

# MCC 2024 Test Descriptions

## **Session 1 Tests: 8:45-10:00**

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### **Algebra I** **8:45-10:00** **Barnett Hall 224**

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1. One Student per school
2. Grade levels: 9<sup>th</sup>-10<sup>th</sup> graders - Students taking this test ***MUST BE CURRENTLY*** enrolled in Algebra I
3. Test format: Multiple Choice
4. **ONLY NON-GRAPHING CALCULATORS ALLOWED - WILL NOT BE PROVIDED**

This is a multiple-choice test covering fundamental mathematical operations, simplification of fractions, factoring, formulas, linear equations, system of linear equations in two unknowns, and removing parentheses.

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### **Algebra II** **8:45-10:00** **Barnett Hall 225**

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1. One student per school
2. Grade levels: 10<sup>th</sup>-12<sup>th</sup> graders - Students ***MUST BE CURRENTLY*** enrolled in Algebra II
3. **ONLY NON-GRAPHING CALCULATORS ALLOWED - WILL NOT BE PROVIDED**

This test contains a comprehensive review of second year algebra including the following: the axioms of the real number systems; roots and rational powers; linear, quadratic and rational equations; linear systems of equations; linear inequalities; circles; functions; logarithms; polynomial theory; combinations and permutations; imaginary numbers; indexed sums; Pascal's triangle; sequences; and matrices.

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### **Biology** **8:45-10:00** **Barnett Hall 111/112**

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1. Three students per school
2. Grade levels: 10<sup>th</sup>-12<sup>th</sup> graders who have had or are currently enrolled in a general biology class
3. Test format: Antibody Detection and hands-on exam

Students will investigate the role of antibodies in protecting the body against disease and learn about how antibodies are used in biotechnology. Students will also take a hands-on exam that covers several areas of biology.

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### **Chemistry** **8:45-10:00** **Barnett Hall 113**

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1. Two students per school – Test takers cannot exceed 24
2. Grade level: 11<sup>th</sup>-12<sup>th</sup> graders who have taken or are currently taking chemistry
3. Students will need a pencil and a scientific calculator for the test
4. Testing format: Multiple Choice

Students should expect a multiple choice and problem solving exam covering topics in chemistry. Students will need a basic scientific calculator and pencil. Participants will be given 30 minutes to complete the exam and the balance of the time will be spent in chemistry demos to allow them to see chemistry in action.

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### **English Composition** **8:45-10:00** **Walsh-Brady 227**

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1. One student per school
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>
3. Test format: Essay

Students will be tested on rhetoric and rhetorical situations.

**Early Childhood Education** **8:45-10:00** **Walsh-Brady 121 & 135**

1. One team of 2 students per school will be allowed
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>
3. Test Format: Multiple Choice

Students will be engaging in a standard exam with their partner and participating in early childhood experiences together, including time in the newly remodeled Child Development Center. They will share their knowledge of early childhood and then apply what they have learned regarding the basics of child development, Developmentally Appropriate Practice and wellness for children in a team experience. Students with an interest in working with young children will excel in this test.

**Graphic Design** **8:45-10:00** **Wrightstone Art Lab 106A**

1. One student per school (limited to 10 testers, the first 10 entries will be given priority)
2. Grade levels: 11<sup>th</sup> - 12<sup>th</sup>
3. The test will include three parts: a quiz, a computer exercise, and a logo sketch

Students taking the Graphic Design exam would benefit from some design background. A student can expect success in this exam if they enjoy working on the computer, have great ideas, and a good eye for detail.

**Health Occupations** **8:45-10:00** **Walsh-Brady 229**

1. Two students per school
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup> graders considering a career in health occupations
3. Testing format: Multiple Choice
4. Presentation: Career exploration of health related careers including Emergency Medical Services, Dental Assisting, Medical Laboratory Technician, and Nursing

These sessions will allow students to explore the wide range of health occupations training and the great careers that are available after graduation. The test will cover topics of general biology and sciences as they relate to the field of health.

**Music Competition - Instrumental** **8:45-10:00** **Tipton Hall Music Lab**

1. No limit on number of students
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>

Students auditioning will perform a solo instrumental piece (memorization is optional). Students should bring their own instrumental & accompaniment scores they will perform. The piece should be around 3 minutes in length. Students may be asked to perform a scale (or scales) on their instrument. An accompanist will be available or students are welcomed to bring their own.

Questions may be directed to Mirna Cabrera at [cabreram@mpcc.edu](mailto:cabreram@mpcc.edu) or 308-345-8187.

**Music Theory** **8:45-10:00** **Tipton Hall Music Lab**

1. No limit on number of students – students may take this as a stand alone test, or in conjunction with their vocal or instrumental competition while they await their audition.
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>
3. Testing format: Multiple choice, fill-in-the-blank, and true/false.

Overview of MCC music program and opportunities. This test will cover general music knowledge including music history and some elementary music theory (scales, key signatures, major/minor chords, etc.).

**Sociology** **8:45-10:00** **Barnett Hall 223**

1. No limit on testers - *Students testing Sociology in McCook cannot register to test for Sociology in North Platte*
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>
3. Testing format: Interactive lecture followed by a multiple-choice test

Students who have an interest in the behavior sciences and may be interested in career fields such as social work, law, healthcare, justice, early childhood development, or counseling. Sociological concepts can be applied in any career field. Students should expect 20-30 minutes of interactive lecture covering the topics of culture and socialization followed by a multiple-choice test over the information presented and general sociological concepts. Students who are attentive and are able to follow the lecture will do well.

# Session 2 Tests: 10:10-11:25

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## **Advanced Math** **10:10-11:25** **Barnett Hall 224**

1. One student per school
2. Grade Levels: 11<sup>th</sup>-12<sup>th</sup> graders – Students ***MUST BE CURRENTLY*** enrolled in a Pre-Calculus Course
3. Testing format: Multiple Choice
4. Only Non-Graphing Calculators Allowed – calculator **WILL NOT** be provided

This test will include questions on probability, statistics, trig, and pre-calculus. Students must be enrolled in a pre-calculus course. A graphing calculator is allowed but not provided. This will be a multiple-choice test that covers basics of probability and statistics; trigonometric functions and their properties; the limits of functions and sequences; properties of algebraic, exponential, and logarithmic functions; and polar coordinates

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## **English Literature** **10:10-11:25** **Walsh-Brady 227**

1. One student per school
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>
3. Test format: Essay

Students will be tested on literary analysis.

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## **Geometry** **10:10-11:25** **Barnett Hall 225**

1. One student per school
2. Grade levels: 9<sup>th</sup>-11<sup>th</sup> only - Students ***MUST BE CURRENTLY*** enrolled in Geometry
3. Test format: Multiple choice
4. **ONLY NON-GRAPHING CALCULATORS ALLOWED - WILL NOT BE PROVIDED**

This is a multiple-choice test covering lines, angles, triangles, parallel lines, quadrilaterals, circles, similar figures, congruent figures, loci, and construction.

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## **Health Occupations** **10:10-11:25** **Walsh-Brady 229**

1. Two students per school
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup> graders considering a career in health occupations
3. Testing format: Multiple Choice

Presentation and trivia games geared toward career exploration of health-related careers including Nursing, Emergency Medical Services, Medical Laboratory Technician, and medicine. Students with a solid background in biology and health, or with an interest in pursuing a career in a health-related field will do well in this exam.

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## **Information Technology** **10:10-11:25** **Walsh-Brady 211**

1. One student per school (space will be limited to the first 20 registrants)
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup> graders with computer knowledge or interested in a career in Information Technology or related fields
3. Testing format: Multiple Choice, True/False, Matching

The Information Technology exam will cover basic concepts of computer hardware, operating systems, networking, and security. Students will be successful if they are computer savvy and have a strong desire to engage in computer related activities.

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## **MCC Facts** **10:10-11:25** **Barnett Hall 223**

1. No limit on test takers. Testers must be planning to attend MPCC.
2. Grade levels: **SENIORS ONLY!**
3. Test Format: Multiple choice with a short essay
4. Activity: verbal contest, Q&A with current MCC students, and test review

This exam is designed exclusively for a future MCC student. Students should expect a multiple-choice test covering all aspects of MCC, including tuition, housing, programs, student activities, statistics, and other general information about the campus. (Tip: Students are encouraged to study our website at [www.mpcc.edu](http://www.mpcc.edu))

**Music Competition Vocal****10:10-11:25****Tipton Hall Music Lab**

1. No limit on number of students
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>

Students auditioning will perform a solo vocal piece (memorization is optional). Students should bring their own vocal & accompaniment scores they will perform. The piece should be around 3 minutes in length. An accompanist will be available or students are welcomed to bring their own.

Questions may be directed to Mirna Cabrera at [cabreram@mpcc.edu](mailto:cabreram@mpcc.edu) or 308-345-8187.

**Music Theory****10:10-11:25****Tipton Hall Music Lab**

1. No limit on students-students may take this as a stand alone test, or in conjunction with their vocal competition while they await their audition.
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup>
3. Testing format: Multiple choice and true/false

Overview of MCC music program and opportunities. This test will cover general music knowledge including music history and some elementary music theory (scales, key signatures, major/minor chords, etc.)

**Physics****10:10-11:25****Barnett Hall 113**

1. Limited to first 18 registrants
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>
3. Testing format: Scored on how close their projectile hits the target

Students will be performing a projectile motion lab. Student should bring a calculator and any notes that they want about projectile motion and free-fall. Students will be scored on how close their projectile hits the target. Limited to 6 groups with no more than 3 in a group. Students can be from the same school and work together or they can be from different schools and will be put into teams.

# **EXTENDED SESSIONS :**

## **TESTERS SHOULD NOT REGISTER FOR OTHER TESTS**

**Business**

**8:45 – 11:25**

**Start in Student Union**

Students will have the option of participating in one of two business tracts: a Mock Interview or an Exam Session. All students in this event will participate in a panel discussion with local business and industry professionals.

### **Track 1: Mock Interview (9:00-11:00)**

1. Limited to 20 students – bring resume to session and dress for interview
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup>

Four students will be selected to participate in a mock interview with a business panel consisting of local business professionals. Sixteen remaining students will be given the option to visit with Career Placement Coordinator or move to the Track 2: Exam Session.

### **Track 2: Exam Sessions**

1. Limited to 40 students (4 students per school)
2. Students must choose 1 exam from both sessions A and B – please watch grade level for exam choice

#### **Exam Session A (9:00-9:45)**

##### **Accounting Principles I:**

1. Two students per school
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup> grade students who have completed one year of high school accounting
3. Students should bring calculators

Topics to be covered include: classifying accounts, analyzing, journalizing and posting business transactions; applying the matching concept and adjusting entries, preparing financial statements, performing all steps in the accounting cycle including closing entries and accounting for service and merchandising businesses.

**OR**

##### **Marketing Concepts:**

1. Two students per school
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup> grade students who have completed one business course
3. Students should bring calculators

Students will be tested in their knowledge of marketing including the marketing concepts and strategies, content marketing, market research, target market segmentation and selection, marketing communications, product concepts and value propositions.

#### **Exam Session B (10:00-10:45)**

##### **Microsoft Office Suite:**

1. Two students per school
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>

The Microsoft Office Suite test will consist of multiple-choice questions relating to computer concepts, document formatting rules and standards, proofreading and word processing applications.

**OR**

##### **Leadership and Organizational Behavior:**

1. Two students per school
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup>

This test will cover the basics of leadership including theories, traits, characteristics, motivational practices, individual and group behavior, organizational communication, corporate culture, and problem-solving skills.

### **Business Panel (11:00-11:25)**

All students in the business extended session will participate in a business panel. There will be local business and industry professionals present to answer questions.

**Criminal Justice****8:45 – 11:25****Barnett Hall 221 & 222**

1. Three students per school - limited to first 24 students
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup>
3. Testing format: Hands-on interactive crime scene investigation, interactive lecture on criminal justice fundamentals and career possibilities, examination and discussion

Open to students who have an interest in criminology or the criminal justice field. Future careers may include police officer, sheriff, secret service, lawyer, probation officer, border control agent, U.S. Marshal, victims advocate, correctional officer, fire investigator, court clerk, etc. Students should expect to split their time between a hands-on crime scene investigation, an interactive lecture and examination focusing on fundamental concepts within the criminal justice field as well as exploration of career possibilities. The morning will conclude with an interactive discussion with MPCC criminal justice instructors where students can ask questions and debrief from the morning's events. Winners will be selected based on results from the examination and the accuracy of their crime scene investigation. The material presented will include mock crime scenes and may include depictions of blood, but no injured persons. Students who may be uncomfortable with photos or depictions of crime scenes should avoid this session.

**Monologue Workshop & Theater Competition****8:45-11:15****Tipton Flex Theater**

1. First 12 registrants will be accepted
2. Grade levels: 11<sup>th</sup>-12<sup>th</sup>
3. Students will participate in this interactive workshop designed to help them express their own voice through writing and performing a short monologue of their own creation
4. Testing format: on-book reading original monologue

This workshop is designed to empower students to express their unique voice through writing and performance. The workshop will be in two parts. The first session will be the writing session. Students will be given writing prompts to use in the creation of the monologue. Some instruction will be given at the beginning of the session to help students identify and refine how characters are developed and performed. The second session will be a brief period of refinement, then the student will perform a reading of their monologue. Evaluation will be based upon how creatively the prompts are addressed and the final reading of the monologue. Students must bring what is necessary to write and read their monologue.

**STEM/Engineering****8:45-11:25****McMillen Hall 213**

1. No limit on students from any given school (limit to the first 38 registrants)
2. Grade levels: 9<sup>th</sup>-12<sup>th</sup> who have an interest in Science, Technology, Engineering or Math, including:
  - Pre-Med, Pre-Dental, Pre-Vet
  - Agricultural Sciences
  - Software and Computer Engineering
  - Robotics, Mechatronics
  - 3D printing/manufacturing
  - Medical imaging
  - And so many more

**3. Students must wear closed-toe shoes for this session**

4. Schedule:
  - 8:45 – Introductions and Q&A about science and engineering
  - 9:15 – Student-chosen STEM research and presentations
  - 10:45 – Tour of Valmont Industries
  - 11:25 – Return to MPCC for InterHigh day activities

The Physics/Engineering test will give students interested in STEM fields the opportunity to research a topic of their choosing and give a presentation to the other students attending. The tours will be at nearby facilities where students will see ongoing research projects, meet faculty and staff, and be able to ask questions about current activities. All interested students are welcome.