

Student Learning Outcomes for Adolescence Mathematics

Candidates who successfully complete all required components of the Adolescence Mathematics program at SUNY New Paltz will:

- **Content Knowledge:** Demonstrate content area mastery by completing at least 30 hours of coursework in content math plus cognates.
- **Planning:** Be able to plan lessons in math that are NCTM standards-based, are clear and organized, rely upon a variety of appropriate pedagogical practices, include appropriate technologies, and differentiate instruction that provides opportunities to promote appreciation of diversity, tolerance, and inclusion in safe, democratic, and equitable learning environments.
- **Assessment and P-12 Learning:** Be able to choose, design, and implement authentic and appropriate formative and summative assessments to evaluate student learning, to consider assessment data when making instructional decisions, and to identify effective or problematic teaching moments as they are occurring in order to facilitate student growth in specified content, cognitive skills, and/or social skills.
- **Pedagogical Practice:** Demonstrate the ability to maximize student learning by incorporating content with pedagogical knowledge, utilizing appropriate and effective technology, and implementing a variety of developmentally and contextually appropriate evidence-based instructional strategies to make learning meaningful and relevant for students while teaching.
- **Dispositions:** Exhibit the knowledge, skills, and dispositions necessary to practice an ethically informed and self-reflective philosophy, participate effectively in institutional change, and develop respectful relationships with students, families, communities and colleagues.
- **Critical Thinking:** Identify, analyze, and evaluate different methods of planning, assessing, and teaching in order to develop well-reasoned arguments that support pedagogical decisions, and transfer these skills to students through the development of higher order thinking lesson development.
- **Information Management:** Use technology and basic research techniques in order to locate, evaluate, and synthesize new findings in mathematics with concepts in content knowledge, planning, assessment, and pedagogical practice.

Student Learning Outcomes for Adolescence Mathematics, MAT

Candidates who successfully complete all required components of the MAT Adolescence Math program at SUNY New Paltz will:

- **Content Knowledge:** Enhance content area through synthesizing mathematical conceptual understandings with pedagogical practice and implementation.
- **Planning:** Be able to plan lessons in math that are NCTM standards-based, are clear and organized, rely upon a variety of appropriate pedagogical practices, include appropriate technologies, and differentiate instruction that provides opportunities to promote appreciation of diversity, tolerance, and inclusion in safe, democratic, and equitable learning environments.
- **Assessment and P-12 Learning:** Be able to choose, design, and implement authentic and appropriate formative and summative assessments to evaluate student learning, consider assessment data when making instructional decisions, and identify effective or problematic teaching moments as they are occurring in order to facilitate student growth in specified content, cognitive skills, and/or social skills.
- **Pedagogical Practice:** Demonstrate the ability to maximize student learning by incorporating content with pedagogical knowledge, utilizing appropriate and effective technology, and

implementing a variety of developmentally and contextually appropriate evidence-based instructional strategies to make learning meaningful and relevant for students while teaching.

- **Dispositions:** Exhibit the knowledge, skills, and dispositions necessary to practice an ethically informed and self-reflective philosophy, participate effectively in institutional change, and develop respectful relationships with students, families, communities and colleagues.
- **Critical Thinking:** Identify, analyze, and evaluate different methods of planning, assessing, and teaching in order to develop well-reasoned arguments that support pedagogical decisions, and transfer these skills to students through the development of higher order thinking lesson development.
- **Information Management:** Use technology and basic research techniques in order to locate, evaluate, and synthesize best-practices concepts in content knowledge, planning, assessment, and pedagogical practice.

Student Learning Outcomes for Adolescence Mathematics, MEd

Candidates who successfully complete all required components of the Adolescence Math program at SUNY New Paltz will:

- **Content Knowledge:** Enhance content area through synthesizing scientific conceptual understandings with pedagogical practice and implementation.
- **Planning:** Be able to plan lessons in math that are NCTM standards-based, are clear and organized, rely upon a variety of appropriate pedagogical practices, include appropriate technologies, and differentiate instruction that provides opportunities to promote appreciation of diversity, tolerance, and inclusion in safe, democratic, and equitable learning environments.
- **Assessment and P-12 Learning:** Be able to choose, design, and implement authentic and appropriate formative and summative assessments to evaluate student learning, consider assessment data when making instructional decisions, and identify effective or problematic teaching moments as they are occurring in order to facilitate student growth in specified content, cognitive skills, and/or social skills.
- **Pedagogical Practice:** Demonstrate the ability to maximize student learning by incorporating content with pedagogical knowledge, utilizing appropriate and effective technology, and implementing a variety of developmentally and contextually appropriate evidence-based instructional strategies to make learning meaningful and relevant for students while teaching.
- **Dispositions:** Exhibit the knowledge, skills, and dispositions necessary to practice an ethically informed and self-reflective philosophy, participate effectively in institutional change, and develop respectful relationships with students, families, communities and colleagues.
- **Critical Thinking:** Identify, analyze, and evaluate different methods of planning, assessing, and teaching in order to develop well-reasoned arguments that support pedagogical decisions, and transfer these skills to students through the development of higher order thinking lesson development.
- **Information Management:** Use technology and basic research techniques in order to locate, evaluate, and synthesize best-practices concepts in content knowledge, planning, assessment, and pedagogical practice.