Proposal to Modify the Requirements for the M.S. in Education Science and Environmental Education Major
November 2, 2009 From Bob Sherwood

Issues:

- Current program was prepared for old licensure standards where teachers had to get a significant number of credit hours in their content area to keep license
- Getting the number of hours of science courses (15) is very difficult for any returning teacher
- Getting the “masters in passing” towards the Ph.D. does not fit very well with the current Ph.D. program
- It would allow for more distance education courses as offerings grow.

Proposed Changes:

1. Reduce number of science hours to 9 instead of 15. This would make the degree more in line with the M.S. in Mathematics Education (requires 6 hours of graduate level mathematics), students who are admitted for the M.S. in Education but expect to apply for the Ph.D. as well as in-service teachers.

2. Make the course selections in science education (9 hours) more broad such as:

“Courses selected from E548 (Advanced Elementary Methods), S518 (Advanced Secondary Methods) and any 500 or 600 level Q course”

3. Increase the electives to 12 from 9 to allow more flexibility

Keep:

- J500 Instruction in Context of Curriculum (3)
- One Foundations/Inquiry Course (3)

Summary of Program

- J 500 (3)
- Foundations/Inquiry (3)
- Graduate Level Science Courses (COAS or SPEA) (9)
- Graduate Level Science Education Courses (9)
- Practicum or Thesis or Electives (6)
- Electives (6)
- Total 36 hours
Department of Curriculum & Instruction

Science & Environmental Education Specialization within the Secondary Education Master’s Degree Program

The Science & Environmental Education Secondary Education major includes 21 hours in professional education and 15 hours in science. The professional education courses provide you with a broad overview of science instruction and curriculum as well as experiences in curriculum design and development. The science courses are prescribed on an individual basis to provide you with a choice of field breadth or specialization in a selected discipline of science.

1. General Curriculum (3 hours): Education J500.

2. Special Program Area Basic Course (3 hours): Education E548, Q517, or S518.

3. Specialized Studies (12 hours):
   A. Science Education (6 hours)
      — Select from the following Education courses: E548, Q506, Q528, Q540, and S518
   B. Primary Science Area Courses (6 credits).
      — These courses must be at the graduate level in the primary area in which professionalization is desired.

4. Foundational Areas & Inquiry Skills (3 hours minimum):
   — Select at least one of the following Education courses: P501, P507, P510, P516, P525, P540, P544, H510, H520, H530. Other courses may be needed for special skills related to a particular practicum or thesis topic.

5. Electives in Science for the Supporting Area (9 hours): These courses must be at the graduate level in the supporting area in which professionalization is desired.

6. Thesis or Practicum Option (6 hours): Practicum proposals and thesis topics must be selected with the approval of your advisor. Practicums must extend over at least two semesters or one semester and a regular summer session. Six hours of course work may be substituted in lieu of a thesis or practicum with the approval of your advisor.

For information about a secondary education master’s degree with a specialization in Science & Environmental Education, contact:

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