

NATIONAL RECOGNITION REPORT

Initial Preparation of Mathematics Teachers at the Secondary Level (2012 Standards)

National recognition of this program is dependent on the review of the program by representatives of the National Council of Teachers of Mathematics (NCTM).

COVER PAGE

Name of Institution

Clarion University, PA

Date of Review

MM DD YYYY
08 / 01 / 2017

This report is in response to a(n):

- Initial Review
- Revised Report
- Response to Conditions Report

Program Covered by this Review

Bachelor of Science in Mathematics Education

Grade Level⁽¹⁾

7-12

(1) e.g. Early Childhood; Elementary K-6

Program Type

First teaching license

Award or Degree Level

- Baccalaureate
- Post Baccalaureate
- Master's

Confidential

PART A - RECOGNITION DECISION

SPA decision on national recognition of the program(s):

- Nationally recognized
- Nationally recognized with conditions
- Further development required OR Nationally recognized with probation OR Not nationally recognized [See Part G]

Test Results (from information supplied in Assessment # 1, if applicable)

The program meets or exceeds SPA benchmarked licensure test data requirement, if applicable:

- Yes
- No
- Not applicable
- Not able to determine

Comments, if necessary, concerning Test Results:

Under CAEP, there is no stated policy and no CAEP standard stating an 80% pass rate requirement on licensure tests. Additional information can be found at <http://caepnet.org/accreditation/caep-accreditation/program-review-options/data-requirements>.

Summary of Strengths:

Candidates do well on the PRAXIS II examination. The requirements for field experiences in two levels are commendable.

PART B - STATUS OF MEETING SPA STANDARDS

Standard 1: Content Knowledge

Effective teachers of secondary mathematics demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, connections, and applications within and among mathematical content domains.

Preservice teacher candidates:

1a) Demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, applications in varied contexts, and connections within and among mathematical domains (Number, Algebra, Geometry, Trigonometry, Statistics, Probability, Calculus, and Discrete Mathematics) as outlined in the NCTM Mathematics Content for Secondary.

Met

Met with Conditions

Not Met

Standard 1 Comments:

State-required licensure test(s) aligned to NCTM CAEP Mathematics Content for Secondary and at least two additional assessments collectively demonstrating at least an 80% alignment to each domain of the NCTM CAEP Mathematics Content for Secondary providing evidence that Element 1a* is met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 1.

*: Indicates essential (required) element

Section III of the program report indicates Assessments 1, 2, and 6 address this standard.

*Element 1a: NOT MET

Assessment 1 (State licensure exam - PRAXIS II): Assessment 1 provides evidence for Element 1a.

Assessment 2 (course grades): Assessment 2 provides evidence for mathematical domain competencies as outlined in the NCTM NCATE Mathematics Content for Secondary.

Assessment 2 tables require both the course number and course name. The course name was omitted from the second table. Note: MATH 272, Calculus III was omitted from the initial table in the description of Assessment #2.

Assessment 6 (Senior Seminar): Because there is no specific content to be addressed in the senior seminar and because not all candidates are assessed on the same content, Assessment 6 is not appropriate to document content knowledge.

An additional content-based assessment aligned to the mathematical domain competencies specified in the NCTM CAEP Mathematics Content for Secondary is required to satisfy the preponderance of evidence requirements for Standard 1.

Assessment 4 (Student Teaching Performance Evaluation) is not appropriate for documenting content knowledge since not every candidate teaches the same content during the student teaching experience. Also note that Section 3 did not indicate that Assessment 4 would be used for Standard 1.

Feedback on the NCTM CAEP Mathematics Content for Secondary alignment:

A.1 Number and Quantity Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (State licensure exam - PRAXIS II): 100% passing rate on the PRAXIS II Mathematics: Content Knowledge 0061 exam provides evidence for A.1.1, A.1.2, A.1.3

Assessment 2 (course grades): Provides evidence for A.1.4. Description of MATH 451 does not provide sufficient evidence for A.1.1 and A.1.2. Descriptions of MATH 270, 271, 272, 321 do not provide sufficient evidence for A.1.3.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 1a.

A.2 Algebra Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (State licensure exam - PRAXIS II): 100% passing rate on the PRAXIS II Mathematics: Content Knowledge 0061 exam provides evidence for A.2.1, A.2.2, A.2.3, A.2.4

Assessment 2 (course grades): Provides evidence for A.2.5 and A.2.6. Descriptions for courses addressing other items do not provide sufficient evidence for the item in question or are missing (CPSC201). Description of MATH 390 does not address how the course addresses the history of algebra.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 1a.

A.3 Geometry and Trigonometry Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (State licensure exam - PRAXIS II): 100% passing rate on the PRAXIS II Mathematics: Content Knowledge 0061 exam provides evidence for A.3.2, A.3.3, A.3.4, A.3.5, A.3.6, A.3.7, A.3.8, A.3.9

Assessment 2 (course grades): Provides evidence for A.3.1 and A.3.8. Catalog-style descriptions for courses addressing other items do not provide sufficient evidence for the item in question. Description of MATH 390 does not address how the course addresses the history of geometry and trigonometry.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 1a.

A.4 Statistics and Probability Competencies NOT SATISFIED (Less than 80% competency alignment)

Assessment 1 (State licensure exam - PRAXIS II): 100% passing rate on the PRAXIS II Mathematics: Content Knowledge 0061 exam provides evidence for A.4.1, A.4.3, A.4.4, A.4.5

Assessment 2 (course grades): Catalog-style description for MATH 321 does not provide sufficient evidence for any the items. Description of MAT 390 does not address how the course addresses the history of statistics and probability.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 1a.

A.5 Calculus Competencies NOT SATISFIED (Less than 80% competency alignment)

Assessment 1 (State licensure exam - PRAXIS II): 100% passing rate on the PRAXIS II Mathematics: Content Knowledge 0061 exam provides evidence for A.5.1, A.5.3, A.5.5

Assessment 2 (course grades): Provides evidence for A.5.1, A.5.3, A.5.4. Catalog-style descriptions for courses addressing other items do not provide sufficient evidence for the item in question. Description of MATH 390 does not address how the course addresses the history of calculus.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 1a.

A.6 Discrete Mathematics Competencies NOT SATISFIED (Less than 80% competency alignment)

Assessment 1 (State licensure exam - PRAXIS II): 100% passing rate on the PRAXIS II Mathematics: Content Knowledge 0061 exam provides evidence for A.6.2, A.6.3

Assessment 2 (course grades): Provides evidence for A.6.1 and A.6.2. Catalog-style descriptions for courses addressing other items do not provide sufficient evidence for the item in question. Description of MATH 390 does not address how the course addresses the history of

discrete mathematics.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 1a.

Standard 2: Mathematical Practices

Effective teachers of secondary mathematics solve problems, represent mathematical ideas, reason, prove, use mathematical models, attend to precision, identify elements of structure, generalize, engage in mathematical communication, and make connections as essential mathematical practices. They understand that these practices intersect with mathematical content and that understanding relies on the ability to demonstrate these practices within and among mathematical domains and in their teaching.

Preservice teacher candidates:

- 2a) Use problem solving to develop conceptual understanding, make sense of a wide variety of problems and persevere in solving them, apply and adapt a variety of strategies in solving problems confronted within the field of mathematics and other contexts, and formulate and test conjectures in order to frame generalizations.
- 2b) Reason abstractly, reflectively, and quantitatively with attention to units, constructing viable arguments and proofs, and critiquing the reasoning of others; represent and model generalizations using mathematics; recognize structure and express regularity in patterns of mathematical reasoning; use multiple representations to model and describe mathematics; and utilize appropriate mathematical vocabulary and symbols to communicate mathematical ideas to others.
- 2c) Formulate, represent, analyze, and interpret mathematical models derived from real-world contexts or mathematical problems.
- 2d) Organize mathematical thinking and use the language of mathematics to express ideas precisely, both orally and in writing to multiple audiences.
- 2e) Demonstrate the interconnectedness of mathematical ideas and how they build on one another and recognize and apply mathematical connections among mathematical ideas and across various content areas and real-world contexts.
- 2f) Model how the development of mathematical understanding within and among mathematical domains intersects with the mathematical practices of problem solving, reasoning, communicating, connecting, and representing.

Met

Met with Conditions

Not Met



Standard 2 Comments:

At least two assessments providing evidence that Elements 2a*, 2b*, and at least 2 additional elements are met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 2.

*: Indicates essential (required) elements

Section III of the program report indicates Assessments 2, 3, 4, 5 and 6 address this standard.

*Element 2a: MET

Assessment 2 (course grades): The listed courses provide evidence for Element 2a.

Assessment 3 (education field portfolio): Many of the rubric components of Assessment 3 contain multiple behaviors that render making decisions on candidate performance an impossibility. "Problem solving is included" and "Instructional examples" provide some evidence for Element 2a, but the descriptors do not provide sufficient evidence for this element. For this Assessment, data Chart 3: Data for Overall Performance (Field Portfolio) Of NCTM/CAEP standards presents data for Mathematical Practices 2a.1, 2a.2, 2a.3, etc., however the rubric for Assessment 3 shows no alignment for 2a.1, 2a.2, 2a.3.

Assessment 4 (STPP): Many of the rubric components of Assessment 4 contain multiple behaviors that render making decisions on candidate performance an impossibility. The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): Many of the rubric components of Assessment 4 contain multiple behaviors that render making decisions on candidate performance an impossibility. The descriptors do not provide sufficient evidence for this element. Data for Mathematical Practices 2a.1, 2a.2, 2a.3, etc., however the rubric for Assessment 5 shows no alignment for 2a.1, 2a.2, 2a.3.

Assessment 6 (Senior Seminar): Many of the rubric components of Assessment 3 contain multiple behaviors that render making decisions on candidate performance an impossibility. The language of the rubrics' performance descriptors does not articulate clear levels of performance. Data are reported by overall performance score rather than by rubric criterion. According to CAEP's Checklist for Evaluating Key Assessments and SPA Program Reports in PRS, data are to be broken down as much as possible to show candidate performance on individual scored items (or sub-scores) within the assessment. If a rubric is used to score an assessment, and the rubric has 10 criteria that are rated, then data should be presented for each of the 10 criteria. See <http://www.ncate.org/Accreditation/ProgramReview/ProgramReportSubmission/KeyAssessmentsAndProgramReports/tabid/455/Default.aspx>.

*Element 2b: NOT MET

Assessment 2 (course grades): The listed courses might provide evidence for Element 2b. "Need stuff here ..." was included in the description of MATH 321 for Element 2b.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 2a.

Element 2c: MET

Assessment 2 (course grades): The listed courses provide evidence for Element 2c.

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 2a.

Element 2d: MET

Assessment 2 (course grades): The listed courses provide evidence for Element 2d.

Assessment 3 (education field portfolio): See comments for Assessment 3 in Element 2a.

"Activities clearly described," "Mathematics is correct," and "Mathematical terminology" provide evidence for Element 2d. Descriptors for "Activities clearly described" are generic and should be replaced with language that specifically addresses Element 2d.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element. "Formulas, Theorems, Vocabulary" has potential to address Element 2d, but it is not clear how multiple audiences are considered.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 2a.

Element 2e: MET

Assessment 2 (course grades): The listed courses provide evidence for this element.

Assessment 3 (education field portfolio): See comments for Assessment 3 in Element 2a.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element. "Connections" provides evidence for some of Element 2e. "Motivational opening ..." has potential to provide some evidence for Element 2e, but needs to use language of Element 2e. Same rubric item is aligned with 2c,e in Assessment 3.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 2a.

Element 2f: MET

Assessment 2 (course grades): The listed courses provide evidence for Element 2f.

Assessment 3 (education field portfolio): See comments for Assessment 3 in Element 2a. "Variety of instructional styles" has potential to provide evidence for Element 2d, connection to 2f is unclear.

Assessment 4 (STPP): See comments for Assessment 4 in Element 2a.

Assessment 5 (Pre-test, post-test and reflection): See comments for Assessment 5 in Element 2a. "Variety of instructional styles" has potential to provide evidence for Element 2d, connection to 2f is unclear.

Assessment 6 (Senior Seminar): See comments for Assessment 6 in Element 2a.

Standard 3: Content Pedagogy

Effective teachers of secondary mathematics apply knowledge of curriculum standards for mathematics and their relationship to student learning within and across mathematical domains. They incorporate research-based mathematical experiences and include multiple instructional strategies and mathematics-specific technological tools in their teaching to develop all students' mathematical understanding and proficiency. They provide students with opportunities to do mathematics – talking about it and connecting it to both theoretical and real-world contexts. They plan, select, implement, interpret, and use formative and summative assessments for monitoring student learning, measuring student mathematical understanding, and informing practice.

Preservice teacher candidates:

3a) Apply knowledge of curriculum standards for secondary mathematics and their relationship to student learning within and across mathematical domains.

3b) Analyze and consider research in planning for and leading students in rich mathematical learning experiences.

3c) Plan lessons and units that incorporate a variety of strategies, differentiated instruction for diverse populations, and mathematics-specific and instructional technologies in building all students' conceptual understanding and procedural proficiency.

3d) Provide students with opportunities to communicate about mathematics and make connections among mathematics, other content areas, everyday life, and the workplace.

3e) Implement techniques related to student engagement and communication including selecting high quality tasks, guiding mathematical discussions, identifying key mathematical ideas, identifying and addressing student misconceptions, and employing a range of questioning strategies

3f) Plan, select, implement, interpret, and use formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.

3g) Monitor students' progress, make instructional decisions, and measure students' mathematical understanding and ability using formative and summative assessments.

Met

Met with Conditions

Not Met

Standard 3 Comments:

At least two assessments providing evidence that Elements 3a*, 3c*, 3f*, and at least 1 additional element are met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 3.

*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3,4 and 5 address this standard.

*Element 3a: NOT MET

Assessment 3 (education field portfolio): "General objectives" has potential to address Element 3a, but the descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element. The Objectives component has potential to address Element 3a, but descriptors should use language of Element 3a.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Element 3b: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

*Element 3c: NOT MET

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element. "Technology" addresses part of Element 3c.

Element 3d: NOT MET

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Element 3e: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

*Element 3f: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Element 3g: NOT MET

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Standard 4: Mathematical Learning Environment

Effective teachers of secondary mathematics exhibit knowledge of adolescent learning, development, and behavior. They use this knowledge to plan and create sequential learning opportunities grounded in mathematics education research where students are actively engaged in the mathematics they are learning and building from prior knowledge and skills. They demonstrate a positive disposition toward mathematical practices and learning, include culturally relevant perspectives in teaching, and demonstrate equitable and ethical treatment of and high expectations for all students. They use instructional tools such as manipulatives, digital tools, and virtual resources to enhance learning while recognizing the possible limitations of such tools.

Preservice teacher candidates:

4a) Exhibit knowledge of adolescent learning, development, and behavior and demonstrate a positive disposition toward mathematical processes and learning.

4b) Plan and create developmentally appropriate, sequential, and challenging learning opportunities grounded in mathematics education research in which students are actively engaged in building new knowledge from prior knowledge and experiences.

4c) Incorporate knowledge of individual differences and the cultural and language diversity that exists within classrooms and include culturally relevant perspectives as a means to motivate and engage students.

4d) Demonstrate equitable and ethical treatment of and high expectations for all students.

4e) Apply mathematical content and pedagogical knowledge to select and use instructional tools such as manipulatives and physical models, drawings, virtual environments, spreadsheets, presentation tools, and mathematics-specific technologies (e.g., graphing tools, interactive geometry software, computer algebra systems, and statistical packages); and make sound decisions about when such tools enhance teaching and learning, recognizing both the insights to be gained and possible limitations of such tools.

Met

Met with Conditions

Not Met

Standard 4 Comments:

At least two assessments providing evidence that Elements 4b*, 4d*, and 4e* are met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 4.

*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4, 5, and 6 address this standard.

Element 4a: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 6 (Senior Seminar): There is no alignment of Assessment 6 with any of the Elements in Standard 4.

*Element 4b: NOT MET

Assessment 3 (education field portfolio): "Prior knowledge clearly stated" provides some evidence for Element 4b. Descriptors for "Anticipated Difficulties" are generic and should be replaced with language that specifically addresses Element 4b.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element. Language in "4. Sets expectations for learners" is generic, descriptors for "outstanding" and "competent" are almost the same, first paragraph of "satisfactory" reads as if it is stronger than the first paragraph of "outstanding." Descriptors for "10. Maintains on-task ..." are generic and do not connect to Element 4b. Descriptors for "19. Utilizes dimensions ..." are too broad, generic and do not connect to Element 4b.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Element 4c: NOT MET

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

*Element 4d: MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): "9. Exhibits respect ..." provides evidence for Element 4d.

*Element 4e: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element. The bulletin board component has potential to provide evidence for Element 4e, but the definition of satisfactory should be reexamined. Descriptors for "Uses a variety of instructional tools" are generic and should be replaced with language that specifically addresses Element 4e.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element. "12. Creates visual displays ..." provides some evidence for Element 4e, but language is generic and not explicitly connected to Element 4e.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Standard 5: Impact on Student Learning

Effective teachers of secondary mathematics provide evidence demonstrating that as a result of their instruction, secondary students' conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and application of major mathematics concepts in varied contexts have increased. These teachers support the continual development of a productive disposition toward mathematics. They show that new student mathematical knowledge has been created as a consequence of their ability to engage students in mathematical experiences that are developmentally appropriate, require active engagement, and include mathematics-specific technology in building new knowledge.

Preservice teacher candidates:

5a) Verify that secondary students demonstrate conceptual understanding; procedural fluency; the ability to formulate, represent, and solve problems; logical reasoning and continuous reflection on that reasoning; productive disposition toward mathematics; and the application of mathematics in a variety of contexts within major mathematical domains.

5b) Engage students in developmentally appropriate mathematical activities and investigations that require active engagement and include mathematics-specific technology in building new knowledge.

5c) Collect, organize, analyze, and reflect on diagnostic, formative, and summative assessment evidence and determine the extent to which students' mathematical proficiencies have increased as a result of their instruction.

Met

Met with Conditions

Not Met



Standard 5 Comments:

At least two assessments providing evidence that Element 5c* and at least 1 additional element are met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 5.

*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4 and 5 address this standard.

Element 5a: NOT MET

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Element 5b: NOT MET

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element. "Name of course" does not provide evidence for Element 5b; descriptor for "satisfactory" only requires statement of course and grade level.

*Element 5c: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element. Descriptors for "Reflection and Adjustments" are generic and should be replaced with language that specifically addresses Element 5c.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Standard 6: Professional Knowledge and Skills

Effective teachers of secondary mathematics are lifelong learners and recognize that learning is often collaborative. They participate in professional development experiences specific to mathematics and mathematics education, draw upon mathematics education research to inform practice, continuously reflect on their practice, and utilize resources from professional mathematics organizations.

Preservice teacher candidates:

6a) Take an active role in their professional growth by participating in professional development experiences that directly relate to the learning and teaching of mathematics.

6b) Engage in continuous and collaborative learning that draws upon research in mathematics education to inform practice; enhance learning opportunities for all students' mathematical knowledge development; involve colleagues, other school professionals, families, and various stakeholders; and advance their development as a reflective practitioner.

6c) Utilize resources from professional mathematics education organizations such as print, digital, and virtual resources/collections.

Met

Met with Conditions

Not Met



Standard 6 Comments:

At least two assessments providing evidence that Element 6b* and at least 1 additional element are met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 6.

*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4, 5 and 6 address this standard.

Element 6a: NOT MET

Assessment 6 (Senior Seminar): There is no alignment of Assessment 6 with any of the Elements in Standard 6.

*Element 6b: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element. Rubric description of "Observation of at least two other teachers" does not connect to element 6b.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element. Rubric description of "Collaborates with other professionals as instructional partners" is generic and connects minimally with Element 6b.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Element 6c: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

Standard 7: Secondary Mathematics Field Experiences and Clinical Practice

Effective teachers of secondary mathematics engage in a planned sequence of field experiences and clinical practice under the supervision of experienced and highly qualified mathematics teachers. They develop a broad experiential base of knowledge, skills, effective approaches to mathematics teaching and learning, and professional behaviors across both middle and high school settings that involve a diverse range and varied groupings of students. Candidates experience a full-time student teaching/internship in secondary mathematics directed by university or college faculty with secondary mathematics teaching experience or equivalent knowledge base.

Preservice teacher candidates:

7a) Engage in a sequence of planned field experiences and clinical practice prior to a full-time student teaching/internship experience that include observing and participating in both middle and high school mathematics classrooms and working with a diverse range of students individually, in small groups, and in large class settings under the supervision of experienced and highly qualified mathematics teachers in varied settings that reflect cultural, ethnic, linguistic, gender, and learning differences.

7b) Experience full-time student teaching/internship in secondary mathematics that is supervised by a highly qualified mathematics teacher and a university or college supervisor with secondary mathematics teaching experience or equivalent knowledge base.

7c) Develop knowledge, skills, and professional behaviors across both middle and high school settings; examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics; and observe and analyze a range of approaches to mathematics teaching and learning, focusing on tasks, discourse, environment, and assessment.

Met

Met with Conditions

Not Met



Standard 7 Comments:

Information included in Section I - Context #2 of the program report for Element 7a* and in Section I - Context #2 and #6 for Element 7b* and at least one assessment for Element 7c* providing evidence that Elements 7a*, 7b*, and 7c* are met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 7.

*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4 and 5 address this standard.

*Element 7a: NOT MET

Section I Context #2: Candidates engage in a sequence of planned field experiences and clinical practice prior to a full-time student teaching, however it is not clear that observing and participating in both middle and high school mathematics classrooms is required.

Information was not presented to document that candidates work with a diverse range of students individually, in small groups, and in large class settings. Information was not presented to document that candidates work with varied settings that reflect cultural, ethnic, linguistic, gender, and learning differences.

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

*Element 7b: NOT MET

Section I Context #2 and #6: Candidates experience full-time student teaching/internship in secondary mathematics that is supervised by a highly qualified mathematics teacher. Three faculty are identified as university supervisors but one of them does not have secondary mathematics teaching experience or equivalent knowledge.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

*Element 7c: NOT MET

Assessment 3 (education field portfolio): The descriptors do not provide sufficient evidence for this element.

Assessment 4 (STPP): The descriptors do not provide sufficient evidence for this element.

Assessment 5 (Pre-test, post-test and reflection): The descriptors do not provide sufficient evidence for this element.

PART C - EVALUATION OF PROGRAM REPORT EVIDENCE

C.1. Candidates' knowledge of content

The program offers strong content courses and candidates are successful on the Praxis. Assessment 6 is not appropriate to document content knowledge, because not every candidate is assessed on the same content.

C.2. Candidates' ability to understand and apply pedagogical and professional content knowledge, skills, and dispositions

Alignment of multiple elements (or sub-elements) to single rubric criteria renders Assessments 3, 4, 5, and 6 ineffective in supporting elements. The rubrics for Assessments 3, 4, and 5 must be improved to focus rubric items on individual sub-elements with descriptors that provide clear distinction between performance levels.

C.3. Candidate effects on P-12 student learning

Candidate effects on P-12 student learning cannot be verified. Assessment 5 has potential for measuring student impact when the issues addressed in Part B of this report are addressed.

PART D - EVALUATION OF THE USE OF ASSESSMENT RESULTS

Evidence that assessment results are evaluated and applied to the improvement of candidate performance and strengthening of the program (as discussed in Section V of the program report)

The institution initiated steps to improve assessment data tracking and also hired a full time assessment coordinator. The department is taking steps to improve candidates' content preparation based on grades and standardized test data, including encouraging candidates to tutor precalculus students. The program recognizes the need for better alignment with the history standard.

PART E - AREAS FOR CONSIDERATION

Areas for consideration

- * Consider editing the report prior to submission. The following are a few errors noted: "Address" instead of "Addressed," "Reimann" instead of "Riemann," "o" instead of "to", "they procedures."
- *Rewriting course descriptions in Assessment 2 to better describe how identified courses support each mathematical domain competency would provide evidence that competencies are addressed. Catalog-like descriptions cannot always convey what candidates learn and do in a course.
- *The language of the rubrics' performance descriptors should articulate clear levels of performance.
- *Data must be reported by rubric criterion rather than by an overall performance score. According to CAEP's Checklist for Evaluating Key Assessments and SPA Program Reports in PRS, data are to be broken down as much as possible to show candidate performance on individual scored items (or sub-scores) within the assessment. If a rubric is used to score an assessment, and the rubric has 10 criteria that are rated, then data should be presented for each of the 10 criteria. See <http://caepnet.org/accreditation/caep-accreditation/spa-program-review-policies-and-procedur>
- *Some of the data charts are very confusing. For example Chart 3: Data for Overall Performance (Field Portfolio) Of NCTM/CAEP standards presents data for Mathematical Practices 2a.1, 2a.2, 2a.3, etc., however the rubric for Assessment 3 shows no alignment for 2a.1, 2a.2, 2a.3. According to CAEP's Checklist for Evaluating Key Assessments and SPA Program Reports in PRS, data are to be broken down as much as possible to show candidate performance on individual scored items (or sub-scores) within the assessment. Since a rubric is used to score this assessment, data should be presented for each of the rubric criteria.
- *Revising Assessments 3, 4, 5 and 6 and their accompanying rubrics to target individual sub-elements rather than elements or multiple sub-elements would enhance the likelihood of the program meeting many unmet elements.
- *Verify the accuracy of the assessments identified in Section III of the program report compared to the alignment of standard elements in each assessment.

PART F - ADDITIONAL COMMENTS

F.1. Comments on Section I (Context) and other topics not covered in Parts B-E:

The program has strong field experience requirements (e.g., 2 learning units have potential to assess candidates' pedagogical content knowledge in depth).

F.2. Concerns for possible follow-up by the CAEP site visitors:

None.


PART G - DECISIONS

Please select final decision:

- Program does not currently satisfy SPA requirements for national recognition. See below for details.

PROGRAM DOES NOT MEET SPA REQUIREMENTS FOR NATIONAL RECOGNITION

Terms and Subsequent Actions

 Further Development Required The program does not satisfy SPA requirements for national recognition. The program has up to two opportunities to submit a Revised Report addressing unmet standards and other concerns in accordance with the dates provided on this Recognition Report. A program should NOT submit a Revised Report until it has the required data and is confident that it has addressed all of the unmet standards and any other critical concerns cited in this recognition report. If no reports are submitted by the noted date, the program's recognition status will expire and revert to Not Recognized. In case the status expires, the program will not be able to submit a Revised Report, but may submit a new, complete program report and initiate a new program review if time permits for the current CAEP accreditation cycle. Otherwise, the program may submit a new, complete program report and initiate a new program review for the next CAEP accreditation cycle, three years before the site visit.

Comment on decision:

The program has until 3/15/2019 to submit a revised report. The decision thru date is 8/1/2019.

Please click "Next"

This is the end of the report. Please click "Next" to proceed.