

# Indiana University Northwest

Chemistry/Physics/Astronomy

## COURSE SYLLABUS: C100 The Wonderful World of Chemistry, Spring 2016

Instructor Name: Carol Wood  
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Phone: (219) 980 7758

Office Location: HH108  
Office Hours: On-line almost every evening and by appointment  
Class Type: Online Course

See the Canvas Calendar Agenda for this course for a listing of all assignments and due dates.

### Instructor Bio

Hello, I'm Carol Wood, the instructor for C100, an online World of Chemistry course. I am on the staff at IU Northwest where I am Director of Information Technology. I work for IU's University Information Technology Services group, also known as UITS, but I am 100% on the Northwest campus where I have worked for 15 years. I have a Ph.D. in chemistry and have worked throughout my career in a variety of science and technology jobs. One of my first jobs out of graduate school had me working on a "highly classified" project: The Global Positioning Satellite system. Haha. It is hard to believe that when it was initially deployed the GPS system was classified information and hardly anyone knew it even existed. I bet you do not know that the inner workings of the nation's GPS system is based in part on chemistry. I'll tell you how it is in one of our later lessons.

### Catalog Course Description

Intended for non-science majors, the chemistry of everyday life—water, air, plastics, fuels, nutrition, medicinal and agricultural products, living systems, and consumer chemistry. Illustrated by visual displays, computer animation, and interviews with famous scientists and web based demonstrations of industrial processes.

### Course Goals and Outcomes

- Students will identify a chemical and what things are made up of chemicals
- Students will correctly balance a chemical equation
- Students will correctly classify a chemical reaction by type
- Students will correctly identify a process as a chemical or physical change
- Students will correctly identify an element if given the number of protons
- Students will correctly classify the bonding in a compound
- Students will correctly identify the three main types of nuclear radiation and the dangers of each
- Students will correctly identify chemicals as organic or inorganic
- Students will correctly calculate the concentration of solutions

- Students will correctly identify the three states of matter
- Students will correctly interpret and use atomic symbols, the periodic table, and chemical formulas
- Students will correctly write the electron configuration for the atom of an element
- Students will correctly match microscopic representations of physical and chemical changes with symbolic representations of the same processes with the associated macroscopic changes
- Students will correctly identify the shapes of molecules that obey the octet rules

### Course Materials

- Required eText: Investigating Chemistry 3<sup>rd</sup> ed. Launchpad version with access card, by Matthew E. Johll, Freeman Press, ISBN-13: 978-1-4292-5522-6

This is an eText and eLearning environment called LaunchPad. To register for the eText and LaunchPad, go to: <http://www.macmillanhighered.com/launchpad/johll3e/2823588>

PLEASE bookmark the page to make it easy to return to.

You have three options to enroll in the course: you can purchase direct access, you can buy an access code from your IU campus bookstore, or you can get free 21 day access while deciding. Your registration options are explained [here](#).

To navigate and start using LaunchPad please consult the [Get Started guide](#) and/or [view this video](#).

If you have problems registering, purchasing, or logging in, please contact Customer Support. You can reach a representative 24 hours a day, 7 days a week through the [online form](#) by [chat](#).

Or by phone at (800) 936-6899:

Monday through Thursday 7:00 a.m. to 3:00 a.m.

Friday 7:00 a.m. to 11:00 p.m.

Saturday 11:30 a.m. to 8:00 p.m.

Sunday 11:30 a.m. to 11:00 p.m.

- Required Materials: Calculator

**Required Technologies:** Online access.

**Virtual Office:** Have questions about the course, the assignment due dates, other course administrative related questions? Post your questions in the Canvas Virtual Office/Have Questions? pinned Discussion Forum:

[https://iu.instructure.com/courses/1520270/discussion\\_topics/6421419](https://iu.instructure.com/courses/1520270/discussion_topics/6421419)

These posting will be viewable by all. Have a private question? Message me within the Canvas Course or email me directly and I will respond as soon as I can.

**Grading Information:** Grades will be determined as shown in the following assignment chart. Due dates are detailed in the Canvas Calendar for this class.

Assignment of Grade	Percentage
Discussion participation	20 (280 pts)
Midterm examination	20 (280 pts)
Chemistry Presentation	20 (280 pts)
Homework	20 (280 pts)
Final examination	20 (280 pts)
	100% (1400 pts)

### Grading Scale

A (90-100) =	Excellent
B (80-89) =	Good
C (70-79) =	Below standards
F (69 or below) =	Failure
FN =	Failure for nonattendance
I =	Incomplete
W =	Withdrew

### Assessment Information

**Discussions: Expectation for posting to the Discussion questions (Forums)** For each Module I have made 3 Discussion questions available (except week 1, in which there are only 2 Discussion questions, both to which you must respond). You need to pick two of the possible 3 Discussion question to which you will respond with a quality answer with a minimum 3-4 complete sentences. In addition, you are expected to respond with a minimum 3-4 sentence quality response to 2 of the postings made by your classmates **for each discussion question that you answered**. That means you will be posting your answers to 2 questions per week and you will be responding to your classmate's posting with 4 responses per week.

When are Discussions due? To keep things simple, I have made all Discussion responses due by end of day Saturday of each week. However, since all class members are expected not only to post answers but responses to answers, I expect you will have posted your responses to discussion questions by Wednesday of each week in order to give everyone an opportunity to read postings and post responses by end of day Saturday.

**Note about "Ask the Teacher" discussions:** These discussions are for course material (i.e. chemistry) questions. "Ask the Teacher" discussions are not the place to ask course administrative questions, such as when is the mid-term due, or how many points is an assignment worth. Check the syllabus first for

answers to your course related questions and post to the Virtual Office/Have a Question? discussion forum for these sorts of questions.

*Midterm and Final:* These examinations are timed for 50 minutes each section, with 3 sections each. Students will take the examinations in Launchpad. The Examinations will be available to be taken anytime during the exam week. The examinations are open book and open note. Students should have a periodic table available for quick reference. Students will need a calculator.

*Chemistry Presentation Assignment:* This is a group assignment! Student groups will submit a research paper on how Chemistry is used in an area of interest to the student. Students must identify the topic in the second week and have it approved. A list of suggestions will be given in Canvas. Students will need to meet the deadlines shown in the Class Calendar to ensure that they are working consistently to the goal. Detailed information on this assignment will be posted in Canvas.

*Homework assignments:* There will be weekly on-line homework and an Online Quiz for each chapter of the eText. Purchase of the Launchpad Access Card is required. The assignments are graded on-line. Assignments will only be available for the week in which they are due.

#### *Class Policies Regarding Graded Work:*

\*\*The following policies are in effect for all individual deliverables throughout the semester, unless noted otherwise. \*\*

*Late Work:* Late work is only accepted under very unusual circumstances. If you need to make-up any work, you will need to do the following:

- 1) Notify me by e-mail ([cfwood@iu.edu](mailto:cfwood@iu.edu)) that you need to make up the material and why
- 2) Tell me what time zone you are in
- 3) Give me an exact date and time that you wish to work on the late work
- 4) Tell me what you need reopened. I will open the work for a 2 hour window only. You will have 2 hours to do the make-up work
- 5) email me when the work is completed

#### *Plagiarism*

Honesty requires that any ideas or materials taken from another source for either written or oral use must be fully acknowledged. Offering the work of someone else as one's own is plagiarism. The language or ideas thus taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, speeches, or the writings of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgment also is considered plagiarism. Any student who fails to give credit for ideas or materials taken from another source is guilty of plagiarism.

*Cheating:* Dishonesty of any kind with respect to examinations, course assignments, alteration of records, or illegal possession of examinations shall be considered cheating. It is the responsibility of the student not only to abstain from cheating but, in addition, to avoid the appearance of cheating and to guard against making it possible for others to cheat. Any student who helps another student to cheat is as guilty of cheating as the student he or she assists. The student also should do everything possible to induce respect for the examining process and for honesty in the performance of assigned tasks in or out of class.

*Incompletes:* Students must complete the majority of the class to be eligible for an incomplete.

### The Course Evaluation:

We need your help! Your input, suggestions, opinions matter and are taken seriously. We cannot continue to promote online course offerings if students do not complete their course evaluations because departments are held accountable for having adequate response rates. Please do your part in understanding that it is part of your duty as a student to complete every course evaluations. They are important! The course evaluation will be activated approximately 2 weeks before the end of the semester. You will be notified when it is available.

**IU Academic Policies:** This course is governed by IU academic policies in the following areas

- Grading Guidelines
- Writing Standards
- Academic Integrity and Plagiarism
- Course Evaluations
- Students With Disabilities

### SUCCESSFUL STUDY USING CANVAS

For help getting started with Canvas please read the IU Knowledge Base Article:

[At IU, what is Canvas, and how can I get help with it?](#)

If you are having difficulty with technology, it is your responsibility to seek assistance. The IU Support Centers are available to help you: [How do I contact the Support Center at each IU campus for help?](#)

Please check the [IU Online website](#) for additional resources for Online Students.

**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.

*IUN Campus support office:*

Student Support Services location: HH 239, (219) 980-6798

Student Support Services online: [www.iun.edu/student-support](http://www.iun.edu/student-support)