

Western University
Faculty of Health Sciences
School of Kinesiology, School of Health Studies

KIN 3222B / HS 3300B
Anatomy of the Human Body: A Description of systemic Structure & Function
Winter 2021

<p>Instructor: Dr. Danielle Brewer-Deluce Office: Arts & Humanities Bldg Rm 3R12A Email: danielle.brewer-deluce@uwo.ca Phone: 519/661-2111 x81000 Office Hrs: Wed 10-11am; Th 1-2:00pm via Zoom</p> <p>TAs: TBD</p>	<p>Lectures: Weekly Online Web Modules: Asynchronous, via OWL</p> <p>Review Sessions: Online Live Sessions at the end of each unit</p>
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NOTE: This course will be offered fully online for the 2020/21 academic year. All course information including grades, web modules, quizzes, the course schedule, deadlines, and announcements are managed via OWL. Please check the website regularly for course announcements. Log into OWL using your UWO username and password.

Calendar Course Description (including prerequisites/anti-requisites):

A gross anatomical description of the structure and function of the human body focusing on systems responsible for maintaining the body (respiratory, digestive, urinary, endocrine), and for its continuation through the transmission of genes (reproductive system, developmental anatomy). Emphasis on the physiological functions as they relate to the anatomical structure

Antirequisite(s): [Anatomy and Cell Biology 2221](#), or [Anatomy and Cell Biology 3200A/B](#), or [Health Sciences 3300A/B](#), or the former [Anatomy and Cell Biology 3319](#).

Prerequisite(s): [Kinesiology 2222A/B](#) or [Health Sciences 2300A/B](#) or [Health Sciences 2330A/B](#) or [Anatomy and Cell Biology 2200A/B](#).

Extra Information: 3 lecture hours.

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

The course is designed to provide the student with 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 trauma to the various organ systems will be discussed & related to the relevant anatomy. The objective of this course is 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.

Learning Outcomes:

At the end of this course students should be able to:

- Describe the basic function and structure of the main organs and tissues in the body
- Explain the structure and function of major body systems including the Nervous, Endocrine, Respiratory, Digestive, Urinary, and Reproductive Systems
- Identify major structures within each system and their characteristic identifying features
- Use land-marking strategies to identify gross structures relative to one another in the body including bones, muscles, blood vessels, and nerves.

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:

Term: Jan 4 – April 5

Spring Reading Week: Feb 13-21

Spring Exam Period: April 8-30 (April 6/7 = study days)

Midterm: Week of Mar 1-5 (date TBD)

Final: Scheduled by Registrar (between Apr 8-30)

Course Contact

What if I have a question about the course or content?

Your Lab TA is your first point of contact. You will be seeing them weekly, and this will allow for quick and easy communication for all 200+ students enrolled in this course.

You are also encouraged to provide feedback weekly on how the course is going, and any content related questions you have. Based on your feedback, every week I will create a short bonus video clarifying challenging content, and addressing questions posed. This will be available by Tuesday at noon. Please respond to the weekly feedback via the survey link posted on OWL

Chances are that if you have a question, someone else does too. This will allow us to quickly address your question and ensure that everyone can benefit from the answers.

I have sensitive information (including academic accommodations) I need to address:

Please contact the instructor, Dr. Brewer-Deluce directly at danielle.brewer-deluce@uwo.ca.

I'm very happy to work with you to find a solution to problems you are encountering. This is a challenging course, and we're in the midst of a challenging year. Please do not feel like you are alone, and please reach out for help if you need it.

Whenever possible please use your UWO email address to avoid spam blocking etc. and include the course code (Kin 3222, HS3200) in the email subject line.

Weekly Course Schedule (subject to minor changes until course start date)

Every week, you are expected to complete the following:

- 2-3 online modules (available, asynchronously via OWL)
- Practice your knowledge on WileyPLUS
- Provide feedback on this week's content, including any questions you have regarding content
 - *some weeks will include a MCQ quiz covering the unit completed the week prior. All quizzes are due Friday at 4pm, though are open for 48hrs up until that time. Dates are as follows:
 - Unit 1: Nervous system – Jan 27-29
 - Unit 2: Endocrine – Feb 10-12
 - Unit 3: Respiration – Feb 24-26
 - Unit 4: Digestion – March 10-12
 - Unit 5: Urinary - March 24-26
 - Unit 6: Reproduction – April 3-5 (early because of end of term)

Module Review Sessions will be offered on the MONDAY following a unit. These sessions will be facilitated by a TA and recorded for asynchronous viewing. To have your questions answered, please post them on the owl forum by FRIDAY at 8 pm on the week prior to the session.

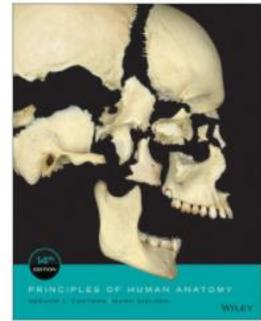
- For example, the Nervous System Review Session will be held on Monday Jan 25, questions are due online by Friday Jan 22.

Here's a preliminary outline of topics we will address in this course. The dates and topics are subject to change up until the start of the course.

	Dates	Topic	Unit	Textbook Chapter Reference
1	Jan 4-8	Anatomy Fundamentals Review Organization of the Nervous System	Nervous System	16.1-16.3
2	Jan 11-15	CNS: Brain, Spinal Cord, PNS: Spinal Nerves & Cranial Nerves		17, 18
3	Jan 18-22	Ascending & Descending Pathways + ANS		20
4	Jan 25-29	Hormones, Hypothalamus/Pituitary, Thyroid	Endocrine System	22.1-22.3, 22.5
5	Feb 1-5	Adrenal Glands, Pancreas, Ovaries & Testes		22.6-22.8
6	Feb 8-12	Respiration	Respiration	23
READING WEEK Feb 13 - 21				
7	Feb 22-26	Overview + Oral Cavity, Esophagus, Stomach + Intestines	Digestive System	24.1-24.6
8	Mar 1-5	Accessory Organs + Abdominal Quadrants Portal Circulation + Liver +MIDTERM		24.7-24.13
9	Mar 8-12	Kidney & Nephron	Urinary System	25.1-25.4
10	Mar 15-19	Ureters & Bladder Urethra, Mitrication		25.5-25.7
11	Mar 22-26	Development, Aging + Male Reproduction	Repro System	26.1, 26.5, 26.6
12	Mar 29 - Apr 2	Female Reproduction + Human Development		26.2-26.4, 4.4-4.5

Textbook

For this course, we will be using Principles of Human Anatomy, Ed 14 by Tortora and Nielsen. The text is available in both hard copy, and e-text. You will need access to WileyPLUS for the term in order to access the online practice platform we will be using throughout the course. Subscription prices vary depending upon whether you would like a physical copy of the text (\$149) or a digital downloaded copy (\$94). Details will be provided on how to access the text on the course OWL site as we approach the course start date. Please note that WileyPLUS has a 14-day free trial you may start if receiving your online access code has been delayed.



Additional Resources

Wiley PLUS (<https://www.wileyplus.com/user-login/>)

- Included with your textbook subscription, WileyPLUS has a host of online resources for you to peruse. None are mandatory but are available for you to use as you see fit. **I'd specifically recommend using their adaptive practice platform to study.**

Anatomy.TV (<https://guides.lib.uwo.ca/c.php?g=270739&p=1871478>)

- Available via the library (log in via the proxy), Anatomy.TV contains digital anatomical models which you can manipulate yourself using an internet browser window. Your TAs will be using this tool to demonstrate the anatomy in your laboratory sessions, and you're encouraged to use this, in conjunction with your text and class notes to gain an appreciation for the 3D nature of bodily structures.

Course Evaluation

Evaluation in this course will be divided across 3 areas. These are subject to change up until the start of the course.

1) Midterm + Final exams (2) – 70% total

- All exams in this course are cumulative.
- Midterm: Nervous System + Endocrine + Respiration (35%)
- Final Exam: Midterm content + Digestion + Urinary + Reproduction Systems (35%)
- Further details will be provided at the start of the course.

2) Unit Quizzes (4) – 5% each. Total of 20%

- 15 question, multiple choice quiz, at the end of each unit on Owl. Due 4pm on Friday afternoons the week after a unit ends
- There will be 6 quizzes in total, only your top 4 scores will be included. This means that you can miss up to 2 quizzes without penalty. This will include any quizzes missed for academic accommodation. Quizzes will remain open for 48 hours and are available on the following dates:
 - Unit 1: Nervous system – Jan 27-29
 - Unit 2: Endocrine – Feb 10-12
 - Unit 3: Respiration – Feb 24-26
 - Unit 4: Digestion – March 10-12
 - Unit 5: Urinary - March 24-26
 - Unit 6: Reproduction – April 3-5 (early because of end of term)

3) Participation on WileyPLUS Adaptive Practice - 10%

- The Adaptive Practice platform will allow you to practice your anatomy knowledge by answering a variety of questions based on the content we are covering. Research shows that practice testing is an incredibly effective way to learn and retain information, which I hope will encourage you throughout the course.
- This platform is built into WileyPLUS, which comes free with your subscription to the course textbook.
- As an added bonus, some questions will be taken from the adaptive practice site and

- included on midterm and the final exams.
- Your participation grade awarded will be based upon the overall proficiency you obtain within the platform **at the end of the course**. Your proficiency is based upon how many questions you answer, your number of correct answers, and your confidence in your answers.
 - 20% proficiency = 2%
 - 30% proficiency = 4%
 - 40% proficiency = 6%
 - 50% proficiency = 8%
 - 60% proficiency = 10%
 - Those experiencing financial need should contact Dr. Brewer-Deluce for alternative solutions.

Online Exams

This year, exams will be written online. This comes with some interesting considerations and requires incredible integrity from students. Unless directed to do so, I expect all graded work that is submitted to be completed independently. I recognize the value of collaboration and teamwork and will offer multiple opportunities throughout the course to do so. Please use review sessions to work as a group and reserve quizzes, the midterm and final exams to show me what you know and have learned.

Missed Exams

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 may consist of short and long answer questions, case studies and/or image-based questions based on anatomical and clinical material from lectures.

Copyrighted Material:

Lectures and practice resources are intellectual property are not to be uploaded on sites like CourseHero or other similar study resource sites. Copyright infringement and takedown requests will be filed if you upload these resources. You are not permitted to make audio or video recordings of class or laboratory presentations, without specific written authorization of the course instructor. Similarly, you may not reproduce or distribute any materials that are provided to you by the course instructor, unless you receive specific written authorization to do so. Violation of this course policy will be evaluated as per the Student Code of Conduct, available here: <http://www.uwo.ca/univsec/pdf/board/code.pdf>

How to Succeed in this Course (and others!)

As a university student, you are responsible for your learning – but that doesn't mean you are own your own! There are an incredible amount of resources and support available to you throughout your studies. Still, a major hurdle students experience is not knowing how to time manage or study effectively – here's some resources & tips to get you started:

Studying Effectively:

Tactics like highlighting and rereading feel good, but actually aren't the most effective strategies for long-term knowledge retention. Anatomy is challenging for most because of the volume of information, and the integration required between systems and topics to understand how the body functions as a whole. This is where that long-term retention is critical. The most effective way to study is via a technique called **successive relearning** in which you quiz yourself, practice recalling answers and space out your studying. Here's how you do it:

- 1) Figure out what to study, and when. Plan out several smaller sessions across a week instead of one big one. For the biggest advantage, plan to begin reviewing material 2 days after you've learned it. Use your calendar to plan this out
- 2) Practice recalling information. It may be as simple as covering up text or labels in your notes

- and trying to remember what was there (you can even leave gaps to write in your answers), or creating flashcards to practice with.
- 3) Do this often, and replace information that you easily recall successfully with more challenging or new information as your courses progress.
 - 4) Our use of Adaptive Practice in WileyPLUS will help with this!

For more information on how and why successive relearning works, and links to additional reliable resources check out my [OpEd](#) in the Conversation Canada:

Another great resource is the learning scientists (<https://www.learningscientists.org/>). This group of educators and researchers have developed a ton of free resources explaining 6 of the most effective ways to study (spaced and retrieval practice are 2!). Be sure to check out their website and consider how these approaches might fit with your study practice. I'll be incorporating many of these throughout your laboratory sessions.

Tips for Effective Time Management:

- 1) Pull out your calendar now... right now.
- 2) Make sure you schedule in all of the non-negotiable dates and times (like in person-lectures, exams, due dates, family gatherings, holidays etc).
 - For important dates/appointments set reminder emails. For example, 2 weeks before an essay is due, set a reminder that the deadline is coming.
- 3) Look at each of your courses and identify what tasks you will need to complete weekly. Physically schedule them in. This should include online course components, quizzes, assignments, and studying
- 4) Around those, schedule in other aspects of your daily life. For example, time for eating + meal prep, sleeping, household chores, working out, spending time in nature, hobbies and interests. It feels silly to lay everything out – but once you know how much time you have, and you have a plan you're far more likely to be successful

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

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 In Person 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: As part of a successful undergraduate experience at Western, we encourage you to make your health and wellness a priority. Western provides several on-campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your degree. 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/>

Accommodation, Illness Reporting and Academic Considerations

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.

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.

At least three days prior to the deadline for withdrawal from a 1000- or 2000-level course without academic penalty, students will receive assessment of work accounting for at least 15% of the final grade.

- November 12th, 2020 (for first term half-courses)
- November 30th, 2020 (for full-year courses)
- March 7th, 2021 (for second term half-or full year courses)

Grade Descriptions:

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".

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

9. Classroom Behaviour: Synchronous classes will begin promptly at the time specified at the top of page one of this syllabus. In the event that you arrive late, please enter our virtual classroom with a minimal disturbance to the class. Please be sure you are muted prior to joining.

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 and/or TAs 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. Online Learning Support: If you require support with online learning tools and resources, please refer to the Faculty of Health Sciences Online Teaching and Learning Support [Jira request links](#) for students

12. 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>