

Course Syllabus



MAYSVILLE
COMMUNITY
& TECHNICAL COLLEGE

MAT-141-CZEC (3 Credit Hours) **Liberal Arts Mathematics** **83485** **2024 Fall (12 Weeks)**

Instructor: Christopher Sears

Contact Information:

You can reach your instructor through the course on your tablet. If you do not hear back from them within 48 business hours, please reach out to the director of correctional education for MCTC.

Academic Support:

Should you need support or help in your courses, please reach out to Mr. Gilliam, MCTC's Director of Correctional Education.

Official Course Description

Serves as a course in quantitative reasoning and problem solving intended for liberal arts majors. Includes voting methods, apportionment, interest and investments, probability, statistics, and geometry. (Students may not receive credit for both this course and MAT 146.).

Course Prerequisite

College Readiness or concurrent enrollment in MAT 141-S.

Course Competencies

Upon completion of this course, the student can:

1. Compare and contrast a variety of voting methods, including majority, plurality, runoff, Borda count, and pairwise methods.
2. Determine the winner of an election from a preference schedule using the methods aforementioned.
3. Solve real-world problems related to apportionment.
4. Calculate interest on investments and loans and other financial tools, including amortization schedules.
5. Calculate the probability of outcome of an event with and without replacement, combinations and permutations.
6. Apply the Law of Large Numbers to critical thinking problems.
7. Calculate and interpret basic descriptive statistical measures such as mean, median, mode, range, variance, standard deviation, and determine z-scores from a normal distribution.
8. Solve problems using basic two- and three-dimensional geometry.
9. Solve geometry problems using similarity, scalability, and Pythagorean Theorem.

General Education Information

MAT-141 specifically addresses the following Student Learning Outcomes from the General Education Competencies:

- Interpret information presented in mathematical and/or statistical forms. (Gen Ed Comp B)

Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Quality Enhancement Plan (QEP) Update:

MCTC is accredited through the SACSCOC and was reaffirmed by the Commission in 2019. As part of the reaffirmation of accreditation process, a comprehensive QEP was developed at MCTC focusing on Problem-solving Skills.

The MCTC students will improve problem-solving skills by learning to:

- Examine the evidence
- Define the problem
- Identify strategies
- Analyze potential solutions
- Implement the solution
- Reflect on the outcome

Kentucky Graduate Profile and Essential Skills:

The Council on Post Secondary Education (CPE) has identified the following learning outcomes that are considered essential to the success of students in higher education as they prepare for the workforce:

1. Communicate effectively.
2. Think critically in order to solve problems and create new ideas and solutions.
3. Apply quantitative reasoning skills to analyze and solve numerical problems.
4. Interact effectively with people from diverse backgrounds.
5. Adapt to changing circumstances while leading and supporting others.
6. Perform professionally within their chosen field of study or occupation.
7. Engage in civic life to improve society.
8. Collaborate and work in teams.
9. Apply academic knowledge, skills, and abilities to their chosen career.
10. Use information for decision making.

Liberal Arts Mathematics specifically addresses the following Essential Skills: 3

Course Outline

Selected topics from Chapters 6, 7, 8, 10, and 11.

Text(s) and Supplies

Contemporary Mathematics by Donna Kirk. Published by OpenStax. Textbook is available in a free PDF. Appropriate chapters are loaded into the course site.

Evaluation and Grading Policy

Grades will be calculated as a weighted average of homework, weekly quizzes, chapter exams, and a final exam. Your course grade will be calculated with the following weights:

Class Exams:	400 points
Homework:	260 points
Quizzes:	200 points
Final Exam:	140 points

The scale below shows the relationship between your semester percent average and the letter grade you will receive.

Grade	Range
A =	90% and above
B =	80% and above
C =	70% and above
D =	60% and above
E =	Below 60%

Class Exams:

There will be four class exams. Each class exam will be announced at least one week ahead of time. Each class exam will carry equal weight. You will have two attempts at each quiz. The highest score for each exam will count toward your final grade. Each exam will be worth 100 points.

Quizzes:

There will be a quiz each week, except for the first week and finals week. Quizzes are on the course site. A practice quiz is available for each section quiz. You will have three attempts at each quiz. The highest score for each quiz will count toward your final grade. Each quiz will be worth 20 points. Each quiz will be due one week after it is assigned.

Homework:

Homework is on the course site. Directions are posted with each assignment. Homework will be due two weeks after it is assigned. Each homework assignment is worth 10 points.

Final Exam:

The final exam will be held on finals week according to the published final exam schedule. The final exam will be worth 140 points.

Attendance Policy

You must start at least one homework assignment to not be counted as a no-show for the class.

Late Work Policy

Late work will not be accepted without documentation of extenuating circumstances.

Withdrawal Information**KCTCS Withdrawal Policy**

KCTCS Policy states a W: represents a withdrawal from class without completing course requirements. A student may officially withdraw from any class up to and including the date of mid-term with a W grade.

The Midterm Date or the last day for students, at their discretion, to officially withdraw from this course and receive a grade of W is: October 27, 2024.

After the date of midterm and through the last class of the semester or session, any student may officially request to withdraw from a course and receive a W which may be given at the discretion of the instructor. Each instructor shall state on the first or second class meeting the factors to be used in determining if a student will be allowed to withdraw during the discretionary period. An instructor shall not assign a student a W for a class unless the student has officially withdrawn from that class in a manner prescribed by the college. A grade of W may be assigned by the College Appeals Board in cases involving a violation of student academic rights or for academic offenses.

Instructor's Withdrawal Policy (After Midterm):

After midterm, permission to withdraw will only be granted if a student has been regularly attending and participating in class or has an extenuating circumstance. The last day for students, with instructor's permission, to officially withdraw from this course and receive a grade of W is December 6, 2024.

Directions for submitting a withdrawal request:

Reach out to MCTC's Director of Correctional Education.

College Statement Regarding Flexible Instructional Delivery:

The College must remain flexible to meet challenges that may include epidemics, pandemics, natural disasters, human-influenced disasters, and any and all threats to the College campus, students, employees, and surrounding communities. To ensure the safety and well-being of our constituencies, the College maintains the right to move classes temporarily or permanently to online, remote platforms; to a hybrid section that includes some face-to-face learning and some remote learning; or to a different campus, location, building, or time. Additionally, the College reserves the right to institute plans or practices in the physical classroom/lab/activity spaces and common areas to protect students and faculty. The College will attempt to make these changes as minimally disruptive as possible, but the College reserves the sole right to alter the particular type, place, or time for their classes.

MCTC Diversity, Equity, and Inclusion Statement

Maysville Community and Technical College is dedicated to creating a learning environment that recognizes the dignity and value in all people and all groups. All

MCTC courses encourage effective interaction with people from diverse backgrounds. In this class, students have the right to learn, study, grow, and develop without fear of threats, harassment, bullying, or discrimination on the basis of race, ethnicity, color, nationality, age, religion, gender, gender identity, gender presentation, sexual orientation, or military service. In this course, everyone will be treated with civility and recognized as individuals and will treat others with respect and civility. The diversity that students bring to this class is viewed as a resource, strength, and benefit. MCTC is committed to a community of learning where students and ideas do not simply exist but flourish and thrive.

Accessibility Services

MCTC strives to make learning experiences accessible to all participants and is committed to providing reasonable accommodations for all persons with disabilities. If you are seeking accommodations for this course under the Americans with Disabilities Act (ADA), you are required to contact MCTC's Director of Correctional Education and complete the **Accommodation Request Form**.

Your accommodations will begin after the instructor has received confirmation of your accommodations from the Accessibility/Disability Services Office. Accommodations cannot be applied to your course retroactively.

KCTCS Student Code of Conduct

Kentucky Community and Technical College System (KCTCS) faculty and students are bound by principles of truth and honesty that are recognized as fundamental for a community of teachers and scholars. The college expects students and faculty to honor, and faculty to enforce, these academic principles. The college affirms that it will not tolerate academic dishonesty including, but not limited to, violation of academic rights of students and student offenses. Students may refer to the KCTCS Code of Student Conduct in the Education Department.

Cheating

Using an electronic device or other materials without permission during an exam will be considered cheating regardless of intent. Other forms of cheating will include, but are not limited to: having information available in any non-approved form, such as papers, books, notes, materials hidden in apparel, written on self or desks, tabbing out to another computer screen, looking at other students' work, communicating with other students in any manner

Plagiarism

Collegiate work requires a strict standard of academic responsibility. While engaged in academic coursework, we encounter other people's ideas. How we incorporate these ideas into our own work requires caution. When these ideas are not properly credited, this is referred to as plagiarism. Plagiarism involves the intentional and/or unintentional use of others' words and thoughts without acknowledgement.

Examples of plagiarism:

- Turning in someone else's work as your own
- Copying words or ideas from someone else without giving credit
- Failing to put a quotation in quotation marks
- Giving incorrect information about the source of a quotation
- Changing words or phrases (paraphrasing) while keeping the structure of a source without giving credit
- Copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not
- Using information or graphics from an internet site without citing your source
- Giving your rough draft to another person to revise or rewrite
- A form of plagiarism that is not always found in typical definitions is self-plagiarism. Self-plagiarism involves duplication of original essays in part or whole. Resubmitting written work that has previously been presented in another course is considered self-plagiarism. Self-plagiarism is as serious as other forms of plagiarism and will carry the same consequences.

If you are unsure whether or not a specific situation constitutes plagiarism, ask your instructor.

At MCTC plagiarism is a serious academic offense which can result in a student failing an assignment, failing a course, or being dismissed from the college. Be aware of your instructor's rules and regulations concerning plagiarism, this can be found in your course syllabus.

Students are expected to exhibit honesty in all work. Students caught plagiarizing or cheating will be subjected to the disciplinary policy as stated in the KCTCS Student Code of Conduct.

Division Chair Contact Information

The first step in any class dispute is to talk with the Instructor. If disputes cannot be resolved in this way or if you are having communication difficulties, you can contact the Division Chair via MCTC's Director of Correctional Education.

Student Account and Services

Reach out to MCTC's Director of Correctional Education for assistance.