



# HK\*3401 Human Anatomy: Dissection - DRAFT

Fall 2018

Section(s): C01

College of Biological Science

Credit Weight: 0.75

Version 1.00 - June 14, 2018

## 1 Course Details

### 1.1 Calendar Description

First part of the two-semester course HK\*3401/2. Refer to HK\*3401/2 for course description.

**Co-Requisite(s):** HK\*3810 or HK\*3940

**Restriction(s):** HK\*3501/2. Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science.

### 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.

**HK\*3401/3501 Laboratory Fee:** \$50.00; please bring exact cash or cheque (made out to University of Guelph) to your FIRST laboratory period (week of September 14, 2015).

### 1.3 Timetable

	Monday, Wednesday, Friday: 8:30 – 9:20		
Lectures			ALEX 200
	HK*3401	Tuesday	10:00 – 12:50 OVC 1610
Laboratories		Tuesday	2:30 – 5:20 OVC 1610
		Thursday	10:00 – 12:50 OVC 1610
		Thursday	2:30 – 5:20 OVC 1610

HK\*3501 Wednesday 10:30 – 12:20 OVC 1610

Wednesday 2:30 – 4:20 OVC 1610

## 1.4 Final Exam

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

---

## 2 Instructional Support

### 2.1 Instructor(s)

Lorraine Jadeski

**Email:** ljadeski@uoguelph.ca  
**Telephone:** +1-519-824-4120 x53740  
**Office:** OVCE 2617  
**Office Hours:** TBA

### 2.2 Teaching Assistant(s)

**Teaching Assistant:** tba tba  
**Teaching Assistant:** tba tba  
**Teaching Assistant:** tba tba  
**Teaching Assistant:** tba tba  
**Teaching Assistant:** tba tba  
**Teaching Assistant:** tba tba  
**Teaching Assistant:** Ian Scagnetti  
**Email:** iscagnet@uoguelph.ca

---

## 3 Learning Resources

### 3.1 Required Resource(s)

**Essential Clinical Anatomy (Textbook)**

Essential Clinical Anatomy, 5th Edition, Keith L. Moore and Anne M. Agur

**Grant's Dissector (Textbook)**

Grant's Dissector, 16th Edition, Allen J. Detton

**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, Rothen, Yakochi and Litjen-Drecoll

### **Colours (Equipment)**

Bring colours to class (e.g., markers, pencil crayons or Crayola Twistables) for drawings.

### **Lab Coat (Equipment)**

You are required to bring a white laboratory coat to all laboratory sessions (available in bookstore), and wear clothing that covers your legs and feet: e.g., long pants and suitable shoes (closed-toed/ensure whole foot is covered) are required. Please be aware that you are not permitted to enter the laboratory if you are not suitably attired.

### **Gloves (Equipment)**

Gloves (nitrile; non-latex) and dissection instruments are provided in the laboratory.

### **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 Additional Resource(s)**

### **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.

## **3.3 Note**

Your course instructor (LCJ) highly recommends that you use Moore's Essential Clinical Anatomy, and at least one anatomy atlas as a reference tools for HK\*3401/3501. In addition, you will require access to Grant's Dissector, 16th edition. You may choose to share a copy of Grant's Dissector with your laboratory group, group member/friend, or have access to your own copy. Older editions the recommended text (Moore's Essential Clinical Anatomy), or any any of the recommended atlases of anatomy are suitable for use in the course.

---

# **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.
- 

## 5 Teaching and Learning Activities

### 5.1 Course Schedule

Laboratory Week	Laboratory Topic	Suggested Textbook Readings Moore's Essential Clinical Anatomy, 5th Edition
Laboratory 1	<b>Back 1</b>	Terminology: 3 – 7
	Vertebral Column and Spinal Cord:	Vertebral Column: 266 – 274; 279 – 281
	Vertebral Canal; Spinal Cord and Meninges	Spinal Cord and Meninges: 288 – 292 Clinical Box: 294
		Muscles of Back: 295 – 300; 416 – 418
Laboratory 2	Superficial, Intermediate and Deep Back	Osteology of Pectoral Girdle: 398 -402
	Scapular Region	Scapulohumeral Muscles: 418 - 419
Laboratory 3:	<b>Upper Limb 1</b>	Pectoral Region: 414 – 415
	Pectoral Region	Axilla: 419 -430
	Axilla: Walls, BP, Axillary Artery	

## **Upper Limb 2**

Laboratory 4: Arm, Cubital Fossa and Forearm

Arm: 432 – 436

Cubital Fossa: 438

Anterior Forearm: 438 – 442

### **Group Demonstrations for:**

Posterior Forearm: 442 – 446

## **Back and Spinal Cord**

## **Upper Limb 3**

Laboratory 5:

Hand

Hand: 452 - 459

## **Review Laboratory**

**Test 1**

Laboratory 6:

**Back and Spinal Cord; Upper Limb**

**Practical: TBA**

### **Group Demonstrations for:**

**Written: TBA**

## **Upper Limb**

Thoracic Wall and Apertures: 44 – 48

Laboratory 7: **Thorax 1**

Movements of Thoracic Wall: 49 – 50

Muscles, Nerves and Vasculature of Thoracic Wall: 56 – 60

Laboratory 8: **Thorax 2**

Mediastinum: Superior; Inferior (anterior, middle and posterior)

Middle Mediastinum: 77 – 95

Superior Mediastinum: 98 – 103

Posterior Mediastinum: 103 – 107

Peritoneum and Peritoneal Cavity: 130 – 134

Laboratory 9: **Abdomen 1**

Abdominal Viscera and Blood Supply: 135 – 167

Laboratory 10: **Abdomen 2**

Anterolateral Abdominal Wall: 112 – 117

Inguinal Region: 121 – 129

### **Review Laboratory**

Laboratory 11:

**Test 2**

**Thorax and Abdomen**

**Group Demonstrations for: Practical: TBA**

**Thorax and Abdomen Written: TBA**

---

## **6 Assessments**

### **6.1 Methods of Assessment**

<b>ASSESSMENT: (% of Final Grade)</b>	<b>Value</b>	<b>Date</b>	<b>Learning Outcomes</b>	<b>Course Activity</b>
<b>Written Test 1</b>	22.5%			Back, Spinal Cord, Upper Limb:

		TBA	1 - 7	Labs 1 – 6 and Associated Lectures
				Back, Spinal Cord, Upper Limb:
<b>Practical Test 1</b>	22.5%	TBA		Labs 1 – 6 and Associated Lectures
				Thorax and Abdomen:
<b>Written Test 2</b>	17.5%	TBA		Labs 7 – 11 and Associated Lectures
			1 - 7	Thorax and Abdomen:
<b>Practical Test 2</b>	17.5%	TBA		Labs 7 – 11 and Associated Lectures
<b>Laboratory Progress</b>	5%	Evaluated Weekly by Teaching Assistants	1 – 7, 9	Labs 1 – 11
<b>Group Demonstration A:</b>	10%	Students, working in pairs, perform one laboratory demonstration in the fall semester (i.e., Back/Spinal Cord, Upper Limb or Thorax/Abdomen)	8 - 9	Students Perform 1 of 3 possible Laboratory Demonstrations:  Labs 1 – 2 (Back/Sp. C)
<b>Peer Teaching Exercise</b>				Labs 3 – 5 (UL)  Labs 7 – 10 (Th./Abd/)

			Students Participate in all Team Learning Exercises:
<b>Group Demonstration B:</b>	5%	On Group Demonstration Days, <b>entire</b> laboratory group participates in oral quizzes (administered by TAs)	Labs 1 – 2 (Back/Sp. C)
<b>Team Learning Exercise</b>		8 - 9	Labs 3 – 5 (UL)
			Labs 7 – 10 (Th./Abd)

---

## 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 College of Biological Science 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.
- 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: [Chemistry & Physics Help](#) and [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.
  - [Student Health Services](#) is located on campus and is available to provide medical attention.
  - 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](#).
- 

## 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 regulations and procedures for [Academic Consideration](#) are detailed in the Undergraduate Calendar.

### 9.3 Drop Date

Courses that are one semester long must be dropped by the end of the fortieth class day; two-semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for [Dropping Courses](#) are available in the Undergraduate Calendar.

### 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.

More information: [www.uoguelph.ca/sas](http://www.uoguelph.ca/sas)

## 9.6 Academic Misconduct

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 discourages misconduct. 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.

The [Academic Misconduct Policy](#) is detailed in the Undergraduate Calendar.

## 9.7 Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate 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 which apply to undergraduate, graduate and diploma programs.

## 9.8 Resources

The [Academic Calendars](#) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

---