

Arkansas State University-Newport’s mission is to provide an accessible, affordable, quality education that transforms the lives of our students, enriches our communities, and strengthens the regional economy.

# MATH0021: Foundations of Mathematical Reasoning

ACTS Equivalency: N/A

**Course Description:** A study of quadratic equations and inequalities, polynomial, rational, exponential, and logarithmic functions. This includes graphing functions, combining functions, inverse functions. Solving systems of linear and nonlinear equations and use of matrices and determinants are also included. Emphasis will be placed on applications and problem-solving. Required for all students who have scored a 16 - 18 on the ACT in Math. (This is a non-credit course).

**Co-requisites:** MATH1023 College Algebra or MATH1083 Quantitative Literacy

**Credit Hours:** 3

**Instructor Name:**

**Office:**

**Office Phone:**

**Email:**

**Office Hours:**

## Department Information

Course Department:

Academic Department:

Academic Coordinator:

Associate Dean/Director:

Associate Dean/Director Contact Number:

Email:

Associate Dean/Director Email:

## Materials: Required and Optional

**Required Text(s):** OpenStax College, *College Algebra*. OpenStax College. 13 February 2015. ISBN-13 978-1-938168-38-3.

**Optional Materials:** Notebook, Pencils, Calculator (**TI-84Plus** Silver Edition not required but is strongly recommended)

**Note:** Students are expected to obtain the required text and materials for this course by the start of the term. Accommodations cannot be made concerning assignment due dates and class participation due to a student having not attained the required text and materials. Students participating in online courses are expected to have internet access. Accommodations cannot be made concerning assignment due dates and class participation due to a lapse or absence of internet service or access to a working computer and necessary software. ASUN has computer labs at each of our three campus locations available for students to access during normal hours of operation.

## Basic Computer Skills

- Ability to connect to the Internet and log into course regularly throughout each week.
- Ability to correspond and send files electronically and navigate the Internet.
- Ability to use Microsoft Word, PowerPoint, Excel, manage files, and keyboarding ability.

Computer/laptop running Windows 7 or later

Microsoft Office

Internet: Cable/Fiber-optic network

Anti-virus software: updated weekly

Acrobat Reader: most recent version

Web browser: Google Chrome or Firefox

Adobe Flash Player: Most recent version

Last name of Faculty, Semester

## INSTITUTIONAL POLICIES

### Institutional Learning Outcomes

Upon graduating from ASU-Newport with any Associate Degree, a student will be proficient in the following:

#### ILO1: Communication

*Goal: Students will express ideas, knowledge, and concepts in a clear and concise manner.*

- |            |           |                  |
|------------|-----------|------------------|
| a) Written | b) Verbal | c) Interpersonal |
|------------|-----------|------------------|

#### ILO2: Reasoning

*Goal: Students will apply reasoning skills in a variety of environments, which demonstrates problem-solving and applied knowledge.*

- |            |              |          |
|------------|--------------|----------|
| a) Explore | c) Interpret | e) Apply |
| b) Locate  | d) Evaluate  |          |

#### ILO3: Responsibility

*Goal: Students will participate in service activities that instill in them a sense of social responsibility.*

- |          |             |              |
|----------|-------------|--------------|
| a) Civic | b) Academic | c) Financial |
|----------|-------------|--------------|

### Institutional Grading Scale

Grading Scale:

- A: 90-100
- B: 80-89
- C: 70-79
- D: 60-69
- F: 0-59
- S: Satisfactory
- U: Unsatisfactory

### Americans with Disabilities Act Compliance

In order to obtain appropriate disability related accommodations and services to which they are entitled, students with documented disabilities should voluntarily and confidentially provide the Office of Educational Access (870-512-7838 or [CEA@asun.edu](mailto:CEA@asun.edu)) with appropriate medical documentation regarding the nature and extent of their disability, make their needs known to this Office and follow established procedures for acquiring needed services and accommodations in the classroom or online.

### Information Technology Services

If you experience any problems or issues with Canvas, MyCampus, or other equipment, please contact ITS at 870-512-7783 or <http://its.asun.edu>. Canvas also has a 24/7 live chat. This is a valuable resource for those late-night tests or assignments that just do not seem to work properly.

ASU-Newport provides a number of different services to assist students in areas that directly impact their academic success. The following direct websites will help you get in touch with those services that may be needed during your time as an ASUN student:

Academic Support Center: <http://academicsupport.asun.edu>

Financial Aid: <http://financialaid.asun.edu>

Career Pathways: <http://pathways.asun.edu>

University Police: <http://cpd.asun.edu>

Information Technology Services: 512-7783 or [its@asun.edu](mailto:its@asun.edu)

Center for Educational Access: <https://www.asun.edu/cea>

Admissions: <http://admissions.asun.edu>

### Academic Dishonesty (as stated in the Student Handbook)

ASU-Newport enthusiastically promotes academic integrity and professional ethics among all members of the ASU-Newport academic community. Violations of this policy are considered serious misconduct and may result in disciplinary action and severe penalties. Cheating in any form-including plagiarism, turning in assignments prepared by others, unauthorized possession of exams - may result in the student being dropped from the class with an "F" and/or being suspended from the College. Students who feel they have been unfairly accused of cheating may appeal to the Associate Dean of General Education.

### Printing

Last name of Faculty, Semester

\*Each student is allowed 200 sheets of copy paper per semester for printing. Additional printing requires a \$5.00 printing fee which covers an additional ream of copy paper. The fee can be paid by either visiting or calling the Business Office.

**Campus Safety Information**

What to know and do to be prepared for emergencies at ASUN:

- Opt-in to receive ASUN’s School Messenger notifications regarding weather closings, emergencies, and other important notifications. All currently enrolled students will receive an email within the first two weeks of the semester prompting them to Opt-in to the messaging system.
- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- Listen for and follow instructions from your instructor or other designated authorities.
- For additional emergency information see the ASUN Emergency Response Guide in the Portal under “More” then select “Department of Safety”.
- Know the emergency phone number for ASUN Campus Police or dial 911.
- Report suspicious activities and objects found on campus.
- Keep your permanent address and emergency contact information current in My Campus.

**Inclement Weather**

In the event of inclement weather, class cancelation is left to the discretion of the Chancellor. You will be notified of class cancelation on the university website, through news media, and through our school messaging system.

**Children in the Classroom:**

ASUN classroom policy requires that the learning environment should be free of distraction in order to provide the highest learning opportunity for all students. In this light, students should not bring children to the classroom. If you must bring a child on campus, please have your child properly supervised in the public gathering areas.

**NOTE TO STUDENTS:**

All course activity open and due dates are articulated in Central Standard Time (CST) regardless of the student’s residential location. If you reside in a time zone other than CST, please ensure you utilize the appropriate conversion for all course activities.

**COURSE POLICIES**

**Course Learning Outcomes**

Upon the successful completion of this course, students will be proficient in the following:

<b>Learning Outcomes</b>	<b>Assessment</b>
Course parameters	Syllabus Contract, Discussion Forums Introductions, Meeting Expectations, Unit Assessment
The ability to perform and solve basic function operations and algebraic problems using appropriate vocabulary	Homework, Discussions, Quiz, In Class Assignment, Project, Unit Assessment
Critical thinking to formulate decisions and problem solving based on reasoning and analysis.	Homework, Discussions, Quiz, In Class Assignment, Project, Unit Assessment
The appropriate use of technology to supplement and enhance conceptual understanding, visualization, and inquiry.	Homework, Discussions, Quiz, In Class Assignment, Project, Unit Assessment
The ability to synthesize information from a variety of sources to solve problems and interpret results	Homework, Discussions, Quiz, In Class Assignment, Project, Unit Assessment

\*MSA for this course will specifically measure/assess the ILO’s 2d

**COURSE LEARNING ASSESSMENTS**

The student will demonstrate a basic understanding of the following functions: Absolute values, Quadratic, Polynomial, Rational, Logarithmic, Exponential and Graphing of inequalities and quadratic inequalities. The student will demonstrate an understanding of the application of systems of equations and matrices.

All Mathematics courses now require a Master Summative Assessment (MSA) assignment, which determines whether or not a student has achieved all of the learning outcomes of the course. For this course, the Master Summative Assessment assignment is the *Final Exam*.

Students who do not participate and complete assignments related to and including the *Final Exam* will not be eligible to receive a passing grade for the course. Additionally, although the grade students earn for the *Final Exam* and related assignments will have a significant effect on his or her grade, completion and success on this portion of the course grade will not guarantee a student a passing grade for the course, as the overall course grade is subject to a composite, as shown below.

**Academic Calendar**

<http://www.asun.edu/catalogs>

**Finals Schedule**

<http://www.asun.edu/catalogs>

**Disclaimer**

This syllabus and all documents associated with the syllabus are considered a contract between the student and the instructor. Students are expected to carefully read and review the syllabus and all associated documents in order to be familiar with course expectations and policies. This syllabus is subject to change at the discretion of the instructor, who will inform students of any changes. Students are responsible for keeping up with any changes.