



**CHEMISTRY 101**  
**GENERAL CHEMISTRY I**

Core Course

Section 01: Mon. & Wed. 11:00 a.m. – 12:15 p.m.

Section 02: Mon. & Wed. 12:30 p.m. – 2:45 p.m.

Section 03: Mon. & Wed. 3:30 p.m. – 4:45 p.m.

Section 04: Mon. & Wed. 6:30 p.m. – 7:45 p.m.

Instructional Modality: Online/Onsite

Class Location: Section 01: G301

Section 02: B308

Section 03: G301

Section 03: A103

**Professor:** Dr. Karim N. Jallad

**Office Location:** A323

**Office Phone:** 3720

**Email:** [kjallad@auk.edu.kw](mailto:kjallad@auk.edu.kw)

**Office Hours:**

Mon. 2:00 p.m. – 3:30 p.m.; 5:00 p.m. – 6:30 p.m.

Wed. 2:00 p.m. – 3:30 p.m.; 5:00 p.m. – 6:30 p.m.

**Course Prerequisite:** Undergraduate level Math 110 Min Grade of C

**Course Corequisite:** Any undergraduate level Math 200 or above

**AUK Mission Statement:**

The American University of Kuwait is a liberal arts institution dedicated to teaching, learning, and scholarship. The University offers programs that provide students with the knowledge and skills necessary for lifelong learning and professional success. AUK enriches society by fostering an environment that encourages critical thinking, effective communication, personal growth, service, and leadership.

**College Mission Statement:**

The College of Arts and Sciences (CAS) is committed to cultivating lifelong learning that empowers students to pursue technical competency in professional fields, self-awareness, a sense of civic and moral responsibility, and a breadth of vision in the tradition of liberal arts education. The College offers quality undergraduate programs leading to a bachelor's degree.

**Department Mission Statement:**

The Department of Mathematics and Natural Sciences is committed to excellence in teaching, research, and scholarly activities. The Department prepares AUK students in different

disciplines with the fundamental scientific and analytical skills critical to a quality liberal education. The department strives to prepare students to be successful in their careers and promotes lifelong learning.

### **Catalog Course Description:**

This is the first of two general chemistry courses that cover the fundamental principles, concepts, and laws of chemistry (Taking General Chemistry II is not required by the College of Engineering). In this course you will learn about atomic structure and periodicity, reaction stoichiometry, types of chemical reactions, gas laws, atomic and molecular theories, bonding theory, and different structures of solid.

### **Course Objectives:**

- To introduce the students to the language of chemistry and the scientific way of critical thinking and problem solving.
- To provide basic information for the understanding of how the states of matter can be described and altered and used to express chemical changes in the form of balanced chemical equations.
- To provide clear understanding of the various laws related to the behavior of the ideal gases.
- To give an insight on how energy is transformed during a chemical reaction.
- To acquaint the students with the periodic table and periodicity.

**Course Learning Outcomes:** Upon successful completion of the course, students will be able to:

- Understand some basic concepts of chemistry and the philosophy behind studying them.
- Learn the different states of matter and their properties.
- Explore the concept of the periodic table and the properties of different elements.
- Develop a thorough understanding of the theory of chemical stoichiometry and its applications to chemical reactions.
- Apply the ideal gas laws for calculations involving gaseous reactions.
- Understand the general concepts of thermodynamics and apply them to calculate enthalpy and internal energy changes during any chemical reaction.

### **Course Delivery/Methodology:**

For this course we will be meeting in-person 2 days per week and material will be presented through lectures. All course material will be posted on Moodle, which can be accessed at <https://lms.auk.edu.kw/>. All types of assessments must also be submitted through Moodle. You will be completing the following evaluations for this course: Exams and a Take-Home Assignment. In addition, you are encouraged to actively participate during the lecture sessions.

### **Textbook:**

Theory: "Chemistry", 7th edition, by Steven Zumdahl, 2007, Houghton Mifflin, USA

### Supplemental Readings:

Principles of General Chemistry, 3rd edition, by Martin Silberberg, 2012, McGraw-Hill, USA

### Evaluations and Grading:

<i>Evaluation Type</i>	<i>Weight</i>
On-Site Midterm Exam - Written	30%
Take-Home Assignment - Written	25%
On-Site Final Exam - Written	40%
Class Participation *	05%
<b>Total</b>	<b>100%</b>

\*Class-Participation will take into consideration synchronous and asynchronous work. The student is expected to:

- Engage in discussions during lecture sessions.
- Connect with the Professor during the semester through virtual and in-person meetings and emails.
- Attend online classes regularly (see below).

### AUK Official Grading Scale:

Letter Grade	Percentage	University Points
A	94-100	4.0
A-	90-93	3.7
B+	87-89	3.3
B	84-86	3.0
B-	80-83	2.7
C+	77-79	2.3
C	74-76	2.0
C-	70-73	1.7
D+	67-69	1.3
D	64-66	1.0
D-	60-63	0.7
F	0-59	0.0

### AUK Attendance Policy:

On-Site attendance will be enforced and taken regularly. Any student who misses more than 15% of class sessions (04 Lectures) of any course during a semester should expect to fail, unless she/he submits documented evidence to the course instructor of inpatient medical care, death of an immediate family member, academic instructional activities, or national athletic activities. If excused, students are required to satisfy all coursework due or assigned during their absence as determined by the course instructor. It is recommended and preferred to use the university's official medical excuse form found at <https://www.auk.edu.kw/AUK/media/pdf/sl/Medical-Excuse->

[Form.pdf](#). If a student does not submit documented evidence for her/his absence exceeding the limit, it is the student's responsibility to withdraw from the course by the specified deadline, as indicated on the academic calendar. Students who withdraw from a course receive a grade of "W". Students who do not withdraw from a course nor submit supporting documents for excessive absences will receive a grade of "FN" (failure for non-attendance).

### **Code of Academic Honesty and Integrity:**

Upon admission to the American University of Kuwait, students agree to act responsibly in all areas of academic, personal and social conduct and to take full responsibility for their individual and collective action. Such regulations are found in the American University of Kuwait Catalogue, Student Handbook, and the AUK website at [www.auk.edu.kw](http://www.auk.edu.kw). Any question of interpretation regarding the code of academic honesty and Integrity shall be reported to the appropriate academic dean. The Code shall be reviewed annually at the discretion of the academic deans. Any student or student organization found to have committed the cited violations or misconduct, either on or off campus, is subject to the disciplinary sanctions outlined in adjudication procedures.

### **Academic Conduct:**

Cheating (*see below*) will be punished as severely as is appropriate under University Guidelines. Cheating during the assessments' (Midterm & Final) sessions will not be tolerated and the penalty will be a grade of zero for that assessment and a possible failure of the course. Solving problems using methods either not covered in the, or beyond the scope of the course will be considered cheating.

### **Cheating:**

The term "cheating" includes but is not limited to, copying take home assignment from another student; working together with another individual on a take-home assignment when not approved by the instructor, looking at and/or copying text, notes or another person's paper during an examination when not permitted to do so. Cheating also includes the giving of work information to another student to be copied and/or used as his or her own. This includes but is not limited to giving someone answers to exam questions either when the exam is being given or after having taken an exam; informing another student of specific questions that appear or have appeared on an exam in the same academic semester; giving or selling a term paper, report, project or other restricted written materials to another student.

### **Academic Support:**

Learning Support Services focuses on empowering students to become independent and successful learners by developing their literacy skills, enhancing their understanding, and helping them improve their academic and study skills. Learning Support Services is comprised of two centers: the Tutoring Center and the Writing Center. The Tutoring Center provides free academic support in various subjects to AUK student. Email: [tutoringcenter@auk.edu.kw](mailto:tutoringcenter@auk.edu.kw). The Writing Center provides multilingual support (English, Arabic, French, and Spanish) through individual or small-group consultations. Email: [writingcenter@auk.edu.kw](mailto:writingcenter@auk.edu.kw)

**Disability Accommodations:**

AUK provides equal and inclusive educational environment in order to enable all students to meet and perform requisite academic standards and to participate in the opportunities and activities of its community. If you believe you can benefit from accommodations for a learning, physical, or mental health disability, [click here to book a session through the Counseling Center/Disability Services Booking Page](#), to ask about disability services at AUK, initiate an accommodation plan, or receive disability services. You can also email [counseling@auk.edu.kw](mailto:counseling@auk.edu.kw) if you need assistance in booking a session.

**Student Responsibilities:**

These digital/electronic devices are required to participate successfully in the On-Site/On-Line Remote Learning:

- Reliable and steady internet connection
- Desktop or Laptop
- Tablet (iPad or similar)
- Webcam
- Headset and microphone

**Make-Up Work Policy:**

There will be no make-up Exams. If you miss an Exam due to a case of illness or family emergency, it is your responsibility to ensure the submission of the proper documentation within 48 hours of the missed Exam; otherwise, a grade of zero will be given for the missed Exam.

**Communication Policy:**

Please be sure to use your official AUK email account, write your full name, and indicate which class and section you are taking (Class ###, DAY/TIME section) when you send me an email. If you have a question, please check the syllabus first and if your question is not answered there, then please feel free to send an email and I will be happy to clarify. I respond to questions within 24 hours of receiving them; if I do not respond within 24 hours, please re-send the email. Please note I normally respond during these working hours: 8:00 a.m. – 5:00 p.m., Sunday - Thursday. Emails sent on weekends will be responded to on Sunday.

**Technology Issues:**

The Take-Home Assignment must be submitted through Moodle. However, you may experience trouble submitting the assignment due to technology or internet issues. If such a situation does arise and you are unable to submit your assignment through Moodle, please send the completed assignment by email. Please make sure that you email me the assignment before the deadline as this documents that you did finish everything by the due date and time, but that you just had a technology issue. This will ensure that your assignment will be accepted, and you will not get a zero. Once the technology or internet issue is resolved, please upload the assignment to Moodle. In general, always be sure to frequently save your files and keep

backups of your assignment. Full name should be written on the Take-Home Assignment and used to rename the submitted file; otherwise, 10 points will be deducted from the Assignment's grade.

**Course Schedule:**

<i>Chapter</i>	<i>Title</i>	<i>Number of On-Line Lecture Sessions</i>
1	Chemical foundations	4
2	Atoms, molecules, ions	4
3	Stoichiometry	5
<b>On-Site Midterm Exam - Written: 30 %</b>		
4	Types of Chemical Reactions	5
<b>Take-Home Assignment – Written: 25 %</b>		
5	Gases	3
6	Thermochemistry	3
<b>On-Site Final Exam – Written: 40 %</b>		

**Syllabus Changes:**

There may be changes to the schedule and syllabus during the semester. When this happens, you will be informed in class and over email.

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