Hands-On Skills. High-Tech Careers.

MA-102 Essential Math

Sean Keady
NORTH CENTRAL KANSAS TECHNICAL COLLEGE

COURSE INFORMATION

Essential Math is a course starting with the basic numerical concepts and moving to more complex concepts involving critical thinking and problem solving. The course will not only deal with theory and principles, but will also concentrate on applications of using those concepts in solving problems dealing with Finance, Probability and Risk, Social Issues, and across other disciplines.

Credits: 3

Total Hours: 45
Pre/Corequisites:

• Prerequisite: Minimum Score on Compass, ACT, or ACCUPLACR Exam

CLASS INFORMATION

Section Number: FB1

Term: Spring Year: 2024 Start Date: 1/8/2024 End Date: 5/17/2024

Meeting Times: Asynchronous Meeting Location: Online Delivery Mode: Online

INSTRUCTOR

Sean Keady

Email: skeady@ncktc.edu

Office Phone: 785-738-9022 (Please email)

Mobile Phone: Please email

Office Location: Beloit Math Classroom General Education Building

Office Hours:

Check moodle page for office hour information

TEXTBOOKS

(Required) Cengage Unlimited (Preferred Option)--> includes e-book access

(Suggested) print book: Mathematical Excursions, Fourth Edition 4th Edition

ISBN-10

9781305965584

ISBN-13

If you want a print copy, used or new is fine.

SUPPLIES

- You can use 4 pages of printer paper (8.5 by 11 inches) for final exam notes.
- Calculator Choices
- Casio fx-300ESPLUS2 2nd Edition, Standard Scientific Calculator, Black (teaching videos feature this calculator, available cheaply on amazon)
- Casio fx-115ESPLUS2 2nd Edition, Advanced Scientific Calculator (very similar to the prior calculator)
- A Ti-36 or Ti-84 is another option(especially if you already have one), but the help videos do feature The Casio fx-300ESPLUS2 2nd Edition
- You can use the best physical calculators that you already have (if you have any) for assignments.

COURSE COMPETENCIES

- 1. Apply critical and logical thinking skills to various applications
- 2. Apply estimation and an understanding of numbers to various applications
- 3. Apply generalizations, principles, theories, or rules to the real world with respect to different disciplines
- 4. Use statistics for decision making
- 5. Demonstrate basic concepts of probability and risk
- 6. Apply mathematical tools to financial applications
- 7. Apply mathematics to the study of social issues

GRADING INFORMATION

NCK Tech's Grading Scale:

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

Grade Calculation & Parts

I recommend viewing the Cengage grade book just to see your progress on an individual assignment.

Your Moodle grade book has your most accurate grade calculation for the assignments that have been transferred over.

20% Participation Assignments(un-order list below)

- Introductions Discussion Board
- Misleading Graphs and Statistics Summary
- Fuzzy Sets
- Misleading Graphs #1
- Geometry IRL
- Algebra IRL
- Misleading Graphs #2
- Graph Theory Vocab/Descriptions
- Misleading Graphs #3
- Correlation Vs. Causation
- Final Week DISCUSSION BOARD whole forum

30% Homework

On Web assign, the home works are for chapters 1, 2, 6, 7, 9, 10, 4, 5, 8, 12, 13, 11, Payroll, then the Game of Life activity

30% Web assign Quizzes on Chapters: 1, 2, 6, 7, 9, 10, 4, 5, 8, 12, 13, then 11

20% Final Exam (Cumulative, Multiple choice in one part) on Web Assign

- Test Notes Requirements:
 - Maximum of both sides of 4 pages of notes on the final exam (8.5 by 11 inch sheets only).

Other policies

Late work is not accepted. Take all tests and things will often go better than you expect.

If you miss a test or are going to miss a test, email me asap. This is for emergencies only!

If you are traveling(for your NCK tech program classes or department), homework and quiz assignments are still due Wednesday at 11:59 PM and should be completed ahead of time.

Please check the Moodle for the last day a student can withdraw from class for spring of 2023. A grade of "W" will appear on the transcript if the student withdraws on or before that date; a grade of "F" will appear if you withdraw after that date. Email the registrar doffutt@ncktc.edu if interested in withdrawing..

Schedule

First Week

Due Date: Wed. Jan. 17th at 11:59 PM

This week's focus will be on getting everything set up for the course, while beginning the first few assignments. Here are the expectations of you during this first week:

- 1. Review the Moodle Orientation
- 2. Track your Progress with Moodle open to see what I'm talking about!
- 3. Check your System Requirements
- 4. Do a System/Browser Check
- 5. If you need to make any changes, utilize the Browser Settings
- 6. Watch & Read the Discussion Board Etiquette
- 7. After #6 is completed, Introduce yourself in the Introductions Discussion Board
- 8. Create a WebAssign Account you have to have access to this to be able to complete the course!
- 9. After #8, you can then link your Moodle account to your WebAssign account (for easy log-in!)
- 10. **Download WebAssign Lockdown Browser** through the URL provided! You have to have this to take quizzes (starting next week).
- 11. Complete the WebAssign Tutorial & Basic Math Review Assignments on WebAssign

Chapter 1: Problem Solving

Due Date: Jan. 24th 2023 at 11:59 PM

This week, you are expected to:

- Watch Chapter 1 Lecture Video & Take Notes
- Complete Chapter 1 Homework (WebAssign)
- Complete Chapter 1 Quiz (WebAssign)
 - *You will be unable to begin Chapter 1 Quiz until you complete Chapter 1 Homework to 70% mastery*
- Watch the Misleading Graphs & Statistics video, and write a short summary.

Chapter Objectives:

- Understand and use inductive reasoning.
- Understand and use deductive reasoning.
- Predict the next term in a sequence using difference tables.
- Solve problems using the organization of the four-step problem solving process.
- Apply estimation techniques to information given by graphs.

Chapter 2: Sets

Due Date: Wed. Jan 31st at 11:59 PM

This week, you are expected to:

Watch Chapter 2 Lecture Video & Take Notes

- Complete Chapter 2 Homework (WebAssign)
- Complete Chapter 2 Quiz (WebAssign)
 - *You will be unable to begin Chapter 2 Quiz until you complete Chapter 2 Homework to 70% mastery*
- Complete the "Fuzzy Sets" assignment.

Chapter Objectives:

- Use three methods to represent sets
- Define and recognize the empty set
- Use the symbols ∈ and ∉
- Apply set notation to sets of natural numbers
- Determine a set's cardinal number
- Recognize subsets and use the notation ⊆
- Understand the meaning of a universal set
- Understand the basic ideas of a Venn diagram
- Use Venn diagrams to visualize relationships between two sets
- Find the complement of a set
- Find the intersection of two sets
- Find the union of two sets
- Perform operations with sets
- Determine sets involving set operations from a Venn diagram
- Understand the meaning of and and or
- Use the formula for n(AUB)
- Use Venn diagrams with three sets
- Use Venn diagrams to visualize a survey's results
- Use survey results to complete Venn diagrams and answer questions about the survey

Chapter 6: Numeration Systems & Number Theory

Due Wed. Feb. 7th at 11:59 PM

This week, you are expected to:

- Watch Chapter 6 Lecture Video & Take Notes
- Complete Chapter 6 Homework (WebAssign)
- Complete Chapter 6 Quiz (WebAssign)
 - *You will be unable to begin Chapter 6 Quiz until you complete Chapter 6 Homework to 70% mastery*
- Complete Misleading Graphs Discussion Board

Chapter Objectives:

- Evaluate an exponential expression
- Write a Hindu-Arabic numeral in expanded form
- Express a number's expanded form as a Hindu-Arabic numeral
- Understand and use the Egyptian system

- Understand and use the Roman system
- Determine divisibility
- Distinguish between prime and composite numbers
- Write the prime factorization of a composite number

Chapter 7: Measurement & Geometry

Due Date: Wed. Feb. 14th at 11:59 PM

This week, you are expected to:

- Watch Chapter 7 Lecture Video & Take Notes
- Complete Chapter 7 Homework (WebAssign)
- Complete Chapter 7 Quiz (WebAssign)
 - *You will be unable to begin Chapter 7 Quiz until you complete Chapter 7 Homework to 70% mastery*
- Complete Geometry IRL Discussion Board

Chapter Objectives:

- Use dimensional analysis to change units of measurement
- Understand and use metric prefixes
- Convert units within the metric system
- Use dimensional analysis to change to and from the metric system
- Use square units to measure area
- Use dimensional analysis to change units for area
- Use cubic units to measure volume
- Use English and metric units to measure capacity
- Apply metric prefixes to units of weights
- Convert units of weight within the metric system
- Use relationships between volume and weight within the metric system
- Use dimensional analysis to change units of weight to and from the metric system
- Understand points, lines, and planes as the basis of geometry
- Solve problems involving angle measures
- Solve problems involving angles formed by parallel lines and transversals
- Solve problems involving angle relationships in triangles
- Solve problems involving similar triangles
- Solve problems using the Pythagorean Theorem
- Solve problems involving a polygon's perimeter
- Find the sum of the measures of a polygon's angles
- Use area formulas to compute the areas of plane regions and solve applied problems
- Use formulas for a circle's circumference and area
- Use volume formulas to compute the volumes of three-dimensional figures and solve applied problems
- Compute the surface area of a three-dimensional figure

Chapter 9: Applications of Equations

Due Date: Wednesday Feb. 21st at 11:59 PM

This week, you are expected to:

- Watch Chapter 9 Lecture Video & Take Notes
- Complete Chapter 9 Homework (WebAssign)
- Complete Chapter 9 Quiz (WebAssign)
 - *You will be unable to begin Chapter 9 Quiz until you complete Chapter 9 Homework to 70% mastery*
- Complete Algebra IRL Discussion Board

Chapter Objectives:

- Evaluate algebraic expressions
- Use mathematical models
- Understand the vocabulary of algebraic expressions
- Simplify algebraic expressions
- Solve linear equations
- Solve linear equations containing fractions
- Solve proportions
- Solve problems using proportions
- Use linear equations to solve problems
- Solve a formula for a variable
- Determine percent increase or decrease
- Investigate some of the ways percents can be abused

Chapter 10: Applications of Functions

Due Date: Wednesday, February 28th at 11:59 PM

This week, you are expected to:

- Watch Chapter 10 Lecture Video & Take Notes
- Complete Chapter 10 Homework (WebAssign)
- Complete Chapter 10 Quiz (WebAssign)
 - *You will be unable to begin Chapter 10 Quiz until you complete Chapter 10 Homework to 70% mastery*
- No Additional Discussion Board this week

Chapter Objectives:

- Plot points in the rectangular coordinate system
- Graph equations in the rectangular coordinate system
- Use function notation
- Graph functions
- Obtain information about a function from its graph
- Use intercepts to graph a linear equation
- Calculate slope
- Use the slope and y-intercept to graph a line
- Graph horizontal or vertical lines

- Interpret slope as rate of change
- Use slope and y-intercept to model data

Chapter 4: Apportionment and Voting

Due Date: Wednesday, March 6th at 11:59 PM

This week, you are expected to:

- Watch Chapter 4 Lecture Video & Take Notes
- Complete Chapter 4 Homework (WebAssign)
- Complete Chapter 4 Quiz (WebAssign)
 - *You will be unable to begin Chapter 4 Quiz until you complete Chapter 4 Homework to 70% mastery*
- Complete Misleading Graphs #2 Discussion Board

Chapter Objectives:

- Understand and use preference tables
- Use the plurality method to determine an election's winner
- Use the Borda count method to determine an election's winner
- Use the plurality-with-elimination method to determine an election's winner
- Use the pairwise comparison method to determine an election's winner
- Understand Arrow's Impossibility Theorem
- Find standard divisors and standard quotas
- Understand the apportionment problem
- Use Hamilton's method
- Use Jefferson's method

Chapter 5: The Mathematics of Graphs

Due Date: Wed., March 20nd at 11:59 PM

This week, you are expected to:

- Watch Chapter 5 Lecture Video & Take Notes
- Complete Chapter 5 Homework (WebAssign)
- Complete Chapter 5 Quiz (WebAssign)
 - *You will be unable to begin Chapter 5 Quiz until you complete Chapter 5 Homework to 70% mastery*
- Complete Graph Theory Vocab/Descriptions Assignment

Chapter Objectives:

- Understand relationships in a graph
- Model relationships using graphs
- Understand and use the vocabulary of graph theory
- Understand and use weighted graphs
- Use the Greedy Algorithm to solve traveling salesperson problems
- Use the Edge-Picking Algorithm to solve traveling salesperson problems

Chapter 8: Mathematical Systems

Due Date: Wed. March 29th at 11:59 PM

This week, you are expected to:

- Watch Chapter 8 Lecture Video & Take Notes
- Complete Chapter 8 Homework (WebAssign)
- Complete Chapter 8 Quiz (WebAssign)
 - *You will be unable to begin Chapter 8 Quiz until you complete Chapter 8 Homework to 70% mastery*
- No additional assignment this week

Chapter Objectives:

- Apply properties of real numbers to clock addition
- Understand modulo *n* and congruence statements
- Verify modulus in congruence statements
- Perform arithmetic operations with modulo *n*
- Verify ISBN and UPC Check Digits using given formulas
- Encode plaintext using cyclical alphabetic encryption
- Decode ciphertext using cyclical alphabetic decryption

Chapter 12: Combinatorics and Probability

Due Date Wed. April 3rd at 11:59 PM

This week, you are expected to:

- Watch Chapter 12 Lecture Video & Take Notes
- Complete Chapter 12 Homework (WebAssign)
- Complete Chapter 12 Quiz (WebAssign)
 - *You will be unable to begin Chapter 12 Quiz until you complete Chapter 12 Homework to 70% mastery*
- Complete Misleading Graphs Discussion Board #3

Chapter Objectives:

- Use the Fundamental Counting Principle to determine the number of possible outcomes in a given situation
- Compute theoretical probability
- Computer empirical probability
- Compute probabilities with permutations
- Compute probabilities with combinations
- Find the probability that an event will not occur
- Find the probability of one event or a second event occurring
- Understand and use odds
- Find the probability of one event and a second event occurring
- Compute expected value
- Use expected value to solve applied problems
- Use expected value to determine the average payoff or loss in a game of chance
- Identify deception in visual displays of data

Chapter 11: The Mathematics of Finance

Due Date: Wed April 10th at 11:59 PM

This week, you are expected to:

- Watch Chapter 11 Lecture Video & Take Notes
- Complete Chapter 11 Homework (WebAssign)
- Complete Chapter 11 Quiz (WebAssign)
 - *You will be unable to begin Chapter 11 Quiz until you complete Chapter 11 Homework to 70% mastery*
- No extra assignment this week know how to use your calculator!!

Chapter Objectives:

- Solve applied problems involving sales tax and discounts
- Determine gross income, adjustable gross income, and taxable income
- Calculate federal income tax
- Calculate FICA taxes
- Solve problems involving working students and taxes
- Calculate simple interest
- Use the future value formula
- Use compound interest formulas
- Calculate present value
- Compute the monthly payment and interest costs for a car loan
- Compute the monthly payment and interest costs for a mortgage
- Solve problems involving what you can afford to spend for a mortgage

Chapter 13: Statistics

Due Date: Wed. April 17th at 11:59 PM

This week, you are expected to:

- Watch Chapter 13 Lecture Video & Take Notes
- Complete Chapter 13 Homework (WebAssign)
- Complete Chapter 13 Quiz (WebAssign)
 - *You will be unable to begin Chapter 13 Quiz until you complete Chapter 13 Homework to 70% mastery*
- Complete Correlation vs Causation Discussion Board

Chapter Objectives:

- Determine the mean for a data set
- Determine the median for a data set
- Determine the mode for a data set
- Determine the midrange for a data set
- Determine the range for a data set
- Determine the standard deviation for a data set
- Understand percentiles and quartiles
- Make a scatter plot for a table of data items
- Interpret information given in a scatter plot

Extension Activities

Due Date: Wednesday, April 24th at 11:59 PM

This week, you are expected to:

- Payroll Assignment (WebAssign)
- Game of Life Activity (WebAssign)

Essential Math Final Review & Discussion Board

Due Date: Wed. May 1st at 11:59 PM

This week, you are expected to:

- Complete Final Review Assignment 1 on Web Assign
- Complete Final Review Assignment 2 on Web Assign
- Practice and Final Exam Notes Requirements: Maximum of both sides of 4 pages of notes on the final exam (8.5 by 11 inch sheets only).

^Make your own notes or use & print the posted .pdf on Moodle

• Complete the Final Discussion Board of the course

Actual Final Exam

Due Date: Thurs. May 2nd at 11:59 PM

Complete the Final Exam for Essential Math

ACADEMIC HONESTY

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 of 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 course, program, or College
- 2. Dismissal from the course, program, or College

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 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 18 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.

NCKTC INCLEMENT WEATHER POLICY

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

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.