

CHEMISTRY 1311 B – Fall 2019
Course Information and Syllabus

COURSE WEBSITE: <https://mysite.science.uottawa.ca/sgambarotta/content/chm1311-b>

PROFESSOR:

Prof. Sandro Gambarotta
D'Iorio 305
562-5800 ext. 2849
Email: sgambaro@uottawa.ca

OFFICE HOURS:

Monday After class, CRX-C140
Thursday After class, CRX-C140
*or by appointment

TEACHING ASSISTANTS (TA's)

Albkuri Yahya yalbk064@uottawa.ca
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DGD
DGD
marks, attendances, gradebook
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CLASS SCHEDULE:

Monday	Tuesday	Wednesday	Thursday	Friday
Lecture 11:30-12:50 CRX-C140			Lecture 1:00-2:30 CRX-C140 DGD (starts Sept 12 th) 2:30-4:00 CRX-C240 and 5:30-7:00 MNT203	

LAB SCHEDULE: (see below)

COURSE EVALUATION:

Your mark is based on two parts: the lecture portion and the laboratory portion. The lab portion is fixed at 25% .

The lecture portion counts for the remaining 75% of your final grade, but its calculation is the result of a few components. Since you may “opt-out” of the online assignments, if you so desire, there are two possible evaluation schemes:

	With homework	Without homework
Post-chapter Homework (Assignment on Wiley+)	10%	–
Attendance (at least 85% of all lectures)	5%	5%
Midterm test (at home on Wiley+) (Oct 5 th 6:00 – 8:00 pm)	5%	
Mid 1 in class (Oct 21)	10%	10%
Mid 2 in class (Nov 25)	15%	15%
Final Exam (TBA)	30%	45%

LAB (25%)

Lab Coordinator: Dr. Rashmi Venkateswaran, vrashmi@uottawa.ca

For your lab schedule (including lab tutorials) and other details, consult the Gen Chem Lab website on Brightspace. You can download and print what you want/need at your own convenience.

IMPORTANT NOTES ABOUT THE LAB:

- The lab starts on **September 10, 2019** but you will have to find out your own lab schedule and show up at the appropriate time and day. You can find out the info about your lab section online. If you print your timetable in table format, the lab section is the number in brackets next to CHM LAB (x). Once you know your lab section, go to the CHM LAB website on Brightspace to see the schedule. Please bring a printout of your timetable to the lab, to verify that you are in the correct lab section.
- You **MUST** purchase safety glasses and a lab coat **BEFORE** coming to the lab. These are available in various places, including the Science Students' Association and uOttawa Bookstore. **NO admission to the lab will be allowed unless the proper clothing is worn: safety glasses, lab coats, clothing covering legs (no rips/tears/shorts/short skirts/capris), shoes and socks that completely cover the feet.**
- For ANY query about the lab, please contact the lab coordinator Dr. Venkateswaran (vrashmi@uottawa.ca)
- If you miss a lab due to illness, please obtain a medical certificate, inform your demonstrator and see Dr. Rashmi.

Pre Labs: Pre Lab Quizzes **must be completed** with a grade of 80 % or better at least 30 minutes **before** entering each lab. You may do each quiz as many times as you like, only the HIGHEST grade is used. Follow the Prelab link on Brightspace.

ATTENDANCE (5%)

The Faculty has a policy of 85% mandatory attendance to courses. Your presence will be recorded via the web **in class** by using your Wi-Fi device by sending an email, **when requested to do so**, to :
19.chm1311.b@gmail.com

ON-LINE HOMEWORK Wiley plus (10%)

A total of 11 homework assignments, which can be worth up to **10%** of your final mark, will be made available online at the appropriate times.

These exercises will be administered through a program called WILEY PLUS. These are designed to help you practice solving more complex problems, *after having covered the material in class*. When an assignment is announced, login to the website at any time to work on it (you do not have to complete the whole assignment in one sitting; you can save your work at any point). **BE AWARE OF THE DUE DATE** posted on the assignment.

Each assignment will give you a score of **either zero or 1** depending on whether you scored less or more than 50%. Of the total **11 assignments**, **your best 10** will be counted to give you the component mark from zero to a maximum of 10.

MIDTERM Home test (5%)

This is a test with the same format of the two class midterms but it will be done in the comfort of your home and open book. It will be administered via the **Wiley+** as for the weekly assignments. The only difference will be that it will be comprehensive and will have the same time constraint you will have in the two class midterms.

Two in-Class MIDTERMS (10% and 15%)

First: In class on the portion of the program covered from the beginning to the midterm date.

Second: In class and on the portion of the program from the 1st midterm to date.

FINAL EXAM (either 30 or 75%)

Final exam will be scheduled and organized by the Faculty. **THERE ARE NO RETESTS**

If you miss the final exam due to illness, please bring a medical certificate to the Faculty of Science

DGDs (0%) begin September 12th

Attendance to DGD is **NOT** mandatory and will give no mark. However, it will be a great studying moment. End of the chapter exercises from your textbook will be treated in class with the guidance of a TA. The list of these exercises will be posted in advance to allow you decide whether or not you want

to attend the DGD. The DGD is supposed to be as interactive as possible for your maximum benefit. The TA will NOT answer questions relating to your lab reports – if you have questions or need help with lab reports, talk to your lab demonstrator or go to the lab tutorials (that’s what they are for!).

GENERAL INFO

CALCULATORS:

You will need a *non-programmable* calculator for the tests and for the final exam. You may NOT use cell phones or other electronic devices in place of a calculator during tests or final exams.

RECOMMENDED TEXT (see below for the opting-out option):

The text that we will be using as an official reference for this course is **Chemistry, 3rd Canadian Edition by Olmsted, Williams, and Burk**. Please note that, while purchasing a textbook is not mandatory, it is *strongly recommended*, especially for students in the Faculty of Science, since you can use it as a reference for multiple courses.

YOUR ACCESS to WILEYPLUS: www.wileyplus.com

To register students can go to www.wileyplus.com and enter the below Course ID.
CHM1311 F00 Course ID: **719805**

OPTING OUT THE WILEY+ (and using alternative textbooks):

You may certainly do so with no penalty to your course mark. If you let me know at the beginning of the semester that you do not wish to participate in this aspect of the course, I will redistribute your marks as shown in the evaluation scheme on page 2. To be on the “**OPT-OUT LIST**”, you must contact me by email no later than **September 30th 2017**.

COURSE SYLLABUS:

The schedule is tentative and could be slightly modified. Lecture presentations will be posted to the course website in pdf format and possibly recorded on ECHO; however, we will be solving problems by hand in class, so bring some paper and a pencil.

Lecture	Date	Topic	
1	Sep 9	Brief Introduction + Stoichiometry and Equations	Ch1
2	Sep 12	Stoichiometry and Equations	Ch1
3	Sep 16	Stoichiometry and Equations . Redox	Ch 1 & Ch 17
4	Sep 19	Atoms and Light.	Ch 4
5	Sep 23	Atoms and Light.	Ch 5
6	Sep 26	Chemical Bonding.	Ch 6
7	Sept 30	Chemical bonding	Ch 7
8	Oct 3	The Behaviour of Gases.	Ch 2
9	Oct 5	W+ Bonus Midterm at home (6:00-8:00 pm)	
	Oct 7	The Behaviour of Gases	Ch 2
10	Oct 10	Principles of Chemical Equilibrium	Ch 14
11	Oct 13-19	Reading week	
12	Oct 21	1st MIDTERM in class	
13	Oct 24	Principles of Chemical Equilibrium	Ch 14
14	Oct 28	Kinetics.	Ch 13
15	Oct 31	Kinetics: Mechanisms and Rates of Reactions	Ch 13
16	Nov 4	Kinetics: Mechanisms and Rates of Reactions	Ch 13
17	Nov 7	Kinetics: Mechanisms and Rates of Reactions	Ch 13
18	Nov 11	Acid-Base Equilibria	Ch 15
19	Nov 14	Acid-Base Equilibria	Ch 15
20	Nov 18	Energy and Thermochemistry	Ch 3
21	Nov 21	Energy and Thermochemistry	Ch 3
22	Nov 25	2nd Midterm	
23	Nov 28	Energy and Thermochemistry	Ch 12
24	Dec 2	Applications of Aqueous Equilibria (Buffers and Solubility)	Ch 16