



Be an Educator!

Middle School Mathematics, B.S.

2025 Assessment Plan

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Program Mission

The Middle School Mathematics Education (MS Math) major, which leads to a B.S. degree, is designed to provide a strong education for future middle school mathematics teachers (grade 6-8). Core requirements build upon students' experiences in General Education to provide both breadth and depth in mathematics that is appropriate for middle school teachers. Students completing this program acquire a foundation of knowledge in mathematics and the skills to apply strong content knowledge in designing curriculum and instruction within middle school mathematics settings.

In designing the Middle School Mathematics Education major, faculty aligned courses, course content, requirements, and assessments with the *Colorado Academic Standards, Rules for the Administration of the Educator Licensing Act of 1991, Senate Bill 154* (which specifies the standards required for teachers by the Colorado commission on Higher Education), and the *Teacher Quality Standards* for all Colorado teachers.

A Middle School Mathematics Education program supports both the role and mission of CSU-Pueblo as a *regional, comprehensive university with moderately selective admissions standards. The University shall offer a broad array of baccalaureate programs with a strong professional focus and a firm grounding in the liberal arts and sciences. The University shall also offer selected masters level graduate programs. (Colorado Statutes 23-55-101)*

Moreover, the mission statement for CSU-Pueblo adopted by the Board of Governors of the Colorado State University system is as follows: *CSU-Pueblo's success will be measured by the resilience, agility, and problem-solving abilities of our diverse student population and the ways in which our graduates are able to navigate work in a rapidly changing world.* As the Middle School Mathematics Education major addresses strong mathematics education and the need to prepare quality teachers, the program directly fulfills the mission of CSU-Pueblo. CSU-Pueblo has a long tradition of collaboration with pK-12 schools and has provided leadership in educational reform in the region. To meet its mission, CSU-Pueblo must be sensitive to the needs of our pK-12 partners, providing well-trained teachers to fill highly needed vacancies.

Student Learning Outcomes (SLOs)

The philosophy of the School of Education (SoE) is to provide both a theoretically sound and very practical program for teachers. In keeping with this, the SoE has adopted the *Teacher Quality Standards* from the Colorado Department of Education as its student learning outcomes (SLOs) for the bachelor's degree in Middle School Mathematics. These will be the standards students will have to meet or exceed as teachers in the schools, so the sooner they understand those expectations, the better. Furthermore, it makes sense that students completing an educator preparation program should be proficient in all these standards and ready to excel in a classroom of their own.

To provide additional support and clarity for its preservice students, the SoE has also adopted a set of Program Dispositions. These represent the temperaments that someone should have to be successful in our program and as an educator. The SLOs and Program Dispositions are shown on the following pages. For each SLO, there are "Elements" or sub-points that provide greater detail about the overarching outcome.

Teacher Quality Standards (aka SLOs)

SLO/QUALITY STANDARD I

Teachers demonstrate mastery of and pedagogical expertise in the content they teach.

The elementary teacher is an expert in literacy and mathematics and is knowledgeable in all other content that he or she teaches (e.g., science, social studies, arts, physical education, or world languages). The secondary teacher has knowledge of literacy and mathematics and is an expert in his or her content endorsement area(s).

ELEMENT A: Teachers provide instruction that is aligned with the Colorado Academic Standards and their district's organized plan of instruction.

ELEMENT B: Teachers develop and implement lessons that connect to a variety of content areas/disciplines and emphasize literacy and mathematics.

ELEMENT C: Teachers demonstrate knowledge of the content, central concepts, inquiry, appropriate evidence-based instructional practices, and specialized characteristics of the disciplines being taught.

SLO/QUALITY STANDARD II

Teachers establish a safe, inclusive and respectful learning environment for a diverse population of students.

ELEMENT A: Teachers foster a predictable learning environment characterized by acceptable student behavior and efficient use of time in which each student has a positive, nurturing relationship with caring adults and peers.

ELEMENT B: Teachers demonstrate an awareness of, a commitment to, and respect for multiple aspects of diversity, while working toward common goals as a community of learners.

ELEMENT C: Teachers engage students as individuals, including those with diverse needs and interests, across a range of ability levels by adapting their teaching for the benefit of all students.

ELEMENT D: Teachers work collaboratively with the families and/or significant adults for the benefit of students.

SLO/QUALITY STANDARD III

Teachers plan and deliver effective instruction and create an environment that facilitates learning for their students.

ELEMENT A: Teachers demonstrate knowledge about the ways in which learning takes place, including the levels of intellectual, physical, social, and emotional development of their students.

ELEMENT B: Teachers use formal and informal methods to assess student learning, provide feedback, and use results to inform planning and instruction.

ELEMENT C: Teachers integrate and utilize appropriate available technology to engage students in authentic learning experiences.

ELEMENT D: Teachers establish and communicate high expectations and use processes to support the development of critical-thinking and problem-solving skills.

ELEMENT E: Teachers provide students with opportunities to work in teams and develop leadership.

ELEMENT F: Teachers model and promote effective communication.

SLO/QUALITY STANDARD IV

Teachers demonstrate professionalism through ethical conduct, reflection, and leadership.

ELEMENT A: Teachers demonstrate high standards for professional conduct.

ELEMENT B: Teachers link professional growth to their professional goals.

ELEMENT C: Teachers are able to respond to a complex, dynamic environment.

ELEMENT D: Teachers demonstrate leadership in the school, the community, and the teaching profession.

Program Dispositions

A. Growth Mindset

1. Approaches situations with an open mind.
2. Demonstrates flexibility in thinking and behavior.
3. Views challenges as opportunities.
4. Focuses on the process, not the end result.
5. Is inspired by others' success.
6. Learns and grows from failures.
7. Steps out of comfort zone.

B. Professional Behaviors

1. Aware of program policies and professional practices.
2. Demonstrates the emotional intelligence required of professional educators.
3. Models an excitement for teaching and learning.
4. Engages in critical inquiry related to the teaching and learning community.
5. Is well-groomed and dresses professionally, appropriate to the site and content.
6. Models democratic ideals personally and professionally.

C. Work Ethic

1. Attends on time and remains for the duration.
2. Engages throughout.
3. Works effectively with appropriate supervision.
4. Takes initiative.
5. Advocates for self.

D. Responsiveness

1. Responds in a caring manner towards K-12 students, peers, and other learning community members.
2. Articulates own opinions, feelings, and needs while demonstrating sensitivity to others' opinions, feelings, and needs.

E. Communication

1. Uses professional oral expression in public settings (including digital media).
2. Uses professional written expression in public settings (including digital media).
3. Practices active listening.
4. Respects the input of others.

Program Assessment

The assessment plan for CSU Pueblo's Middle School Mathematics degree ensures that the program:

1. Is evaluated regularly, including who is being evaluated.
2. Uses appropriate measures to evaluate SLOs (direct and indirect).
3. Includes rubrics when they are used.
4. Has clear criteria for performance expectations.

Frequency of Evaluation & Who Is Being Evaluated

When: All program SLOs are evaluated each year.

Who: All students who complete the degree within the academic year.

Evaluation Measures

A range of tasks aligned to program SLOs provide the sources of evidence to assess performance. These tasks yield a body of artifacts that are compiled into a final electronic portfolio that is organized by SLO. Artifacts come from a variety of tasks, including all the following:

- Curriculum plans: lesson plans and unit planning.
- Self-evaluations and peer evaluations of teaching.
- Measures of achievement of pK-12 students: student work samples, pre-post data, etc.
- Test scores and other measures of content knowledge.
- Materials and evaluations from fieldwork in area schools.
- Research papers
- Effective use of technology in teaching and learning.
- Videos.
- Classroom management and other educational plans.

Students begin developing their electronic portfolio with their first education course. The portfolio is a web-based system that allows faculty to review materials and communicate their feedback to the student. Documents that demonstrate student performance on specific SLOs are added throughout the program. During the final semester while student teaching, students compile and then submit their final portfolio for review. The quality of student performance is evaluated using: a) the Rubric for Evaluating Colorado Teachers and b) the Program Disposition Scale.

Evaluation Rubrics/Tools

Please see the Appendix for copies of these rubrics/tools.

Performance Expectations

Expectations include all the following:

- a) All program completers should receive ratings of 3.00 or higher on all program SLOs and Dispositions and average ratings by the group should be greater than or equal to 3.00, **and**
- b) Greater than 80% of graduates are rated as proficient (3.00 or above) on all SLOs by their supervisors/principals after one year of teaching (same scale as evaluation rubric).

Appendix

I. Rubric for Evaluating Colorado Teachers

(click on hyperlink above)

Key to Evaluation: Compare the student's performance to an individual who has completed an educator preparation program and is ready to enter the workforce as a teacher. Use only whole numbers according to the following scale.

- 1 = Basic (Minimal Understanding/Application)
- 2 = Partially Proficient (Needs Help/Inconsistent)
- 3 = Proficient
- 4 = Accomplished (often exceeds standard)
- 5 = Exemplary (consistently exceeds standard)

II. Program Disposition Scale

Key to Evaluation: Compare the student's performance to an individual who has completed an educator preparation program and is ready to enter the workforce as a teacher. Use only whole numbers according to the following scale.



4 = Cruise Control! Excellent performance on the disposition.

3 = Go! Satisfactory performance on the disposition.

2 = Caution! Growth opportunity on the disposition.

1 = Stop! Severe Concern on the disposition.

Blank = Parked. No opportunity to observe the disposition.

A. Growth Mindset

1. Approaches situations with an open mind.
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