**Template Revised September 13, 2024**

**Program Report Format**

**Mathematics,**

**6-12**

 **Kansas State Department of Education**

**COVER SHEET**

**Education Preparation Provider (EPP):** \_\_\_\_\_\_\_\_\_\_

**Date Submitted:** \_\_\_\_\_

**Name of Preparer(s):** \_\_\_\_\_\_\_\_\_\_

**EPP Unit Head Name:** \_\_\_\_\_\_\_\_\_\_

**Unit Head Phone Number:** \_\_\_\_\_\_\_\_\_\_ **Email:** \_\_\_\_\_\_\_\_\_\_

**Level of the Program:** \_\_ Initial

**Grade levels for which candidates are being prepared:**

☐ 6-12

**Program Report Status:**

☐ New Program ☐ Continued Program

**(NEW PROGRAMS MUST SUBMIT SYLLABI)**

**Reminder:**

**By regulation initial-level programs must include**

**a plan of study that constitutes a major in the subject at the institution or that is equivalent to a major;**

**at least 12 weeks of student teaching; and**

**a validated preservice candidate work sample.**

**See the template instructions for directions on completing the form.**

**Required materials:**

**Program of Study required of all candidates in the program.**

**Course syllabi for new programs and Science of Reading.**

**Summary of Standards and Assessments**

| **Standard****The teacher of** **Mathematics 6-12** | **Key assessment(s) for each standard** **(please label ex. A, B, C)** |
| --- | --- |
| **Standard 1: Mathematical Connections to the Learner and Learning** **Effective teachers of secondary mathematics exhibit in-depth knowledge of adolescent development and behavior and 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.**  | Ex: A, B |
| **Standard 2: 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.** | Ex: C |
| **Standard 3: Content Knowledge** **Effective teachers of secondary mathematics understand the conceptual foundations of mathematics and can demonstrate and apply knowledge of major mathematics concepts connections, applications, and how conceptual understanding leads to an understanding of algorithms and procedures, within and among number and quantity, algebra including linear and abstract concepts, Euclidian and non-Euclidian geometries, trigonometry, statistics and probability, analytical geometry and calculus, and discrete mathematics.**  | Ex: D, E |
| **Standard 4: 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.**  |  |
| **Standard 5: 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.**  |  |
| **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.** |  |
| **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 with supervision by university or college faculty with secondary teaching experience and mathematics content knowledge base.** |  |

**EVIDENCE FOR MEETING STANDARDS**

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| --- |
| **Standard 1: Mathematical Connections to the Learner and Learning** Effective teachers of secondary mathematics exhibit in-depth knowledge of adolescent development and behavior and 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. **Evidence for meeting the standard:**[enter text here] |

**\_\_ Assessment rubrics are included.**

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| **Standard 2: 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.**Evidence for meeting the standard:**[enter text here] |

**\_\_ Assessment rubrics are included.**

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| **Standard 3: Content Knowledge** Effective teachers of secondary mathematics understand the conceptual foundations of mathematics and can demonstrate and apply knowledge of major mathematics concepts connections, applications, and how conceptual understanding leads to an understanding of algorithms and procedures, within and among number and quantity, algebra including linear and abstract concepts, Euclidian and non-Euclidian geometries, trigonometry, statistics and probability, analytical geometry and calculus, and discrete mathematics. **Evidence for meeting the standard:**[enter text here] |

**\_\_ Assessment rubrics are included.**

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| --- |
| **Standard 4: 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. **Evidence for meeting the standard:**[enter text here] |

**\_\_ Assessment rubrics are included.**

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| **Standard 5: 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. **Evidence for meeting the standard:**[enter text here] |

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| **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.**Evidence for meeting the standard:**[enter text here] |

**\_\_ Assessment rubrics are included.**

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| **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 with supervision by university or college faculty with secondary teaching experience and mathematics content knowledge base.**Evidence for meeting the standard:**[enter text here] |

**\_\_ Assessment rubrics are included.**

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