

Location and Time: Lectures: 10:35 AM – 11:25 AM Montreal time / Days: Mondays, Wednesdays & Fridays
Location: McMed 1027

Instructors: T.M. Schmeing (**Coordinator**), Bellini Pavilion, Room 465, Tel: 398-2331 (martin.schmeing@mcgill.ca)
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 A. Hendricks, McConnell Engineering Building, Room 356, Tel: 398-8925 (adam.hendricks@mcgill.ca)
 J. Ortega, Strathcona Anatomy and Dentistry Building, Room W315B, Tel: 398-5230 (joaquin.ortega@mcgill.ca)

Teaching Assistants TBD

Date	Day	Lecture Title	Lecture	Instructor	T.A.		
JAN. 04	W	Biophysical separation methods	1	Prof. Guarné	Danilo Ide		
06	F	Biophysical separation methods	2				
09	M	Biophysical separation methods discussion / practical	3				
11	W	Affinity measurement methods	4	Prof. Schmeing	Ali Behvarmanesh		
13	F	Affinity measurement methods	5				
16	M	Affinity measurement methods / DSF	6				
18	W	Dichroism	7				
20	F	Dichroism	8				
23	M	Mass spectrometry	9				
25	W	Mass spectrometry	10				
27	F	Mass spectrometry	11				
30	M	NMR	12				
FEB. 01	W	NMR	13			Prof. Gehring	Rayan Fakh
03	F	NMR	14				
06	M	NMR	15				
08	W	NMR	16				
10	F	NMR	17				
13	M	NMR	18				
15	W	X-ray crystallography	19	Prof. Guarné	Mark Hemmings		
17	F	X-ray crystallography	20	AG, TMS, KG	AB, AI, RF		
20	M	<i>PRE-MIDTERM Exam Tutorial</i>	21				
21	Tu	Midterm (32.5%) Exam (6-8pm, McIntyre 1034) – Lectures 1-18 inclusive					
22	W	X-ray crystallography	22	Prof. Guarné	Mark Hemmings		
24	F	X-ray crystallography	23				
FEB 27 – MAR 3, 2021 – STUDY BREAK							
6	M	X-ray crystallography	24				
8	W	X-ray crystallography	25				
10	F	X-ray crystallography	26				
13	M	X-ray crystallography	27				
15	W	SAXS	28				
17	F	SAXS	29				
20	M	SAXS	30				
22	W	Electron microscopy	31	Prof. Ortega	Danilo Ide		
24	F	Electron microscopy	32				
27	M	Electron microscopy	33				
29	W	Electron microscopy	34				
31	F	Electron microscopy	35				
APR. 03	M	Fluorescence methods	36	Prof. Hendricks	No TA		
05	W	Fluorescence methods	37				
12	W	Fluorescence methods	38				
13	Th	<i>PRE-FINAL Exam Tutorial</i>	39	All instructors	All TAs		
TBD		Cumulative Final Exam (62.5%): All lectures included					

Assignments/Practicals = 5%; Midterm=32.5; Final = 62.5% The deferred final exams is worth 62.5% and the supplemental exam is worth 100%.

NOTE: Students unable to write the Final must contact the Exam Center (<https://www.mcgill.ca/exams/>) and register for a deferred Final.

Pre-requisites

CHEM 204, CHEM 214 or equivalent

Learning Outcomes – Theoretical Content & Higher Skills

- Theory of biophysical techniques
- Data interpretation
- Problem solving

Recommended Textbook

No recommended text

Instructional Methods in this Course

- In class interactive lectures. Include theoretical content, hands-on teaching, in-class exercise and problem-based learning.
- In class review sessions.
- The instructional approach is based on student **attendance** and **active participation to exercises**.

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Online-Learning Etiquette

- We may continue with broadcasting by Zoom, If so:
- Mute your microphone upon joining sessions. Changing your name is forbidden.
- Students' participation makes the course interesting for everyone. Students may use the chat to ask questions or raise their hand while having their camera on during Zoom sessions.
- Polite and respectful language must be used at all times. Disrespectful comments and/or disruptive behavior will not be tolerated (Article 5, https://www.mcgill.ca/secretariat/files/secretariat/code_of_student_conduct_and_disciplinary_procedures.pdf).

Evaluation Method (Assignments/Practicals, 1 Midterm Exam + 1 Final Exam)

- Unless otherwise indicated by the instructor, **all assessments must be written INDIVIDUALLY**. Quizzes and the Final exam are not meant to be collaborative work. Answers will be vetted for cheating and/or plagiarism using a text-matching software. Any suspicious case will be submitted to the Faculty of Science Disciplinary Officer.
- **5% Assignments/Practicals, 5%**
Assignments/Practicals are accessible to students via MyCourses, and will be due several days after they become available. There is typically one assignment/practical per section of the course.
- **32.5% Midterm Exam**
The midterm exam is designed to be answered in 2h - or less – and will be given in person.
- **62.5% Final Exam**
The final exam is designed to be answered in 3h - or less – and will be given in person.

* These settings optimize universal access and were designed to accommodate different time zones, religious observances, technical and/or internet connectivity issues AND barriers to learning. Hence, OSD students are deemed accommodated with these settings, unless otherwise requested by OSD. (Faculty of Science Assessment Policy <https://www.mcgill.ca/science/covid-19/undergrads>)

- **Language**

Les étudiants peuvent soumettre en anglais ou en français tout travail écrit destiné à l'évaluation.

In accord with McGill University's Charter of Students' Rights, students have the right to submit in English or in French any written work that is to be graded (except in courses where knowledge of a language is one of the objectives of the course).

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

Deferred Final and Supplemental

The Deferred Final (worth the same percentage as the Final Exam) and Supplemental (worth 100% of the grade) are managed by Exam Center and are usually written during the March break. Students unable to attend the final exam must contact the Exam Center and follow the procedure stated here <https://www.mcgill.ca/exams/>. In some cases, a valid medical note may be required.

Grading:

The department of Biochemistry will not revise/upgrade marks except on sound academic grounds. Once computed, the marks in this course will not be altered/increased. Decimal points will be "rounded of" as follows: if the final aggregate mark is computed to be 79.5%, the mark will be reported as 80% (an A-); a final aggregate mark of 79.4% will be reported as 79% (a B+). These marks are final and non-negotiable.

Useful resources

• Student Rights and Responsibilities

<https://www.mcgill.ca/students/srr/academicrights>

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/students/srr/honest/> for more information).

• McGill Academic Calendar (add/drop, withdrawal and other deadlines)

<https://www.mcgill.ca/study/2020-2021/important-dates>

• Time management

<https://www.mcgill.ca/tutoring/channels/event/time-management-your-best-ally-323895>

<https://www.mcgill.ca/osd/student-resources/learningresources/time-management>

• Stress management

<https://www.mcgill.ca/osd/student-resources/learningresources/stress-management>

• Office for Students with Disabilities (OSD)

<https://www.mcgill.ca/osd/>

• Health and Wellness Resources at McGill

Student well-being is a priority for the University. All of our health and wellness resources have been integrated into a single Student Wellness Hub, your one-stop shop for everything related to your physical and mental health. If you need to access services or get more information, visit the Virtual Hub at www.mcgill.ca/wellness-hub or drop by the Brown Student Services Building (downtown) or Centennial Centre (Macdonald Campus). Within your faculty, you can also connect with your Local Wellness Advisor (to make an appointment, visit <https://mcgill.ca/lwa>).