Course Description

Prerequisite: None.

This course is based on the study of functions and their role in problem solving. Topics will include graphing linear functions, quadratic functions, exponential functions, and inverse functions. Students will be required to solve applied problems and communicate their findings effectively. Technology tools will be utilized in addition to analytical methods. A minimum grade of C is required to progress in mathematics or if MAC 1105 is used to meet the general education requirement in mathematics.

CRN	Class Meeting Times:	Final Exam Date and Time
20082	Fully Online (Canvas/ALEKS)	Due in ALEKS by Monday, April 24 th , 2023
20083	Fully Online (Canvas/ALEKS)	Due in ALEKS by Monday, April 24 th , 2023

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E-mail address: janfinson@valenciacollege.edu

Office location: West Campus 4-212

Office Hours: Monday - Friday: 8:00am-10:00am (Canvas/Email/Zoom)

Required Materials

- 1) Physical Scientific Calculator or Graphing Calculator (not your cell phone for tests)
- 2) WEBCAM or a LAPTOP with a built-in camera and Google Chrome is needed for tests/exams for HonorLock proctoring via Canvas (no tablets or cell phones).
- 3) ALEKS code for: College Algebra, Miller/Gerken, 2nd edition, McGraw Hill, 2016

*Note: Purchasing from the bookstore (instead of from www.aleks.com directly) may result in slightly different prices and delayed access.

HonorLock

HonorLock is an online proctoring service that operates through Canvas. The service requires you to use a laptop/desktop with a webcam. The platform monitors/records your progress as you take tests/exams in ALEKS. It records your immediate surroundings and the computer screen to protect the integrity of the online testing process. HonorLock is **required** for this online course for chapter tests and the final exam. If you are unable to use the service or do not accept the policies of the service, you should withdraw from the course.

Attendance

To be sure you are not dropped as a "No Show" during Week One, be sure to complete *Intro post* in Canvas and take the *Syllabus Quiz* in Canvas, as well as Register and take the Initial Knowledge Check in ALEKS on time. Students are expected to practice and engage daily in ALEKS and Canvas, completing assignments by due dates, as math is not a spectator sport.

ALEKS

You are responsible for registering your ALEKS account and completing your Initial Knowledge Check <u>during the first week of class</u> (you may use free two-week access with Financial Aid <u>Code listed on the Canvas "Start Here" page).</u> You can access all ALEKS assignments, gradebook and other resources by going directly to www.aleks.com.

Course Learning Outcomes

- Use processes, procedures, data, or evidence to solve problems and make effective decisions
- Use functions and function concepts to analyze and model realistic situations.
- Use appropriate technological tools to analyze and model realistic situations.

Important Dates

- Withdrawal Deadline: The deadline for withdrawing from class with a grade of "W," if you are eligible to do so, is on **March 24**th for Full Spring 2023 classes. After the deadline you will not be permitted to withdraw yourself from the class. Your professor will NOT withdraw you from the class (after the No Show Period). For a complete Valencia policy overview, visit https://valenciacollege.edu/students/business-office/policies.php
- <u>College Closed</u>: The College will be closed on **January 16**th (MLK Jr. Day), **February 10**th (Learning Day), and **March 13**th **19**th (Spring Break)

Online Tutoring Resources

- Your instructor is interested in your success in this class. Please ask questions regularly!
- Many students of mathematics find it extremely helpful to form study groups with their classmates. See "Study Group Space!" and "Ask the Tutors!" Discussion Threads in Canvas.
- Try online tutoring: https://libguides.valenciacollege.edu/distancetutoring

Academic Integrity

Honesty and integrity reward you in many ways, including avoidance of the grade of zero that is assigned to any student who cheats on any test or assignment. For Valencia Academic Integrity policy visit https://valenciacollege.edu/students/disputes/academic-integrity.php

Grading

- Partial credit on tests and other assignments is sometimes given, when appropriate, solely at the discretion of the instructor.
- All grades will be posted in the ALEKS Gradebook (with overall grades sent to Canvas).

ALEKS Mastery Practice (20% of Grade)

- In addition to completing notes and watching videos made by your professor in Canvas, regular practice and completion of weekly learning objectives (due on Saturdays by 11:59pm) in ALEKS is crucial to your success in this course. After working for 5 hours in ALEKS AND completing 20 new topic objectives, you will be prompted to take a Progress Knowledge Check to see which topics you have mastered and which ones you will need to keep working on throughout the course. Most students will need to spend at least 10-15 hours per week practicing to succeed. Students are encouraged to work ahead!
- The weekend before each test, students should review the topics mentioned in their **Test Reminder Announcement** in Canvas and *should time themselves* doing the suggested eBook problems. To further encourage students to time themselves strategically practicing problems before the test, students who complete **timed Test Reviews** (under Quizzes in the "Assignments" section of ALEKS), <u>before the test</u>, may receive up to 5 extra points on their test (90% earns 5 points, 80% earns 4 points, etc.).
- After taking an assigned module test, students will be prompted to take a **required**Comprehensive Knowledge Check (similar to the Initial Knowledge Check) where students will have the opportunity to see how many of the (entire) course topics they have already mastered. This could either reduce or increase the amount of topic objectives you will need to complete in the upcoming module. ALEKS is adaptive and thus will not make you practice what you already know, so be sure to take these Knowledge Checks seriously to help you use your time most efficiently each week. It's perfectly normal to see concepts and problems on these comprehensive checks which are unfamiliar to you. ☺

Proctored ALEKS Testing (50% of Grade)

There are <u>5 timed Module Tests (30% altogether)</u>, and a <u>timed Comprehensive Final Exam</u> (20%) all taken online (in ALEKS with HonorLock proctoring via Canvas). *Students are* strongly advised to time themselves doing review problems before attempting actual tests. Every test score will be used, there are NO "dropped" test scores.

Canvas Desmos Activities (30% of Grade)

There are **5 Desmos Activities** under "Assignments" in Canvas which should be completed *after* you have completed your homework and test for each module. You must complete each Desmos Activity by the scheduled deadline and are encouraged to create a free account www.student.desmos.com to save your work if you wish to complete it in more than one sitting.

Course Grade Determination

Component	<u>Weight</u>	
ALEKS Mastery Practice	20%	
ALEKS Module Tests	30%	
Canvas Desmos Activities	30%	
Comprehensive Final Exam	20%	

The following scale will be used for graded assignments and computation of the course grade:

90 - 100%	A
80 - 89%	В
70 - 79%	C
60 - 69%	D
Below 60%	F

Valencia Core Competencies

Valencia Community College wants graduates to possess and demonstrate a set of global competencies including the ability to **THINK, COMMUNICATE, VALUE AND ACT**. In an effort to help you acquire and improve your ability to demonstrate the competencies, this course will include activities that require you to:

- 1. Think clearly, critically and creatively.
- 2. Communicate with others in written and verbal form.
- 3. Make reasoned value judgments and responsible commitments.
- 4. Act purposefully, reflectively and responsibly.

Special Accommodations and Counseling Resources

Students with disabilities who qualify for academic accommodations must provide a letter from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities (West Campus, extension 1523, or https://valenciacollege.edu/students/office-for-students-with-disabilities/)

Student Resource for Assistance: Valencia College is interested in making sure all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. BayCare Behavioral Health Student Assistance Program (SAP) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available. Additional information about Valencia Counseling Resources can be found at: https://catalog.valenciacollege.edu/studentservices/

Corequisite MAC 1105 Schedule--Online Spring 2023 Calendar

Week	Topics (Notes & Videos in Canvas)	Deadlines (all due at 11:59pm)
Week 1	R.3/R.4 Radicals (Review) R.5 Factoring (Review)	"Initial Knowledge Check" due in ALEKS: <u>Tue. 1/10*</u> Intro. Post Due in Canvas: <u>Wednesday 1/11*</u> Syllabus Quiz Due in Canvas: <u>Saturday 1/14*</u> Week 1 Objectives Due in ALEKS: <u>Saturday 1/14*</u> * <u>Note</u> : Skipping these may result in being dropped from the class.
		(Valencia Campuses Closed on 1/16)
Week 2	1.3 Complex Numbers (Review) 1.4 Quadratic Equations (Review) 1.6 Radical/Abs. Val. Eqtns. (Review) 1.7 Abs. Value Inequalities	Week 2 Objectives Due in ALEKS: Saturday 1/21
Week 3	2.4/2.5 Lines (Review) 2.1/2.7 Graphing: Intercepts & Sym. Review for Test 1	Week 3 Objectives Due in ALEKS: <u>Saturday 1/28</u>
Week 4	2.1 Distance/Midpt. Formulas2.2 Circles2.3 Functions/Notation/Domain	Proctored Test 1 Due in ALEKS: Monday 1/30 Desmos Activity 1 "Lines" Due in Canvas: Tues. 1/31 Post-Test 1 K.C. Due in ALEKS: Wed. 2/1 Week 4 Objectives Due in ALEKS: Saturday 2/4
Week 5	2.8 Difference Quotient/Comb. Func. 2.4 Avg. Rate of Change 2.7 Graphs/Properties of Functions 2.6 Library of Func./Transformations 2.7 Piecewise-Defined Functions Review for Test 2	Week 5 Objectives Due in ALEKS: Saturday 2/11 (Valencia Campuses Closed on 2/10)
Week 6	2.5 Building Linear Models 3.1 Quadratic Func. & Properties	Proctored Test 2 Due in ALEKS: Monday 2/13 Desmos Activity 2 "Graphs" Due in Canvas: Tue. 2/14 Post-Test 2 K.C. Due in ALEKS: Wed. 2/15 Week 6 Objectives Due in ALEKS: Saturday 2/18
Week 7	3.1 Building Quadratic Models 5.1 Systems of Linear Eqtns. (Review)	"Math in Real-Life" post Due in Canvas : Wed. 2/22 Week 7 Objectives Due in ALEKS: Saturday 2/25

Week 8	5.4 Systems of Non-Linear Eqtns. 5.5 Systems of Inequalities R.6 Rational Expressions (Review) Review for Test 3	Week 8 Objectives Due in ALEKS: <u>Saturday 3/4</u>
Week 9	1.1 Rational Equations (Review) 3.7 Variation	Proctored Test 3 Due in ALEKS: Monday 3/6 Desmos Activity 3 "Models" Due in Canvas: Tue. 3/7 Post-Test 3 K.C. Due in ALEKS: Wed. 3/8 Week 9 Objectives Due in ALEKS: Saturday 3/11 (Valencia Campuses Closed 3/13 through 3/19)
Week 10	3.2/3.3 Polynomial Functions 2.3/3.5 Prop. Of Rational Functions 3.5 Graphs of Rational Functions 3.6 Polynomial/Rational Inequalities Review for Test 4	Week 10 Objectives Due in ALEKS: Saturday 3/25
Week 11	2.8 Composite Functions 4.1 Inverse Functions	Proctored Test 4 Due in ALEKS: Monday 3/27 Desmos Activity 4 "Polynomials" Due in Canvas: Tue. 3/28 Post-Test 4 K.C. Due in ALEKS: Wed. 3/29 Week 11 Objectives Due in ALEKS: Saturday 4/1
Week 12	4.2 Exponential Functions 4.3 Logarithmic Functions	Week 12 Objectives Due in ALEKS: <u>Saturday 4/8</u>
Week 13	4.4 Properties of Logarithms4.5 Exponential/Log. Equations4.6 Exponential ModelingReview for Test 5	Week 13 Objectives Due in ALEKS: <u>Saturday 4/15</u>
Week 14	Finish all ALEKS PIE Objectives Review for Final Exam	Proctored Test 5 Due in ALEKS: Monday 4/17 Desmos Activity 5 "Exp. Graphs" Due in Canvas: Tue. 4/18 Post-Test 5 K.C. Due in ALEKS: Wed. 4/19
Week 15	Finish all ALEKS PIE Objectives Take Final Exam	Overall ALEKS PIE Objectives Due in ALEKS: Mon. 4/24 Proctored Final Exam in ALEKS Due: Monday 4/24