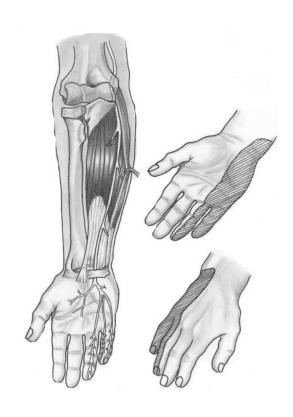
Full year 2018-2019

# **ANAT 9501, School of Physical Therapy:**

Two terms Sept - Feb, 2018-2019

# **ANAT 9524, School of Occupational Therapy:**

Fall term Sept - Dec, 2018



# Anatomy 2221/9501/9524: Functional Human Anatomy for Kin, PT, OT

## THE OVERALL COURSE OBJECTIVES ARE TO:

- Identify through cadaveric dissection the major structures of each of the body regions.
- Correlate structure and function as it applies to the gross anatomical features and overall function of the body systems
- Integrate basic physiological and biomechanical concepts to better understand the gross anatomical structure and function
- Provide practical examples of how the anatomical knowledge may be applied to the students' varied disciplines (kinesiology, physical therapy and occupational therapy)
- Develop an ability to predict the anatomical basis for a number of injury mechanisms and congenital anomalies

## **COURSE INFORMATION**

<u>Organization</u>: There are **two lectures** and **one lab** per week. Where possible, the lecture material will explain and expand upon the topics covered in the subsequent lab. **The labs are designed as self-discovery experiences so that exploration is done by the student.** Professor(s) and Teaching Assistant(s) will supervise the labs, and help to facilitate learning, as needed. Doors to the lab shall remain locked at all times.

**Lectures:** Western Science Centre 55 **All Cohorts:** Tuesdays & Thursdays, 2:30 - 3:30 p.m.

**Labs:** Dental Sciences Building 4001 **Kin 2221** - Tuesdays <u>or</u> Thursdays, 3:30 - 5:30 p.m.

**PT 9501** - Wednesdays, 2:30 - 4:30 p.m.

**OT 9524** - Fridays, 8:30 - 10:30 a.m.

## Requisites:

Required course for each of ANAT 2221, 9501, 9524

Prerequisite(s): for Kin - Grade 12U Bio; enrollment in MScPT or MScOT or BSc stream of Kin

Corequisite(s)

Antirequisite(s): for Kin - ANAT 3319

# Senate regulation regarding the student's responsibility regarding requisites:

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

#### INSTRUCTOR INFORMATION

Course Committee Chair: Dr. Brian Allman

Office: MSB 460, Medical Sciences Building

Phone: 519-661-2111 ext. 88689 Email: brian.allman@schulich.uwo.ca

Course Director: Dr. Brian Allman

**Anatomy 9501, 9524** Office: MSB 460, Medical Sciences Building

Phone: 519-661-2111 ext. 88689 Email: brian.allman@schulich.uwo.ca

Course Director: Dr. Michelle Mottola
Anatomy 2221: Room 2214, 3M Centre

Phone 519 661-2111, ext. 85480 E-mail: mmottola@uwo.ca

Instructors: Dr. Brian Allman

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Dr. Lauren Allen

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Dr. Katherine Willmore

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**Dr. Michelle Mottola**Office: 3M Rm 2214

Phone 519 661-2111, ext. 85480

Email: mmottola@uwo.ca

# **Teaching Assistants:**

Each lab will have 2-4 graduate Teaching Assistants or volunteers - names TBA on the OWL site

## **Office Hours:**

Primarily, we have an open door policy and do respond to email as "virtual office hours". It is always good practice to call or email ahead of time if you would like to meet in person.

#### OWL:

This site will be used primarily for lecture material, grades, practice quizzes, announcements and calendar updates. Students with OWL issues should contact the Computer Support Centre at 519 661-3800

#### **COURSE MATERIALS**

#### **Lectures:**

Posted on the OWL site are the lecture slides in e-format (e.g., pdf). It is expected that you use the notes in the e-format during lectures as a guide to your learning. **There are no required textbooks for this course.** That said, if a student chooses to supplement their learning with a textbook, here are some examples. Note, older/newer textbook editions would be acceptable.

Atlas of Clinical Gross Anatomy, Moses et al.

Human Anatomy: Color Atlas and Text, Gosling et al.

## Labs:

Posted on the OWL site are the lab instructions in e-format (e.g., pdf). Students are expected to print out a copy of the lab instructions and bring it to the lab each week. To assist in their lab dissections, students are required to use an <u>atlas</u>. There must be at least one atlas per group during the lab sessions. Some atlases are provided in the lab, but these must remain in the lab. If a student wishes to purchase an atlas, here are some examples. Note, older/newer atlas editions would be acceptable.

Atlas of Clinical Gross Anatomy, Moses et al.

Grant's Atlas of Anatomy, Agur & Dalley.

Atlas of Human Anatomy, Netter.

Color Atlas of Anatomy, Rohen, Yokochi, Lutjen-Drecoll

# **Audiovisual Aids:**

Look for additional resources on the OWL site under Practice Activities, Helpful Links and Videos.

# The Anatomy Learning Centre:

The Anatomy Learning Centre is located in **Room D4002** of the Dental Sciences Building, and it houses plastic models of most anatomical structures. The entrance code for the locked door will be given out during the first lab.

# **EVALUATION:** see Schedule (pages 8-11) for specific dates

<u>Course</u>	Type of Test/Exam	<u>Duration</u>	% of Final
Kin 2221	Lab Practical 1 (November 2018)	<1 hour	15%
	Lab Practical 2 (December 2018)	<1 hour	15%
	Term 1 Written Test (December 2018)	2.5 hours	20%
	Term 2 Lab Practical 3 (April 2019)	<1 hour	25%
	Term 2 Written Exam (April 2019)	2.5 hours	25%
PT 9501	Lab Practical 1 (November 2018)	<1 hour	15%
	Lab Practical 2 (December 2018)	<1 hour	15%
	Term 1 Written Test (December 2018)	2.5 hours	30%
	Term 2 Lab Practical 3 (February 2019)	<1 hour	20%
	Term 2 Written Exam (February 2019)	1 hour	20%
OT 9524	Lab Practical 1 (November 2018)	<1 hour	20%
	Lab Practical 2 (December 2018)	<1 hour	25%
	Online case quizzes (throughout Term)	NA	15%
	Final Written Exam (December 2018)	2.5 hours	40%

**Written exams** are cumulative within each term, not across terms. The breakdown of questions will reflect the material covered (e.g., December written exam will be 50:50 back/upper limb and lower limb; April written exam will be 50:50 head/neck/thorax and abdomen/pelvis.) The written exams are in a multiple-choice format, which will be graded using the Scantron system, and may be examined by computer software to check for unusual coincidences in answer patterns that may indicate cheating.

**Lab practical tests** will be in a "bell-ringer" format. More information about the bell-ringer format will be given in lab and lecture prior to the first lab practical.

**Online case quizzes** may be attempted by all cohorts, but performance will only count toward the OT student grades.

#### ASSESSMENT CONDITIONS

- A minimum of 80% **attendance** is required for the labs. Documentation is required for attendance less than 80%. Any attendance less than 80% without documentation will result in an automatic loss of 5% of the overall course grade.
- An overall passing average (according to your specific program) is required to
  pass the course. In other words, a student may fail a lab component but still have
  an overall passing average.
- Rounding of grades: According to the Schulich undergraduate science courses guidelines, decimal points will NOT be rounded to the next whole number (e.g., 69.56 to a 70%). Marks close to the next decade will **not be** rounded beyond the next single digit grade e.g., 68.5 will **not be** round to 70, nor will 69=70). In other words, you get what you achieved; however, the OWL grading software will automatically round up the grade submissions to a whole number.
- **Minimum average** of 65% is required for 9524 students (OT program requirement)

#### ABSENCE FROM COURSE COMMITMENTS

#### A. Absence for medical illness or non-medical reasons:

Students must familiarize themselves with the Policy on Accommodation for Medical Illness: https://studentservices.uwo.ca/secure/index.cfm

- Documentation for medical or non-medical reasons, according to the Policy on Accommodation for Medical Illness is required for absences from tests or exams.
   Documentation is not required for work worth less than 10% of the total course grade (e.g., individual lab sessions). When documentation is required for missing an exam or test, such documentation must be submitted by the student directly to the appropriate Faculty Dean's office and not by the Instructor.
- It will be the Dean's office that will determine if accommodation is warranted.
- The date and nature of a make-up test/exam will be determined by the Instructor, in consultation with the student. Make-up written exams will be in a multiple-choice format. Generally, students who miss a lab practical will be given a verbal 1:1 lab test, or re-weighing of grades will be considered.

# Statement from the Dean's Office:

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to the Dean's office as soon as possible and contact your Instructor immediately. It is the student's responsibility to make alternative arrangements with their Instructor once the accommodation has been approved and the Instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For further information please see:

# http://www.uwo.ca/univsec/handbook/appeals/medical.pdf

# PT Attendance:

Students in the MSc PT are expected to attend all classes and laboratory sessions. If a student must be absent from regularly scheduled class times he/she is expected to contact the course instructor/manager

and the School of PT main office and excuse himself/herself from that class or lab. A student requiring academic accommodation due to illness, should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services.

The form can be found at:

https://studentservices.uwo.ca/secure/medical\_document.pdf

The Policy on Accommodation for Medical Illness is also available on the BMSUE secure site: www.uwo.ca/bmsc

# **B. Special Examinations**

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the Instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents. A Special Examination must be written at the University or an Affiliated University College no later than 30 days after the end of the examination period involved. To accommodate unusual circumstances, a date later than this may be arranged at the time permission is first given by the Dean of the Faculty. The Dean will consult with the instructor and Department Chair and, if a later date is arranged, will communicate this to Registrarial Services. If a student fails to write a scheduled Special Examination, permission to write another Special Examination will be granted only with the permission of the Dean in exceptional circumstances and with appropriate supporting documents. In such a case, the date of this Special Examination normally will be the scheduled date for the final exam the next time the course is offered.

# **PLAGIARISM**

Senate regulations require all Instructors to include the following statements on plagiarism, cheating and proficiency in English in the course outline:

"Students must write their essays and assignments in their own words. Whenever students take an idea or passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar)."

#### 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 Western University, 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:

https://www.uwo.ca/univsec/pdf/board/code.pdf

**TERM SCHEDULE** as follows: (changes may be made during the Term, if needed)

TERM 1: INTRODUCTION, BACK & UPPER LIMB – Dr. Brian Allman All Cohorts

DATE	LECTURE TOPIC
Thursday, September 6, 2018	Intro to the Course; Anatomical Terminology; Tissues; Joints
Tuesday, September 11, 2018	Osteology
Thursday, September 13, 2018	Intro to Upper Limb; Muscles of the Scapula
Tuesday, September 18, 2018	Deep Back & Spinal Cord
Thursday, September 20, 2018	Pectoral Muscles & Axilla
Tuesday, September 25, 2018	Brachial Plexus
Thursday, September 27, 2018	Arm
Tuesday, October 2, 2018	Shoulder & Elbow Joints
Thursday, October 4, 2018	Anterior Forearm
Tuesday, October 16, 2018	Anterior Forearm & Carpal Tunnel
Thursday, October 18, 2018	Posterior Forearm
Tuesday, October 23, 2018	Hand
Thursday, October 25, 2018	Review

DATE (Lab times specific for Cohort)	LAB TOPIC
Week of September 3, 2018	No labs
Week of September 10, 2018	Service; Osteology of Axial Skeleton & Upper Limb
Week of September 17, 2018	Superficial & Deep Back
Week of September 24, 2018	Spinal Cord; Pectoral Region
Week of October 1, 2018	Brachial Plexus; Arm
Week of October 15, 2018	Anterior Forearm; Shoulder & Elbow Joints
Week of October 22, 2018	Posterior Forearm; Hand
Monday, November 5, 2018	Lab Practical 1: All Cohorts (Kin, PT & OT) 7:00 – 10:00 p.m.
	Specific time slots provided in Lecture/Lab.

TERM 1: LOWER LIMB – Dr. Lauren Allen All Cohorts

DATE	LECTURE TOPIC
Tuesday, October 30, 2018	Intro to Lower Limb; Pelvic Girdle; Lumbosacral Plexus
Thursday, November 1, 2018	Anterior & Medial Thigh
Tuesday, November 6, 2018	Medial & Lateral Thigh
Thursday, November 8, 2018	Gluteal & Posterior Thigh
Tuesday, November 13, 2018	Hip & Knee Joints
Thursday, November 15, 2018	Popliteal Fossa; Overview of Leg
Tuesday, November 20, 2018	Posterior & Anterior Leg
Thursday, November 22, 2018	Lateral Leg; Ankle Joint
Tuesday, November 27, 2018	Foot Arches; Joints; Ligaments
Thursday, November 29, 2018	Intrinsic Foot Muscles

DATE (Lab times specific for Cohort)	LAB TOPIC
Week of October 29, 2018	Anterior & Medial Thigh; (Lower Limb Osteology Self-Study)
Week of November 5, 2018	Gluteal & Posterior Thigh; Hip Joint
Week of November 12, 2018	Posterior Leg
Week of November 19, 2018	Anterior Leg; Knee Joint
Week of November 26, 2018	Foot
Tuesday, December 4, 2018	Lab Practical 2: Kin Tuesday Cohort, 3:30 – 5:30 p.m.
Wednesday, December 5, 2018	Lab Practical 2: PT Cohort, 2:30 – 4:30 p.m.
Thursday, December 6, 2018	Lab Practical 2: Kin Thursday Cohort, 3:30 – 5:30 p.m.
Friday, December 7, 2018	Lab Practical 2: OT Cohort, 8:30 – 10:30 a.m.
December 10 – 21, 2018	Exam Period for Written Exam; Specific Date/Time TBA

TERM 2: NECK & THORAX – Dr. Katherine Willmore Kin & PT Cohorts

DATE	LECTURE TOPIC
Tuesday, January 8, 2019	Brain; Base of Skull
Thursday, January 10, 2019	Cranial Nerves I
Tuesday, January 15, 2019	Cranial Nerves II; Muscles of Mastication; TMJ
Thursday, January 17, 2019	Blood Supply to Head and Neck
Tuesday, January 22, 2019	Triangles of the Neck
Thursday, January 24, 2019	Carotid Triangle; Root of the Neck
Tuesday, January 29, 2019	Thoracic Wall; Respiration; Breasts
Thursday, January 31, 2019	Pleura and Lungs
Tuesday, February 5, 2019	Mediastinum; Pericardium
Thursday, February 7, 2019	Heart I
Tuesday, February 12, 2019	Heart II
Thursday, February 14, 2019	Posterior Thoracic Wall
Tuesday, February 26, 2019	Review (Kin Cohort Only)
Wednesday, February 27, 2019	Written Exam PT Cohort: 1:30 – 3:00 p.m.
	Lab Practical PT Cohort: 3:00 – 4:30 p.m.

DATE (Lab times specific for Cohort)	LAB TOPIC
Week of January 7, 2019	Osteology of Skull; Cranial Nerves
Week of January 14, 2019	Brain; Muscles of Face; CNVII
Week of January 21, 2019	Muscles of Mastication; CNV; TMJ
Week of January 28, 2019	Triangles of Neck; Blood Supply
Week of February 4, 2019	Thoracic Wall; Pleural Cavity; Lungs
Week of February 11, 2019	Middle Mediastinum; Heart; Posterior Mediastinum
Wednesday, February 27, 2019	Written Exam PT Cohort: 1:30 – 2:30 p.m.
	Lab Practical PT Cohort: 3:00 – 4:30 p.m.

TERM 2: ABDOMEN & PELVIS – Dr. Michelle Mottola Kin Cohort

DATE	LECTURE TOPIC
Thursday, February 28, 2019	Abdominal Wall; Inguinal Canal
Tuesday, March 5, 2019	Inguinal Canal; Overview of Digestive System
Thursday, March 7, 2019	Peritoneal Membranes; Abdominal Contents
Tuesday, March 12, 2019	Abdominal Contents; Portal System
Thursday, March 14, 2019	Posterior Abdominal Wall; Blood & Nerve Supply
Tuesday, March 19, 2019	Urinary System & Kidneys
Thursday, March 21, 2019	Bony Pelvis; Perineum
Tuesday, March 26, 2019	Pelvic Nerves & Vessels
Thursday, March 28, 2019	Male Pelvic Viscera
Tuesday, April 2, 2019	Female Pelvic Viscera
Thursday, April 4, 2019	Pregnancy + Review
Tuesday, April 9, 2019	Lab Practical Kin Tues & Thurs Cohorts: 2:30 – 5:30 p.m.
April 11 – 30, 2019	Exam Period for Written Exam; Specific Date/Time TBA

DATE (Lab times specific for Cohort)	LAB TOPIC
Week of March 4, 2019	Abdominal Wall; Inguinal Canal
Week of March 11, 2019	Abdominal Contents
Week of March 18, 2019	Posterior Wall of Abdomen (contents will be removed)
Week of March 25, 2019	Pelvic Nerves & Vessels (prosections; intact cadaveric viscera)
Week of April 1, 2019	Pelvis; Perineum (prosections; intact cadaveric viscera)
Tuesday, April 9, 2019	Lab Practical Kin Tues & Thurs Cohorts: 2:30 – 5:30 p.m.

#### ADDITIONAL INFORMATION AND RULES

Students may have access to the Lab and Learning Centre during regular hours of each week day, if no class is present. *Due to security issues the building will lock down at 6pm each night and will not be open on weekends*.

#### LAB RULES AND REGULATIONS:

- Food and/or drink are not allowed in the Anatomy lab or Learning Centre.
- Lab coats and closed-toe shoes are required in the Anatomy lab. Safety glasses are required.
- The security system locks down the building at 6pm every night, and the lab will not be accessible on the weekends.
- Extra study hours outside of your designated lab time will be posted on the blackboard in the lab. Please let Haley or Kevin know if you will be in the lab.
- See Haley about all lab equipment, lab coats and locker combinations.

#### **Statement on Academic 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 Web site: <a href="http://www.uwo.ca/univsec/handbook/appeals/scholoff.pdf">http://www.uwo.ca/univsec/handbook/appeals/scholoff.pdf</a>

# **Support Services:**

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

- Student Development Centre -- http://www.sdc.uwo.ca/ssd/
- Student Health -- http://www.shs.uwo.ca/student/studenthealthservices.html
- Registrar's Office -- http://www.registrar.uwo.ca/
- Ombuds Office -- http://www.uwo.ca/ombuds/
- Academic Counselling (Science & Basic Medical Sciences): http://www.uwo.ca/sci/counselling/index.html

Students who are in emotional/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of options about how to obtain help.

# RESPECTFUL LEARNING ENVIRONMENT

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"We can all learn from each other. To encourage the free and open sharing of information and ideas, we must all work together to develop a respectful and supportive environment. Disrespectful or discourteous behaviour is inappropriate and unacceptable in the classroom."