Course Information:

Course Number: Anatomy & Cell Biology (ANATCELL) 2200B
Course Name: Systemic Anatomy of the Human Body

Term: Summer Distance 2020

Course Description: Similar to the second half of the former ANCATCELL 3319, Systemic Anatomy of the Human Body (ANATCELL) 2200B is a 0.5 credit introductory course that focuses on the gross anatomical structures and functional connections of the body’s core systems. Topics include: the musculoskeletal system, circulatory system, respiratory system, gastrointestinal system, urinary system, and reproductive system. Finally, hands-on practical demonstrations will be provided to reinforce and extend material presented in the lectures.

Course Outcomes:

1. Identify the major structures and general function of the body systems.
2. Explain the functional mechanisms behind the anatomy and each part’s role in maintaining homeostasis.
3. Apply your understanding of the anatomy to predict and/or rationalize symptoms of provided clinical cases.

Lectures:

On-line course (650): lectures available Monday, Tuesday, Thursday and Friday at 9:00 am (EST) using Echo360 virtual classroom software. Lectures are a combination of previously recorded lectures and new lectures recorded specifically for summer students.

Demonstrations/ Laboratory:

Labs are held online. Students are expected to familiarize themselves with the Lab Outlines prior to viewing the Lab Video. Material covered in the lab outlines may be tested on the Bell Ringer exams. Teaching Assistants will prepare summary material based on the lab outlines and lab videos. They will be available live, online Monday and Wednesday, 1-2pm(EST) to present summaries and answer questions. Students do not need to attend the live labs but can access the archived material at a later date.

Laboratory videos have been created using human cadaveric material. This course is privileged to be able to provide human cadaveric specimens for student learning. These specimens have been donated by individuals through Western’s Body Bequeathal Program and hence, we expect the utmost of respect for them by our students. Sharing or downloading of this material for use outside of this course is strictly prohibited. Several resources have been suggested to allow students to review cadaveric specimen images outside of the lab.

Technical Requirements:
Students require a high-speed internet connection to access course material and complete assessments.

**OWL:**

All course information will be communicated via the course OWL website. A link to echo360 site for recorded lectures will be provided through Owl. Students may use the OWL discussion board to interact with other students regarding course material and to post questions for their Teaching Assistants (TA’s). The Lab/tutorial sessions are designed to facilitate student questions. However, it is understood that not all students can attend these sessions live during the summer and students may have additional questions; therefore, this is an appropriate forum to post these questions. The course manager will view the discussion board on a weekly basis to ensure all questions are being answered. Your online quizzes will be offered via OWL and assignments submitted on this site. It is expected that this work is completed on an individual basis. Students with OWL issues should contact the Computer Support Centre at 519 661-3800 or fill out the OWL webform: [https://servlet.uwo.ca:8080/vistahelpdesk/controller.jsp](https://servlet.uwo.ca:8080/vistahelpdesk/controller.jsp)

**Requisites:**

**Antirequisite(s):** Anatomy and Cell Biology 2221, 3319*, Health Sciences 2300A/B, 3300A/B, Kinesiology 2222A/B, Kinesiology 3222A/B

**Prerequisite(s):** A background in introductory Biology is recommended.

**Corequisite(s):** None

Extra Information: 4 lecture hours, 2 demonstration hour per week, 0.5 course. This is not a laboratory course.

Senate regulations 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:**

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Michele Barbeau, Course Coordinator</td>
<td><a href="mailto:mbarbeau@uwo.ca">mbarbeau@uwo.ca</a></td>
</tr>
<tr>
<td>Dr. Stephen Renaud</td>
<td><a href="mailto:Stephen.Renaud@schulich.uwo.ca">Stephen.Renaud@schulich.uwo.ca</a></td>
</tr>
<tr>
<td>Dr. Tyler Beveridge</td>
<td><a href="mailto:tbeverid@uwo.ca">tbeverid@uwo.ca</a></td>
</tr>
</tbody>
</table>

**Course Materials**

Posted on the OWL site are the lecture slides in PDF format. Although no text is required, lectures will follow information provided in the recommended text. Any edition of this text is acceptable. New versions of the text do come along with additional features such as self-tests, and online options.

Recommended text:
With the purchase of a new textbook, students will have access to supplemental online material developed by Pearson publishing. This material is not directly testable but will provide you with practices tests and other activities to designed to enhance your learning.

To access to this supplemental material:

**INSTRUCTIONS FOR STUDENTS (new books come with an access code for this):**
2. Select 'Register' as a 'Student'
3. Enter your professor's CourseID:
4. You will need to create an account or sign in with an existing Pearson account.
5. This will give you access to quiz questions, practice tests, dynamic study modules, anatomy Flix, labeling activities, A&P tutor, practice anatomy lab, etc.
6. Pearson Support is available at: [https://support.pearson.com/getsupport/s/contactsupport](https://support.pearson.com/getsupport/s/contactsupport)

(Previous editions also acceptable and the same textbook will be used for Fall/Winter 2020 course if you wish to re-sell your book, however, unless the access code has not been redeemed, used books do not allow access to supplemental materials)

Any other comprehensive anatomy text is also acceptable.

Some suggestions:

*The Principles of Human Anatomy* by Tortora and Nielsen

*Clinically Oriented Anatomy* by Moore, Dalley and Agur

*Gray’s Anatomy for Students* by Drake, Vogl and Mitchell

Also suggested (at Taylor Library 2 hour Reserve):


Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.
Methods of Evaluation

Component Date % of Final Mark

Written Exam 1: Saturday July 11 (Online) 25%
Written Exam 2: Exam period July 27-30 (Date TBD) 25%
Lab Practical Test: (2 x 10% each) 20%
Anatomy Research Project (Due: July 18) 15%
Lab Assignments (10) 10%
Weekly Quiz (6) 5%

Written Exams: The written exams will be short answer and case study questions. These will be completed online and handed in through the “Assignment” tab on Owl and will be passed through Turnitin to detect irregularities. It is expected that these exam will be completed using your course notes but the exam is to be completed on an individual basis. Please review the UWO policy on Scholastic Offences.

The Lab Practical Test will be in a “bell-ringer” format. These will be given online with a time of approximately 1 min per question. The date for these assessments will be the same as the exam dates. It is expected that this exam will be completed on an individual basis. Please review the UWO policy on Scholastic Offences.

Weekly Lab Assignments will be completed for each lab session and submitted within 24 hours following each live lab session.

Weekly Quizzes will be completed online, at the end of each week. Quizzes will cover the material presented that week in the lectures and labs. You will receive access to quizzes on Owl and you will have 1 attempt and 30 minutes to complete each quiz of 10 questions. The quizzes will be available for completion on Fridays at noon and must be completed by Monday at 11:55pm (just before midnight). You are expected to complete these quizzes on an individual basis. There will be 6 quizzes but only the highest 5 quiz grades will be included in your final grade.

Anatomy Research Project: Students will select a topic from a list of suggestions or students can request to study an alternative topic with instructor approval. These topics include diseases/disorders with strong anatomical basis. Students will prepare a short voice over powerpoint presentation and submit a written document. More details on the assignment will be provided separately.
### Course Schedule

#### Lectures:

<table>
<thead>
<tr>
<th>Dates</th>
<th>Term 1 Topics</th>
<th>Lecturer</th>
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<tbody>
<tr>
<td>June 15</td>
<td>Systemic Anatomy Overview</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 16</td>
<td>Nervous System Part I - Somatic</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 18</td>
<td>Shoulder</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 19</td>
<td>Arm</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 22</td>
<td>Forearm</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 23</td>
<td>Hand</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 25</td>
<td>Anterior &amp; Medial Thigh</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 26</td>
<td>Posterior Thigh &amp; Gluteal</td>
<td>Barbeau</td>
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<tr>
<td>June 29</td>
<td>Leg</td>
<td>Barbeau</td>
</tr>
<tr>
<td>June 30</td>
<td>Nervous System Part II - Autonomic</td>
<td>Barbeau</td>
</tr>
<tr>
<td>July 2</td>
<td>Heart</td>
<td>Barbeau</td>
</tr>
<tr>
<td>July 3</td>
<td>Coronary and Pulmonary Circulation</td>
<td>Barbeau</td>
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<tr>
<td>July 6</td>
<td>Systemic Circulation</td>
<td>Barbeau</td>
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</tbody>
</table>

**End of Term 1**

**Sat July 11** Mid Term Exam  **Online Sat July 11**

#### Term 2 Topics

<table>
<thead>
<tr>
<th>Dates</th>
<th>Term 2 Topics</th>
<th>Lecturer</th>
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</thead>
<tbody>
<tr>
<td>July 7</td>
<td>Nasal Cavity, Pharynx &amp; Larynx</td>
<td>Renaud</td>
</tr>
<tr>
<td>July 9</td>
<td>Trachea, Bronchial Tree &amp; Lungs</td>
<td>Renaud</td>
</tr>
<tr>
<td>July 10</td>
<td>Digestive System I</td>
<td>Renaud</td>
</tr>
<tr>
<td>July 13</td>
<td>Digestive System II</td>
<td>Renaud</td>
</tr>
<tr>
<td>July 14</td>
<td>Digestive System III</td>
<td>Renaud</td>
</tr>
<tr>
<td>July 16</td>
<td>Digestive System IV</td>
<td>Renaud</td>
</tr>
<tr>
<td>July 17</td>
<td>Urinary System I</td>
<td>Beveridge</td>
</tr>
<tr>
<td>July 20</td>
<td>Urinary System II</td>
<td>Beveridge</td>
</tr>
<tr>
<td>July 21</td>
<td>Male Pelvic Anatomy</td>
<td>Beveridge</td>
</tr>
<tr>
<td>July 23</td>
<td>Female Pelvic Anatomy</td>
<td>Beveridge</td>
</tr>
<tr>
<td>July 24</td>
<td>Functional Anatomy &amp; Physiological Reflexes</td>
<td>Beveridge</td>
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</tbody>
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#### Demonstrations:

<table>
<thead>
<tr>
<th>Lab</th>
<th>Dates</th>
<th>Term</th>
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<tbody>
<tr>
<td>1</td>
<td>June 17</td>
<td>Terminology and Overview of Body Systems</td>
</tr>
<tr>
<td>2</td>
<td>June 22</td>
<td>Upper Limb – Shoulder &amp; Arm</td>
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<tr>
<td>3</td>
<td>June 24</td>
<td>Upper Limb – Forearm &amp; Hand</td>
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<tr>
<td>4</td>
<td>June 29</td>
<td>Lower Limb – Thigh and Gluteal Regions</td>
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<tr>
<td>5</td>
<td>July 6</td>
<td>Lower Limb - Leg</td>
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<tr>
<td>6</td>
<td>July 8</td>
<td>Heart &amp; Systemic Circulation</td>
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<tr>
<td>7</td>
<td>July 13</td>
<td>Oral Cavity, Pharynx and Esophagus</td>
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<tr>
<td>8</td>
<td>July 15</td>
<td>Foregut and Celiac Trunk</td>
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<tr>
<td>9</td>
<td>July 20</td>
<td>Mid/Hind Gut</td>
</tr>
<tr>
<td>10</td>
<td>July 22</td>
<td>Retroperitoneum</td>
</tr>
</tbody>
</table>

**July 1** **Canada Day – No Lab!**
Tips for Success

The lectures in this course are recorded to allow flexibility in accessing the material. Students have the option of attending lectures live or viewing the recording at a later date. Some students appreciate the opportunity to review or to view the lecture at their own pace; however, with this type of set up, it is very easy to procrastinate and fall behind. The following are a few suggestions to help you succeed:

1. “Attend” the lectures on a regular schedule. It is not possible to view all of the lectures for the first time the week before the exam and expect a high grade. Anatomy takes time to understand all of the relationships and functions of the structures. Give yourself lots of time to learn the material. If you find yourself more than 2 lectures “behind”, start coming to class. Anatomy lectures should not be binge watched.
2. Read the textbook. After attending the lecture, you should follow up with textbook readings.
3. Find a study buddy. Try to find someone to study with – “teach” each other to help you understand the material better. You will find it very helpful for your own learning if you can explain something to another person.
4. Draw it! If you can draw the anatomy, you will have an easier time understanding it.
5. Ask questions. We have a knowledgeable, enthusiastic team assembled to help you succeed in this course. Take advantage of us! Post questions on the forum if you think others might have similar questions.

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 website: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Computer-marked multiple-choice tests and exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Individual student log in data for online lectures is available to instructors and may be monitored for research purposes.

Absence from Course Commitments

If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted either through a self-reporting of absence or via the Dean’s Office/Academic Counselling unit of your Home Faculty. If you are a BMSc or Neuroscience student, the Academic Counselling Office is located in the Faculty of Science room NCB 280, and can be contacted at scibmsac@uwo.ca.
All documentation must be submitted by the student directly to the Academic Counseling office and not to the instructor. An academic counselor in that office will review and either approve or deny the accommodation request. It will be the Academic Counseling office that will determine if accommodation is warranted. This policy applies to all forms of assessment, including evaluations that are less than 10%.

NEW!! For further information, please consult the university’s policy on academic consideration for student absences as there are updates to the academic consideration procedures. [https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf)

**Accommodation for Religious Holidays**

The policy on Accommodation for Religious Holidays can be viewed at the following link: [https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf)

**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. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examinations dates. These dates as well as other important information about examinations and academic standing can be found at the following link: [http://www.uwo.ca/univsec/pdf/academic_policies/exam/definitions.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/exam/definitions.pdf)

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (see [http://www.registrar.uwo.ca/examinations/exam_schedule.html](http://www.registrar.uwo.ca/examinations/exam_schedule.html)).

We will offer one opportunity for make up exams for each assessment. Any student who is unable to write the make up exam with approval from the Dean of their Faculty, will be offered an opportunity to write the exam on that material the next time the course is offered – either Fall/Winter or next Summer term. We do not reweight assessments to accommodate for exams missed with approval. All exams and lab practical exams must be completed in order to complete the course.

**Accessibility Statement and Support Services**

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students Accessibility Services (SAS) at 661-2111 x 82147 for any specific question regarding an accommodation or review. The policy on Accommodation for Students with Disabilities can be found at the following link:
Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental_health) for a complete list of options about how to obtain help.

**Cell Phone and Electronic Device Policy**

The Schulich School of Medicine & Dentistry is committed to ensuring that testing and evaluation are undertaken fairly across all our departments and programs. For all tests and exams, it is the policy of the School that any electronic devices, i.e., cell phones, tablets, cameras, or iPod are strictly prohibited. These devices **MUST** be left either at home or with the student’s bag/jacket at the front of the room and **MUST NOT** be at the test/exam desk or in the individual’s pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam. Non-programmable calculators are only allowed when indicated by the instructor. The program is not responsible for stolen/lost or broken devices.

**Copyright and Audio/Video Recording Statement**

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. You must always ask permission to record another individual and you should never share or distribute the recording.

**Correspondence Statement**

In accordance with the policy, http://www.uwo.ca/its/identity/activatenonstudent.html, the centrally administered **e-mail account** provided to students will be considered the individual’s official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

**Rounding of Marks Statement**

Across the Basic Medical Sciences Undergraduate Education programs, we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. **Final grades** on this course, irrespective of the number of decimal places used in marking individual assignments and tests, will be calculated to one decimal place and rounded to the nearest integer, e.g., 74.4 becomes 74, and 74.5 becomes 75. Marks **WILL NOT** be bumped to the next grade or GPA, e.g. a 79 will **NOT** be bumped up to an 80, an 84 **WILL NOT** be bumped up to an 85, etc. The mark attained is the mark you achieved, and the mark assigned; requests for mark “bumping” will be denied.
SSC Funding

This course is supported by the Science Student Donation Fund. If you are a BSc or BMSc student registered in the Faculty of Science or Schulich School of Medicine and Dentistry, you pay the Science Student Donation Fee. This fee contributes to the Science Student Donation Fund, which is administered by the Science Students’ Council (SSC). One or more grants from the Fund have allowed for the purchase of equipment integral to teaching this course. You may opt out of the Fee by the end of September of each academic year by completing the online form linked from the Faculty of Science’s Academic Counselling site. For further information on the process of awarding grants from the Fund or how these grants have benefitted undergraduate education in this course, consult the chair of the department or email the Science Students’ Council at ssc@uwo.ca.

Support Services

Western University is committed to a thriving campus; therefore, your health and wellness matter to us! The following link provides information about the resources available on and off campus to support students: https://www.uwo.ca/health/ Your course coordinator can also guide you to resources and/or services should you need them.

Registrar Services: http://www.registrar.uwo.ca
Academic Counselling (Science and Basic Medical Sciences): http://www.uwo.ca/sci/counselling/index.html
USC Student Support Services: http://westernusc.ca/service
Student Development Services: http://www.sdc.uwo.ca
Student Health Services: http://www.shs.uwo.ca/

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.

Invitation to Participate in Research Projects

Students in this course may be invited to participate in education research projects conducted by graduate students in the Department of Anatomy and Cell Biology. These projects are used for the research component of either their MSc or PhD degrees. Your participation is greatly appreciated by these students however, it is entirely voluntary. Non-participation in these studies will not have a negative impact on your standing in this course. Students should be assured that any research projects involving this course have been approved by the Department of Anatomy and Cell Biology as well, they have also undergone rigorous review and approval by Western’s Office of Human Research Ethics. https://www.uwo.ca/research/services/ethics/index.html