



MA-111 College Algebra

Amber Meis

FORT HAYS TECH | NORTH CENTRAL

COURSE INFORMATION

The course reviews the fundamental concepts of real and imaginary numbers along with symbolism used in Algebra. Concepts to be developed include solving and graphing linear and quadratic equations, exponential and logarithmic functions, systems of equations, and matrices. Students will apply these concepts to real-world situations through word problems.

Credits: 3

CLASS INFORMATION

Section Number: MA- 111

Term: Fall Year: 2026 Start Date: 8/17/2026 End Date: 12/11/2026

Delivery Mode: Online

INSTRUCTOR

Amber Meis

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Office Phone: 7856236153

Office Location: Health Science Building

Office Hours: M, W- 7:30 - 8:00 AM, 12:00- 12:45 PM; T- 7:00- 7:30 AM, 12:00- 12:45 PM; R- 7:00- 7:30 AM, 11:00- 12:00 PM; F- 7:30- 8:30 AM or by appointment.

Email is the best way to communicate with me and get in contact with me for the fastest response. My email is ameis@fhtechnnc.edu. I do get back to students within 48 business hours.

TEXTBOOKS

Cengage Unlimited ISBN: 978-0-357-70001-3 (12 months) or 978-0-357-70003-7 (4 months). Includes:

College Algebra, 11th ed. R. Larson, ISBN 978-0-357-45409-1

SUPPLIES

- Paper and Pencil
- Graphing Calculator
- Computer

COURSE COMPETENCIES

1. Use functional notation, including finding arithmetic combinations and compositions of functions.

2. Recognize and distinguish between functions and relations (equations).
3. Use concepts of symmetry, intercepts, left- and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description.
4. Determine the domain and range of relations and function.
5. Write the equation that describes a function (for types given above) or circle given its description.
6. Use graphs of functions for analysis.
7. Find arithmetic combinations and composites of functions.
8. Find the inverse of a function.
9. Solve equations including literal equations, linear equations, quadratic equations by factoring and the quadratic formula, higher-order polynomial equations, equations involving rational expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions.
10. Solve inequalities of the following types: linear (in one and two variables), polynomial, rational, absolute value.
11. Solve systems of inequalities by graphing.
12. Apply equations from outcome #1 to real-world situations, including but not limited to depreciation, growth and decay, and max/min problems.
13. Examine and analyze data, make predictions/interpretations, and do basic modeling.
14. Solve systems of equations by various methods, including matrices.

GRADING INFORMATION

Fort Hays Tech | North Central Grading Scale:

- A 100% -90%
- B 89% - 80%
- C 79% - 70%
- D 69% - 60%
- F 59% and below

Instructor Grading-

Grading will be awarded on a weighted point basis.

Each category will be part of your grade:

Chapter Online assignments

Possible Quizzes

Application/Real-World Problem Completion

3 Unit Exams

1 Cumulative Final

<u>Criteria</u>	<u>Percentage</u>
Tests (15% each)	45%
Final Exam	30%

Weekly Assignments/ Notes	25%
Total	100%

Extra Credit will also be offered about midway through the semester.

ACADEMIC HONESTY

Membership in the Fort Hays Tech | North Central learning community imposes upon the student a variety of commitments, obligations, and responsibilities. It is the policy of this College to impose sanctions on students who misrepresent their academic work. Appropriate classroom instructors or other designated persons will select these sanctions consistent with the seriousness of the violation and related considerations.

Examples of academic dishonesty include but are not limited to:

- Plagiarism: i.e., taking someone else's intellectual work and presenting it as one's own. Each department sets standards of attribution. Faculty will include disciplinary or class-specific definitions in course syllabi.
- Cheating is unacceptable in any form. Examples include consultation of books, library materials, notes, or intentional observation of another student's test on paper or a computer screen; accessing another student's answers from an exam to be given or in progress; submission of falsified data; alteration of exams or other academic exercises; and collaboration on projects where collaboration is forbidden.
- Falsification, forgery, or alteration of any documents or assignments and examinations.
- The use of AI-generated content from AI tools such as, but not limited to, ChatGPT, Dall-E, Co-Pilot, etc., is up to faculty discretion per course as stipulated within the course syllabus. Submitting AI-generated work as your own, without attribution, will be considered academic dishonesty.
- In courses where the use of AI tools are not permitted as stipulated within the course syllabus, work submitted using AI will be considered academic dishonesty.
- Students who participate in, or assist with, cheating or plagiarism will also violate this policy.

Classroom instructors and/or administrators will assess sanctions for violations of this policy. The seriousness of the violation will dictate the severity of the sanction imposed. Academic sanctions may include but are not limited to any of the following:

1. verbal or written warning
2. lowering of grade for an assignment
3. lowering of term grade

Administrative sanctions may include but are not limited to either of the following

1. Suspension from the course, program, or College
2. Dismissal from the course, program, or College

FORT HAYS TECH | NORTH CENTRAL MISSION STATEMENT

Fort Hays Tech | North Central delivers applied, innovative, and personalized education to empower learners, enrich lives, develop skilled professionals, and strengthen economic systems.

Vision Statement

Fort Hays Tech | North Central is dedicated to being a leader in workforce development by maximizing value for students, employers, and communities through educational excellence.

Core Values

Achieving EXCELLENCE with INTEGRITY through

DEDICATION

INNOVATION

COLLABORATION

COMMUNICATION

FORT HAYS TECH | NORTH CENTRAL NON-DISCRIMINATION POLICY

To provide equal employment, advancement, and learning opportunities to all individuals, employment and student admission decisions at Fort Hays Tech | North Central will be based on merit and qualifications. Fort Hays Tech | North Central does not discriminate based on any characteristic protected by law in all aspects of employment and admission in its education programs or activities. Any person having inquiries concerning Fort Hays Tech | North Central's non-discrimination policy, including the application of Equal Opportunity Employment, Titles IV, VI, VII, IX, Section 504, ADA, and impending regulations, is directed to the VP of Student and Instructional Services at (800) 658-4655, or compliance@fhtechncc.edu, or PO Box 507, 3033 Hwy 24, Beloit, KS 67420.

FORT HAYS TECH | NORTH CENTRAL TOBACCO USE POLICY

The use of tobacco products in any form and/or electronic cigarettes is prohibited in, or within ten (10) feet of any building owned, leased, or rented by the College. Kansas Law established the minimum age of 21 to sell, purchase, or possess cigarettes, electronic cigarettes, or tobacco products. Underage use or possession of any of these products is prohibited on property owned, leased, or rented by the College.

FORT HAYS TECH | NORTH CENTRAL WEAPONS POLICY

Fort Hays Tech | North Central prohibits the possession and use of firearms, explosives, and other weapons on Fort Hays Tech | North Central property, with certain limited exceptions. Please refer to the Fort Hays Tech | North Central Student Handbook for the full policy.

INCLEMENT WEATHER

College campus dismissals and cancellations will be announced using the College Alert system. Local media will also be notified.

OVERVIEW FOR STUDENTS WITH DISABILITIES

Fort Hays Tech | North Central is dedicated to providing equal access and opportunity to all campus programs and services for students with disabilities. We are committed to providing reasonable accommodations in accordance with applicable state and federal laws including, but not limited to, Section 504 and 508 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. We strive to create a safe, respectful, and inclusive environment and promote awareness, knowledge, and self-advocacy.

Fort Hays Tech | North Central acknowledges that traditional methods, programs, and services are not always appropriate or sufficient to accommodate the limitations experienced by some qualified persons with disabilities. When a student's disability prevents him/her from fulfilling a course requirement through conventional procedures, consideration will be given to alternatives, **keeping in mind that academic standards must be maintained.**

Services are provided through Student Accessibility Services (SAS) staff located in the Student Success Center, on the Beloit Campus, and in Student Services, on the Hays Campus.

•Director of Learning Services may be reached at [1-785-738-9020](tel:1-785-738-9020) or by mail at [Fort Hays Tech | North Central, 3033 US Hwy 24, Beloit, KS 67420](#).

Student Responsibilities

Students requesting support services will need to register ("self-disclose" and complete Student Accessibility Services Intake and Consent Form), provide appropriate documentation (if available) including how the disability affects academic performance and suggested accommodations, and communicate with the Director of Learning Services as part of the interactive process to create an *Educational Accommodation Plan* that will notify Instructors of approved accommodations, services and/or auxiliary aids.

Students are encouraged to make timely and appropriate disclosures and requests, at least two weeks in advance of a course, program, or activity for which an accommodation is requested (or as soon as realistically possible) to allow adequate time for accommodation services to be set in place.

Accommodations, Academic Support Services, or Auxiliary Aids

Reasonable accommodations including academic support services and auxiliary aids are provided to allow students with disabilities an equal opportunity to participate in and benefit from our educational programs. Accommodations will be provided on a case-by-case basis determined by student request, documentation, intake interview, Educational Accommodation Plan team, and assessment of individual needs and course requirements.

Reasonable testing accommodations may include, but are not limited to:

- Extended testing time
- Reduced distraction testing environment
- Test reader and/or scribe
- Use of calculator

Academic support services/auxiliary aids may include, but are not limited to:

- Note-taking assistance (second set of notes, PowerPoint slides, or other visual aids provided)
- Sign Language Interpreter
- Preferential seating in the classroom
- Large print exams, handouts, signs, etc.
- Telecommunications devices
- Use of Assistive Technology

Accommodations may not fundamentally alter the nature of the program or activity, lower academic standards, present undue financial or administrative burden on the college, or pose a threat to others or public safety.

Additionally, some accommodations and services cannot be provided, such as personal devices or assistance with personal services.

Auxiliary aids may be available through a variety of sources available to individual students. The student may make a request in obtaining specialized support services from other resources such as Vocational Rehabilitation Services (VR), Recordings for the Blind, Kansas Talking Book Service, etc. For example, Vocational Rehabilitation may fund such items as transportation to the institution, tuition, textbooks, hearing aids, and other individually prescribed medical devices.

If at any time throughout the academic year, a student feels that the agreed-upon accommodations are not being followed or that alternate accommodations need to be provided, the student should notify Student Accessibility Services (SAS) staff. Fort Hays Tech | North Central is committed to student success; however, we do not require students to use accommodations. The decision of when to utilize approved accommodations or services is up to the student. Integration, self-advocacy and individual responsibility are promoted and expected.

Grievance Procedure

Any student who believes he or she has been subjected to discrimination based on disability or has been denied access or accommodations shall have the right to invoke the Grievance Procedure.

Students are encouraged to first discuss their concerns with SAS. An attempt will be made to resolve the issue(s) causing concern by assisting the student in discussions with the person(s) involved. Most situations are positively resolved through this process. If the

student does not feel the concern or complaint has been appropriately resolved, he or she should contact the [Vice President of Student and Instructional Services](#) at 1-800-658-4655 or PO Box 507, 3033 US Hwy 24, Beloit, KS 67420, where grievance procedures are filed for all students, including students with disabilities.

If the complaint is not resolved at the College level, a student may choose to file a complaint with the [Office for Civil Rights](#) at 1-816-268-0550 or the [U.S. Department of Education, One Petticoat Lane, 1010 Walnut Street, Suite 320, Kansas City, MO 64106](#).

Confidentiality

All information regarding a student's disability is confidential. All documentation will remain separate from academic records and will not be released to an individual or source external to Fort Hays Tech | North Central without the student's written consent. In order to provide effective services, it may be necessary to communicate limited information on a need-to-know basis regarding disability-related needs to Fort Hays Tech | North Central faculty and/or staff.

REASONABLE SUSPICION

If reasonable suspicion of substance abuse exists regarding an employee or student based on objective criteria (including, but not limited to, behavior, appearance, demeanor, detection of the odor of alcohol or any controlled substance), the employee or student will be requested to consent to drug testing performed by Fort Hays Tech | North Central's contract vendor at the expense of the college.

- A. A college administrator (or their designee) shall drive the employee or student to the vendor's site for drug testing and shall return the employee or student to his/her residence (or arrange for transportation) following the testing.
- B. Test results shall be sent directly to the college administrator, with a copy also sent to the employee or student. All test results will be considered confidential; access to the results will be limited to institutional personnel who have a legitimate need-to-know.
- C. In the event of a positive test result, the employee or student may request a retest of the sample at the employee or student's expense. The request must be submitted within 24 hours.
- D. Positive results for any illegal drugs, or prescription drugs (either not prescribed for the employee or student, or at levels above the prescribed dosage), or blood alcohol level of 0.04 or greater shall be grounds for disciplinary action, up to and including termination or expulsion.
- E. Refusal to provide a specimen for this testing shall be treated as a positive drug test result.
- F. Test results or specimens that have been determined to be altered by the employee or student shall be grounds for disciplinary action, up to and including termination or expulsion.
- G. If the employee or student tests positive for an authorized prescription drug which may impair his/her performance or judgment, the employee or student may not be permitted to participate in college activities until he/she provides a doctor's release.

RIGHT TO MODIFY THE SYLLABUS

The instructor reserves the right to modify the syllabus during the semester. Students will be given advanced notice if a change would occur.

MUTUAL RESPECT

The mathematics classes are designed for collaboration rather than competition. That means that each member of the class supports the others in their efforts to succeed. Be sure to come to each class prepared to:

1. Listen with respect.
2. Speak with respect.
3. Contribute actively to the work of your team.

GUIDELINES FOR SUCCESS

Attendance Policy:

- Class attendance is of paramount importance. Consistent login and timely completion of all assignments each week are essential to maintaining satisfactory academic performance. Successful completion of homework assignments is fundamental to passing this course.
- This course comprises two graded components in every chapter. Most chapters will expand over two weeks. These graded assignments will be an online assignment on Cengage's WebAssign and an extension assignment that will be completed on paper. There will be other optional resources uploaded to Blackboard to assist with your learning. These problems will be from the book, and you will be able to look them up if you need assistance. When it comes to the test, you will be able to use these problems as a reference to help you. Showing your work on these extension problems is required. You will upload them either by scanning them into your computer, or you can take pictures of the pages and send them to me via my email address at ameis@fhtechno.edu.
- Optional supplementary materials, including introductory videos and notes, have been made available to enhance student comprehension of course material. These supplementary materials are not required and will not be graded; however, they may contribute to academic success in this course. Extension problems may also be available to facilitate a more profound understanding of statistical concepts; all such problems are derived directly from the course textbook. (Note: While these notes and extension problems are mandatory components of the face-to-face course format, they are provided here as optional resources to support student learning. The accompanying videos are designed for the face-to-face course and give only a foundational understanding. They do not encompass the full scope of content required for the statistics course. More comprehensive instruction would be delivered during face-to-face class sessions.) Communication:
- Communication is essential in an online learning environment. The instructor will usually communicate with students weekly. All communications will be delivered directly to students via Blackboard Messenger or Fort Hays Tech | NC email. No alternative email addresses will be used for course communication. Students should monitor their email and Blackboard accounts daily to stay up to date on course developments. Students requiring instructor assistance should utilize Blackboard Messenger or their Fort Hays Tech email exclusively. Emails sent from external addresses may be directed to junk mail due to verification protocols and domain restrictions, potentially resulting in delayed response times. The instructor maintains a policy of responding to all student inquiries within 48 business hours. If a response is not received within two (2) business days, students should assume the original message was not received and should resend their inquiry. Students utilizing the "ask your teacher" feature on WebAssign should send an additional message to the instructor via Blackboard or email to ensure timely notification. Due to the volume of WebAssign messages and their ease of oversight, failure to provide notification may result in response delays of several days.

Assignment Policy:

- Students are permitted and encouraged to utilize a calculator for this course. A scientific calculator is required to facilitate formula application and computational accuracy.
- Late assignments are generally not accepted after the posted due date. Students facing extenuating circumstances that may warrant an extension must contact the instructor well in advance of the assignment deadline. Extension requests submitted before the due date weekend are more likely to receive favorable consideration. Students should not defer assignment completion until the weekend and then claim they cannot access online resources. While some students may assume that online courses permit concentrated weekend work sessions, this approach does not constitute best practice. Optimal practice involves engaging with the course materials early in the week and commencing homework promptly, thereby allowing sufficient time for

questions to be addressed. Consistent engagement with assignments throughout the week is the most effective path to academic success.

- Online assignment problems frequently appear on examinations in identical or similar forms; therefore, mastering problem-solving techniques and allocating adequate time to this mastery is essential. Students are allotted five (5) attempts to obtain correct answers to the online problems, and it is strongly recommended that they use all available attempts. If a student answers a problem incorrectly three (3) times without understanding the error, the student should contact the instructor via Blackboard Messenger, email, or the “ask my teacher a question” feature in Cengage to request clarification. Students are requested to photograph their work and email the image so the instructor can identify the procedural error and provide a correction. Students who defer questions until the weekend may experience delayed responses due to instructor availability constraints. The instructor is considerably more accessible to address student inquiries during weekdays than on weekends. If you do decide to use the “ask my teacher a question” feature on WebAssign, please email the instructor that you have sent a message there so that there is not a delay in response to your question. Failure to do this step may result in untimely delays.
- Assignment due dates are established as follows: Online and extension assignments are due on Sundays at 11:59 P.M. each week.
- Assignment submission procedures are as follows: First, online assignments are transferred directly to the instructor upon submission of all questions (submission is required for correct answer verification). Online assignments become impossible to submit after the established due date and time; therefore, students must complete them before the deadline. Students are strongly advised to capture a screenshot of the grade summary at the top of the assignment page to provide documentation in the event of transfer errors. Screenshots must include both the grade and the assignment name. In the event of internet connectivity loss during assignment completion, students may remain unaware of the disruption. While work may continue during connectivity loss, grades will not be transferred to the instructor and will be recorded as zero. This circumstance underscores the importance of screenshot documentation.
- Completion of the final examination is mandatory for course passage. Students who do not complete the final examination will not pass the course. The final examination assesses student mastery of course material and provides the instructor with a comprehensive evaluation of individual student learning outcomes. Absence of final examination completion prevents the instructor from verifying that students have acquired the requisite course knowledge.

Videos:

Face-to-face course sections employ a “flipped classroom” pedagogical approach. This methodology involves recording foundational lesson content and distributing it to students for preliminary review. These videos have been made accessible to online students to provide supplementary instructional support. Accompanying notes are available for download to facilitate student note-taking during video review. These videos serve an exclusively instructional purpose, providing foundational basic information regarding chapter concepts. While these videos and notes are not required components of the online course and do not contribute to grade calculation, they are offered as resources to enhance students’ preliminary understanding of course material. These resources do not constitute comprehensive instruction for course mastery. Students enrolled in the online course format are expected to assume primary responsibility for their own learning. The instructor will provide learning tools and resources; however, students must actively seek methods to master the course material independently. While online course delivery eliminates the requirement for regular physical class attendance, this convenience may disadvantage some students by reducing daily exposure to direct instructor-led instruction. These videos and notes are offered as supplementary tools to support student learning.

Academic Dishonesty and AI Policy:

The use of generative AI tools (such as ChatGPT, DALL-E, Grammarly, etc.) is permitted in this course for the following activities:

- Brainstorming
- Refining research questions
- Drafting and outlining

The use of generative AI tools is not permitted in this course for the following activities:

- Impersonating students in classroom contexts, including the use of such tools to compose discussion board prompts and responses.
- Completing group or individual work assignments
- Composing drafts of writing assignments.

Student use of AI tools must be properly documented and cited to maintain compliance with institutional policies on academic integrity. Students must verify all information provided by AI tools through independent research to ensure accuracy. This verification requirement applies to all AI-assisted activities, including those used to refine written work.

All submissions will be processed through AI detection software. If AI usage is detected, the following procedures will be implemented: Upon initial suspicion of academic dishonesty, students will receive a written warning accompanied by a screenshot indicating the percentage of AI-generated content detected. This written warning will be sent to the student's Fort Hays Tech | NC email address. Upon a second occurrence, students will receive no credit for the assignment and will be issued a second written warning regarding suspected use of unauthorized sources, including AI-generated content or the work of others. Upon a third occurrence, students will receive a zero for the course and may be recommended for administrative withdrawal from the course and possible expulsion from the institution, in accordance with the academic integrity policy.

Regarding collaborative work on assignments: Students are permitted to work collaboratively on assignments (online or extension problems); however, collaboration does not constitute copying another student's work or answers.

Appropriate collaboration involves two or more students working simultaneously on their respective assignments while discussing solution strategies, agreeing on problem-solving methods, and engaging in mutual learning.

Proctor:

Students are required to secure a proctor for examination administration. Proctor information and selection criteria are available in the general (upper) area of the course Blackboard site. If you prefer to use HonorLock as a proctor, that can be arranged as well. Students must submit proctor information by the established due date to receive associated grade points. Late submission of this information may result in consequences beyond forfeiture of points, including inability to take scheduled examinations. Make-up examinations will not be provided to students who fail to submit proctor forms by the deadline, or at the very least, by Friday of the first exam.

Office Hours:

Office hours will be held on Thursdays. Students may schedule appointments or meet with the instructor via Microsoft Teams to receive assistance and have questions addressed. The instructor is also available to assist students, answer questions, review material, or address other academic needs via email, an individual Microsoft Teams meeting, or other avenues. Students are encouraged to request assistance as needed. Students must initiate contact to receive support, as the instructor cannot identify the need without student communication.

DISCLAIMER: This online course is primarily a self-directed learning format. Students bear primary responsibility for independent learning. The course textbook is an excellent resource, providing comprehensive problem-solving demonstrations. Independent learning skills contribute to academic success and foster lifelong learning capabilities. Students should recognize that self-directed learning is an integral component of online education. The instructor will not be available to work through every assignment problem individually. This limitation is inherent to the online course format. The instructor can assist with issues selected or specific conceptual difficulties, but will not complete all assignment problems with individual students. The instructor will provide support to the extent feasible throughout the semester.

Additional resources beyond the course textbook are recommended for students requiring supplementary assistance. There is an online platform at www.larsonprecalculus.com where you pick your book, topics, chapters, and sections to choose from that have videos of an instructor explaining various problems. Various apps may be available that provide step-by-step demonstrations of problem-solving. These apps should be utilized solely to understand problem-solving methodologies and ensure accurate completion on examinations. Students are prohibited from using apps or mobile devices during examinations; therefore, dependence on such tools for assignment completion is highly discouraged.

Brainfuse Tutoring is available on the Blackboard platform, located at the bottom of the general area (preceding the dated course content). This 24-hour, seven-day-per-week online tutoring service is provided by Fort Hays Tech | North Central. Students requiring assistance accessing this service should contact the instructor. Scientific calculators serve as another valuable resource. These devices allow students to input numerical values into formulas to obtain automated solutions. Mastery of calculator functionality can significantly enhance efficiency. Instructional videos for specific calculator models are available on YouTube. Students should search using their calculator model name and the desired function to access relevant instructional content.

Class Importance:

1. Students should utilize a calculator whenever applicable.
2. Students are encouraged to seek clarification when questions arise.
3. Errors are an acceptable and expected component of the learning process. All participants in the course—instructor and students alike—will make mistakes. Students should view errors as learning opportunities and extract educational value from them.
4. The instructor is committed to student success and available to provide individualized assistance. The instructor can provide guidance and direction when students encounter difficulties. Student success requires mutual effort and engagement; students must demonstrate initiative and actively seek assistance when needed. Students are advised to approach the instructor with a professional and respectful demeanor when seeking help. Negative attitudes or inappropriate approaches may impede the effectiveness of instructional support.
5. Students should document every step of problem-solving processes on paper for reference during examinations and when requesting assistance. Failure to show work limits the utility of such documentation during examinations and impedes the instructor's ability to provide practical assistance. When students request help,

the instructor will require a review of completed work to identify procedural errors and provide appropriate corrections to achieve accurate solutions.

6. Students should maintain consistent course attendance (online), actively participate, complete all homework assignments, and dedicate twice as many hours to independent study as are allocated to class time each week. Sustained effort correlates directly with desired academic outcomes.

"Education is the most powerful weapon which you can use to change the world." - Nelson Mandela

Fall 2026 Schedule for Online Class

Date/ Session	Chapter	Activities/ Assignments	Competencies Covered
Week 1	Intro	Introduction Read Blackboard General Info PreReq Ch Test- Report	
Week 2	Ch 1: 1.1-1.4	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Solve equations, including literal equations, linear equations, quadratic equations by factoring and the quadratic formula, higher-order polynomial equations, equations involving rational expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions. *Solve inequalities of the following types: linear (in one and two variables), polynomial, rational, and absolute value. *Solve systems of inequalities by graphing. *Apply equations from #1 in this core outcome to real-world situations, such as depreciation, growth *and decay, and max/min problems. *Examine and analyze data, make predictions/ interpretations, and do basic modeling.
Week 3	Ch 1: 1.5-1.8	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Same As Above*
Week 4	Ch 2: 2.1-2.4	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Use function notation, including finding arithmetic combinations and compositions of functions. *Recognize and distinguish between functions and relations (equations). *Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational,

			exponential, and logarithmic) or relations (circle) given in description. *Determine the domain and range of relations and functions. *Write the equation that describes a function (for types given above) or the circle given in the description. *Use graphs of functions for analysis. *Find the inverse of a function.
Week 5	Ch 2: 2.5-2.7	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Same as Above*
Week 6		Test 1	Chapters 1-2
Week 7	Ch 3: 3.1 - 3.2	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description. Write the equation that describes a function (for types given above) or the circle given in the description. *Use graphs of functions for analysis.
Week 8	Ch 3: 3.3 - 3.4	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Same as Above*
Week 9	Ch 4	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description. Write the equation that describes a function (for types given above) or the circle given in the description. *Use graphs of functions for analysis.
Week 10		Test 2	Chapters 3- 4
Week 11	Ch 5: 5.1-5.3	Watch Videos/ Notes (optional) Chapter Reading	*Solve equations, including literal equations, linear equations, quadratic equations by factoring and the quadratic formula, higher-order polynomial equations, equations involving rational

		Online Assignment Extension Assignment	expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions. *Use function notation, including finding arithmetic combinations and compositions of functions. *Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description. Write the equation that describes a function (for types given above) or the circle given in the description. *Use graphs of functions for analysis. *Apply equations in this core outcome to real-world situations, such as depreciation, growth, and decay, and max/min problems. *Examine and analyze data, make predictions/interpretations, and do basic modeling
Week 12	Ch 5: 5.4-5.5	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Same As Above*
Week 13	Ch 6/7	Watch Videos/ Notes (optional) Chapter Reading Online Assignment Extension Assignment	*Solve systems of equations by various methods, including matrices.
Week 14		Test 3 Extra Credit due	Chapters 5-7
Week of Thanks			No Classes
Week 16		Final Exam	Chapters 1-7

RIGHT TO MODIFY THE SYLLABUS

The instructor reserves the right to modify the syllabus during the semester. Students will be given advanced notice if a change occurs.

