MA-111 College Algebra

Amber Meis

NORTH CENTRAL KANSAS TECHNICAL COLLEGE

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

Pre/Corequisites:

- Prerequisite: Grade of C or better in MA-110 Intermediate Algebra or appropriate placement scores.

CLASS INFORMATION

Section Number: MA111

Term: Summer Year: 2021   Start Date: 6/7/2021   End Date: 7/30/2021

Meeting Location: online

INSTRUCTOR

Amber Meis

Email: ameis@ncktc.edu

Office Phone: 7856236153

Office Location: Classroom A Office

Office Hours: by appointment only

Email is the best way to communicate with me and get in contact with me for the fastest response.

TEXTBOOKS

College Algebra by Larson 10th ed. Hybrid (with WebAssign) ISBN: 978-1-337-28229-1

SUPPLIES

- Access to Enhanced Webassign (Can be acquired free through purchase of textbook or from textbook company with additional fee)
- Graphing Calculator
- Paper and writing utensil.

COURSE COMPETENCIES

1. Use functional notation.

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 a 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 listed in the third bullet above, i.e., literal equations, quadratic equations by factoring and the quadratic formula, 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 the first bullet in this core outcome 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

NCK Tech Grading Scale
A   100% -90%
B   89% - 80%
C   79% - 70%
D   69% - 60%
F   59% and below
Points will be awarded on a total point basis.

3 unit exams possible (100 points each possible) (each 8.5% of your grade)
Final exam (200 points possible) (23.5% of your grade)
Chapter assignments worth 50-70 points each (51% of your grade)

Extra Credit will be offered at the end of the semester (this should not be used as a reason to not do the chapter assignments or tests though).

NCK TECH COVID 19 MASK REQUIREMENT

All students in a classroom or lab setting will be required to wear a cloth face mask or disposable face mask. Students with a recognized disability who have an accommodation that prevents the wearing of a mask – please contact Jayme Owen at jowen@ncktc.edu or 785-738-9037 for student accommodations. If a student does not have a mask, one will be provided, and it must be in place at all times in the classroom or lab setting.

Disclaimer: NCK Tech, by requiring, and if needed, providing a mask, is not liable for any student who may contract the virus. The mask is simply an assist and not a guarantee. Students hereby release the College from any and all liability created by these guidelines, including providing a mask.

NCK TECH COVID 19 STATEMENT

NCK Tech values the health and well-being of all who are involved in higher education. In its classes, NCK Tech follows Center for Disease Control and Prevention (CDC), American College Health Association (ACHA), and Kansas Department of Health and Environment (KDHE) recommendations for protecting students and faculty members during the Coronavirus 2019 (COVID-19) pandemic. These recommendations to lower risk include limiting the number and length of interactions with others by scheduling hybrid, virtual, or restricted sizes of classes, activities, or events, with individuals spaced 6 feet apart and not sharing objects.

Changes and limitations specific to different class types, for example, lecture, lab, and hybrid classes, will be provided in class. In all class types and educational settings, NCK Tech faculty, staff, and students are required to wear approved face masks until further notice.

NCK Tech endorses:

- staying home or self-isolating when appropriate in respect to NCK Tech student, faculty, and staff self-screening questionnaires and KSDE quarantine recommendations

- frequent, thorough handwashing and covering of all coughs and sneezes

- using of masks based on NCK Tech mask requirements

- individual conduct consistent with these considerations

NCK Tech students with questions should contact Jayme Owen, Dean of Student Success for more information.

NCK TECH MISSION STATEMENT

North Central Kansas Technical College delivers applied, innovative and personalized education to empower learners, enrich lives, develop skilled professionals and strengthen economic systems.

Vision Statement

North Central Kansas Technical College 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

NCK TECH NON-DISCRIMINATION POLICY

NCK Tech is committed to nondiscrimination on the basis of race, color, gender, ethnic or national origin, sex, sexual orientation, gender identity, marital status, religion, age, ancestry, disability, military status, or veteran status in admission or access to, or treatment or employment in, its programs and activities. Further, it is the policy of the college to prohibit harassment (including sexual harassment and sexual violence) of students and employees. Any person having inquiries concerning the college's compliance with the regulations implementing Title VI, Title VII, Title IX, Section 504, and the Americans with Disabilities Act Amendments Act is directed to the VP of Student and Instructional Services (Section 504/ADA Compliance Officer and Title VI, Title VII, & Title IX Compliance Officer) at (785)738-9055, cisbell@ncktc.edu, or PO Box 507, 3033 US Hwy 24, Beloit, KS 67420.

NCK TECH 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.

NCK TECH WEAPONS POLICY

Individuals who choose to carry concealed handguns **are solely responsible to do so in a safe and secure manner in strict conformity with state and federal laws and NCK Tech weapons policy.** Individuals must be 21 years of age to carry concealed handguns.

Safety measures outlined in the NCK Tech weapons policy specify that a concealed handgun:

• Must be under the constant control of the carrier.

• Must be out of view, concealed either on the body of the carrier, or backpack, purse, or bag that remains under the carrier's custody and control and within immediate reach of the individual.

• Must be in a holster that covers the trigger area and secures any external hammer in an un-cocked position

• Must have the safety on, and have no round in the chamber.

Lockers, toolboxes, and/or tool bags are not approved storage devices in accordance with NCK Tech Policy.

OVERVIEW FOR STUDENTS WITH DISABILITIES

NCK Tech 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.

NCK Tech 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 NCK Technical College, 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. NCK Tech 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 NCK Tech 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 NCK Tech 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 NCK Tech'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.

SCHOLASTIC DISHONESTY

Membership in the NCK Tech 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 o the violation and related considerations.

Examples of scholastic 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.

- 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 College

2. dismissal from the College

NETIQUETTE

ach member of our cyber community should expect courtesy and respect from all other members. Because it's a new and different kind of class for some of us, we may not realize it when we are rude or inconsiderate on line. There are some dos and don'ts of courteous behavior on line, called "netiquette."

Please visit the Albion Netiquette Web Site at http://www.albion.com/netiquette/corerules.html. Read details about "The Core Rules of Netiquette:"

1 Remember the human.
2 Adhere to the same standards of behavior online that you follow in real life.
3 Know where you are in cyberspace. (Adjust your behavior to fit the site or "lurk before you leap.")
4 Respect other people's time and bandwidth.
5 Make yourself look good online.
6 Share expert knowledge.
7 Help keep flame wars under control.
8 Respect other people's privacy.
9 Don't abuse your power.
10 Be forgiving of other people's mistakes.

The "Core Rules of Netiquette" quoted from NETIQUETTE by Virgina Shea as presented at http://www.albion.com/netiquette/corerules.html. Test your netiquette knowledge by completing the ten-question netiquiz. http://www.albion.com/netiquette/netiquiz.html

ONLINE - COMMUNICATION

In a cyber community, you present yourself and learn about others through written words. You don't need to be a prize-winning author or poet to successfully communicate in an online community, however you do want to present yourself in a positive light and to communicate your thoughts and ideas effectively.

The following guidelines will help you ensure that you are properly understood, get your points across effectively, avoid getting anybody annoyed, and avoid looking like a "beginner" on the net.

1. Format your posting so that it is easy to read. Use short paragraphs separated by blank lines. Don't write everything in uppercase (capital) letters. It is more difficult to read and, even worse, in an online environment it means you are SHOUTING.

2. Be brief. Plan your messages ahead so that you don't ramble.

3. Be clear. Don't use abbreviations or acronyms that others may not understand. Read your messages over before sending them.

4. Check your spelling. People will not take you seriously, no matter how brilliant your ideas, if your writing is full of misspellings. Use your computer's Spell Check features; then read over what you have written to catch errors that Spell Check misses.

5. When you are interacting with others online, remember that things may "sound" harsh or less friendly when the reader cannot see your smile or the twinkle in your eye. Read your messages over to be sure they are diplomatic and polite.

ONLINE - CORE ABILITIES

Although the primary setting for learning in this course is online, you are a member of a learning community just as you would be in a classroom course. As members of an online learning community, we share responsibility for creating and maintaining an environment that communicates mutual respect, supports learning for all members, and provides opportunities for all members of the community to learn from one another. Throughout this learning experience we will strive to build the following online learning core abilities:

Learn effectively

You will know you are practicing effective online learning habits:

o you actively engage in the online learning community

o you use the syllabus, learning plans, performance assessment tasks, and learning materials to guide learning

o you use online learning tools such as Profiles, Orientation, Learning Plans, Discussion, Chat, In/Out Box, WorkSpace, GradeBook, Help Desk

o you take responsibility for self as a learner

o you use resources that are provided and find additional resources to meet learning needs

o you produce evidence of learning that meets the performance expectations

Work cooperatively

You will know you are effectively contributing to the online learning community when:

o you complete assigned tasks for team/group work

o you use collaborative strategies to complete tasks

o you exchange information, ideas, and opinions in group and/or class discussions

o you actively provide feedback through Peer Review process

Act responsibly

You will know you are taking responsibility for your online learning when:

o you complete assigned tasks according to prescribed deadlines

o you complete assigned tasks according to prescribed criteria

o you are an active participant in your cyber community

o you observe the rules of netiquette

Think critically and creatively

You will know you are thinking critically and creatively when:

o you respect other points of view

o you apply the principles and strategies of purposeful, organized thinking to problem solving and decision making

o you distinguish between fact and opinion

o your contributions to online discussions show original thought

o you synthesize information from a variety of sources

ONLINE - CREATING A LEARNING ENVIRONMENT AT HOME

What makes a particular setting or space a good place to learn? Think about classrooms or training rooms that have worked well for you. Chances are they provided good lighting, comfortable seating, ample workspace, good ventilation and a comfortable temperature, minimal distractions, and content-related visual or audio cues.

When you attend class in a classroom, the school and your instructor create a good learning environment. When attend class online, you need to create a good learning environment for yourself-most likely in your home. Don't underestimate the importance of your study surroundings. The time you spend creating surroundings that support learning will be well invested.

Here are some tips to help you get started:

- Select a space in which you can set up your computer (with access to your internet connection) and your tools for learning (books, papers, pencils and pens, calendar) and (if possible) leave them undisturbed between sessions.

- Keep the area well ventilated and at a temperature that works for you-cool enough so that you don't feel sleepy, but warm enough so that you are comfortable.

- Provide yourself with a comfortable desk or work chair (preferably adjustable; not an easy chair) and ample work surface (table space) at a comfortable height.

- Ensure that you have good lighting that does not cause a glare on your computer screen, but still allows you to read comfortably.

- Keep your study space as free from distractions as possible (television, distracting music, conversations, ringing phones).

- Add props to make your learning space more interesting and to help you focus on the subject matter. You might use posters, pictures, mind maps, geographic maps, drawings, charts, etc. that are related to the subject matter you are studying.

- Play music that enhances learning. Research shows that classical music written by classical composers such as Bach, Brahms, Handel, Mozart, Vivaldi, Mendelssohn, Haydn, Tschaikovsky, and Corelli, can enhance the ability of many students to concentrate and think. You can purchase classical music CDs or tapes very reasonably at any music store, many book story chains, and online.

- Have fresh drinking water and nutritious snacks nearby.

ONLINE - EMAIL GUIDELINES

Assume that mail on the Internet is not secure. Never put in a mail message anything you would not put on a postcard.

Respect the copyright on material that you reproduce. Almost every country has copyright laws.

If you are forwarding or re-posting a message you've received, do not change the wording. If the message was a personal message to you and you are re-posting to a group, you should ask permission first. You may shorten the message and quote only relevant parts, but be sure you give proper attribution.

A good rule of thumb: Be conservative in what you send and liberal in what you receive. You should not send heated messages (we call these "flames") even if you are provoked. On the other hand, you shouldn't be surprised if you get flamed and it's prudent not to respond to flames.

In general, it's a good idea to at least check all your mail subjects before responding to a message. Sometimes a person who asks you for help (or clarification) will send another message which effectively says "Never Mind". Also make sure that any message you respond to was directed to you. You might be cc:ed rather than the primary recipient.

Make things easy for the recipient. Many mailers strip header information that includes your return address. In order to ensure that people know who you are, be sure to include a line or two at the end of your message with contact information. You can create this file ahead of time and add it to the end of your messages. (Some mailers do this automatically.) In Internet parlance, this is known as a ".sig" or "signature" file. Your .sig file takes the place of your business card. (And you can have more than one to apply in different circumstances.)

Watch cc's when replying. Don't continue to include people if the messages have become a 2-way conversation.

In general, most people who use the Internet don't have time to answer general questions about the Internet and its workings. Don't send unsolicited mail asking for information to people whose names you might have seen on mailing lists.

Be especially careful with sarcasm.

Use mixed case. UPPER CASE LOOKS AS IF YOU'RE SHOUTING.

Use smileys to indicate tone of voice, but use them sparingly. :-) is an example of a smiley (Look sideways). Don't assume that the inclusion of a smiley will make the recipient happy with what you say or wipe out an otherwise insulting comment.

Wait overnight to send emotional responses to messages.

Be brief without being overly terse. When replying to a message, include enough original material to be understood but no more. It is extremely bad form to simply reply to a message by including the entire previous message: edit out all the irrelevant material.

Mail should have a subject heading which reflects the content of the message.

If you include a signature keep it short. Rule of thumb is no longer than 4 lines. Remember that many people pay for connectivity by the minute, and the longer your message is, the more they pay.

If you think the importance of a message justifies it, immediately reply briefly to an e-mail message to let the sender know you got it, even if you will send a longer reply later.

Be careful with slang or local acronyms. .

This information was abstracted from Netiquette Guidelines offered for unlimited distribution on the Delaware Technical Community College website <http://www.dtcc.edu/cs/rfc1855.html>.

ONLINE - INSTRUCTOR ROLE AND RESPONSIBILITIES

As your instructor, I am responsible for providing an environment in which an opportunity for learning exists. I will work with you and assist you in your quest for understanding. I cannot make you learn anything. As a resource person and facilitator, I will organize the course, schedule learning activities, and evaluate the short-run "products" of your learning process. Recognizing that even asynchronous online communication is time sensitive, I will monitor threaded discussions and respond to queries within 48 hours of the time they were posted. Since the Writing and Thinking Skills and Individual Reflections are significant pieces of writing, it may take a little longer to assess them. I will be giving your work, as well as that of your fellow learners, careful consideration.

ONLINE - LEARNER ROLE AND RESPONSIBILITIES

You are an adult learner and as such you are responsible for your own learning. No one else can be a "stand in" for you in the learning process. You will be held accountable for all assigned activities. You matter and what you do does make a difference. You will have an opportunity to share your unique ideas and experiences with your student peers and instructor. The form and content of your participation will determine the level of achievement, satisfaction, and enjoyment that you experience. Because others are depending on you to keep the course moving, you have an obligation to meet deadlines for completing assignments and postings.

GUIDELINES FOR SUCCESS

Attendance Policy:

- Attendance in class if very important. I expect you to sign in and complete your assignment every week. The first week that you do not complete any assignment, you will be warned that you have one absence. The second week, you will have chosen to fail this class for attendance. This class has only one required component to it. That component is that you are required to complete an assignment online through the book called WebAssign. If that is not completed during your week, you will receive an absence, and I will email or message you regarding your attendance. If you fail to complete an assignment twice, then you are choosing to fail this course.

Assignment Policy:

- You are permitted and encouraged to use a calculator for this class. It should be a calculator that gives you the ability to raise a number to a large exponent.
- **No late assignments are accepted** after the due date.
- Due dates will be as follows: Webassign will be due on Sunday evening at 11:59 p.m. (unless otherwise stated). I will have a section for extra paper problems where you can attempt to complete some additional real-world problems and gain assistance if needed. There will also be a video of me teaching the basic concepts of the chapter that you can download notes for and watch that will assist you greatly in learning the material. Again, **NO LATE ASSIGNMENTS ARE ACCEPTED**. Normally I do not find that there is any reason for an extension on WebAssign either but if you feel you have a good reason (i.e., you have had the flu for the week and have a doctor note), please ask. If I say no, you are not out anything.
- About the paper problems- these are meant to be more difficult than the WebAssign. These problems are used to help you think deeply about the subject and the problems and incorporate the learning that you have had that week. These problems come directly out of the book and can be used for a greater understanding of the subject. Also, if you are needing a little extra help, I will be available to give that to you by emailing me and asking me for help with what concepts you are not understanding.

Videos:

For my face-to-face classes, I use what is known as a "flipped classroom" approach to teaching. This requires me to video the basics of the lesson and send it to the 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 for your entertainment value and are only to be used for the purpose of providing information to you about the concepts of the chapter. One thing that students always used to say to me was, "Amber, when I come to class, you make things seem so easy. When I get home, I do not remember how you did the problems, so I could not complete my homework." Watching the video and taking notes at home and then attempting your assignment will hopefully help with that. Another good reason I video the lesson, some of you may only need to hear it one time, and you will get the process down. There are some of you, though, that will require more exposures to the content than that and this provides you the opportunity to rewatch the videos at your convenience.

Class Importance:

1. Use calculator if possible
2. If you have any questions, please ask. Do not think that you are the only one with the question because chances are you are not! It is always okay to make mistakes in class! I will, you will, the other classmates will too. Please welcome this. Learn from them.
3. 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 either. 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 that wants you to succeed.
4. It would be helpful if you show every step of your problems on paper so then you are able to use them on your test or when you need assistance. If you do not show your work on the problems on the paper that will not help you much on the test. I also will have difficulty helping you with questions if you do not show your work so that would be your first task to complete.
5. Show up to class, participate, do your homework, and study twice as many hours out of class as you attend class per week.

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

NCKTC KANSAS CORE OUTCOME STATEMENT

The learning outcomes detailed in this syllabus meet, or exceed, the learning outcomes specified by the Kansas Core Outcomes Project for this course, as sanctioned by the Kansas Board of Regents.

NCKTC INCLEMENT WEATHER POLICY

School dismissals and cancelations will be announced using the NCKTC RAVE Alert system. Local media will also be notified.

SCHEDULE

Date/Session	Activities	Competencies	Chapters
June 7- 13	Prerequisite Chapter test 1 Page Paper Over finding on		Prerequisite Chapter

Date/Session	Activities	Competencies	Chapters
	test		
June 14- 20	Watching Video Video Notes Reading Text WebAssign Lesson Extension Problems	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. 9. Solve equations listed in the third bullet above, i.e., literal equations, quadratic equations by factoring and the quadratic formula, 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. 12. Apply equations from the first bullet in this core outcome 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.	Chapter 1

Date/Session	Activities	Competencies	Chapters
June 21- 27	Watching Video Video Notes Reading Text WebAssign Lesson Extension Problems	1. Use functional notation. 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 a 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. 12. Apply equations from the first bullet in this core outcome 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.	Chapter 2
July 5- 11	Watching Video	3. Use concepts of symmetry,	Chapter 4

Date/Session	Activities	Competencies	Chapters
	Video Notes Reading Text WebAssign Lesson Extension Problems	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. 10. Solve inequalities of the following types: linear (in one and two variables), polynomial, rational, absolute value.	
July 19- 25	Watching Video Video Notes Reading Text WebAssign Lesson Extension Problems	7. Find arithmetic combinations and composites of functions. 9. Solve equations listed in the third bullet above, i.e., literal equations, quadratic equations by factoring and the quadratic formula, 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. 14. Solve systems of equations by various methods, including matrices.	Chapter 6/7

Date/Session	Activities	Competencies	Chapters
July 26-30	Test 3 (Chapters 5-7) Final Exam		
July 12- 18	Test 2 (Chapters 3 & 4) Watching Video Video Notes Reading Text WebAssign Lesson Extension Problems	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. 9. Solve equations listed in the third bullet above, i.e., literal equations, quadratic equations by factoring and the quadratic formula, equations involving rational expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions. 12. Apply equations from the first bullet in this core outcome 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.	Chapter 5
June 28- July 4	Test 1 (Chapters 1& 2) Watching Video	1. Use functional notation. 2. Recognize and distinguish between functions and	Chapter 3

Date/Session	Activities	Competencies	Chapters
	Video Notes Reading Text WebAssign Lesson Extension Problem	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 a 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. 12. Apply equations from the first bullet in this core outcome 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.	