



Course Prefix/Number: MATH100-04
Course Title: College Algebra
Class Meeting Times: UTR 9:00-9:50
Class Location: G302

Instructor: Dr. Ali El Saheli
Office Location: A324
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Email: aelsaheli@auk.edu.kw
Office Hours: UTR 11:00-1:00

AUK Mission Statement:

The American University of Kuwait is a liberal arts institution based on the American model of higher education. It is dedicated to providing students with knowledge, self-awareness, and personal growth experiences that can enhance critical thinking, effective communication, and respect for diversity. AUK seeks to create leaders and lifelong learners who aspire to the highest standards of moral and ethical responsibility in their societies.

Department/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.

Catalog Course Description: Intermediate Algebra, review of polynomials and rational expressions, equations and inequalities, graphs, functions and their properties, polynomial (piecewise defined), and exponential and logarithmic functions. Prerequisite: MATH 095 or by placement test.

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

1. Solve, write, and graph linear, quadratic, radical, rational, absolute value, exponential and logarithmic equations and inequalities.
2. Understand the basic properties of real and complex numbers.
3. Define the basic concepts of functions and use concepts to perform algebraic operations and composition, find domain and range, and graph piece-wise defined functions.
4. Use graphing techniques, including translations, reflections, and stretch and shrinkage to transform graphs of functions.
5. Find the zeros and sketch the graphs of polynomial functions.
6. Find the inverse of functions and their graphs.

Course Delivery/Methodology: For this course we will be meeting in-person 3 times per week, and material will be presented through lectures. All course material will be posted on Moodle.

Required Textbook/Required Readings: *Essentials of College Algebra*, 11th Global edition, Lial, Hornsby, Schneider, & Daniels, Pearson. Series: MyLab MATH.

Readings: PDF and/or PPT lecture notes available on Moodle and/or the S-Drive via Moodle.

Recommended:

1. Video lectures on Moodle.
2. College Algebra. **American University of Kuwait Library**, Library Book Stacks - Second Floor

Evaluations and Grading:

1. HW1 – 4%: due date March 11, 10:00 PM, on Pearson’s MyLab Math.
2. HW2 – 4%: due date March 29, 10:00 PM, on Pearson’s MyLab Math.
3. HW3 – 4%: due date April 19, 10:00 PM, on Pearson’s MyLab Math.
4. HW4 – 4%: due date May 17, 10:00 PM, on Pearson’s MyLab Math.
6. Test1 – 25%: March 30, in class during class time.
7. Test2 – 25%: May 18, in class during class time.
8. Project – 4%: due date June 03, 10:00 PM on Moodle
9. Final Exam - 30%: On campus, Cumulative, Date and time TBD by the Registrar’s.

AUK Official Grading Scale:

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

Important Note: To pass the course, your grade should be at least **70%**.

AUK Attendance Policy: Any student who misses more than 15% of class sessions 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. 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).

All Students are expected to be in class on time, and to spend the entire session time in class. If you leave the class room before the end of the session, you will be considered absent, and you will receive a grade of FN after 7 absences.

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. 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.

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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.

The Writing Center provides multilingual support (English, Arabic, French, and Spanish) through individual or small-group consultations. Email: 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 if you need assistance in booking a session.

Course Policies/Student Responsibilities:

Class participation is a very important part of the learning process in this course. Although not explicitly graded, you will be evaluated on the QUALITY of your contributions and insights.

You are expected to come to/join class on time. To be attentive and engaged in class. To refrain from using laptops, cell phones and other electronic devices during class. To spend an adequate amount of time on the homework each week, making an effort to solve and understand each problem. To engage with both the abstract and computational sides of the material. And to seek help when appropriate.

As research on learning shows, unexpected noises and movement automatically divert and capture people's attention, which means you are affecting everyone's learning experience if your cell phone, pager, laptop, etc. makes noise or is visually distracting during class.

For this reason, I strongly ask you to turn off your mobile devices and close your laptops during class. I allow you to take notes on your laptop, but you must turn the sound off so that you do not disrupt other students' learning.

Late and Missing Work Policy: If you miss a test/quiz you have to provide a legitimate, documented excuse (such as a verifiable valid Doctor's note), otherwise you will automatically be assigned a zero mark.

Make-Up Work Policy: If you provide a legitimate, documented excuse (such as a verifiable valid Doctor's note), the weight of the missed test/quiz will be moved to the final exam.

Testing Policy: You are not allowed to obtain any kind of assistance with your tests, and only **cashier calculators** are allowed (see last page for an example). Your tests should be totally your own work. Tests will be multiple choice, open response questions or a combination of these, as the instructor sees fit. Multiple choice tests will be in sequential format, which means that you can navigate through the test only forward. Any attempt at circumventing this will result in a mark of zero without any exception.

If you "think" there is a problem with a question, solve it to the best of your understanding /knowledge. After the test, email me about it and I will look into it.

After a test is done you have one week to discuss and/or contest your mark. After that you cannot discuss or contest your mark.

Homework: HW assignments are formative assessments and are designed to help you understand the material. The extra-long deadline for the HWs is to avoid any deadline problems due to technical problems. So make sure you do it asap. Once the deadline passes, the HW won't be available on Pearson and you get zero for that HW.

Technical Problems: It is totally your responsibility to make sure you sign up for the course with Pearson so that you can do the homework assignments and quizzes and submit them in the due time. Any problems with your Pearson account should be directed to Pearson support team.

In case of any internet problems during testing situations, you should contact your internet provider. You should provide documentation of the problem from the internet provider.

In case of any Moodle problems during the Test or Final, you should contact the IT department. You should provide documentation of the problem from the IT dept.

Most problems with Pearson occur because students forget their user name or password. To avoid this, make sure you write this information down when you create your account. In case of problems with your account you need to contact Pearson support team immediately to solve the problem to avoid missing a HW or a Quiz.

I have no control over the internet, your Pearson account or Moodle. Do not contact me regarding these problems. These are your responsibility.

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 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 via email or posted on the discussion forum within 2 hours of receiving them; if I do not respond within 24 hours, please re-send the email. Emails sent on weekends will be responded to on Sunday.

Syllabus Changes: There may be changes to the schedule and syllabus during the semester. When this happens, I will inform you in class and by email.



1. Equations and Inequalities

- 1.1 Linear Equations
- 1.2 Applications and Modeling with Linear Equations
- 1.3 Complex Numbers
- 1.4 Quadratic Equations
- 1.5 Applications and Modeling with Quadratic Equations
- 1.6 Other Types of Equations and Applications
- 1.7 Inequalities
- 1.8 Absolute Value Equations and Inequalities

2. Graphs and Functions

- 2.1 Rectangular Coordinates and Graphs
- 2.2 Circles
- 2.3 Functions
- 2.4 Linear Functions
- 2.5 Equations of Lines and Linear Models
- 2.6 Graphs of Basic Functions
- 2.7 Graphing Techniques
- 2.8 Function Operations and Composition

3. Polynomial and Rational Functions.

- 3.1 Quadratic Functions and Models
- 3.2 Synthetic Division
- 3.3 Zeros of Polynomial Functions
- 3.4 Polynomial Functions: Graphs, Applications, and Models
- 3.5 Rational Functions: Graphs, Applications, and Models
- 3.6 Variation

4. Inverse, Exponential, and Logarithmic Functions.

- 4.1 Inverse Functions
- 4.2 Exponential Functions
- 4.3 Logarithmic Functions
- 4.4 Evaluating Logarithms and the Change-of-Base Theorem
- 4.5 Exponential and Logarithmic Equations
- 4.6 Applications and Models of Exponential Growth and Decay