

Rubric for Evaluation of Student Teaching (Part II): Mathematics Education

Field Outcome	Exceeds	Acceptable-High	Acceptable-Low	Unacceptable
1. The teacher candidate uses and emphasizes sound mathematics and precise mathematical vocabulary/symbols to communicate mathematical ideas to students.	Systematically and consistently uses correct mathematics. Emphasizes the importance of precise communication.	Consistently uses correct mathematics. Emphasizes the importance of precise communication.	Minor mathematical errors made during lessons. Uses, but does not emphasize, the importance of precise communication.	Frequently makes mathematical errors during lessons. Infrequently emphasizes the importance of precise communication.
2. The teacher candidate encourages students to use precise communication.	Consistently encourages students to use clear definitions, provide accurate labels, graphs and measurements, and provide carefully formulated explanations.	Regularly encourages students to use clear definitions, provide accurate labels, graphs and measurements, and provide carefully formulated explanations.	Sometimes encourages students to use clear definitions, provide accurate labels, graphs and measurements, and provide carefully formulated explanations.	Infrequently encourages students to use clear definitions, provide accurate labels, graphs and measurements, and provide carefully formulated explanations.
3. The teacher candidate involves students in rich problem solving tasks with multiple solutions, urges students to evaluate the reasonableness of their results, and encourages students to persevere.	Consistently involves students in rich problem solving tasks with multiple solutions, urges students to evaluate the reasonableness of their results, and encourages students to persevere.	Regularly involves students in rich problem solving tasks with multiple solutions, urges students to evaluate the reasonableness of their results, and encourages students to persevere.	Sometimes involves students in problem solving tasks with multiple solutions, urges students to evaluate the reasonableness of their results, and encourages students to persevere.	Misses or avoids opportunities to provide problem solving tasks. Does not provide opportunities for students to evaluate the reasonableness of their results, nor encourage students to persevere.
4. The teacher candidate demonstrates the ability to differentiate instruction.	Consistently creates a learning environment that differentiates instruction based on students' readiness, interests, and learning styles. Uses a wide range of instructional and management strategies to accommodate the needs of all learners.	Creates a learning environment that differentiates instruction based on students' readiness, interests, and learning styles. Uses a range of instructional and management strategies to accommodate learners with special needs.	Creates a learning environment that differentiates instruction based on students' readiness, interests, and learning profile. Uses at least one instructional and/or management strategy to accommodate learners with special needs.	Creates a learning environment that does not differentiate instruction. Does not adapt instruction to accommodate the needs of identified learners with special needs.

Field Outcome	Exceeds	Acceptable-High	Acceptable-Low	Unacceptable
5. The teacher candidate uses multiple representations and models during instruction which are appropriate for the lesson.	Consistently uses multiple representations and models. Consistently discusses the interconnectedness between representations.	Regularly uses multiple representations and models. Regularly discusses the interconnectedness between representations.	Sometimes uses multiple representations and models. Sometimes discusses the interconnectedness between representations.	Infrequently uses multiple representations and models. Infrequently discusses the interconnectedness between representations.
6. The teacher candidate encourages students to use developmentally and content appropriate mathematical models.	Consistently encourages students to use developmentally and content appropriate mathematical models to identify important quantities and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts, and/or formulas.	Regularly encourages students to use developmentally and content appropriate mathematical models to identify important quantities and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts, and/or formulas.	Sometimes encourages students to use developmentally and content appropriate mathematical models to identify important quantities and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts, and/or formulas.	Infrequently encourages students to use developmentally and content appropriate mathematical models to identify important quantities and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts, and/or formulas.
7. The teacher candidate engages students in developmentally appropriate, sequential, and challenging mathematical learning opportunities that require active participation.	Consistently provides challenging learning activities based on students' backgrounds and presents learning activities that allow students to discover mathematical concepts. Consistently helps students make connections and develop coherent understandings of mathematics. Consistently engages students in learning.	Regularly provides challenging learning activities based on students' backgrounds and presents learning activities that allow students to discover mathematical concepts. Regularly helps students make connections and develop coherent understandings of mathematics. Regularly engages students in learning.	Sometimes provides challenging learning activities based on students' backgrounds and presents learning activities that allow students to discover mathematical concepts. Sometimes helps students make connections and develop coherent understandings of mathematics. Sometimes engages students in learning.	Infrequently poses learning activities based on students' backgrounds and presents learning activities that allow students to discover mathematical concepts. Infrequently helps students make connections and develop coherent understandings of mathematics. Infrequently engages students in learning.
8. The teacher candidate uses appropriate questioning techniques and incorporates a variety of question types which promote higher order thinking.	Consistently poses a variety of question types. Consistently allows appropriate wait time and calls on a variety of students. Consistently incorporates questions designed to promote higher-order thinking and reasoning.	Regularly poses a variety of question types. Regularly allows appropriate wait time and calls on a variety of students. Regularly incorporates questions designed to promote higher-order thinking and reasoning.	Sometimes poses a variety of question types. Sometimes allows appropriate wait time and calls on a variety of students. Sometimes incorporates questions designed to promote higher-order thinking and reasoning.	Infrequently poses a variety of question types. Infrequently allows appropriate wait time and calls on a variety of students. Infrequently incorporates questions designed to promote higher-order thinking and reasoning.

Field Outcome	Exceeds	Acceptable-High	Acceptable-Low	Unacceptable
9. The teacher candidate provides students with opportunities to make connections among mathematics concepts, across various content areas, within everyday life, and in the workplace.	Consistently provides opportunities to make connections among mathematics concepts, across various content areas, within everyday life, and in the workplace.	Regularly provides opportunities to make connections among mathematics concepts, across various content areas, within everyday life, and in the workplace.	Sometimes provides opportunities to make connections among mathematics concepts, across various content areas, within everyday life, and in the workplace.	Infrequently provides opportunities to make connections among mathematics concepts, across various content areas, within everyday life, and in the workplace.
10. The teacher candidate provides and orchestrates opportunities for students to interact and communicate about mathematics in the classroom including listening to the solution strategies of others, discussing alternative solutions and defending their own ideas.	Consistently provides and orchestrates opportunities for students to interact and communicate about mathematics in the classroom including listening to the solution strategies of others, discussing alternative solutions and defending their own ideas.	Regularly provides and orchestrates opportunities for students to interact and communicate about mathematics in the classroom including listening to the solution strategies of others, discussing alternative solutions and defending their own ideas.	Sometimes provides and orchestrates opportunities for students to interact and communicate about mathematics in the classroom including listening to the solution strategies of others, discussing alternative solutions and defending their own ideas.	Infrequently provides and orchestrates opportunities for students to interact and communicate about mathematics in the classroom including listening to the solution strategies of others, discussing alternative solutions and defending their own ideas.
11. The teacher candidate uses appropriate instructional tools such as manipulatives, presentation tools, and mathematics-specific technology to enhance learning.	Consistently uses appropriate instructional tools such as manipulatives, presentation tools, and mathematics-specific technology to enhance learning.	Regularly uses appropriate instructional tools such as manipulatives, presentation tools, and mathematics-specific technology to enhance learning.	Sometimes uses appropriate instructional tools such as manipulatives, presentation tools, and mathematics-specific technology to enhance learning.	Infrequently uses appropriate instructional tools such as manipulatives, presentation tools, and mathematics-specific technology to enhance learning.
12. The teacher candidate uses effective classroom management techniques to maintain a positive learning environment.	Consistently uses effective classroom management techniques resulting in a positive learning environment.	Regularly uses effective classroom management techniques resulting in a mostly positive learning environment.	Sometimes uses effective classroom management techniques resulting in a mostly positive learning environment.	Has difficulty maintaining a classroom environment conducive to learning.