

ANAT 262-Introductory Molecular and Cell Biology - Time Table 2024

Time: 4:05 pm-5:25 pm (Tuesday and Thursday); **Location:** Strathcona M-1

Text Book: Molecular Biology of the Cell (5th, 6th OR 7th Ed.) Author(s): Alberts et al.

Coordinator: Dr. J. Presley, Strathcona Anatomy Bldg (Room 1/28); Tel:398-2580;

Email: john.presley@mcgill.ca

Professors: Dr. H. Bui (huy.bui@mcgill.ca); *Dr. J. Presley(john.presley@mcgill.ca); Dr. Susanne Bechstedt (susanne.bechstedt@mcgill.ca), Dr. U. Stochaj (ursula.stochaj@mcgill.ca).

TA: Ben Ulmer (benjamin.ulmer@mail.mcgill.ca)

Day	Date	Lecture Title	Lecturer
Thu	04/Jan	Introduction to ANAT 262.	Presley
Tue	09/Jan	The microscopic study of cells. Light microscopic techniques.	Presley
Thu	11/Jan	Localization of molecules by light microscopy	Presley
Tue	16/Jan	Electron Microscopy I	Bui
Thu	18/Jan	Electron Microscopy II	Bui
Tue	23/Jan	Nuclear lamins and nuclear pores, biocondensates	Stochaj
Thu	25/Jan	Transport of proteins and RNAs across the nuclear envelope.	Stochaj
Tue	30/Jan	Peroxisomes, biogenesis and function; Posttranslational import of proteins into organelles.	Stochaj
Thu	01/Feb	Introduction to Membrane Trafficking	Presley
Tue	06/Feb	. The secretory pathway I: Genetic Approaches to the Secretory Pathway	Presley
Thu	08/Feb	The secretory pathway II: ER to Golgi Transport	Presley
Tue	13/Feb	The secretory pathway III: In vitro systems and the Golgi Apparatus	Presley
Thu	15/Feb	The secretory pathway IV: Sorting in the Golgi apparatus	Presley
Tue	20/Feb	Lipid Droplets and Lipoprotein Particles	Presley
Thu	22/Feb	Advanced Light Microscopy -- Confocal and Super-resolution Microscopy	Presley
Tue	27/Feb	Endocytosis I -- Introduction to Endocytosis (NOT ON MIDTERM)	Presley
Thu	29/Feb	Mid-Term Examination (6-8pm) Covers lectures through 22/Feb (27/Feb not covered).	MIDTERM
**	**	Study Break – Mar 4 -- Mar 8, 2024	**
Tue	12/Mar	Endocytosis II -- Traversing the Endocytic Pathway	Presley

Thu	14/Mar	Endocytosis III -- Intersection of Endocytosis and Secretion	Presley
Tue	19/Mar	Endocytosis IV – Autophagy	Presley
Thu	21/Mar	Pathogens and Intracellular Membranes	Presley
Tue	26/Mar	Overview of Cytoskeleton: Microtubules, Actin, Intermediate Filaments	Bechstedt
Thu	28/Mar	Microtubules: Polymerization, cilia, centrioles, dynein, kinesin	Bechstedt
Tue	02/Apr	Actin: Organization: Arp 2/3, Rho-GTPases, myosins	Bechstedt
Thu	04/Apr	Intermediate Filaments and Cell Motility	Bechstedt
Tue	09/Apr	Review Session	

The Midterm is designed for 2 hrs and will take place in Adams Auditorium and McConnell 13. The Final Exam is designed for 3 hrs. Both exams will use a mix of multiple choice and short answer questions (one word to half a page).

Midterm Examination **.

Midterm: 30% of the final mark

Final Examination *: 70% of the final mark

.....

*Final Supplemental Exam: 70% of the final mark. The format will be similar to the regular final exam.

** In the case that a midterm is missed due to an excused absence, a deferred midterm will be available at 6:00 pm March 12 (location TBA). This will be the same length and in a similar format and will replace the original midterm at full credit. Should the midterm be missed without an acceptable excuse, the deferred midterm will still be permitted. However, there will be a penalty: the mark will be reduced by 15%.

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see <http://www.mcgill.ca/integrity> for more information).

Language of Submission (applies to the Midterms and Final Exam in this course): "In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives." (Approved by Senate on 21 January 2009)