

**Systemic Approach to Functional Human Anatomy  
 KIN 2222A/1060A/HS 2300A  
 Intersession 2023**

<p><b>Instructor: Dr. Katelyn N Wood</b>  <b>Email:</b> <a href="mailto:katelyn.wood@uwo.ca">katelyn.wood@uwo.ca</a> (knorton9)  <b>Office Hrs:</b> By appointment, via zoom</p> <p><b>TAs:</b>          KJ Uyeno      kuyeno@uwo.ca          AJ Stephen    asteph8@uwo.ca</p>	<p><b>Lectures: Online, asynchronous via OWL</b>  <b>Labs: In-person, HSB 414</b></p> <table> <tr> <td>June 1, 2</td> <td>Sec 002</td> <td>9am-12pm</td> </tr> <tr> <td>June 1, 2</td> <td>Sec 003</td> <td>1pm-4pm</td> </tr> <tr> <td>June 22, 23</td> <td>Sec 002</td> <td>9am-12pm</td> </tr> <tr> <td>June 22, 23</td> <td>Sec 003</td> <td>1pm-4pm</td> </tr> </table>	June 1, 2	Sec 002	9am-12pm	June 1, 2	Sec 003	1pm-4pm	June 22, 23	Sec 002	9am-12pm	June 22, 23	Sec 003	1pm-4pm
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**NOTE:** All course information including grades, assignment outlines, deadlines, etc. are available via OWL. Check the website regularly for course announcements.

<p><b>Calendar Course Description (including prerequisites/anti-requisites):</b>          A gross anatomical description of systemic structure and function of the human body, with emphasis on skeletal, muscular and cardiovascular systems. Integration between systems will be discussed using clinical examples related to sport, medicine, and physical therapy. This is an introductory level lecture course for students in the faculty of health sciences.</p> <p><b>Antirequisite(s):</b>          Anatomy and Cell Biology 2200A/B, Anatomy and Cell Biology 2221, Health Sciences 2330A/B, the former Anatomy and Cell Biology 3319.</p> <p><b>Prerequisite(s):</b>          Kinesiology Students: Registration in year 1 or 2 Kinesiology          Health Studies + Non-FHS Students: Grade 12U Biology or equivalent is strongly recommended.</p>
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*You are responsible for ensuring that you have successfully completed all course pre-requisites, and that you have not taken an anti-requisite course.*

*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.*

**NOTE: If you wish to enroll in this course without the stated pre-requisite(s), you must obtain written approval from the course instructor. The approval should then be forwarded to your academic counsellor.**

**My Course Description**

Welcome to Anatomy! I'm delighted to have you join us this term. In this course, we'll focus on understanding the basics of human anatomy, with specific attention to the musculoskeletal (muscles + bones), neuro (brain & spinal cord + neurons), cardiovascular (heart + vessels) and respiratory (lungs + breathing) systems. Anatomy is a fundamental discipline that will support your understanding of core concepts in health and disease in your degree ahead. It's cumulative, and voluminous in nature, so I encourage you to stay involved, ask questions, and participate wherever you are able. Make sure that you complete the online lecture modules before coming to your lab

section. I look forward to meeting you soon!

**Course Learning Outcomes:**

By the end of the course you should be able to:

- communicate structure location, function and movement using correct anatomical terms
- outline, using pictures and words, principles of neuronal conduction
- explain the basic structure of the nervous system differentiating between the Central vs Peripheral nervous systems as well as Somatic vs Autonomic nervous systems
- understand how the autonomic nervous system regulates homeostasis in the body
- identify major bones, joints, muscles, nerves, and vessels, of the upper limb, lower limb, thorax and pelvis by name, location, and function and identify key surface anatomy landmarks
- understand how the heart and lungs interact to form the cardiorespiratory system, differentiating between systemic and pulmonary circuits
- describe muscle contraction, key events of the cardiac cycle and mechanics of breathing
- explain and predict, based upon clinical signs/symptoms, functional implications of musculoskeletal, neural, and cardiorespiratory changes in aging, exercise and injury

Overall, the spirit of this course is to foster learning, critical thinking, active questioning, and an appreciation for health and disease from a gross anatomical perspective.

**Important Dates:**

Quiz 1	Anatomy Basics	Opens May 17 – June 23
Quiz 2	Intro to Neuro	Opens May 24 – June 23
Quiz 3	Muscles + Upper Limb	Opens May 31 – June 23
Quiz 4	Lower Limb + Trunk	Opens June 8 – June 23
Quiz 5	Cardiorespiratory	Opens June 15 – June 23
Final Exam	Units 1-5	TBD (June 26, 27) <b>*in-person</b>

**Weekly Schedule:**

Every week, you are expected to complete the following:

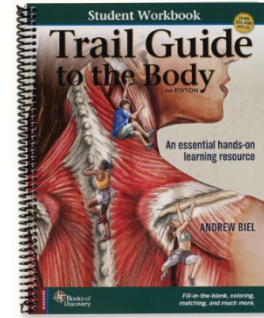
- 4-6 online modules (asynchronously via OWL)
- Provide feedback on this week’s content, including any questions you have regarding content (forums on OWL)
- Complete the MCQ unit quiz. All quizzes will open Wednesday at 4pm (as per the dates above), and will close on the last day of classes, Friday June 23 at 4pm.
- Complete MCQ practice online via PeerWise

Here’s an outline of topics we will address in this course.

wk	Dates	Unit	Topic	
1	May 15-19	1: Intro	1A	Terms + Bones
			1B	Joints, Cartilage, Muscle
2	May 22-26	2: Neuro	2A	Intro to Neuro, CNS, PNS
			3A	Brachial Plexus, Compartments, Force
3	May 29-June 2	3: Upper Limb	3B	Upper Limb I: Shoulder to Elbow
			3C	Upper Limb II: Forearm to Hand
4	June 5-9	4: Lower Limb	4A	Lower Limb I: Glutes to Thigh
			4B	Lower Limb II: Knee to Ankle
5	June 12-16	4: Lower Limb	4C	Axial Muscles
			5: Cardio/ resp	5A
6	June 19-23	5: Cardio/ resp	5B	Respiratory System

### Required Course Material:

This term, we have an **OPTIONAL** textbook available for purchase: Trail Guide to the Body, 6<sup>th</sup> ed. Student Workbook by Books of Discovery. This is a great study tool for our MSK content and for applying lecture content in the lab. Your best option is to select the hard copy text for purchase.



All other content will be presented in the course notes. If you wish to purchase/use a supplementary resource (which is completely optional) any anatomy textbook will do.

### Course Evaluation:

Evaluation in this course will be divided across 4 areas. Please note that these are subject to change up until the start of the course.

#### 1) Final Exam – 40%

- The final exam will be cumulative, in-person, and on paper.
- Units 1-5 will be covered equally based on their representation in lecture.

#### 2) Unit Quizzes (5) – 6% each. 24% total

- There will be 5 unit quizzes, I am only going to take your top 4 (ie. I will drop your lowest quiz grade, or you can miss one quiz without academic penalty).
- 30mins, 15 MCQ quiz, *open-book*, linear format, on OWL.
- Each quiz will open at the end of each unit and will remain open until 4pm on the last day of classes.
- A quiz cannot be submitted after it has been returned to the class, thus **THERE ARE NO MAKEUP QUIZZES.**

#### 3) Lab Participation + Group Assessment – 26% total

- Attend the 4 x 3hr in-person labs and complete the in-class group assignment. Each assignment is worth 13%.
- During the first day of in-person labs (June 1, 22), each group will be responsible for creating a unit assignment (questions + answers) for another group. This will be due at 5pm for sec002, and 9am (the following day) for sec003.
- The second day of in-person labs (June 2, 23), each group will answer another groups unit assignment and provide feedback for their peers, during the lab time.
- The assignment will be marked by the group that created it and reviewed by teaching staff.
- All assignment questions will be posted after the labs to OWL for use as a study tool before your final exam.

#### 4) PeerWise Participation - 10% total

- Create 10 questions for your peers for 2.5%
- Answer + rate 30 questions from your peers for 7.5% max
  - Each unique question created/answered = 0.25%

**\*\*PLEASE NOTE:** All labs are in-person and mandatory to pass the course. The final exam will be in-person, there is no online alternative.

## Course/University Policies

### 1. Statement on Use of Personal Response Systems (“Clickers”)

If Personal Response Systems (“Clickers”) are used in the course, a reference to the Guidelines for their use (Guidelines are shown below). Instructors are to communicate clearly to students information on how clickers are used including: how the student’s privacy will be protected, how clickers may be used by the instructor for data gathering and for evaluating the students, and why they cannot be used by anyone but the student (since the students involved in misuse of a clicker may be charged with a scholastic offence).

2. **Academic offences:** They 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: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

A) Students must write their essays and assignments in their own words. Whenever students take an idea, or a 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). 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 Western University and Turnitin.com <http://www.turnitin.com>

B) 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.

### 3. Electronic Device Usage:

**During Exams** - Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any of the following electronic devices during ANY of the tests, quizzes, midterms, examinations, or other in-class evaluations: cellphones, smart phones, smart watches, smart glasses, audio players or recorders of any sort, video cameras, video games, DVD players, televisions, laptop/notebook/netbook computers, flashlights or laser pointers.

**During Lectures and Tutorials:** Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. Please be respectful to your fellow students and turn the sound off. If the professor receives complaints from other students regarding noise or other disruptive behavior (e.g. watching videos on YouTube.com, updating your Facebook status, playing Solitaire), your classroom privileges will be revoked. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class. **Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.**

### 4. Health and Wellness:

Information regarding health and wellness-related services available to students may be found at <http://www.health.uwo.ca/>.

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

## 5. 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 & Wellness -- <http://www.health.uwo.ca/>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombudsperson Office -- <http://www.uwo.ca/ombuds/>

## 6. Accommodation, Illness Reporting and Academic Considerations:

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_12](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12)

### Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

### Academic Consideration for Student Absence

<https://www.uwo.ca/fhs/kin/undergrad/academic/consideration/index.html>

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the term, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For Western University policy on Consideration for Student Absence, see [Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs](#)

and for the Student Medical Certificate (SMC), see:

[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

### Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give

reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

7. **Examination Conflicts:** A student with examinations having flexible submission times (e.g., where one or more examination is a take-home examination) cannot request alternative arrangements unless a conflict cannot be avoided by rescheduling writing the exam to a different time within the window specified by the instructor. This applies to direct conflicts as well as “heavy load” conflicts (e.g., three exams within a 23-hour period). The student should discuss any concerns about a potential conflict and/or request accommodation with their academic counselling unit prior to the deadline to drop a course without academic penalty

In the case of online examinations, an “Examination Conflict Room,” which may be assigned when a student is scheduled to write two proctored exams concurrently, will be interpreted as arrangements for continuous proctoring.

8. **Grades:** Where possible assignment objectives and rubrics will be posted on OWL. Should you have a concern regarding the grade you received for an assignment or feel that it is unfair in any way, you must wait 24 hours from the receipt of the assignment to approach the instructor or TA. In doing so, please make an appointment and prepare in writing, with evidence, why you feel your grade is inappropriate. Please be aware that in requesting a grade reassessment, your grade could go up/down/or stay the same. Note that calculations errors (which do occur!) should be brought to my attention immediately.

Generally, students can expect some form of feedback on their performance in a course before the drop date.

A+	90-100	<i>One could scarcely expect better from a student at this level</i>
A	80-89	<i>Superior work that is clearly above average</i>
B	70-79	<i>Good work, meeting all requirements and eminently</i>
C	60-69	<i>Competent work, meeting requirements</i>
D	50-59	<i>Fair work, minimally acceptable.</i>
F	below 50	<i>Fail</i>

**Rounding of Grades** (for example, bumping a 79 to 80%):

This is a practice some students request. **This practice will not occur here.** The edges of this course are clear and sharp. The mark attained is the mark you achieved and the mark assigned; there is no rounding to the next grade level, or ‘giving away’ of marks. Please don’t ask me to do this for you; the response will be “please review the course outline where this is presented”.

9. **Contingency Plan for an In-Person Class Pivoting to 100% Online Learning:** In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor

10. **Online Etiquette:** Some components of this course will involve online interactions. To ensure the best experience for both you and your classmates, please honour the following rules of etiquette:

- please “arrive” to class on time
- please use your computer and/or laptop if possible (as opposed to a cell phone or tablet)
- ensure that you are in a private location to protect the confidentiality of discussions in the event that a class discussion deals with sensitive or personal material
- to minimize background noise, kindly mute your microphone for the entire class until you are invited to speak, unless directed otherwise



- [suggested for classes larger than 30 students] In order to give us optimum bandwidth and web quality, please turn off your video camera for the entire class unless you are invited to speak
- [suggested for cases where video is used] please be prepared to turn your video camera off at the instructor's request if the internet connection becomes unstable
- unless invited by your instructor, do **not** share your screen in the meeting

The course instructor will act as moderator for the class and will deal with any questions from participants. To participate please consider the following:

- if you wish to speak, use the "raise hand" function and wait for the instructor to acknowledge you before beginning your comment or question
- remember to unmute your microphone and turn on your video camera before speaking
- self-identify when speaking.
- remember to mute your mic and turn off your video camera after speaking (unless directed otherwise)

General considerations of "netiquette":

- Keep in mind the different cultural and linguistic backgrounds of the students in the course.
- Be courteous toward the instructor, your colleagues, and authors whose work you are discussing.
- Be respectful of the diversity of viewpoints that you will encounter in the class and in your readings. The exchange of diverse ideas and opinions is part of the scholarly environment. "Flaming" is never appropriate.
- Be professional and scholarly in all online postings. Cite the ideas of others appropriately.

Note that disruptive behaviour of any type during online classes, including inappropriate use of the chat function, is unacceptable. Students found guilty of Zoom-bombing a class or of other serious online offenses may be subject to disciplinary measures under the Code of Student Conduct.

### 11. 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>