

**Warner School of Education – University of Rochester**  
**INNOVATIVE UNIT: MATH**

### Guidelines for teacher candidates

All teacher candidates are required to design and implement innovative units in their student teaching and/or practicum experiences. As in the case of lesson plans, we believe it is important in at least one case to make explicit your thinking processes about design, implementation, and assessment. The following guidelines explain the minimum required components we expect in innovative unit papers. This assessment, in conjunction with final student teaching evaluations, will determine if a candidate will “pass” student teaching. Assessment of the innovative unit paper will occur on two levels: 1) Candidate ability to design, implement, and analyze the unit as described in these guidelines, and 2) Candidate ability to address in the unit the relevant standards set by their professional organization and Warner School proficiencies. The rubric is divided into three parts and is included in this packet. Content area faculty may provide additional rubrics specific to that specialization.

#### ***Required Unit Components:***

- 1. Introduction:** This section should provide a brief description of the unit that gives a context for the components of the unit, including an essential question and/or topic addressed if appropriate. Include a clear description of the context of implementation for the unit, including grade level, racial, ethnic and gender make-up of students and teachers, a description of the school and classroom, and whether the implementation occurred in the first or second student teaching/practicum experience.
- 2. Theoretical framework:** Provide a clear, well thought out theoretical framework that both guides and provides a foundation for, the unit, using course readings (and outside readings where appropriate). Candidates should state their definition of the content area addressed and their theory of learning. In other words, how does your definition of [literacy, language, science, math, English, social studies] and theory of learning frame the unit? This section should also include a clear rationale for the unit (e.g. why is this unit important? Why will student learning be meaningful and relevant in this unit?).
- 3. Goals/Professional Standards:** Describe the overarching goal/s of the unit and connect the goal/s to the larger curriculum in your class (e.g. an integrated curriculum in elementary or the specific content area in secondary). Discuss the professional and/or state standards this unit addresses. Make explicit the specific content addressed and connections to the theoretical framework, curriculum, and overarching unit goal/s.
- 4. Objectives:** Clearly articulate the specific unit objectives and connect these objectives to the unit goals and professional standards.
- 5. Assessment of Student Learning over Time:** Describe the multiple forms of assessment used across the unit. Include formative, summative, formal, and informal assessments. Explicitly connect your assessment to the theoretical framework, unit goals and objectives, and professional standards. In other words, how will your assessments help you scaffold

student learning over time and how will you know you have accomplished your goals? How will your assessments inform instruction?

6. **Pedagogy:** Describe the series of connected lessons and/or experiences in the unit. Include your detailed lesson plans for selected lessons in this section using the lesson plan format given to you. Describe in detail how you will scaffold and support student learning over time, and address any relevant safety considerations.
7. **Unit Implementation:** Describe what happened when you implemented this unit, with particular attention to students' responses to its main activities. Reflect on what went well and what you would change in future implementations.
8. **Analysis of student learning:** Report the results of a systematic analysis of what your students learned as a result of the unit, making explicit references to goals and objectives, and using data from formal assessments and classroom observations (see number 5 above). Refer as appropriate to the assessment results and student work in an appendix to support your claims.
9. **Unit Analysis:** This section is a detailed analysis of the implementation of the unit that brings together content, theory, and practice. Describe how you have integrated the components of the unit into a coherent whole that produces meaningful and relevant student learning and addresses the goals articulated in Part 2 and 3 of the rubric. Connect the unit implementation with the larger curriculum and theoretical framework described in the introduction.
10. **Appendix:** Include: 1) text of key assignments and assessments, including rubrics or handouts given to students; 2) aggregate assessment data; 3) samples of student work with your comments.

What follows are the rubrics that will be used to evaluate this major assessment. You are expected to provide a self-evaluation of your work using these rubrics; your methods course instructor will do the same independently.