



HK*3501 Human Anatomy: Prosection

Fall 2020

Section(s): C01

Department of Human Health and Nutritional Sciences

Credit Weight: 0.75

Version 1.00 - September 08, 2020

1 Course Details

1.1 Calendar Description

First part of the two-semester course HK*3501/2. A two-semester lecture and laboratory course in human anatomy which includes a detailed study of the skeleton, upper and lower limbs, thorax, abdomen, pelvis, perineum, head, neck and central nervous system. Labs involve observation of anatomical details using prosections and dissected specimens. This is a two-semester course offered over consecutive semesters. When you select it you must select HK*3501 in the Fall semester and HK*3502 in the Winter semester. A grade will not be assigned to HK*3501 until HK*3502 has been completed.

Co-Requisites:

HK*3810

Restrictions:

HK*3401, HK*3402 Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science. Instructor consent required.

1.2 Course Description

This is a laboratory-based course that provides students with a regional study of the back, upper limb, thorax and abdomen. A detailed understanding of the relevant osteology and muscles present in these anatomical regions provides the framework for which the pathways and relationships of blood vessels and nerves are examined. Students will learn to progressively layer anatomical structures, from deep to superficial, and/or follow their pathways from proximal to distal. It is with this fundamental understanding of anatomical structures and their relationships, that students will consider applications and/or potential effects of perturbations of anatomy.

1.3 Timetable

Lectures	Monday, Wednesday, Friday: 8:30 – 9:20	Online: Lecture slides (Powerpoint with voice-over will be posted on Courselink)
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Laboratories Tuesday: 10:00 - 11:50

All laboratory periods will be virtual and live, via Zoom

Wednesday: 11:30 - 1:20

Wednesday :2:30 - 5:20

Thursday: 10:00 - 11:50

Thursday: 2:30 - 4:20

1.4 Final Exam

Exam time and location is subject to change. Please see WebAdvisor for the latest information.

2 Instructional Support

2.1 Instructional Support Team

Instructor:	Lorraine Jadeski
Email:	ljadeski@uoguelph.ca
Telephone:	+1-519-824-4120 x53740
Office:	OVCE 2617
Office Hours:	Wednesday 1:30 - 2:30 (or by appointment) via zoom.

2.2 Teaching Assistants

Teaching Assistant:	Sara Frangos
Email:	sfrangos@uoguelph.ca
Teaching Assistant:	Emma Holjak
Email:	eholjak@uoguelph.ca
Teaching Assistant:	Kristina Marrelli
Email:	kmarrell@uoguelph.ca
Teaching Assistant:	Hannah Wellings
Email:	hwellings@uoguelph.ca

3 Learning Resources

3.1 Required Resources

Essential Clinical Anatomy (Textbook)

Essential Clinical Anatomy, 6th Edition, Anne M. Agur and Arthur F. Dalley

Courselink (Website)

<https://courselink.uoguelph.ca>

This course will make use of the University of Guelph's course website on D2L (via Courselink). Consequently, you are responsible for all information posted on the Courselink page for HK*3401/3501.

3.2 Recommended Resources

Mini Skeleton (Other)

Students registered in HK*3501 have the opportunity to purchase mini-skeletons (34 inches high) at a special reduced price using a coupon code provided by the anatomical model company. Details/instructions will be provided to students via email.

AN Anatomy Atlas (Other)

Atlases available in Bookstore:

- Grant's Atlas of Anatomy, 14th Edition, Anne M. Agur and Arthur F. Dalley
- Atlas of Anatomy, 3rd Edition, Gilroy, MacPherson and Ross
- Color Atlas of Anatomy: A Photographic Study of the Human Body, 8th Edition, Rohen, Yakochi and Litjen-Drecoll

3.3 Additional Resources

Undergraduate Calendar (Website)

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/>

Is the source of information about the University of Guelph's procedures, policies and regulations, which apply to undergraduate programs.

3.4 Note

Students registered in University of Guelph Programs have access to images available from Thieme Medical Publishers, Inc. © Copyright 2019. Please read carefully, and adhere to the terms of use set by the publisher.

<http://www.thiemeteachingassistant.com/>

off campus access:

<https://subzero.lib.uoguelph.ca/login?URL=http://www.thiemeteachingassistant.com/>

<http://www.thiemeteachingassistant.com.subzero.lib.uoguelph.ca/Terms%20of%20Use>

4 Learning Outcomes

4.1 Course Learning Outcomes

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

1. Identify and describe the relationships of major anatomical structures present in the back, spinal cord, upper limb, thorax and abdomen.
 2. Identify the proximal and distal attachments of muscles present in the back, upper limb, thorax and abdomen; infer the action(s) of muscles based on their osteological attachments.
 3. Explain the coordinated activity of muscles in producing movements of the body.
 4. Understand and describe the pathway of nerves, from their points of origin as rami of spinal nerves, to their distribution sites; apply your knowledge of the origin and pathway of nerves to determine which structures they innervate.
 5. Understand and describe the pathway of blood vessels, from their points of origin from the heart, to their distal branches.
 6. Provide schematic representations of structures present in the back, upper limb, thorax and abdomen, and the relationships of these structures.
 7. Use your knowledge of: a) structures present in the back, upper limb, thorax and abdomen, b) their relationships, and c) the pathway of nerves and blood vessels, to consider applications of anatomy, and assess the impact of perturbations of anatomy.
 8. Demonstrate oral competency, with an emphasis on providing salient information in a peer-teaching exercise.
 9. Work actively, in a small team-based learning group; work together in a respectful and collaborative manner.
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5 Teaching and Learning Activities

5.1 Course Schedule

Laboratory Week	Laboratory Topic	Suggested Textbook Readings
Laboratory 1	Back 1	Moore's Essential Clinical Anatomy, 6th Edition Terminology: 3 – 7

September 15 - 17, 2020	Vertebral Column and Spinal Cord:	Vertebral Column: 46 - 54; 60 -65
	Vertebral Canal; Spinal Cord and Meninges	Spinal Cord and Meninges: 29 - 31; 69 - 75
		Clinical Box: 75 Lumbar Spinal Puncture, Epidural Anesthesia
Laboratory 2	Back 2	
		Muscles of Back: 76 - 85
September 22 - 24, 2020	Superficial, Intermediate and Deep Back	Osteology of Pectoral Girdle: 92 - 96
	Scapular Region	Posterior Axio-appendicular and Scapulohumeral Muscles: 113 - 117
Laboratory 3	Upper Limb 1	
		Osteology: 92 - 98
September 29 - 30; October 1, 2020	Pectoral Region	Anterior Axio-appendicular Muscles: 112 - 113
	Axilla: Walls, BP, Axillary Artery	Axillary Region and Brachial Plexus: 117 - 129
	Upper Limb 2	
		Osteology: 92 - 98
Laboratory 4	Arm, Cubital Fossa and Forearm	Arm: 130 - 134
October 6 - 8, 2020		Cubital Fossa: 136
		Anterior Forearm: 136 - 140

Upper Limb 3

Hand: 150 - 157

Laboratory 5 Hand

October 14, 15 and
20, 2020

Laboratory 6 **Review Laboratory**

October 21, 22 and
27, 2020

Test 1

Back and Spinal Cord; Upper Limb

**Written: Wednesday October 28, 2020
(during class time); online via Respondus**

**Practical: Friday October 30, 2020 (during
class time); online via Respondus**

Thorax 1

Thoracic Wall and Apertures: 184 - 189

Laboratory 7

Movements of Thoracic Wall: 189 - 190

November 3 - 5,
2020

Muscles, Nerves and Vasculature of
Thoracic Wall: 196 - 200

Laboratory 8 **Thorax 2**

November 10 - 12,
2020

Mediastinum: 217 - 218

Middle Mediastinum: 218 - 233

Superior Mediastinum: 239 - 244

Posterior Mediastinum: 244 - 248

Laboratory 9 **Abdomen 1**

November 17 - 19,
2020

Peritoneum and Peritoneal Cavity: 272 - 276

Abdominal Viscera and Blood Supply: 278 -
294

Laboratory 10 **Abdomen 2**

November 24 - 26,
2020

Anterolateral Abdominal Wall: 255 - 258

Inguinal Region: 263 - 271

Laboratory 11 **Review Laboratory**

December 1 - 3,
2020

Test 2

Thorax and Abdomen

**Written: Friday December 11, 2020 (7:00 -
9:00 PM); online via Respondus**

**Practical: Friday December 4, 2020; online
via Respondus**

6 Assessments

6.1 Methods of Assessment

ASSESSMENT:	Value	Date	Learning Outcomes	Course Activity
	(% of Final Grade)			
Written Test 1	12.5	Wednesday October 28, 2020 Online via Respondus	1 - 7	Back, Spinal Cord, Upper Limb: Labs 1 – 6 and associated class slides
Practical Test 1	12.5	Friday October 30, 2020 (tentative date) During Class Time Online via Respondus		Back, Spinal Cord, Upper Limb: Labs 1 – 6 and associated class slides
Written Test 2	12.5	Friday December 11, 2020 7:00 - 9:00 PM Online via Respondus	1 - 7	Thorax and Abdomen: Labs 7 – 11 and associated class slides

Practical Test 2	12.5	Friday December 4, 2020		Thorax and Abdomen:
		During Class Time		
		Online via Respondus		Labs 7 – 11 and associated class slides
Quizzes	20%	Monday September 28, 2020		Labs 1 – 11 and associated class slides
		Monday October 5, 2020	1 – 7, 9	
		Monday November 9, 2020		
		Monday November 16, 2020		
		Monday November 23, 2020		
		Online via Respondus		
		5% each; best 4 of 5		
Group Assignment 1 - Visualize Anatomy	10%	Friday October 2, 2020 (due at noon)	1 - 7	Lab 2 and associated class slides
		Students prepare a schematic representation of the posterior thoracoappendicular and scapulohumeral Muscles (draw or model using skeleton and clay)		
		Submit digital image(s) via Dropbox		

Group Assignment 2A and 2B - Interpret Anatomy	10%	Friday October 9, 2020	1 - 7, 9	Labs 3 - 4 and associated class slides
		<p>Group Assignment 2A: Students provide a schematic representation of the brachial plexus; submit digital image via Dropbox (5%)</p> <p>Submit digital image via Dropbox</p>		
		Friday October 16, 2020		
		<p>Group Assignment 2B: Students interpret schematic representation of the brachial plexus; online quiz held during class time (5%)</p>		
Group Assignment 3 - Communicate Anatomy	10%	Students (2 - 3 per group) prepare a teaching-based presentation (slide-based with voice-over); student groups will choose one of three topics:	8 - 9	Labs 1 – 2 (Intrinsic Back Muscles)
		Intrinsic Back Muscles (due Thursday October 8, 2020)		Labs 3 – 5 (Cubital Fossa and Anterior Forearm)
		Cubital Fossa and Anterior Forearm (due Tuesday October 27, 2020)		Labs 7 – 8 (Middle Mediastinum)
		Middle Mediastinum (due Thursday November 19, 2020)		

7 Course Statements

7.1 Grading

If you are absent from classes during the semester, you will be expected to make up missed lecture and laboratory material on your own.

8 Department of Human Health and Nutritional Sciences Statements

8.1 Academic Advisors

If you are concerned about any aspect of your academic program:

- Make an appointment with a program counsellor in your degree program. [B.Sc. Academic Advising](#) or [Program Counsellors](#)

8.2 Academic Support

If you are struggling to succeed academically:

- Learning Commons: There are numerous academic resources offered by the Learning Commons including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills. You can also set up individualized appointments with a learning specialist. <http://www.learningcommons.uoguelph.ca/>
- Science Commons: Located in the library, the Science Commons provides support for physics, mathematic/statistics, and chemistry. Details on their hours of operations can be found at: <http://www.lib.uoguelph.ca/get-assistance/studying/chemistry-physics-help> and <http://www.lib.uoguelph.ca/get-assistance/studying/math-stats-help>

8.3 Wellness

If you are struggling with personal or health issues:

- Counselling services offers individualized appointments to help students work through personal struggles that may be impacting their academic performance. <https://www.uoguelph.ca/counselling/>
- Student Health Services is located on campus and is available to provide medical attention. <https://www.uoguelph.ca/studenthealthservices/clinic>
- For support related to stress and anxiety, besides Health Services and Counselling Services, Kathy Somers runs training workshops and one-on-one sessions related to

stress management and high performance situations.

<http://www.selfregulationskills.ca/>

8.4 Personal information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) <http://www.e-laws.gov.on.ca/index.html>. This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes.

For more information regarding the Collection, Use and Disclosure of Personal Information policies please see the Undergraduate Calendar.

(<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml>)

9 University Statements

9.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

9.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Graduate Calendar - Grounds for Academic Consideration

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions

<https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml>

9.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Graduate Calendar - Registration Changes

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml>

Associate Diploma Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml>

9.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

9.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website

<https://www.uoguelph.ca/sas>

For Ridgetown students, information can be found on the Ridgetown SAS website

<https://www.ridgetownc.com/services/accessibilityservices.cfm>

9.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community—faculty, staff, and students—to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not

relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Graduate Calendar - Academic Misconduct

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

9.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

9.8 Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars

<https://www.uoguelph.ca/academics/calendars>

9.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

9.10 Illness

The University will not normally require verification of illness (doctor's notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.
