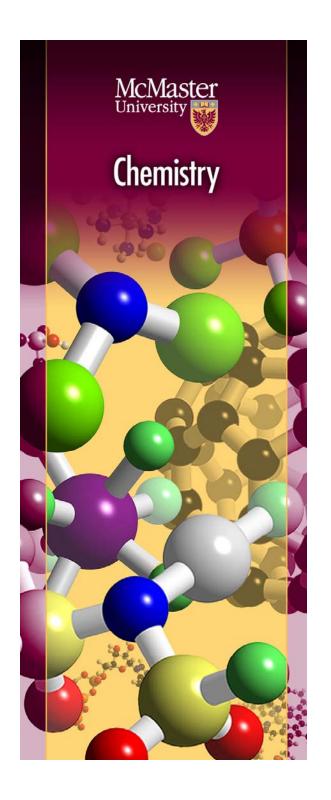
Welcome!

Chemistry 1A03
Introductory Chemistry I

Chemistry in the context of health, energy and the environment



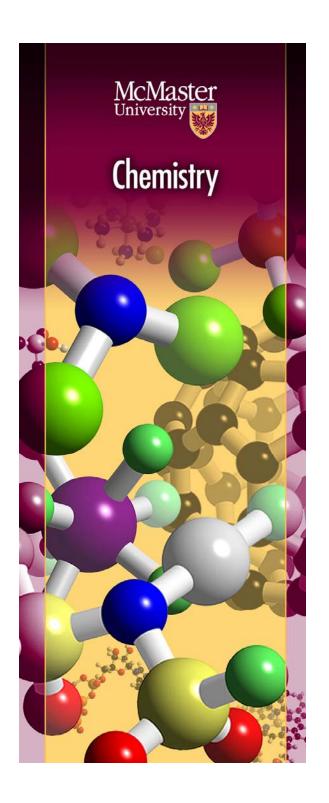
Chemical Philosophy?

"To think is to practice brain chemistry"

~ Deepak Chopra

"I have no special talent, I am only passionately curious"

~ Albert Einstein



Course Instructors

David Brock brockds@mcmaster.ca





Gillian Goward goward@mcmaster.ca

Jeff Landry landryjc@mcmaster.ca

* Also Laboratory Coordinator





Pippa Lock
lockpe@mcmaster.ca
* Course Coordinator



Course Objectives

- Understand chemical concepts, theories and examples of fundamental chemistry
- Apply chemistry to emerging issues within the themes of health, energy and the environment
- Develop skills to solve and address complex real-world chemical problems (tutorials)
- Develop competent experimental skills in the investigation of chemical questions (labs)



Group Activity

- Get yourself in a group of 5 (yourself and 4 others)
- Take a moment to introduce yourself to the group and meet others
- Identify a major global issue of concern that is associated with chemistry and impacts your life!



Course Information Sheets

The information will answer many of your questions – please take some time to read them carefully.

Also available in Avenue.

Questions can be posted in discussion boards under 'Administration/Technical' – Feel free to answer other students questions!

http://avenue.mcmaster.ca/



Review Manual

- Intended to provide review of some fundamental and often used concepts from the high school chemistry curriculum.
- Review of content, worked examples, practice problems/solutions & math review.
- Recommend to work through early
- Updated in Avenue (2 new chapters!)

http://www.chemistry.mcmaster.ca/undergraduate-/chemistry-review-manual



Avenue: Web Based Resources

- This is the online portion of the course
- In here, you will find:
 - Course notes
 - Timed quizzes
 - Sample tests & exams
 - Important announcements
 - Discussion board

http://avenue.mcmaster.ca/



Labs

- Watch the avenue safety video and answer the corresponding quiz prior to start of first lab!!
- If you receive 10/10, you will receive a
 0.5% bonus (multiple attempts allowed)
- Lab manual (\$10) is purchased ABB-126
- Need to successfully complete 4 out of 5 labs to pass course

Lab Manual Sales

ABB 126

September 10th – 14th; 9:30 – 15:30

September 17th – 21st; 11:30 – 14:30

Schedule also posted in Avenue



WHMIS 1A00 INTRODUCTION TO HEALTH AND SAFETY

- a 1-hour online course that all students must complete if they are registering in a course with a lab component
- If not already completed, it must be completed by September 17th, 2012
- A link to the course is available in Avenue

http://www.workingatmcmaster.ca/eohss/training-development/scieng/



Tutorials

- Tutorials are the place for you to practice problem-solving skills
- Tutorials alternate with labs every second week in ABB-136 →
- You are welcome to attend additional tutorial sessions in addition to your own!
- NOTE: Homework questions will NOT be addressed during tutorial!
- Drop-in tutorials available Sept. 10-14



Avenue Quizzes

- There are two quizzes
- Available Monday to Wednesday the week of each test
- Once opened, there is a 30 minute time limit to complete the quiz (no exceptions)
- Quizzes count for 6% of final grade
- Aim: provide a test-like practice situation focusing on chemistry problem-solving skills



Mastering Chemistry Homework

- http://masteringchemistry.com/
- Access bundled with new textbook packages or can purchase separately
- Course is "CHEM1A03FALL2012". Search, add, put in your MAC ID when prompted.
- Orientation assignment open Sept. 8-15
- * Not for marks, but highly recommended



Mastering Chemistry Homework

- 6 Homework assignments (for marks)
- First release Sept 13th
- Open for 12 days
- Best 4 will be taken.
- Highly recommended. Student feedback indicates homework is highly beneficial.



Class Notes

- Bring the 'skeleton' notes to class and add to them
 - Skeleton notes are saved as editable PDF's (you can use your laptop and Acrobat Reader - free download)
 - Or can print (multiple slides/page)

Full notes will be posted at the end of a chapter



iClicker

- We will be using iClicker
- Why?
 - Increase engagement/participation in class
 - Increase student preparation before class
 - Feedback for the instructor
- You can purchase the iClicker remote from Titles Bookstore
- Register your iClicker <u>online</u> prior to Test#1 (<u>http://www.iclicker.com</u>).
 Use your MAC ID!



How to Be Successful...

- Go to class and participate actively
- Go to tutorial and ask "why?" questions
- Try quizzes/homework individually and understand
- Review text chapters alongside class lectures
- Come to office hours, help centre and tutorials and Ask questions → Identify weak areas → Seek assistance!
- Explain problems to other students → Learn best by teaching!



Chemistry Research Group



for biomedical applications

2011 - Inorganic Polymers

2012 - Student's Choice



Marks...

Quizzes	6%	
Homework	6%	recommended*
iClicker	3%	recommended*
Labs	15%	must complete 4 of 5
Test #1	15%	
Test #2	20%	cumulative
Final Exam	35%	cumulative, mandatory

^{*} See marking scheme in the course information sheets



Group Activity #2

 Predict which gas filled balloon will have the largest explosion?

$$H_2(g) \xrightarrow{\Delta}$$

$$H_2(g) + O_2(g) \xrightarrow{\Delta}$$

Group Activity #3

 Alchemy, "Water-Wine-Milk-Beer" and the Art of Transformation



Hermes Trismegistus

