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## **BROCK UNIVERSITY**

### **Human Systems Anatomy**

#### **COURSE INSTRUCTOR:**

Dr. Rebecca MacPherson  
STH 315, Extension 6620  
Office hours: Thursdays 9-10 am in person OR Teams

#### **SENIOR LAB DEMONSTRATOR:**

Dr. Martin Dragan  
WH 138, Extension 4521  
Office hours: TBD

**COURSE E-MAIL:** For any inquiries or contact with instructors, students are asked to use [sysanatomy@brocku.ca](mailto:syanatomy@brocku.ca) as the email address. The inbox will be monitored by both Dr. MacPherson & Dragan.

**COURSE COMMUNICATION:** Lecture material/resources will be available via SAKAI when possible. Although the material will be available to you throughout the semester, there are deadlines for completion and submission of assignments, tasks, tests/quizzes/exams. These due dates are non-negotiable. Please plan your time accordingly.

From time to time, information may be distributed to all students via posting on Announcements located on the profile for the course on SAKAI. It is your responsibility to check Announcements regularly to ensure you remain abreast of communications pertinent to your progress in this course.

**COURSE DESCRIPTION:** A systems overview of human functional anatomy. This course focuses on the gross and microscopic anatomical structures and functional connections of the body's core systems.

#### **COURSE OBJECTIVES:**

On completion of this course a student should be able to:

1. Demonstrate an understanding of anatomical terminology and language
2. Develop an anatomic knowledge base
3. Demonstrate an understanding of how the systems function and how they are related to one another
4. Locate and identify major anatomical structures and note their clinical significance

#### **LECTURES:**

Fridays 2:00 – 4:00 pm TH247

Note: If we have to switch to an online format. Lecture content will be delivered asynchronously (i.e., you do not have to watch the lectures "live"). Resources (such as syllabus, lab manual, video links, etc.) will be provided directly through the course Sakai site. Lab sessions will also switch to an online format if deemed necessary with appropriate resources put in place for all students to access.

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### LABORATORY TIMES:

LAB #	DAY	TIME	Teaching Assistants	emails
LAB 1	Monday	8-10	Alex Yang	<a href="mailto:Ay14dx@brocku.ca">Ay14dx@brocku.ca</a>
LAB 2	Wednesday	8-10	Mike Finch	<a href="mailto:Mf15kj@brocku.ca">Mf15kj@brocku.ca</a>
LAB 3	Monday	10-12	Emily Bonisteel	<a href="mailto:Eb18mo@brocku.ca">Eb18mo@brocku.ca</a>
LAB 4	Friday	12-2	Ahmad Mohammad	<a href="mailto:Am17jq@brocku.ca">Am17jq@brocku.ca</a>
LAB 5	Friday	8-10	Alex Yang	<a href="mailto:Ay14dx@brocku.ca">Ay14dx@brocku.ca</a>
LAB 6	Wednesday	4-6	Roopan Dhaliwal	<a href="mailto:Rd14wl@brocku.ca">Rd14wl@brocku.ca</a>
LAB 7	Monday	3-5	Noah James	<a href="mailto:Nj17wj@brocku.ca">Nj17wj@brocku.ca</a>
LAB 8	Friday	10-12	Ahmad Mohammad	<a href="mailto:Am17jq@brocku.ca">Am17jq@brocku.ca</a>
LAB 9	Tuesday	2-4	Brad Baranowski	<a href="mailto:Bb12qf@brocku.ca">Bb12qf@brocku.ca</a>
LAB 10	Monday	1-3	Emily Bonisteel	<a href="mailto:Eb18mo@brocku.ca">Eb18mo@brocku.ca</a>
LAB 11	Wednesday	2-4	Roopan Dhaliwal	<a href="mailto:Rd14wl@brocku.ca">Rd14wl@brocku.ca</a>
LAB 12	Tuesday	10-12	Mia Geromella	<a href="mailto:mgeromella@brocku.ca">mgeromella@brocku.ca</a>
LAB 13	Tuesday	8-10	Mia Geromella	<a href="mailto:mgeromella@brocku.ca">mgeromella@brocku.ca</a>
LAB 14	Tuesday	4-6	Mike Finch	<a href="mailto:Mf15kj@brocku.ca">Mf15kj@brocku.ca</a>
LAB 15	Wednesday	10-12	Jake Sweezey-Munroe	<a href="mailto:Js15el@brocku.ca">Js15el@brocku.ca</a>
LAB 16	Tuesday	12-2	Brad Baranowski (Mia)	<a href="mailto:Bb12qf@brocku.ca">Bb12qf@brocku.ca</a>
Lab 17	Wednesday	12-2	Jake Sweezey-Munroe (Mia)	<a href="mailto:Js15el@brocku.ca">Js15el@brocku.ca</a>

See appended schedule for lab locations WC 240A **OR** Cairns McMaster Lab 221

**SAKAI:** All course information will be communicated via the course SAKAI website. Your online quizzes will be offered via SAKAI and assignments are to be submitted on this site via the "Assignments" tool. It is expected that this work is completed on an individual basis.

### COURSE MATERIALS:

1. HUMAN ANATOMY (Pearson, Benjamin & Cummings, Publishers)  
**Mastering A&P online material\***
2. **Lab Manual**
3. **Lab coat**
4. **Goggles or face shield**

Please see Sakai for access instructions for **Mastering A&P**. Can be purchased through the Brock Bookstore.

**Visible Body** is recommended as an additional study resource.



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METHODS OF EVALUATION	
Midterm	20%
Final Exam	20%
Lab Worksheets	10%
Weekly Online Quiz	10%
Lab Exam 1	20%
Lab Exam 2	20%
FINAL MARK	/100

**EACH COMPONENT OF THE COURSE MUST BE COMPLETED**

**WITHDRAWAL DATE: January 21, 2022**

**EXAMS:** The midterm and final exam will be multiple choice style questions. These will be completed in person. The exams are to be completed on an **individual** basis. Please review Brock's policy on Scholastic Offenses. Emphasis will be on **UNDERSTANDING** the material. Students must write each examination on the day scheduled.

**LAB EXAMS:** Lab Exams will be in a "bell-ringer" format. Students must write each examination on the day scheduled and with the lab group in which they are registered. Students have 1 min per station to answer questions. It is expected that this exam will be completed on an **individual** basis. Please review the Brock policy on Scholastic Offences.

Students who do not write an exam on the scheduled date **MUST** notify the Professor *before* the exam *or within 7 days after* missing the exam. For deferrals granted for medical reasons the student **MUST** bring a Brock medical certificate from the clinic. Only this medical certificate will be accepted as a document for a medical reason deferral. Requests for deferrals for exams or assignment deadlines for non-medical reasons may, in rare cases, be given by the Professor following a meeting with the Professor *before or within seven days* after the missed exam/assignment. **Substitute or additional work for missed exams or assignments is not allowed.**

**Accommodation: Students who miss an exam for any reason – including illness – write a make-up exam on the following dates. No further accommodation will be made.**

Students who MISS a scheduled <b>Lab Exam</b> write the Make-up on:	<b>Saturday, May 7, 2022</b>
Students who MISS the scheduled <b>Midterm or Final</b> write the Make-up on:	<b>Saturday, May 7, 2022</b>

**IMPORTANT: Students who miss both the scheduled exam and the make-up exam earn a grade of 0 for the missed exam. Students in this situation are directed to consult Brock academic policies regarding missed examinations.**



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**Weekly Quizzes:** Quizzes will be completed for each Unit through SAKAI. Quizzes will cover the material presented for that Unit in the lectures. You will have 1 attempt and 30 min to complete each quiz of 15 questions. The quizzes will be available for completion on Thursdays after the scheduled lecture and must be completed by Wednesday at 11:55pm (just before midnight). You are expected to complete these quizzes on an **individual** basis.

**Weekly Lab Worksheets:** Lab worksheets will be completed for each lab session and submitted within a week following each lab session. These worksheets are to be submitted on this site via the "Assignments" tool. We encourage collaboration with course colleagues to discuss the assignment material, however - **the submitted assignments must be completed and submitted on an individual basis, and each student must submit their own created content** (i.e., plagiarism will not be tolerated, including copy/pasting information from other resources or from peers). Please refer to the statement on Academic Integrity for additional clarification.

**Student Accessibility Services:** As part of Brock University's commitment to a respectful work and learning environment, the University will make every reasonable effort to accommodate all members of the University community with disabilities. If you require academic accommodation related to a permanent disability to participate in this course, you are encouraged to contact SAS (4<sup>th</sup> Floor Schmon Tower ext 3240) and also discuss these accommodation(s) with the professor.

**Rounding of Marks Statement:** All students will be treated equally and evaluated based only on their actual achievement. Final grades, 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 "bumping" will be denied.

**Invitation to Participate in Research Projects:** Students in this course may be invited to participate in education research projects conducted by undergraduate thesis students and graduate students in the Faculty of Applied Health Sciences. 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 Brock's REB Office.

**Late Submission Policy:** The penalty for a late submission of assigned coursework (i.e., worksheets) is a 0% for the grade, unless accompanied by medical documentation. See Medical Exemption Policy and the medical health certificate at <http://www.brocku.ca/health->



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[services/policies/exemption](#). **No late assignments will be accepted**, unless arrangements have been made.

**Relationship between attendance and grades:** Students are expected to attend all lectures and labs and must submit all assignments to pass this course.

**Academic Accommodation due to Religious Obligations:** Brock University acknowledges the pluralistic nature of the undergraduate and graduate communities such that accommodations will be made for students who, by reason of religious obligation, must miss an examination, test, assignment deadline, laboratory or other compulsory academic event. Students requesting academic accommodation on the basis of religious obligation should make a formal, written request to their instructor(s) for alternative dates and/or means of satisfying requirements.

**Medical Exemption Policy:** The University requires that a student be medically examined in Health Services, or by an off-campus physician prior to an absence due to medical reasons from an exam, lab, test, quiz, seminar, assignment, etc. The Medical Certificate can be found at: <http://www.brocku.ca/health-services/policies/exemption>

**Important Dates:** Students are responsible for recognizing Important Dates as outlined by the Registrar's Office (check the section on sessional or important dates in the relevant online University calendar at <https://brocku.ca/important-dates/>). Please consult the information at the provided link.



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### LECTURE SCHEDULE

Unit	Week	TOPICS	READING SUGGESTIONS
1	Jan 14	*COURSE OUTLINE / TERMINOLOGY	Pages 1-29
2	Jan 21	*CONNECTIVE TISSUES [Cartilage / Bone]	Pages: 49-70; 107-124; 203-211.
3	Jan 28	*MUSCLE – Types & Functions	Pages: 74-75, 235-258
4	Feb 4	*BLOOD/ CARDIOVASCULAR SYSTEM / HEART	Pages: 528-541; 545-563; 567-576.
5	Feb 11	*RESPIRATORY SYSTEM	Pages: 624-645.
6	Feb 18	MID-TERM (*content on test)	STUDY STUDY STUDY
	Feb 21 - 25	READING WEEK	RELAX!
7	March 4	§NERVOUS SYSTEM I- Neural Tissue and Spinal Cord	Pages: 338-355; 360-369, Reflexes 374, 380-382
8	March 11	§Nervous System II – Brain/ Autonomic Nervous System	Pages: 403-444.
9	March 18	§DIGESTIVE SYSTEM	Pages: 650-682.
10	March 25	§URINARY SYSTEM	Pages: 687-702.
11	April 1	§REPRODUCTIVE SYSTEM- Male §REPRODUCTIVE SYSTEM- Female	Pages: 707- 733.
	April 8	???	

Previewing lecture material in textbook in advance of lectures is **STRONGLY** recommended.



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### **SCHEDULE OF LABORATORIES**

<b>LAB</b>	<b>Week</b>	<b>WHAT WILL BE COVERED</b>	<b>LOCATION</b>
1	Jan 17 - 21	INTRODUCTION/Orientation	CAIRNS 221
2	Jan 24 - 28	Connective tissue [Cartilage / Bone]	WALKER 240
3	Jan 31 – Feb 4	Muscle – types and functions	CAIRNS 221
4	Feb 7 - 11	Cardiovascular System	WALKER 240
5	<b>Feb 14 - 18</b>	Respiratory System	CAIRNS 221
	<b>Feb 21 - 25</b>	<b>Reading Week</b>	
6	<b>Feb 28 – Mar 4</b>	<b>LABORATORY EXAM 1</b>	<b>WALKER 240</b>
7	Mar 7 - 11	Nervous System & Brain I	CAIRNS 221
8	Mar 14 - 18	Nervous System & Brain II	WALKER 240
9	Mar 21 - 25	Digestive system	CAIRNS 221
10	Mar 28 – Apr 1	Urinary & Reproductive Systems	WALKER 240
11	<b>April 4 - 8</b>	<b>LABORATORY EXAM 2</b>	<b>CAIRNS 221</b>

*\*Lab Manual, Mastering A&P, and other resources are encouraged to help augment the Laboratory experience.*



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## ACADEMIC POLICIES

1. Students are responsible for all material covered in the lectures and corresponding material in the textbook (readings).
2. *Academic integrity is a core value of the academic mission of Brock University, defined as the pursuit of knowledge and scholarship through the provision of academic programs and a learning environment of the highest quality. It is in the interest of the University's academic mission that every student adheres to the highest standards of scholarly integrity. As such, academic dishonesty is taken very seriously and will not be tolerated. Students should consult Section VII, 'Academic Misconduct', in the "Academic Regulations and University Policies" entry in the Undergraduate Calendar, available at [brocku.ca/webcal](http://brocku.ca/webcal) to view full description of prohibited actions, and the procedures and penalties.*
3. *Academic dishonesty, defined as academic misconduct, consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. lower grade or failure on the assignment or examination, failure in the course, suspension from the University for a definite period, notation on the student's official transcript, or withholding or rescinding a Brock University degree or certificate. It is your responsibility to understand what constitutes academic misconduct. For information on the various kinds of academic dishonesty please refer to the current Brock University Undergraduate Calendar. (<http://www.brocku.ca/webcal/current/undergrad/areg.html>)*

The following illustrates only four examples of academic dishonesty:

- a) Plagiarism; defined as presenting work done (in whole or in part) by someone else as if it were one's own, or for which other credit has been obtained (e.g. using direct quotation or large section of paraphrased material without acknowledgement.)
  - b) Improper collaboration, e.g., copying from another student, or making information available to other students knowing that this is to be submitted as the borrower's own work
  - c) Impersonation, copying or using unauthorized aids in tests and examinations.
  - d) Obtaining medical or other certificates under false pretenses.
4. Intellectual Property Notice: All slides, presentations, handouts, tests, exams, and other course materials created by the instructor in this course are the intellectual property of the instructor. A student who publicly posts or sells an instructor's work, without the instructor's express consent, may be charged with misconduct under Brock's Academic Integrity Policy and/or Code of Conduct, and may also face adverse legal consequences for infringement of intellectual property rights.