

**BIOC 312**  
**BIOCHEMISTRY OF MACROMOLECULES**  
**TIMETABLE - WINTER 2018**

**Lecturers:**

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**Prerequisites:** BIOC 311, BIOL 200, and BIOC 212 or BIOL 201

**Location:** ENGMC., Room 204 – Wednesdays (W) and Fridays (F) – 11:35am – 12:55pm

Date	Day	Lecture Title	Lecture	Lecturer
Jan. 10	W	Purine & Pyrimidine Metabolism	1	K.G
Jan. 12	F	Purine & Pyrimidine Metabolism	2	K.G
Jan. 17	W	Purine & Pyrimidine Metabolism	3	K.G
Jan. 19	F	Transcription - Techniques	4	V.G
Jan. 24	W	Eukaryotic Transcription: Initiation Complex, Activation/Repression	5	V.G
Jan. 26	F	Eukaryotic Genes and Transcription: Enhancers, Insulators	6	V.G
Jan. 31	W	Transcriptional Regulation in Prokaryotes	7	I.G
Feb. 02	F	Transcription - Phage $\lambda$ : Cro and Repressor	8	I.G
Feb. 07	W	RNA pol III and pol I Transcription	9	B.T
Feb. 09	F	RNA pol III and pol I Transcription	10	B.T
Feb. 14	W	Chromatin Structure and Gene Regulation	11	J.D
Feb. 16	F	DNA Methylation and Gene Regulation	12	J.D
Feb. 21	W	Genomic Imprinting	13	J.D
Feb. 23	F	Transcription Elongation-Prokaryotes	14	S.R
<b>Feb. 28</b>	<b>W</b>	Transcription Elongation-Eukaryotes <b>MIDTERM EXAM 19:00 – 21:30 - in STBIO S1/3 &amp; STBIO S1/4</b> <b>Lectures 1 to 10, inclusively</b>	15	S.R
March 02	F	Post-Translational Regulation of Transcription Factors	16	S.R
<b>March 5 to March 9 - STUDY BREAK</b>				
March 14	W	Translation Mechanisms	17	J.P
March 16	F	Control of Translation	18	J.P
March 21	W	Control of Translation	19	J.P
March 23	F	Translation and Disease	20	J.P
March 28	W	Protein Targeting	21	S.H
<b>March 30</b>	<b>F</b>	<b>GOOD FRIDAY</b>		
April 04	W	Protein Modifications – Glycosylation	22	S.H
April 06	F	Protein Degradation	23	S.H
April 11	W	Apoptosis – Regulation and Therapeutic Implications	24	S.H
April 13	F	Apoptosis – Regulation and Therapeutic Implications	25	S.H

**Midterm Examination:** Lectures 1 to 10 inclusively.

**Final Examination:** Lectures 11 to 25.

**MARKING SYSTEM: Mid-term, 40%; Final Examination, 60%**

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In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

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**MID-TERM EXAMINATION: Wednesday, February 28, 2018 in STBIO S1/3 & STBIO S1/4**

If you miss writing the midterm exam, you **MUST BRING** a doctor's note to the main office, room 905, McIntyre Medical Sciences Building within 1 WEEK of the exam date. Alternatively, a scanned copy of the doctor's note can be sent to [undergrad.biochem@mcgill.ca](mailto:undergrad.biochem@mcgill.ca). In this case, a make up midterm will be scheduled within this 2 week period. If a legitimate doctor's note is not provided, you will receive a zero on the midterm and the final exam will be worth **60%**.

**Suggested Readings**

Lecturers take their material from reviews that are published in various scientific journals. These reviews will be posted on the MyCourses site. In addition, students can consult a number of textbooks.

Molecular Biology of the Cell, 5th edition, 2008. Bruce Alberts, Julian Lewis, Martin Raff, Alexander Johnson, Keith Roberts and Peter Walter. Publisher: Taylor & Francis, Inc..

Molecular Cell Biology, 5th edition, 2008. Harvey Lodish, Paul Matsudaira, Arnold Berk, S. Lawrence Zipursky, Matthew P. Scott; ISBN: 0716743663 (Hardcover).

Biochemistry, fourth edition, 2010. Authors: D. Voet and J.G. Voet. Publisher: John Wiley & Sons, Inc. ISBN: 0470917458.

**Questions Must Be Asked in Class**

PDF files, PowerPoint presentations and video-recordings are available on the myCourses site. Students can also obtain notes from the Note Taking Club (NTC). In addition, two teaching assistants (TAs) who took the course last year will monitor discussions and answer questions on the myCourses site. We make every effort to make the system as flexible as possible. As a result, a smaller proportion of students attend the lectures nowadays. We respect that. In turn, students must understand that this system does not entitle individuals to request private meetings with lecturers at a later time, when they feel ready to study the material. Questions must be asked in class. Questions about old material are typically asked at the start of a lecture or immediately after the end of a lecture. If you do not come to class, you are expected to be 100% autonomous. In particular, professors will not return e-mails or phone calls asking them "What's on the exam?" This question is of general interest and should be asked in class.