

CHEM 1101 A & B

COURSE OUTLINE - FALL 2022

Instructor: Pam Wolff email: pamela.wolff@carleton.ca

Office: HP 4432 (the rear wing of the Herzberg building)

- In person office hours : Open door - Drop in: **HP 4432** (the rear wing of the Herzberg building)
 - 10:30 - 11:15 a.m. Wednesdays
 - 2:45 - 4:00 p.m. Wednesdays

Please check BrightSpace regularly; you are responsible for ALL material posted there. I will try to give you as much notice as possible, but if I send an email or post an announcement on Brightspace, after 24 hours, you are responsible for knowing its contents, so check Brightspace and email at least once per 24 hour interval.

How to contact me (*click for more details*):

- Email is the way to contact me. Use CHEM 1101 and your section as the subject. If you haven't had an answer in three days, please re-send, as I may have missed your message by mistake.
- Please post content questions in the "content questions" section on BrightSpace. If you email them to me, I'll probably just say "please ask that on BrightSpace". That way everyone can see the questions and the answers.
- In person office hours : Open door - Drop in: **HP 4432** (the rear wing of the Herzberg building)
 - 10:30 - 11:15 a.m. Wednesdays
 - 2:45 - 4:00 p.m. Wednesdays
- If you want to meet about a sensitive issue, contact me to make an appointment. Send me with a list of times when you're available to meet - I'll pick the first one when I'm free too..
- Zoom office hours by appointment; contact me with a list of times when you're available to meet - I'll pick the first one when I'm free too..
- If you ask in an email about something that's posted on BrightSpace, I'll reply, but I'll just say "check BrightSpace". This isn't meant to be disrespectful to you, but to get you used to checking before asking.

Textbook: CHEMISTRY – 4TH CANADIAN EDITION (*or any standard first year text: click for more details*)

Textbook: CHEMISTRY – 4TH CANADIAN EDITION by Olmsted, Williams and Burk
I post a list of chapters, sections, and extra practice problems from this textbook. I don't use the textbook for homework or assignments, but it serves as a good source of extra information and practice problems. If you're confident you can use a table of contents and index to figure out what to read and which extra practice problems to do, then feel free to buy any standard first year textbook.

MARKING SCHEME:

Labs:	25 % *	25 % *
Assignments (14 of 19):	10 %	
Topic Quizzes (14 of 19):	10%	
Midterms (2):	20 %	

Wednesday 19 October		
Wednesday 30 November		
Final exam:	35% **	75 %**
Bonus Assignments:	03 % ***	= 103 %

*** Labs: You must complete the lab to pass the course** (*click for more details*)

If you fail to attend all of your labs and submit all of the required lab material, your grade in the course will be an F, regardless of your actual numerical mark. Contact your TA immediately if you're struggling - there is support available.

We will make every attempt to allow you to complete the lab work, but the labs are used to full capacity, so the sooner we know that you need to do a make-up, the easier it is to find the opportunity to schedule it for you. Contact the lab supervisor immediately if you miss a lab.

If you know you need to be absent for one of your scheduled labs, contact the lab supervisor right away. It may be possible to arrange for you to complete it with another lab group, but this MUST be arranged in advance.

**** The final exam is mandatory and you must get at least 40%** (*click for more details*):

You must earn a grade of at least 40% on the final exam in order to pass the course. Any mark of less than 40% on the final will result in an F for the course regardless of your actual numerical grade.

***** Bonus marks: providing you get 100% on the outline quiz** (*click for more details*)

There is a "course outline quiz" in the "course outline" box on Brightspace. You may take it as often as you need to in order to get 100%, but you must score 100% on the outline quiz in order to receive credit for any of the bonus work you do.

There are two opportunities to earn bonus marks.

1. A short bonus assignment on quantum dots
2. An excel assignment where you submit (several times - see the section on the bonus assignments) an excel file with all of your marks up to that point and your 'grade-to-date' (this is an exercise in using excel and it also tells me that you're keeping track of your marks!) If you don't have excel, you can get it at no cost through Carleton. <https://carleton.ca/its/help-centre/get-microsoft-office-for-students/>

NOTE: the Outline Quiz and the bonus assignments must be done by their respective due dates in order to count towards your final mark. I will NOT extend the due dates. I will NOT authorize bonus work after the end of the course under any circumstances.

GRADED MATERIAL for the lecture portion of the course

LECTURE MATERIAL (*click for more details*):

Lectures are in-person, unless Public Health Ontario advice leads to another shift to on-line learning. Let's hope not!!!

I will be recording the lectures (subject to technology; I don't guarantee successful recording of every lecture.) I will make these recordings available *by request* only; you may have four(4) lectures "no questions asked", but if you ask for more than four recordings, I'll need your reasons for missing the in-person class, and I'll decide whether to allow you access. (Don't skip classes at the beginning of term; save that for the busiest times when you may legitimately need a bit of extra time "*right now*" to catch up on something else!)

TOPIC ASSIGNMENTS (19 - one for each sub-topic): (*click for more details*)

Assignments in this course are set up as Brightspace "quizzes". (If it has questions to be answered, Brightspace insists on calling it a "quiz" - if Brightspace calls it an assignment, all it is is a drop-box for file submissions). If you contact tech support at Carleton or at Brightspace, you have to refer to these assignments as "quizzes" or the tech. support people will assume a totally different Brightspace function.

Assignments are designed to help you learn how to handle the material - if you don't know how to do an assignment question, you haven't learned the material yet and you need to go back and review the notes and examples! They are similar to the questions that will be on the topic quizzes, the midterms, and the final exam.

Assignments are posted on Brightspace. You can go in and out of them, and submit, re-submit as often as you like up to the due date/time. It is OK to work with other people or get help on the assignments. Each student will have a different set of variables for the calculated questions, though, so you will need to use the same techniques, but you will NOT get the same answers. **THE LAST SUBMISSION IS THE ONE THAT COUNTS** - so I suggest you do the assignment as well as you can and submit it early - then repeat it carefully, getting help if you need it (from friends or from me - if you want me to help, send me a pdf of the work you've already tried so that I can see where you are in the problem and try to pick out what you do and what you don't understand.)

NOTE: for a numerical assignment, once you submit it, you'll get different numerical values when you go back in to try again. The question will be the same, but with different data.

MAKE SURE YOU DON'T FORGET TO ***SUBMIT*** THE ASSIGNMENT - Brightspace will not submit it for you.

YOU WILL HAVE TO SUBMIT A PDF OF YOUR HANDWRITTEN WORK ON CALCULATED QUESTIONS WITHIN 20 MINUTES OF SUBMITTING THE ASSIGNMENT IN ORDER TO RECEIVE CREDIT FOR THAT ASSIGNMENT. (Most students take a photo with their phone, then convert that to a pdf to submit it. CamScanner is a popular app, but anything that will convert to pdf is fine.) If you work with a stylus on a tablet, it's fine to submit a pdf file of that. It must be handwritten - in *your* handwriting.

Show enough steps for me to tell what equation, you used, and what values you put in. You don't need to show rearranging the equation or calculation steps.

You won't be receiving marks for the handwritten work on assignments, so make sure you don't make a mistake entering the answer on Brightspace. It is the Brightspace answer that you're graded on.

Make sure you do the assignment well before the due date/time. You will not be able to enter answers into the assignment once the due date/time passes (though you will be able to submit it past that time as long as you've already entered the answers.)

I DO NOT GIVE EXTENSIONS BEYOND THE DUE DATE/TIME FOR ANY REASON - that includes health reasons and technical difficulties/network/connectivity issues. I release the answers as soon as the due date/time passes, so extensions aren't possible. To make up for this inflexibility, I drop your lowest five assignment marks and calculate your assignment grade based on your top 14. You can therefore miss up to five without losing marks.

Individual Topic Quizzes (19 - one for each sub-topic): (*click for more details*)

Topic quizzes consist of (usually) one or two questions to test whether you've understood the material well enough to do a question on it in a limited amount of time. These are open book/open notes/open internet, but must be YOUR OWN WORK. It is not OK to get help from anyone - whether they're a student in our course or not, whether you're paying for that help or not, and whether they're with you or on line/on your phone etc.

Most topic quizzes can only be opened once (a few can be tried twice (the numerical values will be different) - you'll know before you begin whether you get a second try.) You will have a limited amount of time to complete the quiz - this varies from quiz to quiz, but you'll know what it is before you start the quiz. The timing is part of the evaluation - if you think there's not enough time, you need to practice more. **YOU WILL NOT BE ABLE TO ENTER AN ANSWER ONCE TIME RUNS OUT** so it's up to you to watch the timer. I will not re-open the quiz for you if you run out of time before entering an answer, and I will not mark your written work instead of your quiz if you run out of time.

You must open the quiz before the due date/time passes. I will not extend the due date/time for any reason, including health, technical difficulties, connection failures etc. I make the answer visible as soon as the due date/time passes (hence the "no extensions" policy!) To make up for being inflexible, I will drop the lowest five topic quiz marks, and base your topic quiz grade on the average of your top 14 topic quiz marks. You can miss up to five of them, therefore, before you start losing marks for missed quizzes.

YOU WILL HAVE TO SUBMIT A PDF OF YOUR HANDWRITTEN WORK ON CALCULATED QUESTIONS WITHIN 20 MINUTES OF SUBMITTING THE QUIZ IN ORDER TO RECEIVE CREDIT FOR THAT QUIZ. (Most students take a photo with their phone, then convert that to a pdf to submit it. CamScanner is a popular app, but anything that will convert to pdf is fine.) If you work with a stylus on a tablet, it's fine to submit a pdf file of that. It must be handwritten - in *your* handwriting.

Show enough steps for me to tell what equation, you used, and what values you put in. You don't need to show rearranging the equation or calculation steps.

You won't be receiving marks for the handwritten work on topic quizzes, so make sure you don't make a mistake entering the answer on Brightspace. It is the Brightspace answer that you're graded on.

Midterms (2 - in-person, during class time): *(click for more details)*

There will be two midterms in this course; each will cover nearly half of the course. They will be written during class time, in our regular classroom.

If you are sick or have a personal emergency happen just before the midterm, contact me as soon as you can. There is paperwork for you to fill out, and then I can either arrange for a deferred midterm or transfer the marks to the final exam, depending on how much time has passed since the missed midterm.

The midterms will have similar questions to the assignments and topic quizzes. They will be written in a test booklet, not on a computer, and they are closed-book, closed-notes format. You'll be given a periodic table and the formulae and constants on your question paper, but you will not be able to refer to any material while you're writing. You will need a calculator - programmable is OK, but you may NOT use a cell phone or any other device with transmit/receive capabilities.

The midterms will be returned during class - typically two weeks after they are written. I will NOT post marks right away; I expect you to pick up your midterm and check what you did right and wrong as well as what your mark is.

Final Exam - scheduled by the University Examination Services: *(click for more details)*

The final exam is mandatory - you must write it and obtain a mark of 40% or better to pass the course. If you earn a lower mark than this on the final exam, your overall

grade will be an F, regardless of what your numerical marks add up to.

The final exam is cumulative to the entire term. The exam format will be similar to the midterms; by the time you write the exam, you'll have had lots of practice with the format and question types.

The exam will take place in person, with the time, date and location set by examination services. I have no say in when and where the exam will take place. I find out that information at the same time you do. It will be posted in late October. The exam period is listed in the university calendar (<https://calendar.carleton.ca/academicyear/>). You must be available to write the exam on campus at any time during that period. If you miss the exam for any reason, you'll have to apply to the University Registrar's Office (<https://carleton.ca/registrar/deferral/>) to request a deferred exam. I can't authorize these - you must make the formal application.

If you know in advance that you absolutely can't write the exam on the date/time published in the official exam schedule, you can talk to me about it. I *maybe* able to make an informal arrangement with you regarding rescheduling, but only if I have advance notice. During or after the exam, you have to apply through the Registrar's Office (link is above).

Bonus Assignments - 1. Quantum Dots Bonus Assignment: *(click for more details)*

This assignment is found in the module "the molecule" and the submodule "band diagrams".

Tell me a bit about an application of "quantum dots". Make sure you mention some of the material we've learned in topic 9: Band Diagrams. You **MUST USE YOUR OWN WORDS** - it is not OK to just quote a site - and you must **cite any**/every site you use for your information (any citation style is OK) *and provide a link* to it/them. (Wikipedia is OK as a source; there's no need to go to a technical source.) A couple of paragraphs is all you need.

Do NOT copy anyone else's report, and do not give yours to anyone else. They will be checked for plagiarism (and you **don't** want a record of plagiarism).

Bonus Assignments - 2. Excel marks assignment: *(click for more details)*

This assignment is found in the module "Course Outline and general course material" and the submodule "Bonus Assignment - excel record of marks".

Set up an excel file and keep a record of your marks in it. There are specific requirements given with the assignment.

Labs: *(click for more details)*

The lab portion of the course is administered separately from the lectures. **You're welcome to come to me with questions about the chemistry involved in the labs, but questions about lab submissions, marking etc. must be discussed with your TA's or with the lab supervisor.** You will find their contact information on the separate Brightspace page for the CHEM 1101 lab.

The lab must be completed in order to get credit for the course as a whole. If you miss a scheduled lab without arranging a make-up, or fail to submit any of the graded work for the lab, your overall grade for

this course will be an F, regardless of the rest of your marks. We'll work with you if you are struggling and need support, but **you** need to reach out and ask for that help. In the end, you have to do the work; We'll try to help you do it, but *not* agree to let you skip it!

If you've already completed and passed the lab, you *may* be eligible for a lab exemption. **You must get this in writing from the lab supervisor or the chemistry department administrator.** Keep a record of this agreement just in case it gets mis-filed on our end.

Non-graded material

Practice Problems (*click for more details*):

There are practice problems posted as pdf files on Brightspace. These are not collected or graded, but they represent exactly the style of question you might see on an assignment, topic quiz, CQ, or on the final exam. They're there for you to judge for yourself whether you're ready for a quiz or exam.

You should do as many of these practice problems as possible - they're your best study tool. If you're struggling with any of them, contact me right away. Come to see me in person, or send an image of the work you've tried to do - this allows me to see where you're going wrong, and to help you get back on track. I CAN HELP - BUT DON'T WAIT UNTIL THE LAST MINUTE TO ASK! The day before the final exam is not the time to decide that you actually want to learn the material and pass the course and "will do anything". Decide that at the start of the course, then DO IT! I will not give make-up assignments to upgrade your earned marks under any circumstances.

Marking (and marking errors):

I can only help you improve *before* a quiz or exam. Once an evaluation is written, **you get whatever mark you earn.** I will not increase your mark because you "need to pass the course" or need a certain minimum grade to stay in your program. I will not give make-up or extra work to raise your grades. I do not make exceptions to this. Ever. (Note – I will fix errors in the marking! Those are marks that you did earn, and just weren't credited with.)

Marking (*click for more details*):

I will not be making marks visible in the gradebook on Brightspace when you submit your work. To see your mark on an assignment, topic quiz, CQ or exam, you need to go into "TOOLS" then "quizzes" then click on that evaluation. It will open and show you: your answer, the correct answer, your mark. These will become visible after the due date/time is past. In order to succeed at university, it's a good idea to try to wrap your head around the fact that you need to think "*what did I get wrong, why did I get it wrong, and how can I get it right on the next evaluation?*" rather than "*what mark did I get on that evaluation?*"

In order to give you practice using very basic functions in excel, you have a bonus assignment of tracking your own marks in an excel spreadsheet (if you don't have excel, you can get it from Carleton ITS (<https://carleton.ca/its/help-centre/get-microsoft-office-for-students/>)). See the bonus assignment section for details.

- Assignments: These are automatically marked on Brightspace, so be very careful not to make typos. Input the answer you want marked, because we are not going to go into Brightspace and overturn the marks if you make an error. You must submit a pdf of your work to get credit for the assignment, but we will not be marking the pdf's.
- Topic Quizzes: These are also automatically marked, so you need to be very careful how you enter your answers here as well. You must submit a pdf of your work to get credit for the topic quiz, but we will not

be marking the pdf's.

- Midterms: These are written in person, in a test booklet, and are hand-marked. This takes about two weeks. I'll return them during class.
- Final Exam: This is written in person. I will post the marks as soon as the exams are all marked, and then set office hours in January when you can drop in my office to review your exam in person. I cannot return exams; I have to keep them securely.

Marking errors (*click for more details*):

Your evaluations are marked automatically by Brightspace. Your midterms and final exam are marked by me and the TA's. Errors can happen; if you think your answer was correct but was marked incorrect, you can contact me **WITHIN TWO WEEKS OF THE EVALUATION BEING RELEASED TO YOU** (for assignments and topic quizzes, that's two weeks after the due date. For the midterms and exam, it's two weeks after we finish hand-marking and release it to you). If there is an error, I will fix it.

IF YOU THINK YOUR ANSWER ON A TOPIC QUIZ OR ASSIGNMENT IS CORRECT BUT WAS NOT GIVEN CREDIT, YOU MUST EMAIL ME AND INCLUDE A pdf COPY OF YOUR WORK SHOWING YOUR STEPS. (You will have uploaded work to Brightspace, but it takes up to five minutes for me to go into Brightspace and find your work among the whole class. This isn't much once, but when I multiply it by all students who ask for a review, it adds up to too much. Re-check your calculation (it's often a calculation error) and resend your work!).

Dates and Deadlines

(click here for details)

Midterms:

Wednesday 19 October (just before reading week)

Wednesday 30 November

Assignments and Topic Quizzes:

These are due throughout the term - I'll announce the dates and post them on Brightspace. You'll have a few days for the assignments and about a week for the topic quizzes.

Final Exam:

The University schedules all final exams; examination services will announce the exam dates, typically in late October. The exam period runs from 10 December to 22 December inclusive; you must be available to write the final exam at any time during that period, so if you're making travel arrangements, either wait until the exam schedule is announced, or make them for *after* 22 December.

Academic Accommodation

The statements below are provided to me by the university, and I support them wholeheartedly. If you want to discuss any of these accommodations with me, by all means feel free to do so. You need not provide me with any information that you don't want to, but you should definitely consult me as soon as possible if you have specific accommodations other than extended time and need to know how they'll work out in practice. [You can link to a short student guide to accommodation \(click here for the guide\).](#)

Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate diversity and difference. The purpose of accommodation is to enable students to perform the essential requirements of their academic programs. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the University. [Please contact Equity and Inclusive Communities \(click for the web page\) for a full explanation.](#)

Carleton University is committed to providing access to the educational experience in order to promote academic accessibility for all individuals. Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate diversity and difference. The purpose of accommodation is to enable students to perform the essential requirements of their academic programs. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the University. [Please contact Equity and Inclusive Communities \(click for the web page\) for a full explanation.](#)

[Academic accommodation for students with disabilities](#) *(click for more details):*

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. [For more details, visit the Paul Menton Centre website \(click for the website\).](#)

[Religious Obligation](#) *(click for more details):*

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. [For more details, visit the Equity Services website \(click for the website\).](#)

[Pregnancy](#) *(click for more details):*

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. [For more details, visit the Equity Services website \(click for the website\).](#)

[Student Activities](#) *(click for more details):*

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. [For more details, click to see the policy.](#)

Survivors of Sexual Violence *(click for more details):*

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. [For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support \(click for the website\).](https://www.carleton.ca/sexual-violence-support)