Welcome to Chem 1301A! Please read and keep this course outline handy, because it is an official document that contains important course information.
Course Description & Prerequisite Requirements

Calendar description: An introduction to the foundational principles of chemical structure and properties, emphasizing their relevance to modern science. Topics include: atomic structure, theories of chemical bonding, structure and stereochemistry of organic molecules, and structure of coordination complexes.

Extra information: 3 lecture hours, 1.5 laboratory hours (3 h every other week), 0.5 course.

Prerequisite: Grade 12U Chemistry or equivalent. Antirequisites: Chem 1024A/B or the former Chem 1100A/B or 1050.

Unless you have either the prerequisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Course Website

News and course updates will be posted on Western’s OWL system (http://owl.uwo.ca). This is the primary method by which information will be disseminated to all students in the class, so you are responsible for checking OWL on a frequent basis.

Dates to Note

For your convenience, a summary of some of the important dates is provided below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, September 12</td>
<td>In-class Knowledge Quiz</td>
</tr>
<tr>
<td>Friday, September 16</td>
<td>Last day to make registration changes, such as lecture and lab sections. This is the last day to de-register from the course and remove it from your academic record.</td>
</tr>
<tr>
<td>Week of September 19th</td>
<td>First week of laboratory rotations</td>
</tr>
<tr>
<td>Saturday, October 15, 1:00 pm</td>
<td>Midterm Test (topic cut-off will be announced by Oct. 7)</td>
</tr>
<tr>
<td>Saturday, November 5</td>
<td>Last day to drop the course without academic penalty. If you drop the course on or before this date, it will be shown on your academic record as WDN (withdrawn). If you drop the course after this date, it will result in a WDF, which counts as an F.</td>
</tr>
</tbody>
</table>
How to Achieve Your Goals in Chem 1301A

You will be more successful in the course if you recognize the following:

1. Like many sciences, chemistry is a cumulative subject. Because one topic acts as a foundation for the next, it is essential to stay up-to-date by studying the material and doing practice problems.

2. Learn why something is the way it is, not just what it is. Please realize that memorization is not the same as learning and understanding. When working on questions from the workbook, focus on the concepts, the thought process, how to arrive at the answer, and why the answer is the answer.

3. Don’t just come to class – get something out of coming to class. Be attentive. Participate. Think. Write down important points, but avoid spending so much time writing that you’re not thinking.

4. Labs are intended to be an enjoyable experience. Prepare for each lab in advance by reading the lab manual and doing the prelab exercise. Study the theory and the concepts behind the experiment. Pay attention during the prelab video. When completing your lab report, refer to the marking scheme so that you are aware of what is expected in the lab report.

5. Use us – we’re here to help! If you have questions about the course material, ask them well in advance. Ask questions at the Resource Room or on the OWL forum as soon as they arise.

6. To assist in learning and understanding, you are encouraged to study in small groups, where you can challenge yourself by defending your work and ideas and also challenge others.

Support Services

Learning-skills counsellors at the Student Development Centre (http://www.sdc.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental_health) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, http://westernusc.ca/services.

The website for Registrarial Services is http://www.registrar.uwo.ca.

Accessibility

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation.
Learning Expectations

The course has an emphasis on the development of skills such as critical-thinking, problem-solving, analysis, and quantitative reasoning; these “soft skills” are essential to success in not just chemistry but also in other courses and many occupations. Any student receiving credit for Chem 1301A will be expected to demonstrate competence in his or her ability to:

Course-Specific Expectations

- Recognize the importance of chemistry in everyday life and the interdisciplinary nature of chemistry.
- Think critically about, explain, integrate, and apply chemical principles, laws, and theories.
- Examine, integrate, and assess any provided or collected chemical data.
- Solve a variety of novel problems, both qualitative and quantitative.
- Draw scientific conclusions from experimental results or data.
- Use a variety of laboratory equipment and instrumentation.
- Execute a variety of experimental procedures and explain the theory behind them.
- Safely perform experimental procedures.

Soft-Skill Expectations

- Analyze and critically assess problems, and take a systematic approach to solve them.
- Work independently.
- Form productive and collaborative working relationships with other individuals.
- Obtain, evaluate, and integrate information from various sources, and determine its relevance.
- Prioritize a set of tasks and manage the use of his or her time.
- Execute mathematical calculations accurately.
- Communicate thoughts, ideas, and observations verbally and in writing.
- Recognize when to seek assistance.
- Develop respect for, and comply with, regulations and policies.
- Learn to accept responsibility for his or her decisions, actions, and non-actions.

Code of Student Conduct

To foster a supportive and enriching academic environment that is conducive to learning and free inquiry, Western has a Code of Student Conduct (http://www.uwo.ca/univsec/pdf/board/code.pdf).

You can expect your instructor to promote this environment and also respect each student’s unique views and opinions. Because Western is also a part of your environment, we expect the same from you. Activities that disturb another student’s right to this environment will not be tolerated; these include talking in class about matters irrelevant to the course and using electronic devices inappropriately.

You can also expect your instructor to come prepared, on time, and eager to help you learn. In turn, we expect that you will come prepared, on time, and ready to learn.
Lecture Sections

<table>
<thead>
<tr>
<th>Lecture Section</th>
<th>Time (MWF)</th>
<th>Room</th>
<th>Instructor</th>
<th>Office</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>8:30–9:20</td>
<td>NS 145</td>
<td>Dr. Keith Griffiths</td>
<td>CHB 25</td>
<td><a href="mailto:griff@uwo.ca">griff@uwo.ca</a></td>
</tr>
<tr>
<td>002</td>
<td>9:30–10:20</td>
<td>NCB 101</td>
<td>Dr. Felix Lee*</td>
<td>MSA 1202</td>
<td><a href="mailto:flee32@uwo.ca">flee32@uwo.ca</a></td>
</tr>
<tr>
<td>004</td>
<td>12:30–1:20</td>
<td>NCB 101</td>
<td>Dr. Viktor Staroverov</td>
<td>CHB 063</td>
<td><a href="mailto:vstarove@uwo.ca">vstarove@uwo.ca</a></td>
</tr>
<tr>
<td>005</td>
<td>1:30–2:20</td>
<td>NCB 101</td>
<td>Dr. David Brock</td>
<td>MSA 1201</td>
<td><a href="mailto:dbrock8@uwo.ca">dbrock8@uwo.ca</a></td>
</tr>
</tbody>
</table>

*Course coordinator

Laboratory Sections

Laboratory sections are shown below. Labs are held in either MSA 1220 or CHB 110.

<table>
<thead>
<tr>
<th>Lab Sections</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>021 and 022</td>
<td>Tuesday</td>
<td>9:30 am – 12:20 pm</td>
</tr>
<tr>
<td>023 and 024</td>
<td>Tuesday</td>
<td>2:30 pm – 5:20 pm</td>
</tr>
<tr>
<td>025 and 026</td>
<td>Tuesday</td>
<td>6:00 pm – 8:50 pm</td>
</tr>
<tr>
<td>031 and 032</td>
<td>Wednesday</td>
<td>9:30 am – 12:20 pm</td>
</tr>
<tr>
<td>033 and 034</td>
<td>Wednesday</td>
<td>2:30 pm – 5:20 pm</td>
</tr>
<tr>
<td>035 and 036</td>
<td>Wednesday</td>
<td>6:00 pm – 8:50 pm</td>
</tr>
<tr>
<td>041 and 042</td>
<td>Thursday</td>
<td>9:30 am – 12:20 pm</td>
</tr>
<tr>
<td>043 and 044</td>
<td>Thursday</td>
<td>2:30 pm – 5:20 pm</td>
</tr>
<tr>
<td>045 and 046</td>
<td>Thursday</td>
<td>6:00 pm – 8:50 pm</td>
</tr>
<tr>
<td>051 and 052</td>
<td>Friday</td>
<td>9:30 am – 12:20 pm</td>
</tr>
<tr>
<td>053 and 054</td>
<td>Friday</td>
<td>2:30 pm – 5:20 pm</td>
</tr>
</tbody>
</table>
Common Concerns

The table below provides a list of common student concerns and how they are to be addressed. If your concern is not listed here, please contact your own instructor.

<table>
<thead>
<tr>
<th>Concern</th>
<th>How to Address Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>All lab-related matters</td>
<td>See the lab coordinators in MSA 1235. If they are unable to resolve your concern, appeal in writing to Dr. Staroverov.</td>
</tr>
<tr>
<td>My test mark on OWL does not agree with the mark that I had calculated from my question booklet.</td>
<td>The discrepancy is often due to an error that you have made in filling in the Scantron bubbles. The Scantron machine does not make errors when reading your Scantron. If you still wish to view your Scantron, download and submit the request form into the appropriate slot of the mailbox in MSA 1205 no later than two weeks after the release of your mark.</td>
</tr>
<tr>
<td>I need help with the course material.</td>
<td>The Resource Room and the OWL forums are your primary source of help. Course instructors will have office hours, scheduled by appointment, but they should be used for all matters other than course material itself.</td>
</tr>
</tbody>
</table>

Email Policies

Your instructor’s email should only be used for administrative purposes. In order to maximize efficiency and to allow your instructors to respond to administrative concerns as quickly as possible, emails of the following nature will not be responded to:

- Questions about course material or on how to do a particular problem in the workbook. Such questions should be taken to the Resource Room or posted on the OWL forum.
- Questions that can be answered based on the information found in this course outline. Being able to find information yourself is an important soft-skill and an employability outcome.
- Requests for grade increases, extra assignments, make-up labs, etc. (see page 15).

If you email your instructor, you must use your Western email address and include Chem 1301A in the subject line. Messages from a non-Western account or those that do not include Chem 1301A may be blocked by the university’s anti-spam system. It is also useful to include your student number somewhere in the message.

Constructive feedback is very valuable to us. Please do not hesitate to contact any one of the instructors if you have any comments or feedback on any aspect of Chem 1301A. We are always trying to improve the course so that we can improve your experience!
Course Materials

All the materials below are required and are available at the Western Bookstore, located in the UCC.

Chemistry 1301A Course Workbook, 2016–17 edition

- The workbook is complete lecture package designed by the Department of Chemistry with you and your learning in mind. There are no other notes that you need to bring to class.
- Lectures are designed to help you understand material from the workbook and develop problem-solving skills. To obtain the maximum benefit from the workbook and from lectures, it is recommended that you read the relevant topics before coming to class.
- Access to Sapling Learning is included with the purchase of the workbook.
- Old editions may not be used. Topic coverage varies from year to year. All lectures, tests, and exams will be based on this year’s edition.


- Safety glasses are included with the purchase of the lab manual. Refer to the front cover of the lab manual for details. More information will be posted on OWL.
- Old editions may not be used. Students must bring this year’s edition to every experiment.

Molecular Model Kit, by Darling Models

- Other model kits may be used, but we highly recommend this kit for its ease of use.

Lab Coat

- For your protection, a proper lab coat is required. Designer lab coats, which are often sold as hospital scrubs or consultation coats, are not acceptable, because they are too short or do not offer sufficient protection to the upper body.

Sharp EL-510R(B) or Sharp EL-510RN(B) scientific calculator

- To ensure fairness to everyone in the course, the Sharp EL-510R(B) and Sharp EL-510RN(B) are the only calculator models permitted in the labs and during tests and exams. All other brands and Sharp models will be confiscated. Proctors and instructors for tests and exams do not lend calculators. It is your responsibility to bring the correct calculator and to ensure that it is in proper working order. It’s not a bad idea to bring a spare calculator of the same model. Obviously, you will not be allowed to share calculators during tests and exams.

The lecture environment will be engaging and lively with discussion. Audience response systems (“clickers”) will be used to provide immediate feedback on your understanding of course concepts. Even though no marks are assigned to this activity, you are encouraged to participate, because research has shown that students who participate are more likely to obtain a better grade in the course. To participate, you will require a web-enabled device (phone, tablet, or laptop) to use as a “virtual clicker.” We will not be using actual “physical clickers,” so you do not need to purchase one.
# Outline of Lecture Topics

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Class Topic</th>
<th>Approx # of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Administration</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>In-Class Knowledge Quiz on High-School Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>General Review</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Atomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>Periodic Properties</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Ionic and Covalent Bonding</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>• Lewis structures, resonance, bond polarity</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>VSEPR Theory</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>• Shapes and polarity of molecules</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Valence Bond Theory</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>• Hybridization and formation of $\sigma$ and $\pi$ bonds</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Molecular Orbital Theory</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Intermolecular Forces</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Transition Metals</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>• Coordination complexes and stereochemistry</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>• Crystal field theory</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Organic Functional Groups and IR Spectroscopy</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Alkanes and Cycloalkanes</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>• Constitutional isomerism and conformations</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>• cis/trans isomerism of substituted cycloalkanes</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Alkenes and Alkynes</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>• cis/trans isomerism and $E/Z$ nomenclature of alkenes</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Chirality</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>• $R/S$ nomenclature of tetrahedral stereocentres</td>
<td></td>
</tr>
</tbody>
</table>

Lectures will also feature visiting speakers from academia, industry, and government. These visitors will present a short segment of their work to give you a glimpse of chemistry in the real world.

In all of the topics, the primary focus is on the understanding and application of the concepts. Please try to garner a thorough, in-depth understanding of the material, because that is what allows success in chemistry. Accordingly tests and exams will be designed to evaluate your comprehension of the material and your ability to apply it to new and different scenarios, and not simply your ability to regurgitate memorized facts or substitute numbers into formulas.
Laboratory Schedule

Every course has its own lab schedule. Do not assume that if another course does not have a lab during a certain week, this course does not have one either. Missed labs will result in a mark of zero unless academic accommodation has been granted. Note that there are no labs the week of October 24th.

<table>
<thead>
<tr>
<th>Experiment</th>
<th>Lab section ends in 1, 3, or 5</th>
<th>Lab section ends in 2, 4, or 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Practices</td>
<td>Week of September 19th</td>
<td>Week of September 26th</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Week of October 3rd</td>
<td>Week of October 10th</td>
</tr>
<tr>
<td>Acid-Base Titration</td>
<td>Week of October 17th</td>
<td>Week of October 31st</td>
</tr>
<tr>
<td>Redox Titration</td>
<td>Week of November 7th</td>
<td>Week of November 14th</td>
</tr>
<tr>
<td>Qualitative Analysis</td>
<td>Week of November 21st</td>
<td>Week of November 28th</td>
</tr>
</tbody>
</table>

Laboratory Information

Laboratory Zone

There are five laboratory zones: Materials Science Addition 1220 zones A, B, C, and D; and Chemistry Building 110. Your zone assignment will be posted on OWL by the evening of Monday, September 19.

Preparation

Before coming to the first experiment, read the Safety Regulations, Safety Contract, Introduction, and Significant Figures sections of the lab manual; read the Lab Practices Experiment; and view the relevant materials on OWL. Bring your lab manual and calculator. Proper attire, including safety glasses and lab coat, is required for all labs. If you wish to pick up your safety glasses (included in the price of the lab manual), check OWL for details.

Prelab exercises must be completed before the lab period.

When you arrive at your lab, there will be additional questions on the video screen. These questions will cover experimental information as well as information from the relevant Tools of Chemistry sections, which you must read prior to coming to the lab.

Lateness Policy

Any student who arrives after the doors to the lab have closed is considered to be late and will not be permitted to do the experiment. A mark of zero will be assigned for that experiment. No credit will be given for the prelab exercises.
Safety and Dress Code

Western is committed to workplace health and safety, and has strict safety regulations. Even your instructor has to follow them! Lab TAs and technical staff will remove students who, in their opinion, do not meet the safety requirements or are not prepared, as described below. **These students, and those who arrive late, will receive a zero for the entire experiment, and no credit will be given for the prelab exercise.**

Eye Protection

Safety glasses or goggles must be worn by everyone whenever laboratory work, including the getting, cleaning, and returning of glassware, is being performed. Students who wear prescription glasses must wear appropriate safety glasses or goggles over their regular glasses. If you wear contact lenses, you must inform the lab TA that you are wearing contact lenses.

Safety glasses can be rented for $2 per lab period.

Lab Coat, Pants, Socks, and Footwear

The Occupational Health & Safety Office at Western mandates “shoulder-to-toe” coverage. A detailed description of the dress code is available in the Lab Manual. For hygienic reasons, we do not rent shoes, socks, pants, or lab coats.

Lab coats must be worn, buttoned up. Students must have a lab coat to enter the laboratory. They may not leave after the video or the prelab talk to get a lab coat or have one delivered.

Students must wear ankle-length pants, socks that cover the ankle, and shoes that cover the whole foot (top, sides, and back) without any “cutout holes.” Shorts, sandals, and capris are among the items of clothing that are not acceptable. No skin may show at the ankles even when you are seated.

Submitting Lab Reports

The reports for Experiments #1 and #5 will be completed and submitted during the lab period.

Lab reports for Experiments #2, #3, and #4 are to be submitted in the proper slot of the mailbox located in MSA 1205 (the Resource Room). Lab reports are due one week after your experiment by 10:00 am, 3:00 pm, and 6:30 pm for lab periods that start at 9:30 am, 2:30 pm, and 6:00 pm, respectively. Of course, you’re welcome to submit your report at any time before the deadline. Reports placed into the wrong slot of the mailbox will be considered late.
Online Component (Sapling Learning)

Chem 1301A will be using assignments and exercises provided by Sapling Learning. As an online learning platform, Sapling delivers chemistry questions in a web browser to provide real-time grading, response-specific coaching, and detailed explanations to answers. Research has shown that Sapling helps chemistry students increase their understanding of core concepts and their problem-solving skills.

To register and get started:

1. Go to www.saplinglearning.ca
   a. If you already have a Sapling Learning account, log in and skip to Step 2.
   b. If you have Facebook account, you can use it to quickly create a Sapling Learning account. Click on “Create an Account,” followed by “Create my account through Facebook.” The form will auto-fill with information from your Facebook account. Choose a password and time zone, accept the terms & conditions and the privacy policy, and click on “Create My Account”. You can then skip to step 2.
   c. Otherwise, click on “Create an Account,” supply the requested information, and click on “Create My Account.” Check your email for a message from Sapling Learning and click on the link provided in that email.

2. Find your course in the list (listed by subject, term, and instructor) and click the link. **University of Western Ontario - CHEM 1301 - Fall16 - LEE**

3. Select your payment option and follow the remaining instructions. You will be able to redeem your Sapling Key Code here if you bought a new workbook package.

4. When you log in for the first time, click on "Profile," click on “Edit profile,” click on “Show Advanced,” and then scroll down and enter your student number in the ID NUMBER box. You will not receive credit for your assignments if you do not correctly enter your number.

5. Work on the Sapling Learning training materials! The activities, videos, and information pages will familiarize you with the user environment and serve as tutorials for efficiently drawing molecules, stereochemistry, etc. within the Sapling Learning answer modules.

During sign up – and throughout the term – if you have any technical problems or grading issues, send an email to support@saplinglearning.ca explaining the issue. The Sapling Learning support team is almost always faster and better able to resolve issues than your instructor.

There will be 9 graded assignments that assess your comprehension of the course to date, but only the best 7 will be used to calculate your mark on the online component of the course. Graded assignments are available starting one week before they are due. They are due by these Wednesdays at 9:00 am:

- September 28
- October 5
- October 19
- October 26
- November 2
- November 9
- November 16
- November 23
- November 30
Resource Room

The Resource Room, located in MSA 1205, provides you with an informal environment for you to ask questions related to lecture material and obtain assistance on practice problems. Group work and peer-to-peer support are strongly encouraged.

During scheduled hours, which will be posted on OWL, the Resource Room will be staffed by a highly qualified teaching assistant or a Chem 1301A course instructor. You are welcome to attend any instructor’s scheduled hours and not just those of your own instructor.

Evaluation

Components

Tests and exams are necessary to assess your mastery of core concepts. Your overall course grade, out of 100, will automatically be the higher of the two grades calculated by the two methods shown below. Listed next to the respective components are their maximum contributions toward the course grade.

<table>
<thead>
<tr>
<th>Component</th>
<th>Notes</th>
<th>Method #1</th>
<th>Method #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Quiz</td>
<td>Based on high-school chemistry. As long as you complete the quiz, you will receive one mark regardless of your actual score.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory</td>
<td>Five experiments (3.00 each)</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Online</td>
<td>Sapling Learning assignments</td>
<td>5</td>
<td>--</td>
</tr>
<tr>
<td>Midterm Test</td>
<td>Saturday, October 15, 1:00–3:00 pm</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Scheduled by the Registrar, 3.00 hours</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

To obtain credit for the course, all three requirements below must be met:

1. Obtain a minimum of 50% on the overall course grade, as calculated above using the method that gives the higher grade.

2. Obtain a minimum of 50% on the laboratory component (7.50 out of 15). This mark is calculated from all five experiments. A missed experiment is assigned a mark of zero unless it has been “excused” (see section on Missed Course Components).

3. Miss no more than two experiments, whether excused or not.

Students who fail to meet requirement #2 or #3 will receive a course grade no greater than 40% (even if the calculated course grade is higher) and will not receive credit for the course.
Important Legalities

It is Department of Chemistry policy that any student repeating a chemistry course must repeat the entire course, including the lab component. There are no lab exemptions.

Students who arrive late for a lab will receive a zero for that lab. No credit will be given for the prelab exercises. Students are deemed late if they arrive after the lab doors have closed. Lab technicians and teaching assistants have the right to remove students from the lab.

It is university policy that a regularly scheduled class (lecture, lab, or tutorial) takes precedence over tests and exams. Therefore, if another course schedules a test or exam that takes place during your chemistry lecture or lab, the instructor for that course must accommodate you.

Aside from the specified calculator, no other electronic devices (phones, iPods, etc.) may be in your possession during tests and exams, even for timekeeping purposes.

Audience response systems (“clickers”) will be used to collect information during class. There are no grades associated with the responses. All responses are anonymous. The data collected using the devices will not be used for research purposes without your consent.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at this website: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Computer-marked, multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Missed Course Components and Late Lab Reports

If you are seeking academic accommodation because of a medical (physical or mental) illness, please begin by contacting the Academic Counselling Office of your home faculty (or affiliated college). Western’s policy on academic accommodation for illnesses can be found at http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf.

All requests for academic accommodation must go through your faculty’s Academic Counselling Office, so please contact them and not your instructor.

If you are a science student, the Academic Counselling Office of the Faculty of Science is located in WSC 140, and can be contacted at 519-661-3040 or scibmsac@uwo.ca. Their website is http://www.uwo.ca/sci/undergrad/academic_counselling/index.html.

A student requiring academic accommodation due to illness must use the Student Medical Certificate (http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf) when visiting an off-campus medical facility.
Missed Labs

There are no make-up labs, and it is not possible to reschedule them. If you miss a lab for any reason, you will be assigned a mark of zero for that lab. If the missed lab is due to a reason that is approved by your faculty’s Academic Counselling Office, the zero will be replaced by a mark of EXCU (excused), which shifts the weight of the missed lab onto all of the other labs.

You must, as soon as you’re able to do so, submit documentation to your faculty’s Academic Counselling Office. If they approve your circumstances, we will be notified.

Tests and exams will contain questions related to the theoretical aspects of the experiments. You are responsible for the material pertaining to the missed labs.

Late Lab Reports

Labs are each marked out of 5. Details of the marking scheme will be posted on OWL.

Late reports are to be placed in the designated slot in the mailbox in the Resource Room (MSA 1205). All late reports will be graded as if on time but assigned a mark of 1.00 out of 5.00, and returned to you at your next lab.

If your reason for not being able to hand in your lab report on time has been approved by your faculty’s Academic Counselling Office, print out a copy of the email from your faculty’s Academic Counselling Office, staple it to your “mark of 1.00” lab report, and resubmit it in the appropriate slot. Your mark will then be changed to the actual mark.

Missed Midterm Test or Final Exam

If you are unable to write the midterm test, contact your faculty’s Academic Counselling Office as soon as possible. If your circumstances are approved, you will be able to write the make-up midterm test on Saturday, October 22, 8:00–10:00 pm. If you are unable to write the make-up midterm test, the weight of the midterm test will be shifted to the Final Exam.

If you are unable to write the Final Exam, contact your faculty’s Academic Counselling Office as soon as possible. They will assess your eligibility to write the Special Exam (the name given by the university to a make-up Final Exam) in January of 2017.

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (see http://www.registrar.uwo.ca/examinations/exam_schedule.html).
Equal Opportunity and Evaluation Policy

We are here to help you achieve your goals. We want you to do well in the course. We were, at one time, students ourselves, so we understand the importance of course grades and the hard work that you will invest into this course.

Most importantly, we also have to be fair. The university is committed to academic integrity and has high ethical and moral standards. All students will be treated equally and evaluated using the criteria presented in this course outline and their respective weights. The evaluation criteria are based strictly on actual achievement, not on effort or how hard the student tried. Claims of an excellent academic history, of attendance in the course components, or of personal issues (family, relationship, financial, etc.) cannot be used to justify a higher grade in the course because they are not criteria for evaluation. There is no extra work available for extra credit or to “make up” another grade. We do not offer any extra assignments, essays, experiments, or other work of any kind to any student.

The requirement for a higher grade in order to, for example, maintain a scholarship, enter a program, or obtain a higher GPA for various reasons, is not a justifiable reason for increasing your grade. If we increased or “bumped” your grade (i.e. gave you a grade that you did not legitimately earn), it would be unfair to the other students and also a great disservice to the scholarships and programs who are evaluating all students on the basis of their grades.

Frequently Asked Questions

Should I focus on the Sapling questions, the questions in the workbook, or the questions on the past tests and exams?

The questions in these sources have very different objectives, so focus on all of them. Sapling questions are designed to help you learn chemical concepts. Questions in the workbook allow you to apply those concepts. Questions on the past tests and exams in the lab manual are intended to evaluate your understanding of, and ability to use, those concepts.

Can you recommend a tutor?

Before considering a tutor, don’t forget about the free help in the Resource Room!

Private, third-party review or tutor services are not affiliated with, or endorsed by, the university. As such, the university cannot be responsible for any of the content they provide, even if the content causes you to answer exam questions incorrectly. Because of liability reasons, your instructors are not permitted to suggest or recommend any specific tutors.

Students should realize that they may not hire tutors who are Chemistry 1301A teaching assistants, even if they are not from your own lab section. This is a serious legal matter pertaining to conflict of interest. If you are ever in doubt, please do not hesitate to ask your instructor, because we don’t want you and the tutor to get in trouble.
My high-school commencement falls on the same day as the midterm test. Can I write the test at an earlier time? Can I write it after I get back?

No. Commencement is not a university-endorsed event. However, your instructors understand the importance of commencement to you and your family. After all, graduating from high school is a significant milestone in your education! Therefore, we will give you the option of missing the test and writing the make-up test. Please contact your faculty's Academic Counselling Office as soon as possible with the appropriate documentation.

I have a lab/test that coincides with a religious observance. What should I do?

Most of the standard religious observances are already noted in the Western Multicultural Calendar (http://multiculturalcalendar.com/ecal/index.php?s=c-univwo), and you should inform your faculty's Academic Counselling Office as soon as possible. If you are requesting accommodation that is not on this list, please bring documentation to your Faculty's Academic Counselling Office. More details are found in the Accommodations for Religious Holidays policy, http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf.

What should I do if a test or exam for another course conflicts with my lab?

University policy is that a regularly scheduled class (lecture, lab, or tutorial) takes precedence, even over tests and exams. Ask the instructor of the other course to accommodate you.

Chemistry on Social Media

Find the Department of Chemistry at Western on Facebook and Twitter!

- Facebook: @ChemistryatWestern
- Twitter: @westernuchem

This course is supported by the Science Student Donation Fund. If you are a BSc or BMSc student registered in the Faculty of Science or Schulich School of Medicine and Dentistry, you pay the Science Student Donation Fee. This fee contributes to the Science Student Donation Fund, which is administered by the Science Students’ Council (SSC). One or more grants from the Fund have allowed for the purchase of equipment integral to teaching this course. You may opt out of the Fee by the end of September of each academic year by completing paperwork in the Faculty of Science’s Academic Counselling Office. For further information on the process of awarding grants from the Fund or how these grants have benefitted undergraduate education in this course, consult the chair of the department or email the Science Students’ Council at ssc@uwo.ca.