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
Total Hours: 45

CLASS INFORMATION

Section Number: MA 111
Term: Fall Year: 2025 Start Date: 8/18/2025 End Date: 12/12/2025
Delivery Mode: Online

INSTRUCTOR

Amber Meis
Email: ameis@fhtechnc.edu

Office Phone: 7856236153
Office Location: Classroom A Office
Office Hours:
Virtual Office Hour- R-5:30- 6:30 P.M.; In person- M, W- 7:30 - 8:00, 10:55-11:45 A.M.; T- 7:30- 8:00,11:55- 12:30 P.M.; R- 7:30-8:00, 10:55-11:30; F- 7:30-8:30, 10:25-11:30 A.M. 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@fhtechnc.edu. I do get back to students within 48 business hours.

TEXTBOOKS

College Algebra, 11 ed. Larson, Ron, ISBN: 9780357454091
Cengage Unlimited ISBN: 9780357700037 (4 months) or ISBN: 9780357700044 (12 months)

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

3 Unit Exams

1 Cumulative Final

Category	Percentage

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 set 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 pertaining to 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 be in violation of 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 on the basis of 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@fhtechnc.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; 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, power point 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 post 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 on the basis of 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 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:

- Attendance in class is very important. Please log in and complete your assignment every week- preferably multiple times a week for maximum learning potential. Completion of homework is how you will pass this

course. If you fail to log in for the entire week, you will have used one of your two available absences for the course. Upon the second week of not logging in, it will be recommended that you be administratively withdrawn from the course due to inactivity.

Assignment Policy:

- You are permitted and encouraged to use a calculator for this class. It should be a scientific calculator.
- For assignments, you will have 1 main task to complete. You will be given a computer-based or online assignment every week to complete (generally, each chapter will span over 2 weeks, so you will be completing 1/2 of your assignment per week). I have included my videos that teach a basic review of the lesson, as well as the guided notes for those videos, for your assistance in learning the material.
- **Late assignments are generally NOT accepted** after the due date. If something comes up and you feel that it may warrant me giving you extra time, please ask. I may say yes, especially if it is BEFORE the weekend that the assignment is due. Do not wait until the weekend to start the assignment and then say that you were not able to get online that weekend. Plus, it is always better to have the assignment due ahead of time in order to ask questions about problems you may be struggling with. You will possibly see the same problems on your exams, so knowing how to complete the problems CORRECTLY would be the purpose of the homework. Also, I am a lot easier to get a hold of and answer your questions during the week than on the weekends.
- Due dates will be as follows: All online assignments are due on Sundays, at 11:59 P.M., unless otherwise noted.
- You will have 5 opportunities to get the right answer (on the online problems). This will help you to get a full understanding of the material and concept. If you miss the problem 3 times, please reach out to me and ask what you are doing wrong. In doing that, please send me a picture of your work so I can tell you where you are going wrong and start the problem for you correctly by sending you a picture of my work on the problem. There is also a place on your problems that says “ask the teacher,” and if you use that, at least describe the process you have gone through to get the right answers, so I can assist you in where you went wrong. If you use this feature, please email me that you did, as it does not always tell me, and I would like to get your question answered promptly. If you would rather send me a picture of your work, put that you have sent that in your “ask the teacher” request, and send me the picture of the work to my email address, ameis@fhtechnc.edu. Just in case, I do always get back to students within 48 business hours (weekends may take a little longer), so if you do not get a message within 48 hours from me, I did not get your message, and you need to email me back. Blackboard is also a good place to send instant messages to each other if you want to use that. (I suggest clicking the box above the message area so that the message also goes to email; otherwise, I may not be in Blackboard to see it.) I will use that platform a lot.
- To turn in assignments-please follow these directions. The assignments will come to me directly as long as you submit each question. It will no longer be available after the due date and time, so make sure that you have the assignment completed by then. I highly recommend you take a screenshot of your total at the top of the page so that if something happens and it does not transfer correctly, you have the ability to show me what you made. For instance, if the internet goes down when you are doing your assignment, you will not know it. You will continue with the assignment, and then the grade will not be transferred to me, and you will show a zero as the grade. This is why I highly suggest taking that screenshot. Please make sure that the assignment title is in the screenshot with the grade so I can give you credit for the right assignment.

Videos:

For my face-to-face classes, I use what is known as a “flipped classroom” approach to teaching. This means that I video the basics of the lesson and send it to my students. I have those videos for you to access so they can help you as well. I have also left the notes for you to download and take notes on the video. These videos are not required or for your

entertainment value and are only to be used to provide information to you about the concepts of the chapter. Feel free to use them for extra assistance.

AI Policy:

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

- Brainstorming
- Fine-tuning your research question
- Drafting and outlining

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

- Impersonating you in classroom contexts, such as using the tools to compose discussion/ reply board posts and/ or answering questions.
- Completing group or individual work assignments
- Writing a draft of a writing assignment.

Your use of AI tools must be properly documented and cited in order to stay in compliance with the policies on academic honesty. You should always look up and research any information that an AI tool gives to make sure that the information is accurate. This includes times when you use it to fine-tune your writing and make it better. I will run your assignments through AI checkers, and if it shows that you have used an AI tool, you will not be given credit for it.

If you are suspected of academic dishonesty, you will not be given credit for your assignment and will be given a written warning concerning the suspicions of you using someone else's ideas/ answers as your own. If this happens a second time, you will receive a zero for the course and could be recommended to be expelled from the college, as the academic honesty policy states. If you choose to work together, I am okay with that, but working together does not mean that you take each other's papers and copy the answers. Working together would be two (or more) people sitting together and doing their work while discussing how to get the right answers and agreeing on those problems, while learning from each other. All students would be actively engaged in doing the problems together to "work together" properly.

Proctor:

This semester, we will be trying something new for testing. You will either have to find a proctor to take the exam with, or I am learning about something called Respondus monitoring through WebAssign. At last check, this Respondus monitoring would cost each student $10 per semester and would "watch" you test in this class. It will video any issues that may occur, such as you looking away from the screen, using your phone, or if you are not the person in the ID who is testing. Then I will be alerted that there were issues in your testing, and I will be able to view the video as well. If things were done that are not allowed during testing, you will be alerted that you did not follow testing procedures and protocols, and a discussion will be had as to why and what you were doing on the exam while not following protocols. If you choose to find a proctor, you will be asked to find a person who meets the criteria for an acceptable proctor and get that information to me. This person can be a teacher from another school or college, someone who is an instructor in another class for you, or another suitable person who is listed on the information for selecting an exam proctor page that is located in your Blackboard shell. If you chose to go the proctor route, please do not wait to get this accomplished. Your first exam will sneak up on you faster than you think, and this is an assignment that has points given to those who have it done by the due date.

On your exams, you will be able to use all of your materials. The only thing that you are not permitted to use will be your phone or another individual. This is why notes and writing out your problems, along with the way you solve them, is very important in this class. You will be able to use those on your exams.

Office Hours:

I will hold office hours for the class on Thursday from 5:30 to 6:30 P.M. This is a time when you can talk with me on Microsoft Teams, get questions answered, and/ or get help from me. You will also find my office hours at the top of the syllabus, but if you want to come see me, please email me to be sure I will be around, as I have many roles and they

sometimes take me off the main campus to service students. I am also available to tutor you, answer questions, go over material, or do anything else that you need by emailing me and asking. I do make myself as available as possible for my students and wish for you to succeed, so I encourage you to reach out and ask for assistance if it is needed. If you do not do this and you need help, I will not know that you need help. DISCLAIMER: Because this is an online class, it is mainly a self-study type of class. You will be responsible for most of the learning on your own. Being able to do this makes you a good student and will help you become a lifelong learner. It is NOT a bad thing that you go and learn on your own. I hope that you are aware of that going into this. I will not be available to do every type of problem that you may have on your assignment. That is not something that happens in an online class, but I can assist you with various problems or issues that you are having. One place that I have found is especially helpful for learning your college algebra material is the book website at larsonprecalculus.com. You can select the book we are using and then go into the chapter and select problems or concepts to watch a teaching video on the concept, and an instructor completing problems on that concept. It is also a good idea to use the tutorial on how to use WebAssign if you have never used it in the past. Ask if you need assistance, please.

There are other places, besides your book videos, that I recommend that you look at if you have issues and need help (in the event that you have tried contacting me but I have not gotten back to you). One is Khan Academy. This guy is great and has many videos that are uploaded to help math students out. There are also apps out there that will show you step-by-step how to complete problems. I only suggest you use these in order to find out how to do the problems so that you are able to complete them correctly on the exam. **You will NOT be able to use an app on the exam, so do not become reliant on one for your assignments**.

Another resource is our Brainfuse Tutoring, which will be accessible in your general area (at the bottom above the first dates) for your Blackboard. This is a 24-hour-a-day/7-day-a-week online tutoring service that Fort Hays Tech | North Central uses. Your scientific calculator may be able to help you as well. With these, you can use the formulas and put the numbers in where appropriate, and then have the answer. If you figure this out, it is a life and time saver. You can look up instructions on this by using YouTube and putting in your calculator's name and then searching for what you are looking to learn how to do. There should be videos there to instruct you on how to do these types of problems.

Class Importance:

1. Use an appropriate calculator when possible.
2. If you have any questions, ask!
3. It is okay to make mistakes in class! I will, you will, and the other classmates will too. Mistakes are a way to learn. Please welcome them and learn from them.
4. Know that I am here to help you. I want you to be successful. I spend a lot of my free time helping students individually and would not hesitate to help you. I can at least point you in the right direction if you have questions. I will work with you if you work with me, but I cannot be the only one who wants you to succeed, and I cannot help you if you do not ask.
5. It would be helpful if you show every step of your problems on paper so you have them on your test or when you need assistance. If you do not show your work on the problems on the paper, it does not help you much on the test. It is also difficult to help you with questions if you do not show your work. If you need assistance, I am going to ask you to show me what work you have completed before trying to help you (so I know what you are doing wrong) to get the correct answer.
6. Show up to the class platform, participate, do your homework, and study twice as many hours out of class as you attend class per week. If you put in the effort, you will get the result you want.

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

Schedule for S2 Class

Date/ Session	Chapter	Activities/ Assignments	Competencies Covered
Week 1 8/18 - 8/24	Intro	Introduction Read Blackboard General Info Test- PreReq Ch Test- Report	
Week 2 8/25 - 8/31	Ch 1: 1.1-1.4	Watch Videos/ Notes (optional) Chapter Reading Online 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 9/1 - 9/7	Ch 1: 1.5-1.8	Watch Videos/ Notes (optional) Chapter Reading Online Assignment	*Same As Above*
Week 4 9/8 – 9/14	Ch 2: 2.1-2.4	Watch Videos/ Notes (optional) Chapter Reading Online 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 9/15 – 9/21	Ch 2: 2.5-2.7	Watch Videos/ Notes (optional) Chapter Reading Online Assignment	*Same As Above*
Week 6 9/22 – 9/28	Test 1	**Test 1 (Ch 1-2)**	
Week 7 9/29 – 10/5	Ch 3: 3.1-3.2	Watch Videos/ Notes (optional) Chapter Reading Online 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 10/6 – 10/12	Ch 3: 3.3-3.4	Watch Videos/ Notes (optional) Chapter Reading Online Assignment	*Same As Above*
Week 9 10/13 –10/19	Ch 4	Watch Videos/ Notes (optional) Chapter Reading Online 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 10/20 –10/26	Test 2	**Test 2 (Ch 3-4)**	
Week 11 10/27 – 11/2	Ch 5: 5.1-5.3	Watch Videos/ Notes (optional) Chapter Reading Online 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. *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 11/3 – 11/9	Ch 5: 5.4-5.5	Watch Videos/ Notes (optional) Chapter Reading Online Assignment	*Same As Above*
Week 13 11/10–11/16	Ch 6/7	Watch Videos/ Notes (optional) Chapter Reading Online Assignment	*Solve systems of equations by various methods, including matrices.
Week 14 11/17–11/23	Test 3	**Test 3 (Ch 5-7)** Extra Credit due	
Week 15 11/24–11/30		Thanksgiving!	
Week 16 12/1 - 12/7	Final	**Final Exam (Ch 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.