

University of British Columbia:

Appendix I provides a table of textbooks in use at UBC (Chemistry). Course outlines are available by following the "Courses" link from <http://www.chem.ubc.ca>.

You can meet the most recent additions to our faculty ranks by following either the "News" or the "Our People" links from our homepage (<http://www.chem.ubc.ca>). Budgetary restraints imposed last year have slowed (halted?) the infusion of new blood that has changed the face of the Department in the recent past.

Sadly, I report the death due to cancer of a long-serving representative to these meetings, Professor Emeritus Lionel Harrison, on March 17, 2008. A memorial gathering took place in Lionel's memory at Cecil Green Park at UBC on March 27.

Changes to our buildings continue. The original Centre Block was officially reopened in March after extensive renovation. Faculty, staff and students are slowly moving back into the building, vacating UBC swing space in the Wesbrook Building that they have occupied for more than two years. Some upgrading and rearrangement of undergraduate laboratory space has begun and will continue through the summer and into the fall. This has forced a reduction in the scale of our summer offerings for 2008.

During the summer of 2008, UBC will offer :

Chem 121, one section, ~250 students, lab-limited to 48 students, June 23 to July 18,
Chem 123, one section, ~250 students, lab-limited to 96 students, July 21 to Aug 15,
Chem 233, one section, ~350 students, from May 5 to June 13,
Chem 235. two sections, totalling 180 students, from May 5 to June 13.

Changes to our course and lab offerings from those of the 2007/2008 academic year largely will be limited to fine tuning of curricula and textbook selections. In the case of Chem 121, a restructuring of the order in which material is presented and some trimming of excess material took place in 2007. The basic curriculum has not changed and re-articulation of existing transfer credit agreements is not required.

The Departments of Mathematics and Physics in the Faculty of Science will commence participation this fall in a dual degree program in Science and Education. In part, this is a response to the shortage of Mathematics and Physics teachers in BC. Chemistry teachers also are in short supply, so our participation in a similar dual degree program is to be expected in the near future.

To view the 2008/09 UBC calendar online, go to <http://students.ubc.ca/calendar>.

Appendix I: 2007/08 Undergraduate Chemistry Courses and Textbooks (Years 1-3)

Course Outlines: follow the "Courses" link from www.chem.ubc.ca

Credit Values are given in parentheses.

CHEM 111 (4) Principles of Chemistry I

General Chemistry: Principles and Modern Applications (9/e, Freeman), Petrucci, Harwood, Herring & Madura. UBC special edition [with organic supplement from "Organic Chemistry" (5/e) by Paula Bruice. This material includes all or parts of Ch 1 through 8, and has been inserted into the back of the main text, which has been split and bound as a two books].

CHEM 113 (4) Principles of Chemistry II

General Chemistry: Principles and Modern Applications (9/e, Freeman), Petrucci, Harwood, Herring & Madura. UBC special edition with organic supplement.

CHEM 121 (4) Structural Chemistry with Application to Chemistry of the Elements

General Chemistry: Principles and Modern Applications (9/e, Freeman), Petrucci, Harwood, Herring & Madura. UBC special edition with organic supplement.

CHEM 123 (4) Physical and Organic Chemistry,

General Chemistry: Principles and Modern Applications (9/e, Freeman), Petrucci, Harwood, Herring & Madura. UBC special edition with organic supplement.

CHEM 154 (3) Chemistry for Engineering

Chemistry for Scientists and Engineers, Fine, Beall & Stuehr.

CHEM 201 (3) Introduction to Physical Chemistry

Physical Chemistry (5/e, McGraw Hill), I. Levine

CHEM 202 (3) Coordination Chemistry

No required text at present. Last used: d-Block Chemistry, M. J. Winter, and Essentials of Inorganic Chemistry II, D.P.M. Mingos

CHEM 203 (4) Introduction to Organic Chemistry

In 2008/09, will move to the newest edition of: Organic Chemistry (5/e, Thomson/Brooks Cole) Brown, Foote, Iverson and Anslyn (with study guide)

CHEM 204 (4) Organic Chemistry

In 2008/09, will move to the newest edition of: Organic Chemistry (5/e, Thomson/Brooks Cole) Brown, Foote, Iverson and Anslyn (with study guide)

CHEM 205 (3) Physical Chemistry

Physical Chemistry for the Biosciences (University Science Books) R. Chang

CHEM 211 (4) Analytical Chemistry

Quantitative Chemical Analysis (7/e, Freeman) D. C. Harris + optional solutions manual.

CHEM 233 (3) Organic Chemistry for the Biological Sciences

Organic Chemistry (5/e, Pearson/Prentice Hall) Paula Bruice

CHEM 235 (1) Organic Chemistry Laboratory (In-house laboratory manual)

CHEM 250 (2) Inorganic Chemistry for Engineers

No required text. The following are recommended: S. Zumdahl, Chemical Principles, (3/e) Cotton, F.A., Wilkinson, G. and Gaus, P.L. Basic Inorganic Chemistry. Wiley, 1987
Huheey, Inorganic Chemistry, Principles of Structure and Reactivity, (3/e), Harper & Row, 1983
T.W. Swaddle, Applied Inorganic Chemistry, U. of Calgary Press, 1990

CHEM 251 (3) Physical Chemistry for Engineers

Physical Chemistry (3/e, Scott/Foresman), 1996, J.H. Noggle

CHEM 260 (3) Organic Chemistry for Engineers

No required text. Optional text: Organic Chemistry (6/e, Thomson/Brooks Cole), J. McMurry

CHEM 301 (3) Aqueous Environmental Chemistry.

Optional textbook: Environmental Chemistry (8/e), S.E. Manahan

- CHEM 302 (3) Atmospheric Environmental Chemistry**
Introduction to Atmospheric Chemistry (Princeton U Press), D. Jacob
- CHEM 304 (3) Fundamentals of Physical Chemistry**
Physical Chemistry (5/e, McGraw Hill, 2002), I. Levine
- CHEM 305 (3) Biophysical Chemistry**
No text required. Reference texts include: Physical Chemistry: Principles and Applications in Biological Sciences (4/e, Prentice Hall, 2002) Tinoco, Sauer and Wang
- CHEM 307 (3) Advanced Physical Chemistry**
Suggested texts (no text required):
Surfaces (Oxford U Press), G. Attard & C. Barnes
Electrode Dynamics (Oxford U Press), A.C. Fisher
- CHEM 309 (3) Foundations of Inorganic Chemistry**
Inorganic Chemistry (3/e, Pearson/Prentice Hall, 2004) G.L. Miessler & D.A. Tarr
- CHEM 310 (3) Chemistry of the Elements**
Inorganic Chemistry (3/e, Pearson/Prentice Hall, 2004) G.L. Miessler & D.A. Tarr
- CHEM 311 (4) Instrumental Analytical Chemistry**
Principles of Instrumental Analysis (6/e). Skoog, Holler & Nieman
- CHEM 312 (3) Introduction to Quantum Mechanics and Spectroscopy**
required: Quantum Chemistry (University Science Books, 1983) by Donald A. McQuarrie
optional: Quantum Chemistry and Spectroscopy (1/e, Benjamin Cummings, 2006)
by Thomas Engel
for advanced reference: Quantum Chemistry (5/e, Prentice Hall, 2000) by I. Levine.
- CHEM 313 (4) Advanced Organic Chemistry for the Life Sciences**
Organic Chemistry (6/e, Brooks/Cole), J. McMurray (or other basic organic text)
- CHEM 320 (3) Structure of Atoms and Molecules**
Essentials of Computational Chemistry: Theories and Models (2/e) C.J. Cramer
- CHEM 330 (4) Advanced Organic Chemistry**
Suggested text, not required: Advanced Organic Chemistry, Part B, Carey & Sundberg
- CHEM 333 (3) Spectroscopic Techniques in Organic Chemistry**
Introduction to Organic Spectroscopy (1/e, Oxford University Press) Harwood and Claridge, and
Organic Structures from Spectra, (3/e, John Wiley & Sons) Field, Sternhell and Kalman.