## M.A.E. in Science Education Academic Assessment Plan 2012-2013

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University of Florida

Institutional Assessment

Continuous Quality
Enhancement

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#### Academic Assessment Plan for M.A.E. in Science Education

College of Education

#### A. Mission

The mission of the M.A.E. in Science Education program mirrors that of the School of Teaching and Learning, i.e., "to create and promote new knowledge and understandings about teaching and learning for the purpose of a just, compassionate, and informed citizenry." Using innovative, evidence-based practice and theory, the M.A.E. in science education program seeks to help experienced science education practitioners improve their own professional practice and become emerging scholars in the areas of formal and/or informal K-adult science education.

This program clearly aligns with both the broader College of Education and University of Florida institutional missions in several ways. First, it integrates and applies the latest research on best practices in formal and informal science education into the degree program and faculty working with the degree program regularly engage in research/scholarship and service activities focused on expanding and disseminating new knowledge and best practices in the science education field to broader audiences. Second, the M.A.E. in science education program focuses on helping experienced science educators pursue and disseminate new knowledge in the field of science education through both coursework and the completion of a quantitative or qualitative research project focusing on a significant problem or original question in the field of science education.

#### **B. Student Learning Outcomes and Assessment Measures**

SLO Type	Student Learning Outcome	Assessment Method	Degree Delivery
Knowledge	The student will identify and describe general and subject-area specific area best practices in teaching and learning in Science Education.	Students will receive a satisfactory rating on the defense of the thesis or project in lieu of thesis as rated by the faculty members on the student's MAE committee.	Campus
Skills	The student will investigate a significant problem or original question within his/her specific field of Science Education.	Students will receive a satisfactory rating on the defense of the thesis or project in lieu of thesis as rated by the faculty members on the student's MAE committee.	Campus
Professional Behavior	The student will apply knowledge of science content and pedagogy to complete a written thesis or project and an oral presentation of research that focuses on a significant problem or original question in Science Education.	Students will receive a satisfactory rating on the written thesis or project, as well as the oral presentation and defense of the thesis or project as rated by the faculty members on the student's MAE committee.	Campus

#### C. Research

Students in this program can choose to complete a thesis or project in lieu of thesis. Regardless of the option chosen, students must take at least one graduate level educational research methods course and complete at least three credits of supervised research while working with a faculty mentor on their thesis or research project.

#### **Thesis Option**

Students completing the thesis option must follow University of Florida Graduate School Guidelines for thesis completion and submission and satisfactorily complete an oral presentation and defense of their thesis.

#### **Project Option**

Students choosing the project option must complete an original action research project in a field setting (usually their own classroom). Projects typically focus on the development and evaluation of an innovative curriculum or program or the completion of quasi-experimental research documenting the impact of a particular educational intervention on student learning. Students must turn in a written copy of their completed project and make an oral presentation of the project to their committee.

#### **D.** Assessment Timeline

<u>Program: M.A.E. in Science Education</u> <u>College: Education</u>

Assessment	Assessment 1
SLOs	
Knowledge	
#1	Thesis or Project defense (Prior to graduation-last semester of program)
Skills	
#2	Thesis or Project defense (Prior to graduation-last semester of program)
Professional Behavior	
#3	Evaluation of Written Thesis or Project and Oral Defense (Prior to graduation-last semester of program)

#### E. Assessment Cycle

Assessment Cycle for:

Program: M.A.E. in Science Education College: Education

Analysis and Interpretation: Completed by 9/30 each year Program Modifications: Completed by 9/30 each year Dissemination: Completed by 5/31 each year

Year	10-11	11-12	12-13	13-14	14-15	15-16
SLOs						
<b>Content Knowledge</b>						
#1	X	X	X	X	X	X
Skills						
#2	X	X	X	X	X	X
<b>Professional Behavior</b>						
#3	X	X	X	X	X	X

#### F. Measurement Tools

SLOs 1, 2, and 3: Measurement of Knowledge, Skills, and Professional Behavior learning outcomes achieved as a result of this degree program are assessed holistically by the student's graduate committee via the satisfactory completion of both a written thesis or project focusing on original student research and an oral presentation/defense of this research. The tool used to document mastery of these learning outcomes is the University of Florida Graduate School Thesis Final Exam Form (Appendix 1).

## G. Assessment Oversight

Name	Department Affiliation	Email Address	Phone Number
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# Appendix 1: University of Florida Graduate School Thesis Final Exam Form

		http://gr	adschool.ufl.edu/gims/forms/final-exam
⊠ Nonthesis	<b>□</b> Thesis	☑ Project	☐ Dissertation
REPORT	UNIVERSITY OF FLOO ON THESIS OR DISSERT	RIDA - GRADUATE SC TATION AND/OR FINA	
To the Dean of the Gradual	re School:		Date:1/31/2013 9:40:22 AM
0.00000	UFID;		
has submitted, in partial fu	Ifiliment of the requirements fo	or the degree of	
Master of Arts in Educat	ion in the College of Education	n	
a project Entitled:			
This has been examined by	all members of the candidate	s supervisory committee a	nd has been
This has been examined by	all members of the candidate	s supervisory committee a	
Approved: 👨	Rejected: 🖻	Not Applicable	
Approved:   The committee has examin	Rejected: 🖻	Not Applicable 13(date) in accordance with	e: 8
Approved:   The committee has examin Examination and has adjudent Satisfactory:	Rejected: 🖺 ed the candidate on 02/14/203 ged his/her performance.	Not Applicable 13(date) in accordance with 변	e: 면 the regulations governing the Final
Approved:   The committee has examin Examination and has adjudent Satisfactory:	Rejected: Education of the candidate on 02/14/20: ged his/her performance.  Unsatisfactory: are noted as follows: No exce	Not Applicable 13(date) in accordance with 변	e: 면 the regulations governing the Final
Approved: E  The committee has examin Examination and has adjud  Satisfactory: E  Exceptions or qualifications  Name	Rejected: Ed ed the candidate on 02/14/20: ged his/her performance.  Unsatisfactory: are noted as follows: No exce	Not Applicable  13(date) in accordance with  图 ptions or qualifications note	e: 년 the regulations governing the Final
Approved: E  The committee has examin Examination and has adjud  Satisfactory: E  Exceptions or qualifications  Name	Rejected: Ed ed the candidate on 02/14/20: ged his/her performance.  Unsatisfactory: are noted as follows: No exce  De Chair)  Teachir	Not Applicable  1.3(date) in accordance with  Properties of qualifications note  2.2. Partment	e: 년 the regulations governing the Final

\*All members of the Supervisory Committee, including the external member, must be members of the Graduate Faculty and must be present for the final doctoral or master's examination and sign this form. The original, printed version of this form with all signatures must be retained at the Department level. Data from the completed form must be submitted electronically via GIMS to the UF Graduate School.

1/31/2013 9:40 AM

Figure 1. University of Florida Graduate/Professional Program Assessment Plan Review Rubric Related resources are found at <a href="http://www.aa.assessment.edu">http://www.aa.assessment.edu</a>

Program: Year:

Component	Criterion	Rating			Comments
		Met	Partially Met	Not Met	
Mission Statement	Mission statement is articulated clearly.  The program mission clearly supports the College and University missions, and includes specific statements describing how it supports these missions.				
Student Learning Outcomes (SLOs) and Assessment Measures	SLOs are stated clearly.  SLOs focus on demonstration of student learning.  SLOs are measurable.  Measurements are appropriate for the SLO.				
	1. 1				
Research	Research expectations for the program are clear, concise, and appropriate for the discipline.				
Assessment Map	The Assessment Map indicates the times in the program where the SLOs are assessed and measured.				
	The Assessment Map identifies the assessments used for each SLO.				
	The assessment cycle is clear.  All student learning outcomes are measured.  Data is collected at least once in the cycle.  The cycle includes a date or time period for				
Assessment Cycle	data analysis and interpretation.  The cycle includes a date for planning improvement actions based on the data analysis.  The cycle includes a date for dissemination of				
	results to the appropriate stakeholders.				

### University of Florida Graduate/Professional Program Assessment Plan Review Rubric, continued

Component	Criterion	Rating			Comments
		Met	Partially Met	Not Met	
Measurement Tools	Measurement tools are described clearly and concisely.				
	Measurements are appropriate for the SLOs.				
	Methods and procedures reflect an appropriate balance of direct and indirect methods.				
	The report presents examples of at least one measurement tool.				
Assessment Oversight	Appropriate personnel (coordinator, committee, etc.) charged with assessment responsibilities are identified				