

M.A. in Interdisciplinary Studies: Science Teaching Curriculum Matrix

| Course | Program Goal #1 KNOWLEDGE | | | | Program Goal #2 RESEARCH | | Program Goal #3 LEADERSHIP | |
|---|---|---|--|---|---|--|--|--|
| | After completing the Master's in Science Teaching program graduates will have: | | | | | | | |
| | SLO #1 The knowledge and ability to integrate real-world applications in their science curricula with state and national science standards | SLO #2 Expertise in the design and implementation of learning experiences that are responsive to students' backgrounds, needs, and abilities | SLO #3 A strong foundation in science content and pedagogy for teaching topic-specific science concepts | SLO #4 A diverse range of skills to evaluate students' conceptual understanding of science content and science processes using formative and summative assessments | SLO #5 The knowledge and ability to critically analyze and synthesize science education research literature relevant to their own studies and practice | SLO #6 The ability to identify research questions/problems that are pertinent to science education and provide a focus for making a contribution to the field of science teaching | SLO #7 Create and model effective environments for learning science based on the understanding of current science education research literature | SLO #8 Leadership and expertise in science education at local, state, and national levels for the improvement of science education. |
| CSP PD Institutes NSCT 498 | | X | | X | | | | X |
| CSP workshops NSCT 498A | | X | | | | | | X |
| Earth Science NSCT 683/684 | X | | X | | | | | |
| Life Science NSCT 685/686 | X | | X | | | | X | |
| Physical Science NSCT 681/682 | X | | X | | | | X | |
| Curriculum Dev. EDCI 625 | | X | | | | | | |
| Assessment and Evaluation EDCI 602 | | | | X | | | | |
| Research Methods NSCT 680 | | | | | X | X | | |
| Critical Thinking Issues in Science Education NSCT 698 | | | | | X | X | | |
| Masters Thesis NSCT 699 | | | | | X | X | | |