NCATE approved the 2012 NCTM Standards in 2012. Programs can use either the 2003 or the 2012 standards through Fall 2014. Beginning in Spring 2015, programs submitting reports must use the 2012 Standards.

1. Institution Name
Edinboro University of Pennsylvania

2. State
Pennsylvania

3. Date submitted
09/15/2016

4. Report Preparer’s Information:
Name of Preparer:
Dr. Whitney Wesley
Phone: Ext.
(814)732-1591
E-mail: wwhitney@edinboro.edu

5. NCATE Coordinator’s Information:
Name:
Dr. Gwyneth Price
Phone: Ext.
(814)732-1542
E-mail: gprice@edinboro.edu

6. Name of institution’s program
Secondary Education- Mathematics

7. NCATE Category
Mathematics Education

8. Grade levels for which candidates are being prepared
7-12

9. Program Type
First teaching license

10. Degree or award level
Baccalaureate
Post Baccalaureate
Master's

11. Is this program offered at more than one site?
☐ Yes
☐ No

12. If your answer is "yes" to above question, list the sites at which the program is offered

13. Title of the state license for which candidates are prepared
Secondary Mathematics

14. Program report status:
☐ Initial Review
☐ Response to One of the Following Decisions: Further Development Required or Recognition with Probation
☐ Response to National Recognition with Conditions

15. Is your unit seeking
☐ NCATE accreditation for the first time (initial accreditation)
☐ Continuing NCATE accreditation

16. State Licensure requirement for national recognition:
NCATE requires 80% of the program completers who have taken the test to pass the applicable state licensure test for the content field, if the state has a testing requirement. Test information and data must be reported in Section IV. Does your state require such a test?
☐ Yes
☐ No

SECTION I - CONTEXT

1. Description of any state or institutional policies that may influence the application of NCTM standards. (Response limited to 4,000 characters INCLUDING SPACES)
Edinboro University is a one of 14 schools in the PA State System of Higher Education (PASSHE). As part of the system, national accreditation is not only encouraged but required for Schools of Education. Edinboro's strategic goals begin with "Ensure Program Quality and Student Success" including the objective "Implement processes and procedures to improve program and service quality in all departments, offices, and academic programs." Given these goals and objectives, institutional policies are designed to support the continuous improvement processes of accreditation and are, therefore, supportive of the NCTM standards. These policies include the need for all programs to undergo PASSHE five year review and submit annual Student Learning Outcome reports for Middle States. Due to our national accreditation and recognition status, these two aforementioned processes are abbreviated for the School of Education programs, reflecting the respect for the rigor and thoroughness of the NCATE/SPA procedures.
Though PA is a partner state with NCATE, Program Major Review conducted by the state department of education is independent from national accreditation or recognition, and does not impede the application of the standards. PA standards are closely aligned with standards for specialized professional associations, including NCTM.

2. Description of the field and clinical experiences required for the program, including the number of hours for early field experiences and the number of hours/weeks for student teaching or internships. (Response limited to 8,000 characters INCLUDING SPACES)
Field experiences are infused throughout all programs in the School of Education. The PA Department of Education guidelines for teacher preparation require four stages of field: (1) observation/exploration, (2) initial teaching experience, aid/help/tutor, (3) pre-student teaching/practicum, and (4) student teaching/internship. All stages are competency based and no long require any hours to be calculated. Having said that, sufficient hours in each stage are completed in every educator preparation program at EU, including 150 hours of stage 3 and 15 weeks of full-day student teaching. (Field Experience guidelines and competencies can be seen in the attachment in #4 of this section.) The following is a description of just some of the field experiences required or available in each Secondary program.

1. Stage 1:
a. SEDU 271 Multiculturalism in American Schools: Candidates are required to observe and participate in activities at one of five diverse locations in Erie. Focusing on ELL theory and strategies, candidates observe student/teacher interactions in a diverse setting with a concentration of ELL students. Candidates then write a reflection paper based on focus questions dealing with ELL.
b. SPED 210 Introduction to Special Education: Candidates are required to observe and participate in activities at one of five diverse locations in Erie. Focusing on inclusion, adaptations, and accommodations for special needs, candidates observe student/teacher interactions in a diverse, inclusive setting. Candidate then answer reflection questions focusing on special education issues.
2. Stage 2:
a. SEDU 350/360 Characteristics of Adolescent Learners / Adolescent Development: Candidates bring theory into practice focusing on
adolescent development, motivation, and learning theory by teaching inner-city, adolescent students through the Junior Achievement
program. Once a week for 12 weeks, candidates teach students in a diverse middle school (grades 6-8).
b. SEDU 306 Content Literacy: Focusing on writing in the content areas, candidates practice content area literacy strategies within their
discipline by conducting centers, circles, and other projects to middle level students in an inner-city K-8 school.
c. SPED 370 Adaptations and Accommodations: Candidates focus on direct use of evidence based practices, provide interventions, apply
prevention strategies, and provide integrated learning experiences to students in an after-school setting at an inner-city charter school. The
charter school was developed to specifically help those in poverty. Homework help, recreational activities, and other learning experiences are
developed and conducted by candidates.
d. SEDU 466/471/472/473 Instructional Techniques courses (by content): Candidates are involved with students from regional, rural middle
& high schools through several programs.
i. Wilderness Quest: (Conducted in fall semester) Candidates act as camp counselors, co-teachers, and mentors to 6th grade students. All 6th
grade students from one rural middle school participate in an outdoor camp for three days - focusing on environmental education, team
building, and citizenship.
ii. Code Orange: (conducted in spring semester) Candidates act as co-teachers and mentors to 6th grade students. All 6th grade students from
one rural middle school participate in the day after having read the book Code Orange. Candidates prepare centers and lessons focusing on
content literacy strategies and team building.
iii. Tutoring: Candidates are required to tutor in their content area for two local, rural high schools. Based on schedules, candidates tutor
those who ask for help before/after/during the school day.
3. Stage 3:
a. SEDU 475 Junior Field: Candidates generally take this course in the second semester Junior or first semester Senior year. Candidates must
have completed all other professional education courses with a C or better before being allowed to enter the field including the "Professional
Block" courses. These courses include SEDU381 Measurement & Evaluation, SPED 370 Adaptations & Accommodations, and SEDU
466/471/472/473 Instructional Techniques (by content). Candidates are in Professional Block for the first nine weeks of the semester and are
then in the Field every day, ½ a day for the last six weeks of the semester. Candidates are placed according to content specialty in a 7-12
classroom with a cooperating teacher. They are asked to teach at least 10 full lessons, with most taking over at least one class per day for
several weeks. Candidates develop a portfolio of lessons throughout Techniques and in the Field incorporating various lesson models,
assessment, content literacy strategies, and adaptations & accommodations. This portfolio is then used at the Portfolio Showcase and
Interviews (described further in Assessment section) where candidates demonstrate to program faculty how they have met the InTASC
standards.
All field placements are coordinated through the Office of Field & Student Teaching.
4. Stage 4:
a. SEDU 495 Student Teaching: The capstone experience for all education majors, student teaching last for a full 15 weeks. Placements are
made based on content area in a 7-12 level classroom. Either the Junior Field or Student Teaching placement must be in a diverse location.
All student teaching placements are coordinated through the Office of Field & Student Teaching.
Candidates are placed with a cooperating teacher who has agreed to mentor the candidate toward taking over the full day for several weeks.
Student teachers are responsible for all lesson planning, materials, assessment, and adaptations & accommodations. During this time, student
teachers develop an Instructional Assessment Plan which is a teacher work-sample assessment- content specific, focusing on impact on
student learning.

3. A program of study that outlines the courses and experiences required for candidates to complete the program. The program of
study must include course titles and numbers. (This information may be provided as an attachment from the college catalog or as a
student advisement sheet.) For post baccalaureate or master’s programs include a graduate advising form or transcript analysis form
showing undergraduate mathematics content course requirements aligned to NCTM NCATE Mathematics Content for Secondary.

See Attachment panel below.

4. This system will not permit you to include tables or graphics in text fields. Therefore any tables or charts must be attached as
files here. The title of the file should clearly indicate the content of the file. Word documents, pdf files, and other commonly used file
formats are acceptable.

5. Candidate Information
Directions: Provide three years of data on candidates enrolled in the program and completing the program, beginning with the most
recent academic year for which numbers have been tabulated. Report the data separately for the levels/tracks (e.g., baccalaureate,
post-baccalaureate, alternate routes, master’s, doctorate) being addressed in this report. Data must also be reported separately for
programs offered at multiple sites. Update academic years (column 1) as appropriate for your data span. Create additional tables as
necessary.

<table>
<thead>
<tr>
<th>Program:</th>
<th>Secondary Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Year</td>
<td># of Candidates Enrolled in the Program</td>
</tr>
<tr>
<td>2013-2014</td>
<td>35</td>
</tr>
<tr>
<td>2014-2015</td>
<td>19</td>
</tr>
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0228 BSED SecEd-Math cs 201520.pdf
6. Faculty Information

Directions: Complete the following information for each faculty member responsible for professional coursework, clinical supervision, or administration in this program.

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Bethany Scullin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Ph.D. Curriculum and Instruction, Kent State University</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Student Teacher Supervisor</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Scholarship, Leadership in Professional Associations, and Service</td>
<td>2014-2015 National Writing Project SEED Professional Development in a High-Need School Grant. Award Amount: $20,000 (awarded) 2014-2016 National Writing Project SEED Teacher Leadership Development Grant. Award Amount: $20,000 (awarded) Conference Organizer - Northwest Pennsylvania American Middle Level Education Conference held at Edinboro University</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools</td>
<td>Teacher, 10 years-urban setting, K-8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Charles Cross</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Ph.D. Curriculum and Instruction, University of Maryland</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Teach 2 SEDU 271 Multiculturalism in American Schools, teach 1 SEDU 702 Teaching in the Contemporary Multicultural Classroom, and supervising SEDU 495 Student Teaching</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools</td>
<td>Supervision of student teachers 1989-present, in Iowa (Briar Cliff College), Ohio (Mount Union College), and Pennsylvania (Edinboro University of PA for the last 16 years). High School Social Studies Teacher 1975-1985, Wicomico County, MD.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Dr. Andrew J. Pushchak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Ed. D. Educational Leadership Youngstown State University</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Program head and Professor of Educational Leadership</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Dr. Barbara J. Miller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Doctor of Education, 2001, University of Pittsburgh, Administration and Policy Studies, Educational Administration</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Educational Leadership Program: Teach six Graduate and Post Graduate Educational Leadership courses and supervise principal interns.</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools</td>
<td>2007 Present, Principals Leadership Induction Network (PLI): Providing mentoring for school based novice</td>
</tr>
<tr>
<td>Faculty Member Name</td>
<td>Dr. John F. Ziegler</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Doctorate of Education, Indiana University of Pennsylvania, Educational Administration &amp; Leadership Studies</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Program advisor and professor</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools(9)</td>
<td>Professional P-12 Appointments: Administrative High School Principal, Greenville High School, Greeneville Area School District, Greenville, PA -12yrs., Elementary School Principal, East Elementary School, Greeneville Area School District, Greenville, PA -10 yrs. Guidance Director/Administrative Assistant, Osoyoos Valley High School, Osoyoos School District, Shinglehouse, PA -5yrs., Guidance Counselor, Bald Eagle Area School District, Wingate, PA -5yrs., Teacher, Smethport Elementary School, Smethport Area School District, Smethport, PA -5yrs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Heather-Lee M. Baron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Ph.D., Interdisciplinary: Reading Education and Linguistics, University of Alaska Fairbanks</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Assistant Professor; University Student Teaching Supervisor; University Field Experience Supervisor; Director and Facilitator of Collaborative Grant with the Perseus House Charter School; Co-Chair of the NCATE Diversity Committee; NCTE/NCATIE Reviewer</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Scholarship(6), Leadership in Professional Associations, and Service (7), List up to 3 major contributions in the past 3 years(8)</td>
<td>TESOL Core: Young Learner Certification; &quot;The influence of positive mother-child verbal interactions on adolescent mothers' literacy&quot; (dissertation); Two chapters in Best Practices for Teaching Reading: What Award-Winning Teachers Do by Randi Stone</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools(9)</td>
<td>K-2 Reading Specialist, West Riviera Beach, FL; 7-10 Reading Teacher, Literacy Coach, K-12 ESL Teacher-Coordinator, Union City, PA; University Student Teaching Supervisor; University Field Experience Supervisor; Director and Facilitator of Collaborative Grant with the Perseus House Charter School of Excellence; ESK Consultant for the Perseus House Charter School of Excellence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Lisa Ciecierski</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Ph.D. Kent State University</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Professor, Supervisor</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Instructor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools(9)</td>
<td>15 years of classroom experience; 5 years as a classroom teacher, 5 years as a reading specialist, 5 years as a reading coach</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Mary Nientimp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Masters of Special Education M.Ed</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the</td>
<td></td>
</tr>
<tr>
<td>Faculty Member Name</td>
<td>Presently teaching 3 undergraduate courses and 1 graduate course</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Presently teaching 3 undergraduate courses and 1 graduate course</td>
<td></td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Regular part time instructor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Scholarship, Leadership in Professional Associations, and Service</td>
<td>Presenter at Pennsylvania Middle School Conference(adaptations) Served on department committees( field experience, sabbatical,grade appeals) Special Education Field Coordinator Presentations for Secondary Block</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools</td>
<td>Taught in Pa K-5 Special Education classroom (5 years) Supervisor of undergraduate and graduate field in Special Education Special Education Field Coordinator</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Michael Vetere Jr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Ed.D. Educational Administration, University of Pittsburgh</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Professor of Educational Leadership</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Associate</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Scholarship, Leadership in Professional Associations, and Service</td>
<td>Financial Secretary for the Foundations for Association of Teacher Educators Several Presentations at National Conferences Faculty Chair for Faculty Evaluations Middle and secondary Education and Educational Leadership Member University Wide Promotion Committee University Senate</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools</td>
<td>Superintendent 12 years, Principal 12 years, Music teacher 9 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Stacie M. Wolbert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>D.Ed., Curriculum and Instruction, Indiana University of Pennsylvania</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Serves as Assistant Chairperson of EMSE Department, teaches 3 graduate/undergraduate courses, Supervisor of Field Students, Liaison for PDS</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
<tr>
<td>Scholarship, Leadership in Professional Associations, and Service</td>
<td>PDS Steering Committee Member, Research; The Impact of an Urban IMmersion Field Experience on Teacher Candidates' Concerns Regarding Teaching in Urban Districts: A Cross-University Comparison, Gates Literacy Design Collaboration</td>
</tr>
<tr>
<td>Teaching or other professional experience in P-12 schools</td>
<td>Received WJ ET TV/Oprah's Big Give Grant for collaborative project with Pfeiffer-Burleigh Elementary School, Developmentally Appropriate Learning Center Project with Roosevelt Middle School, Professional Development for Vision Quest on Problem Based Learning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Susan Curtin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>Ed.D. Educational Leadership, Youngstown State University</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Acting Manager, Associate Dean</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Member Name</th>
<th>Whitney M. Wesley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree, Field, &amp; University</td>
<td>D.Ed. Curriculum and Instruction, Indiana University of Pennsylvania</td>
</tr>
<tr>
<td>Assignment: Indicate the role of the faculty member</td>
<td>Assistant Department chair</td>
</tr>
<tr>
<td>Faculty Rank</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Tenure Track</td>
<td>YES</td>
</tr>
</tbody>
</table>
### Professional Associations, and Service

(7) List up to 3 major contributions in the past 3 years:


### Teaching or other professional experience in P-12 schools


### Faculty Member Name

Joseph Johnson

### Highest Degree, Field, & University

PhD, Science Education, State University of New York at Buffalo

### Assignment: Indicate the role of the faculty member

Teaching SEDU183, SEDU594, and SEDU692 (online). Supervising 6 student teachers.

### Faculty Rank

Assistant Professor

### Faculty Rank

### Tenure Track

YES

### Scholarship, Leadership in Professional Associations, and Service

(7) List up to 3 major contributions in the past 3 years:

- Praxis Licensure
- Grades
- Required Courses throughout the Program
- SEDU 471

### Teaching or other professional experience in P-12 schools

- Classroom teacher grades 11-12 mathematics 2004-2011; Assessment Coordinator grades 7-12, 2004-2011

---

(3) e.g., PhD in Curriculum & Instruction, University of Nebraska.

(4) e.g., faculty, clinical supervisor, department chair, administrator

(5) e.g., professor, associate professor, assistant professor, adjunct professor, instructor

(6) Scholarship is defined by NCATE as systematic inquiry into the areas related to teaching, learning, and the education of teachers and other school personnel. Scholarship includes traditional research and publication as well as the rigorous and systematic study of pedagogy, and the application of current research findings in new settings. Scholarship further presupposes submission of one's work for professional review and evaluation.

(7) Service includes faculty contributions to college or university activities, schools, communities, and professional associations in ways that are consistent with the institution and unit's mission.

(8) e.g., officer of a state or national association, article published in a specific journal, and an evaluation of a local school program.

(9) Briefly describe the nature of recent experience in P-12 schools (e.g. clinical supervision, inservice training, teaching in a PDS) indicating the discipline and grade level of the assignment(s). List current P-12 licensure or certification(s) held, if any.

---

### SECTION II - LIST OF ASSESSMENTS

In this section, list the 6-8 assessments that are being submitted as evidence for meeting the NCTM standards. All programs must provide a minimum of six assessments. If your state does not require a state licensure test in the content area, you must substitute an assessment that documents candidate attainment of content knowledge in #1 below. For each assessment, indicate the type or form of the assessment and when it is administered in the program.

1. Please provide following assessment information (Response limited to 250 characters each field)

| Assessment #1: Licensure assessment, or other content-based assessment aligned to NCTM NCATE Mathematics Content for Secondary (required) | Praxis | Licensure | End of Program |
| Assessment #2: Content knowledge in secondary mathematics aligned to NCTM NCATE Mathematics Content for Secondary (required) | Course Grades | Grades | Required Courses throughout the Program |
| Assessment #3: Candidate ability to plan instruction (required) | Math Instructional Techniques Plan | Unit Plan | SEDU 471 |
SECTION III - RELATIONSHIP OF ASSESSMENT TO STANDARDS

1. 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 NCATE Mathematics Content for Secondary.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. 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.

SECTION IV - EVIDENCE FOR MEETING STANDARDS

DIRECTIONS: The 6-8 key assessments listed in Section II must be documented and discussed in Section IV. Taken as a whole, the assessments must demonstrate candidate mastery of the SPA standards. The key assessments should be required of all candidates. Assessments and scoring guides and data charts should be aligned with the SPA standards. This means that the concepts in the SPA standards should be apparent in the assessments and in the scoring guides to the same depth, breadth, and specificity as in the SPA standards. Data tables should also be aligned with the SPA standards. The data should be presented, in general, at the same level it is collected. For example, if a rubric collects data on 10 elements [each relating to specific SPA standard(s)], then the data chart should report the data on each of the elements rather than reporting a cumulative score.

In the description of each assessment below, the SPA has identified potential assessments that would be appropriate. Assessments
have been organized into the following three areas to be aligned with the elements in NCATE’s unit standard 1:

• Content knowledge (Assessments 1, 2 and 6)
• Pedagogical and professional knowledge, skills and dispositions (Assessments 3 and 4)
• Focus on student learning (Assessment 5)

Note that in some disciplines, content knowledge may include or be inextricable from professional knowledge. If this is the case, assessments that combine content and professional knowledge may be considered "content knowledge" assessments for the purpose of this report.

For each assessment, the compiler should prepare one document that includes the following items:

(1) A two-page narrative that includes the following:
   a. A brief description of the assessment and its use in the program (one sentence may be sufficient);
   b. A description of how this assessment specifically aligns with the standards it is cited for in Section III. Cite SPA standards by number, title, and/or standard wording.
   c. A brief analysis of the data findings;
   d. An interpretation of how that data provides evidence for meeting standards, indicating the specific SPA standards by number, title, and/or standard wording;
   and

(2) Assessment Documentation
   e. The assessment tool itself or a rich description of the assessment (often the directions given to candidates);
   f. The scoring guide for the assessment; and
   g. Charts that provide candidate data derived from the assessment.

The responses for e, f, and g (above) should be limited to the equivalent of five text pages each, however in some cases assessment instruments or scoring guides may go beyond five pages.

Note: As much as possible, combine all of the files for one assessment into a single file. That is, create one file for Assessment #4 that includes the two-page narrative (items a – d above), the assessment itself (item e above), the scoring guide (item f above), and the data chart (item g above). Each attachment should be no larger than 2 mb. Do not include candidate work or syllabi. There is a limit of 20 attachments for the entire report so it is crucial that you combine files as much as possible.

1. State licensure test(s) or professional examinations of content knowledge. NCTM standards addressed in this entry could include Standards 1-2. If your state does not require licensure tests or professional examinations in the content area, data from another assessment aligned to NCTM NCATE Mathematics Content for Secondary must be presented to document candidate attainment of content knowledge. (Assessment Required)

Provide assessment information as outlined in the directions for Section IV

See Attachment panel below.

2. Assessment of content knowledge in mathematics. NCTM standards addressed in this assessment that is aligned to NCTM NCATE Mathematics Content for Secondary could include but are not limited to Standards 1-2. Examples of assessments include comprehensive examinations, GPAs or grades, and portfolio tasks. For post-baccalaureate teacher preparation, include an assessment used to determine that candidates have adequate content background in the subject to be taught. (Assessment Required)

Provide assessment information as outlined in the directions for Section IV

See Attachment panel below.

(14) For program review purposes, there are two ways to list a portfolio as an assessment. In some programs a portfolio is considered a single assessment and scoring criteria (usually rubrics) have been developed for the contents of the portfolio as a whole. In this instance, the portfolio would be considered a single assessment. However, in many programs a portfolio is a collection of candidate work—and the artifacts included.

3. Assessment that demonstrates candidates can effectively plan classroom-based instruction. NCTM standards that could be addressed in this assessment include but are not limited to Standard 3. Examples of assessments include the evaluation of candidates’ abilities to develop lesson or unit plans, individualized educational plans, needs assessments, or intervention plans. (Assessment Required)

Provide assessment information as outlined in the directions for Section IV
Assessment 3: Unit Plan

See Attachment panel below.

4. Assessment that demonstrates candidates' knowledge, skills, and dispositions are applied effectively in practice. NCTM standards that could be addressed in this assessment include but are not limited to Standards 3, 4, 6, and 7. An assessment instrument used in student teaching or an internship should be submitted. (Assessment Required)

Provide assessment information as outlined in the directions for Section IV

Assessment 4 - STPE

See Attachment panel below.

5. Assessment that demonstrates candidate effect on student learning. NCTM standards that could be addressed in this assessment include but are not limited to Standard 5. Examples of assessments include those based on student work samples, portfolio tasks, case studies, follow-up studies, and employer surveys. (Assessment Required)

Provide assessment information as outlined in the directions for Section IV

Assessment 5 - IAP

See Attachment panel below.

Assessment 5- IAP Directions

6. Assessment of content knowledge in mathematics. NCTM standards addressed in this assessment that is aligned to NCTM CAEP Mathematics Content for Secondary could include but are not limited to Standards 1-2. Examples of assessments include comprehensive examinations, GPAs or grades, and portfolio tasks.

Provide assessment information as outlined in the directions for Section IV

Assessment 6- Portfolio Interview.docx

See Attachment panel below.

Assessment 6- Portfolio Interview.docx

7. Additional assessment that addresses NCTM standards. Examples of assessments include evaluations of field experiences, case studies, portfolio tasks, licensure tests not reported in #1, and follow-up studies. (Optional)

Provide assessment information as outlined in the directions for Section IV

Assessment 7 - PDE 430.docx

See Attachment panel below.

Assessment 7 - PDE 430.docx

8. Additional assessment that addresses NCTM standards. Examples of assessments include evaluations of field experiences, case studies, portfolio tasks, licensure tests not reported in #1, and follow-up studies. (Optional)

Provide assessment information as outlined in the directions for Section IV

SECTION V - USE OF ASSESSMENT RESULTS TO IMPROVE PROGRAM

1. Evidence must be presented in this section that assessment results have been analyzed and have been or will be used to improve candidate performance and strengthen the program. This description should not link improvements to individual assessments but, rather, it should summarize principal findings from the evidence, the faculty's interpretation of those findings, and changes made in (or planned for) the program as a result. Describe the steps program faculty have taken to use information from assessments for improvement of both candidate performance and the program. This information should be organized around (1) content knowledge, (2) professional and pedagogical knowledge, skill, and dispositions, and (3) student learning.

(Response limited to 12,000 characters INCLUDING SPACES)

According to data and information listed in Assessments 1-7 of this report, students in the Edinboro University of Pennsylvania Secondary Education Mathematics program are attaining the required content knowledge, and professional and pedagogical knowledge, skills, and disposition to be effective facilitators of learning and create environments that support learning for all students.
Regarding achievement of content knowledge, Praxis scores and grades in Mathematics Specialization courses indicate that a majority of our students are attaining content knowledge at an acceptable level. In an effort to increase their content knowledge, further investigation into the low test score passing rates is needed. As described in the assessment interpretation, the low pass rate may be reflective of students who are able to achieve certification with a lowered cut score due to their higher GPA. As has been past practice, the Middle and Secondary Education Department shares the Praxis II result data from each of the test's subcategories with the faculty of the Mathematics & Computer Science Department. The analysis of subscore data is particularly useful in determining areas of lowest performance and potential course revisions needed. In addition, it will also be helpful for checking alignment of course content to the newest version of the test and addressing any content gaps.

Assessment 4 - the Student Teaching Performance Evaluation - is a recent program addition. This assessment is a slightly modified version of Danielson's Framework for Teaching rubric that is now used across Pennsylvania as a required tool for evaluating in-service teachers. It assesses the candidates across four domains: planning and preparation; classroom environment; instruction; professional responsibilities. The unit chose this particular tool so that the candidates become better aware of the expectations of the profession.

In further attempts to address candidates' professional and pedagogical knowledge, skill, and disposition, Assessment 6 - the Portfolio and Interview - are assessed in the semester prior to student teaching. The results are shared with the candidate and the student teaching supervisor so that the supervisor may support areas of weakness.

One item of focus for the Math Education program resulted from looking at the data from all Secondary completers (both UG and PB) on the Portfolio Interview component of learning differences coupled with Alumni Survey data collected as a Unit level assessment. Together, these two sources provided insight that candidates were not confident in their abilities to service ELL students. A first step toward increasing this confidence was taken in Fall 2015 as an early field experience was added to the Multicultural Education course (SEDU 271), a field experience that occurs at a diverse site serving a high ELL population. Through this early experience, the program hopes to instill a practical knowledge and familiarity with the ELL population such that candidates can connect future learning to their knowledge of this population.

A second major change to the Math Education curriculum resulted from feedback from candidates as well as the observations of University Supervisors. When comparing the results of Secondary candidates to those in the Middle Level program on both Assessment 4 - STPE and Assessment 6 - Portfolio Interview, that those in the Middle Level program were more prepared to deal successfully with adolescents. For this reason, two courses were added to all of the Secondary curricula including Social Studies - SEDU 350 Theories & Practices in Secondary Schools as well as SEDU 360 - Secondary Features and Practices, which in tandem deal with adolescent development, learning theory, and best practices for teaching adolescents. Since the courses are taken as a block, they also allow for early field experiences with young adolescents including teaching through the Junior Achievement program in upper middle level grades.

Together, assessments 4-7, indicate that our candidates possess the necessary professional and pedagogical knowledge, skills, and dispositions to be effective facilitators of learning and create environments that support learning for all students. As explained above, results from assessments 1 and 2 are being further investigated to increase the candidates' attainment of content knowledge.

SECTION VI - FOR REVISED REPORTS OR RESPONSE TO CONDITIONS REPORTS ONLY

1. For Revised Reports: Describe what changes or additions have been made to address the standards that were not met in the original submission. Provide new responses to questions and/or new documents to verify the changes described in this section. Specific instructions for preparing a Revised Report are available on the NCATE web site at http://www.ncate.org/Accreditation/ProgramReview/ProgramReportSubmission/RevisedProgramReports/tabid/453/Default.aspx

For Response to Conditions Reports: Describe what changes or additions have been made to address the conditions cited in the original recognition report. Provide new responses to questions and/or new documents to verify the changes described in this section. Specific instructions for preparing a Response to Conditions Report are available on the NCATE web site at http://www.ncate.org/Accreditation/ProgramReview/ProgramReportSubmission/ResponsetoConditionsReport/tabid/454/Default.aspx

(Response limited to 24,000 characters. INCLUDING SPACES)

Please click "Next"

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