Human Anatomy for Pharmacy Students
Course Syllabus – Fall, 2017

Course # ANAT 1030
Credit Hours 3
Contact Hours 39
Class/lab times Tuesdays and Thursdays, 2:30 – 5:30 pm
Start date: Thursday, September 7, 2017
End date: Thursday, November 30, 2017, final exam date – to be determined
Please see attached lecture/lab schedule.

Lecture Location Room 71, Apotex Center
Lab Location Gross Anatomy laboratory
Basement level of Basic Medical Science Building (BMSB)

Course Director
Dr. Sari S. Hannila
Department of Human Anatomy and Cell Science
Office: Room 128, Basic Medical Sciences Building (BMSB)
Telephone: (204) 789-3483
E-mail: Sari.Hannila@umanitoba.ca

Course Instructors
Neuroanatomy - Dr. Hugo Bergen, Hugo.Bergen@umanitoba.ca
Head and Neck - Dr. Thomas Klonisch, Thomas.Klonisch@umanitoba.ca
Musculoskeletal – Mrs. Alison Bulow, longoa@myumanitoba.ca
Thorax - Dr. Aleksandra Glogowska, Aleksandra.Glogowska@umanitoba.ca
Abdomen - Dr. Sari S. Hannila, Sari.Hannila@umanitoba.ca
Pelvis - Dr. Sabine Hombach-Klonisch, Sabine.Hombach-Klonisch@umanitoba.ca

Course Description and Format
This is a 3 credit hour course that runs 14 weeks from September to December. It consists of both didactic lectures and laboratory sessions. The course is intended to provide an introduction to human anatomy for first year Pharmacy students. The structure and organization of the course are based on a regional approach to the study of the body. Thus, basic concepts and essential details will be presented in a regional manner. The functional aspects of human anatomy will be integrated with structure, and the clinical importance of anatomical relationships will be introduced where appropriate.

Understanding and remembering anatomy is greatly facilitated by visual learning. Accordingly, laboratory periods are an important and regularly scheduled part of the course. They provide an opportunity to view body structures and their relationships in three dimensions. These exercises reinforce the lecture material and open up a different dimension of learning. During the laboratory sessions, students will examine pre-dissected human cadaveric specimens and view models relating to the structures discussed in the lectures. Even though no dissection is involved, students must wear proper attire in the gross anatomy laboratory (requirements will be outlined in the
Introductory lecture). During lab periods students will work alone or in small groups and follow the instructions for each lab that are provided in the Lab Notes and Guide.

Students are advised to come to lectures and lab prepared by having read in advance the Lecture Objectives and/or Lab Notes and Guide for the appropriate sections. The textbook should be used as a learning resource: Do not attempt to memorize it.

**Required Textbook**

*Essential Clinical Anatomy*, Moore KL, Agur AMR, Dalley AF, 5th edition, Lippincott Williams & Wilkins, 2014. (Any of the preceding editions – 1st through 4th – may also be used).

**Additional Resources**

The following atlases are recommended for use in the lab (the student may choose the one that they prefer):


**Lecture & Lab Notes**

All lecture and lab notes/handouts will be uploaded on UM Learn at: [https://universityofmanitoba.desire2learn.com/d2l/login](https://universityofmanitoba.desire2learn.com/d2l/login)

**Evaluation and Grading**

Three examinations will be held to evaluate the students’ knowledge and understanding of the subject matter. The format of these exams will be multiple choice and each exam will be a maximum of 3 hours in duration. Six laboratory quizzes will also be held (one after each lab session). These quizzes will be conducted on UM Learn and collectively will be worth 5% of the final course grade.

**Midterm Exam, 35% of final course grade**

In class - Thursday, October 26, 2017

**Final Written Exam, 40% of final course grade**

Location and time – to be determined (Final written and practical exams will be held consecutively on the same day)

**Final Practical Exam, 20% of final course grade**

Location and time – to be determined

**Laboratory Quizzes (6 in total), 5% of final course grade**

Online – UM Learn, immediately following each lab session (see course schedule for dates)
The final mark (out of 100) will be translated to a course letter grade according to the following scale:

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Please refer to the College of Pharmacy’s Supplemental Exams Policy regarding final course grade marks below C or 60%.

**Student Feedback / Course Evaluations**
Constructive feedback regarding the course is always encouraged! Students are asked to direct any questions and/or concerns they may have about the course directly to the course director (Dr. Sari S. Hannila). At the end of the term, students will be given the opportunity to formally evaluate the course and provide feedback via a standardized form.

**University of Manitoba Academic Regulations**

**Academic Integrity**
Plagiarism or any other form of cheating in assignments or examinations is subject to serious academic penalty as per the University of Manitoba’s policy on academic integrity.

http://umanitoba.ca/student/resource/student_advocacy/academicintegrity/Academic-Integrity-policies-and-procedures.html
ANAT 1030  
Human Anatomy for Pharmacy, and Respiratory Therapy Students  
Lecture and Lab Schedule – Fall, 2017

Please NOTE! Star symbol (*) indicates lectures that occur back-to-back on the same day.

**INTRODUCTORY LECTURE**

Lecture 1 – Introduction to Gross Anatomy and Anatomical Terminology  
Thursday, Sept 7, 2:30 – 3:30 pm, Apotex Centre (Room 71)  
Instructor: S. Hannila

**NERVOUS SYSTEM**

Lecture 2 – Nervous System I: CNS  
Tuesday, September 12, 2:30-3:30 pm, Apotex Centre (Room 71)  
Instructor: H. Bergen

Lecture 3 – Nervous System II: Cranial Nerves, CSF, and Blood Supply  
Thursday, September 14, 2:30 – 3:30 pm, Apotex Centre (Room 71)  
Instructor: H. Bergen

*Lecture 4 – Nervous System III: Spinal Cord, PNS, and Autonomic NS  
Tuesday, September 19, 2:30 – 3:30 pm, Apotex Centre (Room 71)  
Instructor: H. Bergen

*Clinical Anatomy Lecture 1 – Nervous System  
Tuesday, September 19, 3:30 – 4:30 pm, Apotex Centre (Room 71)  
Instructor: H. Bergen

Laboratory 1 – Nervous System  
Thursday, September 21, 2:30 – 5:30 pm, Gross Anatomy Lab  
Section 1 (Groups A, B, and C): 2:30 – 4:00 pm  
Section 2 (Groups D, E, and F): 4:00 – 5:30 pm  
Instructors: S. Hannila, H. Bergen, B. Zhang

**HEAD and NECK**

*Lecture 5 – Head and Neck I: Skull, Face, Eye, and Ear  
Tuesday, September 26, 2:30 – 3:30 pm, Apotex Centre (Room 71)  
Instructor: T. Klonisch

*Lecture 6 – Head and Neck II: Oral and Nasal Cavities, and Pharynx  
Tuesday, September 26, 3:30– 4:30 pm, Apotex Centre (Room 71)  
Instructor: T. Klonisch
Lecture 7 – Head and Neck III: Neck  
Thursday, September 28, 2:30 – 3:30 pm, Apotex Centre (Room 71)  
Instructor: T. Klonisch

Clinical Anatomy Lecture 2 – Head and Neck  
Thursday, September 28, 3:30 – 4:30 pm, Apotex Centre (Room 71)  
Instructor: T. Klonisch

Laboratory 2 – Head and Neck  
Tuesday, October 3, 2:30– 5:30 pm, Gross Anatomy Lab  
Section 1 (Groups A, B, and C): 2:30 – 4:00 pm  
Section 2 (Groups D, E, and F): 4:00 – 5:30 pm  
Instructors: S. Hannila, T. Klonisch, B. Zhang

MUSCULOSKELETAL

Lecture 8 – Musculoskeletal I: Vertebral Column, Back, and Shoulder  
Tuesday, October 10, 2:30 – 3.30 pm, Apotex Centre (Room 71)  
Instructor: A. Bulow

Lecture 9 – Musculoskeletal II: Upper Extremity  
Thursday, October 12, 2:30 - 3:30 pm, Apotex Centre (Room 71)  
Instructor: A. Bulow

Lecture 10 – Musculoskeletal III: Lower Extremity  
Tuesday, October 17, 2:30 – 3:30 pm, Apotex Centre (Room 71)  
Instructor: A. Bulow

Clinical Anatomy Lecture 3 – Musculoskeletal System  
Tuesday, October 17, 3:30 – 4:30 pm, Apotex Centre (Room 71)  
Instructor: A. Bulow

Laboratory 3 – Musculoskeletal System  
Thursday, October 19, 2:30 - 5:30 pm, Gross Anatomy Lab  
Section 1 (Groups A, B, and C): 2:30 – 4:00 pm  
Section 2 (Groups, D, E, and F): 4:00 – 5:30 pm  
Instructors: S. Hannila, A. Bulow, B. Zhang

MIDTERM EXAMINATION

Written MCQ Exam - Thursday, October 26, 2:30 – 4:30 pm, Apotex Centre (Room 71)
THORAX

Lecture 11 – Thorax I: Thoracic Wall and Mediastinum
Tuesday, October 31, 2:30 – 3:30 pm, Apotex Centre (Room 71)
Instructor: A. Glogowska

*Lecture 12 – Thorax II: Heart and Great Vessels
Thursday, November 2, 2:30 – 3:30 pm, Apotex Centre (Room 71)
Instructor: A. Glogowska

*Clinical Anatomy Lecture 4 – Thorax
Thursday, November 2, 3:30 – 4:30 pm, Apotex Centre (Room 71)
Instructor: A. Glogowska

Laboratory 4 – Thorax
Tuesday, November 7, 2:30 – 5:30 pm, Gross Anatomy Lab
Section 1 (Groups A, B, and C): 2:30 – 4:00 pm
Section 2 (Groups D, E, and F): 4:00 – 5:30 pm
Instructors: S. Hannila, A. Glogowska, B. Zhang

ABDOMEN

Lecture 13 – Abdomen I: Abdominal Wall and Cavity
Thursday, November 9, 2:30 – 3:30 pm, Apotex Centre (Room 71)
Instructor: S. Hannila

Lecture 14 – Abdomen II: Abdominal Viscera
Tuesday, November 14, 2:30 – 3:30 pm, Apotex Centre (Room 71)
Instructor: S. Hannila

Clinical Anatomy Lecture 5 – Abdomen
Thursday, November 16, 2:30 – 3:30 pm, Apotex Centre (Room 71)
Instructor: S. Hannila

Laboratory 5 – Abdomen
Tuesday, November 21, 2:30 – 5:30 pm, Gross Anatomy Lab
Section 1 (Groups A, B, and C): 2:30 – 4:00 pm
Section 2 (Groups D, E, and F): 4:00 – 5:30 pm
Instructors: S. Hannila, A. Glogowska, B. Zhang

PELVIS and UROGENITAL SYSTEM

Lecture 15 – Pelvis I: Renal System and Male Reproductive System
Thursday, November 23, 2:30 – 3:30 pm, Apotex Centre (Room 71)
Instructor: S. Hombach-Klonisch
*Lecture 16 – Pelvis II: Pelvis and Female Reproductive System
Tuesday, November 28, 2:30 – 3:30 pm, Apotex Centre (Room 71)
Instructor: S. Hombach-Klonisch

*Clinical Anatomy Lecture 6 – Pelvis
Tuesday, November 28, 3:30 – 4:30 pm, Apotex Centre (Room 71)
Instructor: S. Hombach-Klonisch

Laboratory 6 – Pelvis
Thursday, November 30, 2:30 – 5:30 pm, Gross Anatomy Lab
Section 1 (Groups A, B, and C): 2:30 – 4:00 pm
Section 2 (Groups D, E, and F): 4:00 – 5:30 pm
Instructors: S. Hannila, S. Hombach-Klonisch, B. Zhang

FINAL EXAMINATIONS
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