

Undergraduate Course 2221

COURSE INFORMATION

Course number:

Anatomy 2221/9501/9524 (formerly 221)

Anat 2221, Kinesiology: Full year 2013-2014

Anat 9501, School of Physical Therapy:

Two terms Sept -Feb, 2013-2014

Anat 9524, School of Occupational Therapy:

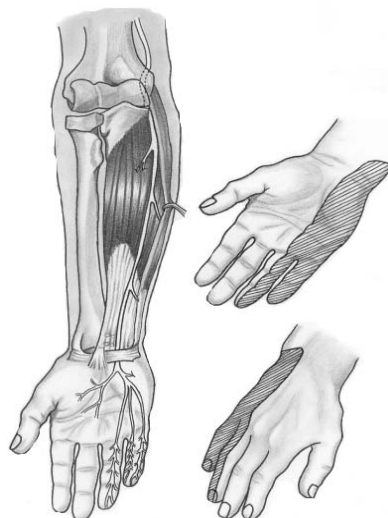
Fall term Sept - Dec, 2013

Course Name:

Functional Human Anatomy for Kin, PT, OT

1. 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 (PT) and occupational therapy (OT))
- Develop an ability to predict the anatomical basis for a number of injury mechanisms and congenital anomalies
- Have fun



2. COURSE INFORMATION:

Organization: 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** with the laboratory assistant supervising and helping only on request. Doors to the lab shall remain locked at all times.

Lectures:

Western Science Centre 55

Tuesdays & Thursdays, 2:30 - 3:30 p.m.

Labs:

Dental Sciences Building 4001

Anatomy 9501 - Wednesdays, 2:30 - 4:30 p.m.

Anatomy 2221 - Tuesdays or Thursdays, 3:30 - 5:30 p.m.

Anatomy 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): 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.

3. INSTRUCTOR INFORMATION

Course Committee Chair:

Dr. M. Johnson

Course Director:

Dr. M. Johnson

Anatomy 9501, 9524

Office: MSB487, Medical Sciences Building

Phone: 519 661-2111, Ext 86756

E-mail: Marjorie.johnson@schulich.uwo.ca

Course Director:

Dr. M. Mottola

Anatomy 2221:

Room 2214, 3M Centre

Phone 519 661-2111, Ext 85480

E-mail: m.mottola@uwo.ca

Instructors:

Dr. T. Wilson

Office: MSB490, Medical Science Building

Phone: 519-661-2111 Ext. 81587

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Dr. Brian Allman

Office: MSB 460, Medical Sciences Building

Phone: 519-661-2111 ext. 88689

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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

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.

Sakai:

This site will be used primarily for lecture material, grades, practice quizzes, announcements and calendar updates.

Students with Sakai issues should contact the Computer Support Centre at 519 661-3800 or fill out the webform: <https://servlet.uwo.ca:8081/vistahelpdesk/controller.jsp>.

4. COURSE MATERIAL**Required Course Notes:**

In the past there were 3 course pkgs for the year. These are now posted on Sakai **NOT** as hard copies. A friend from previous years may have had a hard copy to lend if you do not want to print out the notes.

RECOMMENDED TEXTBOOK:

Atlas of Clinical Gross Anatomy, 2005, Moses et al., Elsevier Mosby, Philadelphia **ISBN 0323037445**

OR

Human Anatomy: Color atlas and text. 2008, 5th edition. Gosling et al., Mosby-Wolfe, London
ISBN:9780723434511 - Older editions are sufficient

LAB BOOKS:

An atlas is required for labs. **Note:** there must be at least one atlas per group during the lab sessions. Some atlases are provided in the lab and these must remain in the lab.

Atlas Recommended if not using Moses et al (above)

Grant's Atlas of Anatomy, 2005, 11th edition, Agur & Dalley, Lippincott, Williams & Wilkins, Baltimore.

OR

Atlas of Human Anatomy, 2003, 3rd edition, Netter, Novartis, East Hanover, N.J.

OR

Color Atlas of Anatomy, 5th edition, 2002, Rohen, Yokochi, Lutjen-Drecol, LWW

AUDIO-VISUAL AIDS:

Videotapes are available for use in the **Natural Sciences Library**. Look for additional resources on the course web site home page.

THE ANATOMY LEARNING CENTRE: WHERE AND WHAT IS IT? The Anatomy Learning Centre is located in **Room D4002** of the Dental Sciences Building. It contains computers, each containing the software package in Gross Anatomy –A.D.A.M. Interactive Anatomy and plastic models of most anatomical structures. The entrance code for the door will be given out during the first lab.

5. EVALUATION:

Course	Type of Test /Exam	Duration (hour)	% of Final
Anatomy 9501	Lab Practical 1	1 hour	10%
	Lab Practical 2 & 3	1 hour	30%
	Term I Written Test	2 hour	25%
	Term II Lab Practical	1 hour	15%
	Term II Written Exam	1 hour	20%

**Anatomy
9524**

Lab Practical 1	1 hour	15%
Lab Practical 2	1 hour	20%
Lab Practical 3	1 hour	25%
Final Written Exam	2 hour	40%

**Anatomy
2221**

Lab Practical 1 & 2	1 hour	10%
Lab Practical 3	1 hour	10%
Term I Written Test	2 hour	25%
Term II Lab Practical 1	1 hour	10%
Term II Lab Practical 2 & 3	1 hour	20%
Term II Written Exam	2 hour	25%

Multiple choice tests and exams will be graded using the Scantron system. Multiple-choice exams may be examined by computer software to check for unusual coincidences in answer patterns that may indicate cheating. Lab practical tests will be oral exams (VIVIs), where students are given 5-10 min to demonstrate or describe the region in question to an examiner. The written exams are cumulative within each term, not across terms. The breakdown of questions will

reflect the material covered. (ie. Dec written will be 50:50 back/upper and lower limb and the April final will be 50:50 head/neck/thorax and abdomen/pelvis.)

6. 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:** Decimal points above .5 will be rounded to the next whole number (eg. 69.5 to a 70%). As a faculty requirement, rounding up of a mark from 68.5% to 70%, for example, **will also** occur in this course.

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 (ie. 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. Generally, students who miss a lab test will be given a verbal 1:1 lab test or re-weighting of grades will be considered. Written tests/exam will be made up by a written test/exam.

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.

7. 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)."

8. TERM SCHEDULE as follows: (changes may be made during the term as needed)

TERM 1 2013-2014

INTRODUCTION, BACK, SPINAL CORD, AND LIMBS

INTRO – Dr. Johnson

Lecture Schedule

Date	Topic	Page # (Gosling -G; Moses -M)
Tues. Sept 10	Introduction to the course, anatomical terminology, skin/fascia	G2-11, M2-5
Thurs. Sept 12	Joints and Vertebral column	G12-15, 392-403; M296-311
Tues. Sept 17	Superficial back & Deep Back	G404-409; M322-333
Thurs. Sept 19	Spinal cord and Peripheral Nervous system	G20-23; M297-298

UPPER LIMB –Dr. Allman

Lecture Schedule

Date	Topic	Pages
Tues. Sept 24	Intro to Upper limb, Muscles of the Scapula	G72-75; M158- 159 G100-105; M184-195
Thurs. Sept 26	Pectoral Muscles and Axilla	G31-32,76; M160-171 G 77-80; M 172
Tues. Oct 1	Brachial Plexus	G 80-81; M 172-183
Thurs. Oct 3	Arm	G82-85, 106- 107; M 210-223
Tues. Oct 8	Shoulder and Elbow Joint	G115-122; M 196-209, M 224- 225
Thurs. Oct 10	Forearm Flexors	G86-90; M224-239
Tues. Oct 15	Forearm Flexors and Carpal tunnel	G 123-126; M240-249, M260- 273
Thurs. Oct 17	Extensors and Wrist/Hand	G108-114; M250-259
Tues. Oct 22	Hand	G90-99; M 274-291
Thurs. Oct 24	Review or catch-up	

Back and Upper Limb Lab Schedule

Date	Topic - see lab instructions in notes pkg under these headings
Week of Sept 9	Service, Osteology of axial skeleton and upper limb
Week of Sept 16	Superficial back
Week of Sept 23	Deep back and spinal cord
Week of Sept 30	Lab Practical 1 Pectoral and Shoulder Region, Axilla
Week of Oct 7	Brachial Plexus, Arm
Week of Oct 14	Flexor Region of Forearm, Shoulder/Elbow Joint
Week of Oct 21	Extensor Region of Forearm, Palm, Hand
Week of Oct 28	Hand and Wrist
Week of Oct 28	Lab Practical 2

LOWER LIMB Lecture Schedule – Dr. Tim Wilson

Date	Topic	Pages (Moses)
Tues. Oct 29	Intro lower limb, Pelvic girdle, Lumbosacral plexus	486
New Fall Break Oct 31-Nov 3		
Tues. Nov 5	Anterior and Medial thigh	488-499
Thurs. Nov 7	Medial and lateral thigh	
Tues.. Nov 12	Gluteal region	512-523
Thurs. Nov 14	Posterior thigh	512-523
Tues.. Nov 19	Hip and Knee Joint	500-511; 524-539
Thurs Nov 21	Popliteal Fossa and Leg Overview	524-539
Tues.. Nov 26	Posterior and Anterior leg	540-559
Thurs. Nov 28	Lateral leg and ankle joint	540-549, 560-573
Tues. Dec 3	Foot arches, joints and ligaments	560-573
Thurs. Dec 5	Intrinsic Foot Muscles	574-593

Lower Limb Lab Schedule

Date	Topic
Week of Nov 4	Anterior/Medial thigh dissection, self-study lower limb osteology
Week of Nov 11	Gluteal and Posterior thigh, Hip Joint
Week of Nov 18	Posterior Leg dissection, knee prosections
Week of Nov 25	Anterior leg
Week of Dec 2	Foot and ankle
	Lab Practical 3
Dec 8 - 21	Mid-year exam period. Exam date TBA

Term 2 2013-2014
NECK & THORAX – Dr. Johnson
Lecture Schedule

Date	Topic	Pages refer to corresponding chapters
Tues. Jan 7	Skull, Brain, Brain Stem	Chapter 7 pg 369-378
Thurs Jan 9	Brain stem, Cranial nerves, Cn VII	pg 333 + 340 - 350
Tues Jan 14	CnVII, CnV, Muscles Mastication, TMJ	pg 333 - 339
Thurs Jan 16	Blood Supply to Head & Neck	pg 321, 325, 328-332, 338
Tues Jan 21	Triangles of Neck	pg 322 - 329
Thurs Jan 23	Carotid Triangle and root of neck	pg 328 - 332
Tues Jan 28	Thoracic wall, respiration, breasts	Chapter 2, pg 26-35
Thurs Jan 30	Pleura and lungs	pg 36 - 42
Tues Feb 4	Mediastinum, pericardium	pg 43 - 45, 57 - 60
Thurs Feb 6	Heart	pg 45 - 52
Tues Feb 11	Heart Circulation and Conductivity	pg 53 - 56
Thurs Feb 13	Posterior Thoracic Wall	pg 61 - 63
Spring Break/Study Week Feb 17-21		
Tues Feb 25	ANS in posterior wall	pg 63, 22, 197-199
Wed Feb 26 PT final (1:30 pm)		
Thurs Feb 27	Wrap-up	

Lab Schedule and instructions will be on the course website:

Date	Topic	Course Lab Notes
Week of Jan 6	Osteology of skull, meninges	follow lab notes in this pkg
Week of Jan 13	Brain, Muscles of Face, CnVII	
Week of Jan 20	Muscles Mastication, Cn V, TMJ	
Week of Jan 27	Triangles of Neck & Blood supply	
Week of Feb 3	Thoracic Wall, Pleural Cavity & Lungs	
Week of Feb 10 Lab Practical 1		
Week of Feb 10	Middle Mediastinum & Heart	
Week of Feb 17 STUDY WEEK		
Week of Feb 24	Posterior Mediastinum	

ABDOMEN & PELVIS –Dr. Mottola

Lecture Schedule

Date	Topic	Textbook Pages
		(M = Moses et al. 2005) (G= Gosling et al. 2008)
Tues Mar 4	Abdominal Wall & Inguinal Canal	M - 422-431 G - 136-137; 140-147
Thurs Mar 6	Inguinal Canal & Overview of Digestive System	M - 423-24; 429; 431; 402-05 G - 146-151; 138
Tues Mar 11	Peritoneal Membranes & Abdominal Contents	M - 390-91; 402-05 G - 152-158
Thurs Mar 13	Abdominal Contents & Portal System	M - 386-398; 402-416 G - 164-179
Tues Mar 18	Posterior Abdominal Wall & Blood/Nerve supply	M - 372-74; 376-82; 392; 417-18 G - 190-206
Thurs Mar 20	Urinary System & Kidneys	M - 373; 387-88; 396 G - 186-189
Tues Mar 25	Bony Pelvis & Perineum	M - 436-38; 445-447; 470-481 G - 214-217; 232-234
Thurs Mar 27	Pelvic Nerves & Vessels	M - 459; 437-438; 441-444 G - 235-239
Tues Apr 1	Male Pelvic Viscera	M - 450-451; 453-459 G - 240-243; 226-231
Thurs Apr 3	Female Pelvic Viscera	M - 450-52; 460-465 G - 246-247; 219-225
Tues Apr 8	Pregnancy and obstetrics concerns	

Lab Schedule and instructions will be found on the web site:

Date	Topic	OnlineCourse Lab Notes
Week of Mar 3	Abdominal wall Lab Practical 2	Abdominal wall lab
Week of Mar 10	Abdominal contents	Abdominal contents
Week of Mar 17	Posterior wall of Abdomen (contents will be removed)	Posterior wall
Week of Mar 24	Pelvis, Blood vessels, Nerves use prosections and intact viscera in	Pelvis Perineum

	cadaver	
	Pelvis & perineum	
Week of Mar 31	use dissections and intact viscera in	Pelvis Perineum
	cadaver	
Week of Apr 7	Lab Practical 3	
Exams begin April		
14th		

9. ADDITIONAL INFO 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:

1. Food and/or drink are not allowed in the Anatomy lab or Learning Centre.
2. Lab coats and closed-toe shoes are required in the Anatomy lab. Safety glasses are required.
3. The security system locks down the building at 6pm every night, and the lab will not be accessible on the weekends.
4. 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.
5. 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:

<http://www.uwo.ca/univsec/handbook/appeals/scholoff.pdf>

Support Services:

Registrarial Services: <http://www.registrar.uwo.ca>

Academic Counselling (Science and Basic Medical Sciences):

<http://www.uwo.ca/sci/counselling/index.html> Student

Student Development Services: <http://westernusc.ca/services/>

Students that 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".

10. 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."