

**Chemistry C102**  
**ELEMENTARY CHEMISTRY II**  
Indiana University Northwest

**COURSE DESCRIPTION AND OUTLINE**

C102 Elementary Chemistry II – The chemistry of organic compounds and their reactions followed by an extensive introduction to biochemistry. See class schedule for the course outline.

**PREREQUISITES:** C101; C121

**TEXTBOOK:** *Fundamentals of General, Organic and Biochemistry*; 6<sup>th</sup> edition; McMurry; *Study Guide*, McMurry, optional

**ATTENDANCE:** Regular attendance in lectures and in discussions is expected. Students are responsible for any assignments and statements made by the instructor in the classroom. Students should try very hard not to miss ANY classes. If you are absent from a class you should confer with the instructor as soon as possible.

**GRADING:** The final grade will be obtained by evaluating each student's work in these areas:

Three 1-hour exams	300 points (100 points each)
Final Exam (comprehensive)	160 points
Quizzes	100 points

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TOTAL	560 points
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(20 bonus points will be given for class participation)

There will be three 1-hour exams and a comprehensive final exam. See the class schedule for exact dates. There will be quizzes given in the discussion hours, which will be based on previously discussed work. A number of these quizzes will be dropped (two lowest grades) and the sum of the remainder will be adjusted to 100 points. There will be regular assignments of problems throughout the semester and students are expected to do these. Problem-solving is essential for success in organic chemistry. Discussion sections will involve solving problems and answering questions on lecture and reading assignment material. No make-up exams will be given except for the final exam. If a student misses a monthly exam and has a valid written excuse for it, two exams will be averaged out and weighted accordingly. No make-up quizzes will be given. The only valid reasons for absence from an exam are illness, funerals and field trips (all documented).

**OFFICE HOURS:** Before and after class

**OFFICE:** Marram Hall 233  
**PHONE:** 980-7123

**Course Objectives:**

Students completing the C101/C121 sequence will:

1. Demonstrate the ability to identify and explain how scientific theories are formulated, tested, and validated.
2. Demonstrate the ability to integrate and apply scientific methods which include defining parameters of problem, seeking relevant information, subjecting proposed solutions to rigorous testing, and drawing conclusions based on the process.
3. Demonstrate an understanding that all matter in the universe is composed of atoms that react in predictable fashions to control us and our environment.

**RIGHT TO ACCOMMODATION FOR INDIVIDUALS WITH DISABILITIES**

Indiana University is committed to creating a learning environment and academic community that promotes educational opportunities for all individuals, including those with disabilities. Course directors are asked to make reasonable accommodations, upon request by the student or the university, for such disabilities. It is the responsibility of students with documented physical or learning disabilities seeking accommodation to notify their course directors and the relevant campus office that deals with such cases in a timely manner concerning the need for such accommodation. Indiana University will make reasonable accommodations for access to programs, services, and facilities as outlined by applicable state and federal laws.

Campus support office: Davetta Haywood, Disabilities Coordinator, Hawthorn 237, 219-980-6942 Student Support Services  
[www.iun.edu/~supportn](http://www.iun.edu/~supportn)

**GOOD LUCK WITH ORGANIC AND BIOCHEMISTRY! ENJOY IT!**

## COURSE OUTLINE

C102 Lecture	4:00-5:15 pm	M/W	Marram Hall 119
Discussion	5:30-6:20 pm	W	Marram Hall 119

TEXT: *Fundamentals of General, Organic and Biological Chemistry*, McMurry, 5<sup>th</sup> edition; *Study Guide*, McMurry (optional)

<b>Date</b>		<b>Chapter</b>	
Jan	9	M	12 – Orientation and Introduction to Organic Chemistry: Alkanes
	11	W	12 – Continued
	16	M	Martin Luther King Holiday – no class
	18	W	13 – Alkenes, Alkynes and Aromatic compounds
	23	M	13-Continued
	25	W	13 - Continued
	30	M	14 – Alcohols, Phenols and Thiols
	February	1	W
6		M	15 – Amines
8		W	<b>Exam I on Chapters 12, 13 and 14</b>
13		M	15 – Continued
15		W	16 – Aldehydes and Ketones
20		M	16 – Continued
22		W	17 – Carboxylic Acids and their Derivatives
27		M	17 – Continued
29		W	<b>Exam II on Chapters 15, 16 and 17</b>
March	5	M	18 – Amino Acids and Proteins
	7	W	18 – Continued
	12-14		<b>Spring Recess, no classes</b>
	19	M	19 – Enzymes
	21	W	22 – Carbohydrates
	23	F	<b>AUTOMATIC WITHDRAWAL DEADLINE</b>
	26	M	22 – Continued
April	28	W	24 – Lipids
	2	M	24 – Continued
	4	W	21 – Bioenergetics
	9	M	23 – Carbohydrate Metabolism
	11	W	<b>Exam III on Chapters 18, 19, 22, and 24</b>
	16	M	23 – Continued
	18	W	25 – Lipid Metabolism
	23	M	25 – Continued
	25	W	28 – Protein Metabolism
May	2	W	<b>FINAL EXAM – Comprehensive, 4:00-6:00 pm</b>