

Essentials of Chemistry - Spring 2007
Chem 102, section 001
Mon, Wed, and Fri 10:40-11:30am B 312

Instructor information

Instructor: Darcy Thie
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Office hours: Tues and Fri from 1-3pm and by appointment
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Required materials

Text: *General, Organic, & Biological Chemistry, 4th edition* by H. Stephen Stoker

Materials: Large 3-ring binder
Calculator
Regular access to a computer

Suggested study guide: *Study Guide with Solutions to Selected Problems for General, Organic, and Biological Chemistry, 4th edition* by Danny V. White and Joanne A. White

Course Objective

This introductory course is designed to give students who are planning a career in a health related field a solid foundation of the principles of organic chemistry and biochemistry to be used in future work. After successful completion of the course, the student should be familiar with the following: 1) functional groups and organization of organic compounds and organic nomenclature, 2) properties of organic compounds within functional groups, 3) characteristics of different types of organic reactions, 4) general structures of biochemicals, such as carbohydrates, lipids, proteins/enzymes, and nucleic acids and 5) properties of biochemicals that are applicable to health the sciences. This course also serves as a requirement in the BSU Core Curriculum. The goals that are applicable to this course from the core requirements are given below:

Critical Thinking/Problem Solving

- ✓ Clearly identify and analyze a problem; identify important information within the problem to construct correct solutions.
- ✓ Use both qualitative and quantitative methods of reasoning.

Communication Skills

- ✓ Read and interpret written discourse.
- ✓ Listen to and interpret spoken discourse.
- ✓ Use speaking, listening, and interpersonal skills in small groups to teach and learn from others.

Cultural Perspective

- ✓ This course does not address this core goal

Breadth of Knowledge and Intellectual Perspective

- ✓ Articulate basic assumptions, concepts, theories, and factual information appropriate to chemistry.
- ✓ Apply techniques and investigations relevant for solving chemistry problems.
- ✓ Apply appropriate critical thinking/problem solving skills and communication skills in the context of chemistry.

Prerequisite

In order to be successful in this course, all students must have successfully completed Chem 101 or an equivalent class at a different university.

Course Website

The online website, Blackboard (Bb), will be used frequently. It is required that you access this website throughout the week and on weekends to view announcements and also to print relevant material for the next day in class. Relevant material includes class notes, homework assignments, and other pertinent handouts.

Blackboard can be accessed at <http://blackboard.boisestate.edu>. The username and password for Bb are the same as the username and password used with broncoweb.

Attendance

Attendance in lecture is highly recommended; however, roll will not be taken. Attendance for exams is required on the day of the exam. Exceptions will be made **ONLY** for students with university excuses or students with **extreme** family or medical emergencies. Proof is required for such emergencies. Students with university excuses must alert the instructor about an absence **BEFORE** the exam is given. Students with extreme family or medical emergencies must alert the instructor of an absence by 12:00noon **on the day of the exam in order to take a makeup exam (please leave a message if I am not in my office).** **Absolutely NO exceptions will be made for the final.**

Laboratory

The required manual for the laboratory can be purchased in the bookstore. The laboratory associated with this lecture is mandatory. The syllabus will be passed out in lab.*

****Note: Attendance in lab is MANDATORY for the first week of class. Students that miss the first week of lab will be dropped from both lab and lecture.***

Lecture Assignments and Exams

There will be 9 homework assignments given throughout the semester. The homework grade will be calculated from the best 8 of 9 homework assignments that are given (for a total of 80 possible points—see point break down below). Because the best 8 of 9 scores are used, homework assignments **will not** be accepted late. There are no exceptions to this rule, including computer problems.

Homework will be available on the Bb website through a link to a pdf file. This file is easily downloadable and can be printed and written on. To turn the homework assignment in, students must take the homework as a "quiz" on blackboard. This "quiz" is an exact replica of the pdf file that is downloaded from the site. Taking the homework as a "quiz" enables the student to receive a score right after the "quiz" is submitted. All 9 homework assignments will be submitted in this way.

There will be 4 exams and one final exam. Each exam will cover only the material presented since the previous exam, but some "key" topics will carry throughout the entire semester. **No** exam scores will be dropped.

The final is cumulative. Everyone must take the final.

Point Break-down:

8 homework assignments @ 10 points each = 80 points

4 chapter exams @ 100 points each = 400 points

1 final exam @ 120 points = 120 points

Total lecture points = 600 points**

**Note: The 600 points listed above are only for the *lecture* portion of the class. This accounts for 75% of the final lecture grade.

Laboratory is worth 25% of the final lecture grade.* At the end of the semester, the total lab grade will be reported to the lecture instructor as a percentage and factored into the overall lecture grade. An example grade calculation can be seen below.

Example grade calculation: If you have an 82.3% from lecture and a 91.0% from lab, your overall grade would be:

$(75\% \times 82.3) + (25\% \times 91.0) = 84.5\%$, for a B in the course (see grade scale below).

Note: Students must obtain a minimum percentage of 70% in the lab portion of the course to be eligible for a passing grade (A-C) in Chem 102. Failure to achieve a 70% score in lab will result in a D or F in the entire course of Chem 102 (not just the lab portion).

Grading

The grade scale for this course is: 100-90% A (A+, A, A-); 89-80% B (B+, B, B-); 79-70% C (C+, C, C-); 69-60% D (D+, D, D-); ≤ 59% F

Please refer to pages 26-27 of the BSU 2006-2007 Undergraduate Catalog for questions regarding new grading policies.

Grades will be posted on Blackboard.

Academic Dishonesty

Academic dishonesty will not be tolerated in lecture or lab. It is expected that all students adhere to the Boise State University Code of Conduct, which can be found at:

<http://www2.boisestate.edu/studentconduct/avoidingacademicdishonesty.htm>

Students that violate the standards set by the university will be punished by the terms outlined in the Code of Conduct.

Common Courtesy

It is important to respect others during class time. Please silence your cell phones during class and limit conversations with other students during class to related material. Also, please refrain from packing up early. The lecture time is 50 minutes and students should not begin packing early unless class has ended.

Proposed schedule** Note: The schedule is subject to change

The week of...	Chapters covered...	Special dates to remember...
Jan 17 - 19	Syllabus and Chapter 12	
Jan 22 - 26	Chapters 12 and 13	
Jan 29 - Feb 2	Chapters 13 and 14	
Feb 5 - 9	Chapter 14	Friday, Feb 9: Exam 1
Feb 12 - 16	Chapters 14 and 15	
Feb 19 - 23	Chapter 16	No class Mon - President's Day
Feb 26 - Mar 2	Chapter 16	Friday, Mar 2: Exam 2
Mar 5 - 9	Chapter 17	
Mar 12 - 16	Chapter 18	
Mar 19 - 23	Chapters 18 and 19	Friday, Mar 23: Exam 3
Mar 26 - 30	No classes	Spring Break!!!
Apr 2 - 6	Chapter 19	
Apr 9 - 13	Chapters 19 and 20	
Apr 16 - 20	Chapters 20 and 21	
Apr 23 - 27	Chapter 21	Fri, Apr 27: Exam 4
Apr 30 - May 4	Chapter 22	
May 9	Finals Week	Wed, May 9: 10:30am - 12:30pm: Final Exam (held in the same room)

