Course Description

CHEM 281 introduces students to the basic principles of organic chemistry with emphasis on bonding, stereochemistry, reaction intermediates and reaction mechanisms, and structure-reactivity correlations. The virtual laboratory introduces basic experimental techniques and illustrates properties of organic compounds in a virtual laboratory setting.

University Operating Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 30</td>
<td>Tuition due</td>
</tr>
<tr>
<td>Sep 8</td>
<td>Classes start</td>
</tr>
<tr>
<td>Sep 21</td>
<td>Last day to add courses</td>
</tr>
<tr>
<td>Nov 2</td>
<td>Last day to drop courses without financial penalty</td>
</tr>
<tr>
<td>Nov 2</td>
<td>Last day to drop without academic penalty</td>
</tr>
<tr>
<td>N/A</td>
<td>Last day to change exam centre</td>
</tr>
<tr>
<td>Nov 7</td>
<td>Last day to submit exam accommodation requests (if applicable)</td>
</tr>
<tr>
<td>Dec 7</td>
<td>Classes end</td>
</tr>
<tr>
<td>Dec 10-23</td>
<td>Exam Period</td>
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</tbody>
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Course Materials

The online postings of student writing will be the primary texts for this course. You will need a good dictionary and thesaurus, and you may find a grammar book helpful. As well, we will use the following textbook which is available at the Campus Bookstore (http://www.campusbookstore.com):

Required Materials

- Textbook package
  - Organic Chemistry, Solomons and Fryhle, 12th ed. (Wiley)
  - Study Guide and Solutions Manual
  - Molecular Models
  - WileyPLUS online code to access digital textbook (may be purchased as part of package or separately)
- Labs/Tutorials
  - An electronic virtual lab guide will be provided

Recommended Materials (not obligatory)

- , Fessenden, Fessenden and Feist, 3rd ed. (Brooks/Cole)


- Wiley E-Text
- Paperback

**Third Party Policy**

This course makes use of WileyPlus online assignments for some activities. Be aware that by logging into the site, you will be leaving, and accessing the WileyPlus online assignments website. Your independent use of that site is subject to Wiley's terms of use and privacy policy. You are encouraged to review these documents, using the link(s) below, before using the site.


**Suggested Time Commitment**

Students can expect to spend approximately 8 - 9 hours a week (108 hours total) in study/practice and online activity for this course during the 12 weeks of the course.

**Weighting of Assessments**

<table>
<thead>
<tr>
<th>Assessment and Activities Description</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>WileyPLUS Online Assignments (regular, in term)</td>
<td>15%</td>
</tr>
<tr>
<td>Final Proctored Examination (Dec exam period)</td>
<td>45%</td>
</tr>
<tr>
<td>Midterm (end of week 7, Saturday morning, October 24th)</td>
<td>20%</td>
</tr>
<tr>
<td>Virtual Lab Report (1 in term, week 10)</td>
<td>5%</td>
</tr>
<tr>
<td>Virtual Lab Exams (2 in term, Saturday mornings, end of week 6,11. Labs 1+2 on Saturday 17th October at 9am, Labs 3,4,and 5 on Saturday 28th November at 9am)</td>
<td>15%</td>
</tr>
</tbody>
</table>

*A 50% overall is required to pass the course*

**Assessments and Activities Overview**

**Virtual Lab Report (5% handed in through ONQ in week 10, look for TA announcement closer to the date)**
The **Virtual lab report** will be a report to be submitted for an experiment from the online tutorials. Several practical questions will need to be answered by the student. A practice lab report will be posted so students know what to expect. This report will be available partway through the course.

**Virtual Labs (15% from two short multiple choice tests during the term, test one covers labs 1+2, test 2 covers labs 3-5).** The exams will take place on Saturday mornings.

The **five interactive, web-based labs** introduce basic techniques and illustrate properties of organic compounds. The labs are a series of online tutorials and videos explaining an experiment or an experimental technique for which small reading and practice problem assignments are also incorporated. Assessments of the labs will examine concepts related to design and the practical aspects of a science course. **NOTE. Marks for the virtual labs only come from the tests, everything else you do prior to this is for practice.**

**WileyPLUS Online Mastery Assignments (15%)**

WileyPLUS online materials are designed to help you expand your knowledge in the concepts discussed and act as a supplementary virtual tutor. The assignments provide an opportunity for you to apply your knowledge to a mastery level before moving onto another topic. Practice questions are also available to help you to check your understanding of the material and increase your skill at completing organic calculations.

The 9 WileyPlus assignments are numbered 1-9 and mirror the Course Unit numbers. Please attempt the assignments in order and make sure they are all completed the due date. Each due date is generously set and thus accommodations are built in and apply to all. Answers to assignments are viewable after the due date in order to help with your studies FOR THIS REASON DEADLINES ARE HARD DEADLINES AND CANNOT BE EXTENDED UNDER ANY CIRCUMSTANCES. I encourage you to do the assignments alongside your work and not leave them until the last moment. Extended due dates are to accommodate internet outages/server issues etc. **DO NOT LEAVE THE ASSIGNMENTS UNTIL THE LAST MINUTE.**

Each assignment clearly shows its due date and time. You will have three attempts at each question in the assignment before it is marked wrong, and each successive try will be worth 80% of the total mark for that question. **Check WileyPlus for the due dates of these assignments.**

These 2-minute tutorials will show you how to utilize WileyPLUS:

- Read, Study, & Practice
- Assignments
- Gradebook

**Midterm (20%)**

This will be a short exam of around 30 multiple choice questions covering the first 6 weeks of the course. I will announce the cut off for work before the midterm in a news post in ONQ. The exam will take place on the Saturday morning of week 7. **Saturday October 24th.** Time TBA. The exam will be 1.5-2h depending on the # of questions I set. Accommodations for all students will be incorporated into the exam time, time will be at least double that required to normally finish the questions.
Final Examination (45%)

It will be a three final exam. There will be two components:

- **exam made up of 2 sections**: a multiple choice section of 30-40 questions followed by a long answer section on the content contained in the main course materials. The long answer section will require you to input SMILES codes that identify structures you draw in a SMILES code generator. A practice sheet will be posted to the website to ensure you are drawing structures and generating the codes correctly.

Proctored Exams

Once the exam schedule has been finalized the exam date will be posted on your SOLUS account. **Due to the ongoing situation with COVID-19, there will be no in person proctored exams. All exams will be written online using OnQ or Examity.**

The ASO Exams team will contact you with more information regarding the use of Examity and the technical requirements that you will need to meet. You will also be asked to provide the time zone in which you will be located at the time of your exam.

When you registered for the course, you indicated the exam centre location. This does not need to be updated.

Location and Timing of Final Examinations

The exam dates for each Term are listed on the Faculty of Arts and Science webpage under "Important Dates." Student exam schedules for the Fall Term are posted via SOLUS immediately prior to the Thanksgiving holiday; for the Winter Term they are posted on the Friday before Reading Week, and for the Summer Term they are individually noted on the Arts and Science Online syllabi. **Students should delay finalizing any travel plans until the examination schedule has been posted. Exams will be moved or deferred to accommodate employment, travel/holiday plans or flight reservations.**

Remote Exams

For exams being offered remotely, Regulation 7.2.3. Restrictions on Assessment is waived. Remote ex-ams will be allowed in the last two weeks of classes and in the study period designated by Senate prior to the examination period in order to accommodate the limited number of online proctoring seats available.

Remote Proctoring

The final exam and some tests/quizzes in this course will use remote proctoring provided by a third-party, cloud-based service that enables the completion of a proctored exam or test from an off-campus location, through onQ. This online proctoring solution was chosen as part of the approach to maintaining academic integrity in online assessment. Precise details about how remote proctoring will be used in this course can be found in the “Getting Started with Remote Proctoring” content module in onQ.

When writing tests/exams using remote proctoring, you are connecting to the third-party service. Queen's has conducted a privacy and security review of the service and has entered into a binding agreement with terms that address the appropriate collection, use and disclosure of personal information in accordance with Ontario’s privacy legislation.
You should also take measures yourself to protect your information by keeping your NetID password and challenge questions private, closing all applications prior to starting an exam/test, and ensuring your device is updated and safeguarded against malware.

For more information about remote proctoring, see the Student FAQs on the OUR Exams resource page for remote proctoring: http://www.queensu.ca/registrar/students/examinations/exams-office-services/remote-proctoring

Calculator Policy (if applicable)

As noted in Academic Regulation 9.2, "Calculators acceptable for use during quizzes, tests and examinations are intended to support the basic calculating functions required by most Arts and Science courses. For this purpose, the use of the Casio 991 series calculator is permitted and is the only approved calculator for Arts and Science students."

Grading

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Numerical Course Average (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>90-100</td>
</tr>
<tr>
<td>A</td>
<td>85-89</td>
</tr>
<tr>
<td>A-</td>
<td>80-84</td>
</tr>
<tr>
<td>B+</td>
<td>77-79</td>
</tr>
<tr>
<td>B</td>
<td>73-76</td>
</tr>
<tr>
<td>B-</td>
<td>70-72</td>
</tr>
<tr>
<td>C+</td>
<td>67-69</td>
</tr>
<tr>
<td>C</td>
<td>63-66</td>
</tr>
<tr>
<td>C-</td>
<td>60-62</td>
</tr>
<tr>
<td>D+</td>
<td>57-59</td>
</tr>
<tr>
<td>D</td>
<td>53-56</td>
</tr>
<tr>
<td>D-</td>
<td>50-52</td>
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<tr>
<td>F</td>
<td>49 and below</td>
</tr>
</tbody>
</table>

Contacting the Teaching Team
The teaching team contact information is located on the Homepage of the course (see “Teaching Team”).

For general questions about the course, please post to the discussion forum Course Questions Forum. Please use the forums for all questions unless they are of a personal nature. Note: I will direct you to the forums to post your question if you email me.

For general questions about the course, please post to the Course Questions Forum.

Netiquette

In any course you often communicate with your peers and teaching team through electronic communication. You are expected to use the utmost respect in your dealings with your colleagues or when participating in activities, discussions, and online communication.

Here is a list of netiquette guidelines. Please read them carefully and use them to guide your communication in this course and beyond.

1. Make a personal commitment to learn about, understand, and support your peers.
2. Assume the best of others and expect the best of them.
3. Acknowledge the impact of oppression on the lives of other people and make sure your writing is respectful and inclusive.
4. Recognize and value the experiences, abilities, and knowledge each person brings.
5. Pay close attention to what your peers write before you respond. Think through and re-read your writings before you post or send them to others.
6. It’s ok to disagree with ideas, but do not make personal attacks.
7. Be open to being challenged or confronted on your ideas and to challenging others with the intent of facilitating growth. Do not demean or embarrass others.
8. Encourage others to develop and share their ideas.

Queen's Email

The university communicates with students via Queen's email. Please check your email regularly to ensure you do not miss important information related to your course.

Copyright

Course materials created by the course instructor, including all slides, presentations, handouts, tests, exams, and other similar course materials, are the intellectual property of the instructor. It is a departure from academic integrity to distribute, publicly post, sell or otherwise disseminate an instructor’s course materials or to provide an instructor’s course materials to anyone else for distribution, posting, sale or other means of dissemination, without the instructor’s express consent.
A student who engages in such conduct may subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights.

Accessibility/Accommodations

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at Senate in November 2016. If you are a student with a disability and think you may need academic accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website.

Academic Considerations for Students in Extenuating Circumstances

To submit a Request for Academic Consideration, go to: https://www.queensu.ca/artsci/undergrad-students/academic-consideration-for-students.

After you submit your request, it is essential that you contact your instructor(s) to discuss arrangements for completing the academic requirements that you have missed.

Academic consideration is meant to help you manage a short-term extenuating circumstance that is beyond your control and could affect your academics. This might be a sudden physical or mental illness, a serious injury or required treatment for yourself or a significant other, bereavement (e.g., death of a family member or close friend), or a traumatic event (e.g., sexual assault, divorce). Another example is an absence due to a significant event, such as participating in a varsity championship or performing at a national or international event.

Academic consideration for an extenuating circumstance may include but is not limited to:

- an excused absence
- a deferral
- an extension
- a modified schedule for assignments, projects, labs, or placements
- an alternative assignment
- a re-weighting of term marks
- permission for an incomplete grade
- course withdrawal without penalty (this requires an appeal to the Associate Dean of Studies)

Your instructor will determine what academic consideration is appropriate for your course based on the academic requirement(s) you may miss and the essential requirements/learning outcomes of the course. All students who receive academic consideration must meet all essential academic requirements/learning outcomes and standards of the course. Academic consideration does not guarantee academic achievement in a course/program.
Situation 1: Requests for academic consideration up to 3 days:

- Each student can make one request for academic consideration for up to 3 days without supporting documentation per academic term (i.e., Fall, Winter, Summer). Any additional requests for academic consideration for up to 3 days will require supporting documentation.

- Requests for academic consideration under 3 days must be submitted as soon as you require academic consideration and no later than 1 day after the 3 day consideration period has ended. (eg. if you are requesting academic consideration for September 10-12, you must have your request submitted into this system by September 13 at the latest).

- Delegates submitting a Request for Academic Consideration for Extenuating Circumstances form and supporting documentation on behalf of a student should contact the Faculty Office at asc.consideration@queensu.ca or 613-533-6000, ext. 75413 to arrange to complete the proper forms.

Situation 2: Requests for academic consideration between 4 days and 3 months:

- Requests for academic consideration between 4 days and 3 months should be made as soon as you require academic consideration.

- All requests for academic consideration between 4 days and 3 months require supporting documentation, which should be submitted within 5 business days of submitting the request or it will be withdrawn.

- All requests for academic consideration for extenuating circumstances between 4 days and 3 months must be submitted before the course has closed/ended.

- Delegates submitting a Request for Academic Consideration for Extenuating Circumstances form and supporting documentation on behalf of a student should contact the Faculty Office to arrange to complete the proper forms.

- If you have questions, please contact the Academic Consideration Team in the Faculty Office at: asc.consideration@queensu.ca or 613-533-6000, ext. 75413.

Situation 3: Requests for academic consideration during final exam periods:

- All requests (up to 3 days and between 4 days and 3 months) for academic consideration made during exam periods require supporting documentation.

Situation 4: Request for Excused Absence for Significant Event:

Students who are making a request for academic consideration related to a significant event must follow these steps outlined below. If you are participating in an event at the provincial, national, or international level that is either a Queen’s Varsity Athletics event or an event to which you were invited as a distinguished guest, you can complete this form. Please submit requests a minimum of 2 weeks before the sanctioned events or as soon as the event is scheduled.

1. Gather the following information:
   - A personal statement about why participation in the event is significant to you/Queen's
• Specific details about what is being missed (i.e., exactly what courses, what tests, what assignments, etc.)

• A copy of the invitation to participate/details about the competitions that determine who is invited

• Any other relevant details about the event (i.e., tournament information, schedules, team details, who is participating)

2. A minimum of two weeks before the sanctioned event, or as soon as the event is scheduled, complete and submit a Request for Excused Absence for Significant Event Form to either:
   • Queen’s Athletics and Recreation senior management team/Athletics Services Coordinator – Retention (athletics and Recreation Centre, 284 Earl Street), for varsity athletic events OR
   • the Vice-Provost and Dean of Student Affairs (Gordon Hall, Room 300, 74 Union Street) for all other significant events
   • BISC Students should submit their requests to the Student Services office at the Bader International Student Centre (BISC).

3. Upload your signed form to the Arts & Science Academic Consideration Portal. If you encounter technical difficulties please reach out to asc.consideration@queensu.ca

As soon as possible, follow-up with your instructor(s) either by email or in-person to discuss how you will be making up for the missed academic requirements. This may require you to complete academic requirements prior to being absent for the event.

Please use the information provided on the Teaching Team page.

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Academic Integrity

Queen’s students, faculty, administrators and staff all have responsibilities for upholding the fundamental values of academic integrity: honesty, trust, fairness, respect, responsibility and courage. These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments and their behaviour conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1), on the Arts and Science website, and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen’s. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Computer Requirements
Please note that mobile devices are not recommended for the course as they cause several known issues in onQ.

### Computer Specifications
- Windows 8.1 or newer
- OS X 10.13 (High Sierra) or newer
- Dual Core 2 GHz processor
- 4 GB RAM
- Soundcard
- USB headset
- Webcam

### Supported Browsers
- Chrome (preferred - latest version)
- Firefox (latest version)

### Internet Connection
- Wired high speed access: Cable or better

### Java
- Latest version

### Media Player
- Flash (latest version)

### Adobe Reader
- Latest Version

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**Students Studying or Travelling Abroad**

If you plan to travel, we strongly recommend that you confirm Internet availability in your host country prior to departure. In the past, students in other countries have been blocked from accessing certain websites relevant to their courses, as well as onQ. It is the responsibility of all students to book travel around course work, as we cannot change the format or timing on assessments or assignments as a result of travel plans.