

CHEMISTRY 1E03 Fall 2017: Information Sheets

These information sheets provide answers to most of your questions about the organization of the course. We suggest that, after reading them carefully, you keep them with your notes for future reference. The online version on AVENUE contains useful links.

COURSE OBJECTIVES

Chemistry 1E03 is a general chemistry course discussing fundamental aspects of chemical phenomena with examples and applications drawn mainly from inorganic and materials chemistry. Three general topics will be covered including 1) chemistry in aqueous solution, 2) structural and bonding properties of atoms and molecules, and 3) energetic aspects of chemical reactions. A more detailed course content is found below. Laboratory experiments will help students develop their problem-solving skills and some basic laboratory skills.

SECTIONS AND INSTRUCTORS

Chemistry 1E03 is taught in three sections. Students may not transfer between these sections unless there is a genuine and serious conflict. Such students should see the Laboratory Coordinator, Dr. L Davis in ABB 121, during the first week of classes.

SECTION 01 - Dr. R. Dumont	(ABB 234)	Mon, Thu 9:30, Tues 10:30	(MDCL 1305)
SECTION 02 - Dr. R. Dumont	(ABB 234)	Mon, Thu 12.30, Tues 13:30	(BSB 147)
SECTION 03 – Dr. P. Kruse	(ABB 263)	Mon, Thu 15:30, Tues 16:30	(BSB 147)

LABORATORY COORDINATOR

Dr. L. Davis (ABB 121, davislj@mcmaster.ca); The laboratory coordinator coordinates the teaching assistants, labs and tests for all sections of the course. Scheduling, permission and exemption issues for labs or tests should be addressed to her.

ONLINE COURSE MANAGEMENT

CHEM 1A03 will make use of Avenue 2 Learn (Avenue for short), an integrated set of tools for delivering course components over the Internet. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor. The web instructional modules, previous years' tests, personalized quizzes, a course bulletin board and other resources are available on Avenue. Important announcements and updates are done through Avenue. Students should check the CHEM 1A03 homepage daily.

AVENUE

Since Avenue courses are maintained in a secure environment on the Internet, only students registered in CHEM 1A03 have access to the materials. In order to login to Avenue you need:

- the internet address: <http://Avenue.mcmaster.ca/>
- your user name: it is your MacID (If you have questions about your MacID, or you are not yet on the electronic course list, please contact the Registrar's office. Your instructors have no control over your MacID, and cannot add you to the electronic course list.)
- your password: you will be given a password when you sign-up for your MacID.

If your registration is delayed and you need access to the website, contact Dr. Davis. Other Avenue issues can be addressed to the Avenue support page: <http://Avenue.mcmaster.ca/support.html>

It is essential that you login to AVENUE as soon as possible since the assumed knowledge practice quiz, the safety quiz, and your personalized **Quiz 1 (due Tuesday September 19th , 8:00 am)** are located there.

WHMIS 1A00

All students taking chemistry courses must complete (or must have previously completed) this safety course presented by Environmental & Occupational Health Support Services (formerly Risk Management). The course is offered through AVENUE and can students can register through MOSAIC. Students not viewing this course should contact EOHS <http://www.workingatmcmaster.ca/eohss/> (eohss@mcmaster.ca, x24352) to be added.

OFFICE HOURS

A **Chemistry tutor** will be available **ABB 142** for one-to-one and group assistance. Hours will be posted on AVENUE and on the door to the tutor room.

- The **Laboratory Coordinator's** office hours in ABB 121 will be posted on AVENUE.
- **Instructors** will hold office hours at a location to be announced. Chemistry 1A03 and 1E03 instructors will staff these hours. Please check AVENUE for the location and schedule.

LABORATORIES

Labs are held in the Arthur Bourns Building (ABB) rooms 122 and 217. There are **five experiments scheduled every other week** through the term, excluding the week of the mid-term recess. **Your personal timetable will indicate your assignment to a lab section.** Lab section changes must be done on-line using MOSAIC within this introductory week. Students must only attend the lab that appears on their timetable, otherwise lab attendance and grades will not be recorded.

Each lab experiment is 2.5-hours in length. Labs begin the week of **September 18th** for Lab Week EVEN. Lab Week ODD begins the week of **September 25th**. Consult the schedule on page 8 for complete details (also available on AVENUE). **Safety goggles** (available at the Campus Store) **must be worn at all times in the laboratory.** You must have these goggles, proper attire*, and your CHEM 1A03/1E03/1AA3 Lab Manual (publisher Hayden-MacNeil, also available at the Campus Store) before your first scheduled lab experiment. *Consult Avenue and the lab manual for more information on what you will need before coming to your first laboratory.

All students must watch the Safety Video on Avenue and pass the safety quiz associated with the video to gain entry to the labs. THE SAFETY QUIZ will be available ON-LINE UNTIL SEPTEMBER 17th. Students who complete the quiz with a score of 100% will receive a <u>0.5% bonus</u> added to the final course mark

LAB EXEMPTIONS

All students repeating CHEM 1E03 who want to be exempted from the lab program must see the Lab Coordinator in ABB 121 by **September 15th**. The criterion used for lab exemption is two-fold: completion of CHEM 1A03 or CHEM 1E03 courses at McMaster University within the last 4 years, and completion of all lab experiments. Lab exemption will not be given to students who withdrew from the course. **There is no partial exemption for some of the labs.** There is no lab exemption granted on the basis of courses taken at another university. If the exemption is granted, the lab mark obtained previously will be used to calculate your final course mark.

REQUIRED ITEMS

- **The Chemistry Handbook, Part 1, by R.S. Dumont** (available on Avenue under “content”)
- **CHEM 1A03/1E03/1AA3 Laboratory Manual:** (Hayden – McNeil) with carbonless sheets must be purchased from the Campus Store. No other manuals will be acceptable.
- **Safety goggles** (~ \$12) may be purchased from the Campus Store. Lab coats are strongly recommended.

CALCULATORS

The two term tests and the final examination all require a calculator. **THE ONLY ACCEPTABLE CALCULATOR IS THE CASIO FX 991 MS and MS PLUS** available at the Campus Store. **NO OTHER CALCULATOR IS PERMITTED DURING TESTS AND EXAMS.**

ONLINE MODULES

On Avenue, we have provided access to a series of E-Learning Modules. Viewing these modules is highly recommended as they review several topics discussed in lecture.

QUIZZES, TESTS, AND EXAMINATIONS

There will be **six personalized Quizzes** during the term to be completed and submitted online via AVENUE. Solutions to your quizzes will be available for you on AVENUE shortly after the due dates. **Five of six quizzes will be counted towards your final grade.** Quizzes can be submitted any time once they have become available on AVENUE. They must be submitted **before 8:00 AM** on the dates shown in the CHEM 1E03 schedule (page 8).

****Note that quizzes cannot be submitted in written form or by email to any of the instructors or the lab coordinator. Try to submit well before the deadline to avoid unexpected server problems on the last day. It is your responsibility to ensure that your quizzes are submitted on time. Quizzes not submitted by the deadline will not be marked.**

The two **Term Tests** will be scheduled on the following days:

- **Test 1: Friday, September 29th, 2017 from 5:30 – 7:00 pm, Rooms TBA**
- **Test 2: Friday, November 10th, 2017 from 5:30 – 7:30 pm Rooms TBA**

Pre-existing conflicts should be discussed with the course coordinator a minimum of 1 week in advance of the test date.

The **December Final Examination** (2.5 hours), scheduled by the Registrar’s Office, will test all course content from the Fall term. **This examination must be written in order to pass the course.**

CALCULATION OF FINAL MARK IN CHEM 1E03

Three weighting options are shown below. Each student's marks will be calculated using all three options and the highest result used for the final grade submission. Option 1 calculates your final grade to include marks from both the midterms tests and final exam. Option 2 drops your Test 1 mark if you perform better on Test 2 and final exam mark. Option 2 drops your Test 2 mark if you perform better on Test 1 and the final exam.

Course Component	Option 1	Option 2	Option 3	
Avenue Quizzes	10%	10%	10%	5 Quizzes @ 2% each
Labs	15%	15%	15%	See Note 1
Term Test 1	15%	0%	15%	See Note 2
Term Test 2	20%	20%	0%	Cumulative. See Note 2
Final Exam	40%	55%	60%	Cumulative. Mandatory
Total	100%	100%	100%	

Note 1: Students must complete and submit a report for a minimum of 4 laboratory experiments to pass the course.

Note 2: To obtain credit for CHEM 1E03, students must complete a minimum of 75% of the weight of the course work as shown in Option 1. This 75% must include both the final exam and laboratory components. Students who miss both Test 1 and Test 2 will not be able to meet this 75% threshold.

Note 3: The instructor(s) and university reserve the right to modify elements of the course during the term. The university may change dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

REQUESTS FOR RELIEF OF MISSED ACADEMIC TERM WORK

A single absence from the university for a minor medical reason, lasting fewer than 3 days, is reported online, without documentation, using the McMaster Student Absence Form (MSAF) in Student Centre in Mosaic. When using the MSAF, report your absence to davislj@mcmaster.ca. Then contact Dr. Davis within 2 working days by email or during office hours to learn what relief may be granted for the work you have missed. Absences lasting more than 3 days and/or exceeding more than one absence per term must be reported to your Faculty/Program office, with documentation, and relief from term work may not necessarily be granted.

There are no make-up quizzes or tests. Missed labs must be completed at a later time (scheduled at the end of term) to obtain credit.

The MSAF on-line, self-reporting tool cannot be used to apply for any missed final examination or its equivalent. See *Petitions for Special Consideration* in the Undergraduate Calendar.

COURSE CONTENT

Chapters 1, 2 and 11 constitute fundamental skills (Moles and Molar Mass, Chemical Equations, Stoichiometry and Limiting Reactant, Density, Solutions – Concentration and Titration, the Ideal Gas Law, Scientific Notation, Significant Figures, Logarithms). **Additional fundamental skills**, covered in grade 12 chemistry, consist of the Elements, Ionic and Molecular Compounds, Basic Nomenclature and the usual Oxidation States of metals and non-metals. **These topics will not be discussed in class but will figure in the quizzes, term tests and final examination.** It is your responsibility to review this material and you should attempt the **Review Quizzes on AVENUE (not for credit)** to check your understanding of it. Note that the review quizzes also cover some content that will be reviewed in class.

The Chapters listed below represent the **Core Course Content of Chem 1E03**. This material will be covered in the lectures, tutorials, quizzes, labs, term tests and final examination. A tentative number of lectures per chapter is given in brackets. The course will include a total of 33 lectures plus 3 in-class reviews before the tests and the exam. (see pg 8)

Chap. 3 Electrons in Atoms (3)

Chap. 4 Periodic Trends (2)

Chap. 5 Chemical Bonding: Basic Concepts (5)

Chap. 6 Reactions in Aqueous Solutions (4)

Chap. 7.1-7.5 Chemical Equilibrium (3)

Chap. 8 Thermochemistry (4)

Chap. 9 Entropy and Free Energy (5)

Chap. 10 Electrochemistry (4)

Chap. 7.6-7.7 Acid-Base Equilibrium (3)

NOTE: Laboratory Experiments are a formal part of the course content. The term tests and final examination will include questions related to the laboratory material.

SENATE POLICY STATEMENTS

All students should read and become familiar with the Statement on Student Academic Responsibility and the Academic Integrity Policy as found in the Senate Policy Statements distributed at the time of registration and available in the Senate Office.

ACADEMIC INTEGRITY

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at www.mcmaster.ca/academicintegrity. The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

COPYRIGHT POLICY

In this course you will have access to material that is subject to copyright laws. This includes (but is not limited to) the textbook, solutions manual and all resources developed by the instructors such as lab manuals, demonstration videos, quizzes, assignments, tests, class notes, class slides and web modules. Under no circumstances are you allowed to share or redistribute this material in any printed or electronic form without the explicit written consent of the copyright holder. This includes posting any course material on Internet bulletin boards, course repositories, social networks, etc.

ACADEMIC ACCOMMODATIONS

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail sas@mcmaster.ca. For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities.

DISCRIMINATION POLICY

McMaster University is concerned with ensuring an environment that is free of all adverse discrimination. If there is a problem that cannot be resolved by discussion among the persons concerned, individuals are reminded that they should contact their Department Chair, or Human Rights & Equity Services, as soon as possible. Issues involving teaching assistants should also be brought to the attention of the Lab Coordinator.

STUDENT RESOURCES

There are many opportunities for students seeking any number of help opportunities while enrolled at McMaster. Please make yourself familiar with the services offered on campus.

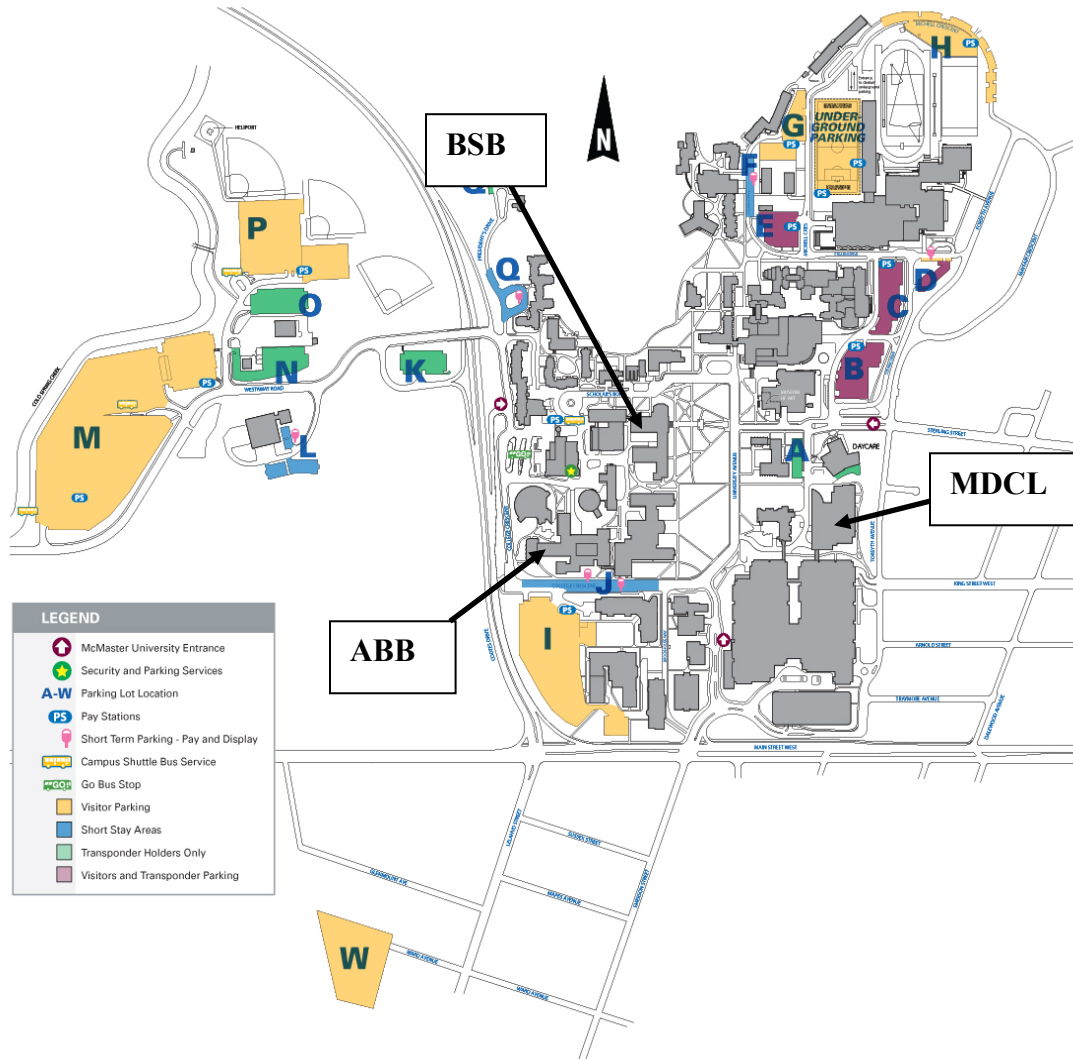
Student Success Center which is on campus to engage students and alumni in diverse learning opportunities to support their academic, personal and professional growth: <http://studentsuccess.mcmaster.ca/>

Student Wellness providing counseling and medical services including wellness education: <http://wellness.mcmaster.ca/>

Student Accessibility Services offers various supports for students with disabilities: <http://sas.mcmaster.ca/>

FINDING CHEMISTRY ON CAMPUS

Lectures are held in BSB 147 and MDCL 1305. Labs and all staff and instructors' offices are in the Arthur Bourns Building (ABB). This building also houses the room for instructor office hours (TBA), and the help centre (ABB 142).



Fall 2017 - CHEM 1E03 Course Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
September					
No lab	4 Labour Day	5 Classes Begin No labs this week	6	7	8
No lab	11 No labs this week Help Centre begins	12	13 Last day for add/drop/swap	14	15
EVEN Exp 1	18	19 Quiz 1 Due 8:00 am	20	21	22
ODD Exp 1	25	26	27	28	29 Test 1: 5:30 pm Rooms TBA
October					
EVEN Exp 2	2	3 Quiz 2 Due 8:00 am	4	5	6
No labs/ classes	9 Thanksgiving	10 Mid-term Recess	11 Mid-term Recess	12 Mid-term Recess	13 Mid-term Recess
ODD Exp 2	16	17	18	19	20
EVEN Exp 3	23	24 Quiz 3 Due 8:00 am	25	26	27
November					
ODD Exp 3	30	31	1	2	3
EVEN Exp 4	6	7 Quiz 4 Due 8:00 am	8	9	10 Test 2: 5:30 pm Rooms TBA Last day to cancel without failure
ODD Exp 4	13	14	15	16	17
EVEN Exp 5	20	21 Quiz 5 Due 8:00 am	22	23	24
December					
ODD Exp 5	27	28	29	30	1
Makeup Labs	4	5 Quiz 6 Due 8:00 am	6 Classes End	7	8 Exams Begin (to Dec 21)