

**CHEM 1010 - Introductory Chemistry I with Lab (formerly Introduction to Chemistry I and Lab)**  
**4 Credit Hours**

**Course Description:**

Introduction to Chemistry I will examine atomic and molecular structure; nuclear chemistry; bonding; equation writing and stoichiometry; compound classification; gas, liquid, and solid states; solutions; acids and bases; basics of organic and analytical chemistry; organic compound families, in particular hydrocarbons and alcohols; and qualitative and quantitative analytical methods. You will be responsible for topics covered in your textbook as well as additional materials available in the online Course Modules and the experiments.

**Student Skills:**

Students entering CHEM 1010 are expected to have mastered a number of skills, especially math and writing skills. These skills include:

- An ability to perform math operations (addition, subtraction, multiplication, and division) correctly, with or without the assistance of a calculator.
- An understanding of the metric system.
- A knowledge of a variety of conversion factors within the English and metric systems (e.g. 1 ft. = 12 in or 1000 m = 1 km) as well as an ability to use conversion factors or proportionalities to convert from one unit of measurement to another.
- An ability to convert numbers in standard decimal notation (23400) to exponential and scientific notation ( $2.34 \times 10^4$ ) and vice versa.
- An ability to convert from percentage to fractions and vice versa.
- An ability to use the basic skills of algebra, especially to rearrange an algebraic expression and/or solve for an unknown.
- An ability to interpret or construct graphs, charts, and tables, and to determine the equation of a straight line from an appropriate graph.
- An ability to read and comprehend English as well as to construct a written response, answer, or report using correct spelling and grammar.
- An ability to manage your time efficiently and study effectively.
- An ability to use a computer to run appropriate software programs (especially word processing) and to access and use the internet.

**Prerequisites and Corequisites:**

Successful completion of learning support competencies.

### Specific Course Requirements:

#### **Time and Effort:**

In order to do well in chemistry, you must put in significant time and effort. You will probably be confused some of the time, and this is normal. We will attempt to keep the confusion under control. The biggest mistake students make in chemistry is not realizing the amount of time and effort required in this difficult course. To be successful in chemistry, you will need to devote about 3 to 4 hours of productive work for every credit hour. Typically, you should plan on spending 12 to 16 hours a week on chemistry, that corresponds to about 2 hours a day 7 days a week or 3 hours a day 5 days a week. Chemistry is also a truly cumulative discipline. That is, you must study and review and keep up with the material on a regular basis because new material builds on the previously learned material. You are expected to read the applicable material in your text as we work through the chapter materials online. Each Module is organized so that, as you go through, the textbook objectives are presented for each section of the chapter. This is followed by activities which include reading the book, reading other online materials, working on various activities, and working problems from the textbook. The last piece on every page is a list of learning outcomes for that section of the text, that is, things you should be able to do once you have completed the activities. We will cover material at a fairly rapid, but reasonable, pace. It is very easy to postpone studying until a test is at hand. DON'T DO IT. New material builds on old material and tends to have a snowball effect. If you wait until the day before a test to begin studying, the chances of doing well are slim. Let me encourage you to keep up with the material on a routine basis (please, please, please). In a typical online study session you should review the material you worked on in your previous online session before beginning new material. You should work on the course every day or at least every other day. You should email your instructor or post a question on the discussion board if there is specific material you do not understand.

### Required Textbooks:

Please visit the [Virtual Bookstore](#) to obtain textbook information for this course. Move your cursor over the "Books" link in the navigation bar and select "Textbooks & Course Materials." Select your Program, Term, Department, and Course; then select "Submit."

### Hardware and Software Requirements:

Minimum hardware requirements can be found [here](#).

Minimum software requirements can be found [here](#).

**Common applications you might need:**

To read a PDF file download the latest version of [Adobe Reader here](#)

Don't have Microsoft Word? Explore an alternative [OpenOffice here](#)

Accessing a PowerPoint file? Download the [PowerPoint Viewer here](#)

**Web Resources:**

Purdue [OWL Online Writing Lab](#) (for APA, MLA, or Chicago style)

The Writing Center [Online Writer's Handbook](#)

**Student Resources:**

- Technical support information can be found on the [TN eCampus Help Desk](#) page.
- Smarthinking virtual tutoring is available **FREE** of charge. to access Smarthinking, visit the course homepage and select Smarthinking under Course Resources. You also view [sample sessions](#) to see what Smarthinking offers and how it works.
- Information on other student issues or concerns can be located on the [TN eCampus Student Resources](#) page.

**Instructor Information:**

Please see "Instructor Information" in the Getting Started Module for instructor contact information, virtual office hours, and other communication information. You can expect to receive a response from the instructor within 24-48 hours unless notified of extenuating circumstances.

**Testing Procedures:**

Course grades will be assigned according to the scale shown below. The overall course grade will be determined as follows:

Discussion Board Assignment (5 pts.), Wiley Plus homework (60 pts.), module quizzes (90 pts.), (see listing below) **155 pts.**

Exams (8 @ 32 pts. each) **256 pts.**

Midterm Exam **150 pts.**

Final Exam **200 pts.**

Laboratory (Experiments 4, 5 (32 pts. each) and 6 (12 pts.) plus best 7 of remaining 8 @ 25 pts. each) **251 pts.**

Total **1012 pts.**

### Grading Scale:

895 – 1012 A

795 – 894 B

695 – 794 C

645 – 694 D

Less than 645 F

### Assignments and Projects:

#### Activities, homework, quiz list by module:

##### Module Assessment list

1. Best quiz of 2 @ 10 pts. 2 WileyPlus homeworks @ 5 pts. each (best 12 of 16 will count), Discussion Board Assignment @ 5 pts.
2. Best quiz of 2 @ 10 pts. 2 WileyPlus homeworks @ 5 pts. each (best 12 of 16 will count)
3. Best quiz of 2 @ 10 pts. 2 WileyPlus homeworks @ 5 pts. each (best 12 of 16 will count)
4. Best quiz of 2 @ 10 pts. 2 WileyPlus homeworks @ 5 pts. each (best 12 of 16 will count)
5. Best quiz of 2 @ 10 pts. 2 WileyPlus homeworks @ 5 pts. each (best 12 of 16 will count)
6. Best 3 quizzes of 4 @ 10 pts. 4 WileyPlus homeworks @ 5 pts. each (best 12 of 16 will count)
7. Best quiz of 2 @ 10 pts. 2 WileyPlus homeworks @ 5 pts. each (best 12 of 16 will count)

**Additionally, to pass this class you must score at least 150 pts. in the laboratory portion, and at least 120 pts. on the final exam, individually.** If you do not score at least the

required points in either of these areas, you will receive an “F” in the course. Your instructor may choose to provide extra credit or bonus point opportunities throughout the semester. You may earn up to 16 additional points through extra credit and bonus opportunities.

**Homework Assignments:**

Homework assignments will be given for each of the chapters or topics in the course at the discretion of the instructor. These homework assignments will be assigned through the WileyPLUS homework system. These assignments will be graded and constitute a portion of your homework grade. These assignments will have due dates, which will be strictly enforced. You will not be given extra time on the assignments due to technical issues with your computer access, so plan accordingly to complete the assignments in sufficient time to allow for any problems that might arise. Missed homework assignments cannot be made up. These assignments along with the quizzes, reports, and other activities will constitute 150 pts. of your overall course grade.

**Quizzes:**

Two quizzes will be given for each of the chapters. These quizzes may be given via eLearn. These quizzes will have due dates, which will be strictly enforced. You will not be given extra time on the quizzes due to technical issues with your computer access, so plan accordingly to complete the quizzes in sufficient time to allow for any problems that might arise. Missed quizzes cannot be made up. These quizzes along with the homework assignments, reports, and other activities will make up 15% of your overall course grade.

**Exams:**

There will be eight (8) module exams offered during the term, worth 32 points each. All exams will be offered online in your course eLearn site. You may use a 4” x 6” study card during the exam. No one will monitor you as you take these online exams so I am relying on your integrity to abide by these rules. The midterm and final exams will be proctored and you will not be allowed unlimited outside materials so abiding by this policy will help prepare you for the final exam. Due to the nature of chemistry, the material on each exam will be comprehensive; however, the focus will be on current material. These exams will count for a total of 256 pts.

A proctored, Midterm Exam (covering the first 4 chapters) and a proctored, comprehensive Final Examination will be offered at appropriate times. Consult your calendar for the exact dates. The Midterm Exam will count for 150 pts. of your grade and the final exam will count for 200 pts. of your grade. You may bring an 8.5” x 11” sheet of paper with hand-written information on one side to use during the midterm exam and the final exam.

**Exam Policy:**

You will have up to one week to reschedule and take one missed exam, however, you will be penalized 20% of your exam grade for taking it late. Any additional missed exams will be given a grade of zero. You must take the Midterm and Final Exams within their scheduled timeframe as these are proctored and proctoring will only be available during certain time periods.

**Behavior:**

The main objective in this course is to learn the basic principles of chemistry. Toward that goal, every effort will be made to maintain an atmosphere conducive to learning chemistry. Students are expected to familiarize themselves and use basic principles of netiquette. You can use the following link to view the core rules of netiquette: <http://albion.com/netiquette/corerules.html>

**Course Ground Rules:**

*The following two statements (1., 2.) were derived from the TBR System-wide Student Rules document, released January 2012:*

RULES OF THE TENNESSEE BOARD OF REGENTS STATE UNIVERSITY AND  
COMMUNITY COLLEGE SYSTEM OF TENNESSEE SYSTEMWIDE STUDENT RULES  
CHAPTER 0240-02-03 STUDENT CONDUCT AND DISCIPLINARY SANCTIONS

[Read the document in its entirety here.](#)

**1. Standards of Conduct:**

- Students are required to adhere to the same professional, legal and ethical standards of conduct online as on campus. In addition, students should conform to generally accepted standards of "netiquette" while sending e-mail, posting comments to the discussion board, and while participating in other means of communicating online. Specifically, students should refrain from inappropriate and/or offensive language, comments and actions.

**2. [Review the TN eCampus Academic Integrity/Academic Honesty Policy:](#)**

- In their academic activities, students are expected to maintain high standards of honesty and integrity. Academic dishonesty is prohibited.

Such conduct includes, but is not limited to:

- an attempt by one or more students to use unauthorized information in the taking of an exam
- to submit as one's own work, themes, reports, drawings, laboratory notes, computer programs, or other products prepared by another person,
- or to knowingly assist another student in obtaining or using unauthorized materials.

Plagiarism, cheating, and other forms of academic dishonesty are prohibited.

Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are subject to disciplinary action through the regular procedures of the student's home institution. Refer to the student handbook provided by your home institution to review the student conduct policy.

In addition to other possible disciplinary sanctions that may be imposed, the instructor has the authority to assign an "F" or zero for an activity or to assign an "F" for the course.

### **Other Course Rules:**

Students are expected to:

- Participate in all aspects of the course
- Communicate with other students
- Learn how to navigate in Brightspace
- Keep abreast of course announcements
- Use the assigned course management (Brightspace) email address rather than a personal email address
- Address technical problems immediately:
  - [Contact Technical Support](#)
  - [View Term Calendar here](#)
- Observe course netiquette at all times.

### **Guidelines for Communications:**

#### **Email:**

- Always include a subject line.
- Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
- Use standard fonts.
- Do not send large attachments without permission.
- Special formatting such as centering, audio messages, tables, html, etc. should be avoided unless necessary to complete an assignment or other communication.
- Respect the privacy of other class members

#### **Discussions:**

- Review the discussion threads thoroughly before entering the discussion. Be a lurker then a discussant.
- Try to maintain threads by using the "Reply" button rather starting a new topic.
- Do not make insulting or inflammatory statements to other members of the discussion

group. Be respectful of other's ideas.

- Be patient and read the comments of other group members thoroughly before entering your remarks.
- Be cooperative with group leaders in completing assigned tasks.
- Be positive and constructive in group discussions.
- Respond in a thoughtful and timely manner.

### Library:

The [Tennessee Virtual Library](#) is available to all students enrolled in TN eCampus programs and courses. Links to library materials (such as electronic journals, databases, interlibrary loans, digital reserves, dictionaries, encyclopedias, maps, and librarian support) and Internet resources needed by learners to complete online assignments and as background reading will be included within the course modules. To access the Virtual Library, go to the course homepage and select the **Virtual Library** link under Course Resources.

### Students with Disabilities:

Qualified students with disabilities will be provided reasonable and necessary academic accommodations if determined eligible by the appropriate disability services staff at their home institution. Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility for specific accommodations from the disability services staff at the home institution. It is the student's responsibility to initiate contact with their home institution's disability services staff and to follow the established procedures for having the accommodation notice sent to the instructor.

### Syllabus Changes:

The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

### Disclaimer

The information contained in this syllabus is for general information purposes only. While we

endeavor to keep this information up-to-date and accurate, there may be some discrepancies between this syllabus and the one found in your online course. The syllabus of record is the one found in your online course. Please make sure you read the syllabus in your course at the beginning of the semester. Questions regarding course content should be directed to your instructor.