October 2, 2009

UNIVERSITY CURRICULUM COMMITTEE – 2008-2009
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Journalism and Mass Communication - Dr. Wendy A. Macias
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Pharmacy - Dr. Keith N. Herist
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Public Health – Dr. Phaedra S. Corso
Social Work - Dr. Patricia M. Reeves
Veterinary Medicine - Dr. K. Paige Carmichael
Graduate School - Dr. Malcolm R. Adams
Undergraduate Student Representative – Cameron Secord
Graduate Student Representative – Robert Shostak

Dear Colleagues:

The attached proposal to offer a major in Science Education (Ed.S.) in Jackson County will be an agenda item for the October 9, 2009, Full University Curriculum Committee meeting.

Sincerely,

David E. Shipley, Chair
University Curriculum Committee

cc: Dr. Arnett C. Mace, Jr.
    Professor Jere W. Morehead
August 28, 2009

Maureen Grasso, Dean
Graduate School
320 East Clayton Street, Suite 400
Athens GA 30602-4401

Dear Dean Grasso,

Attached please find a proposal to offer the Education Specialist (Ed.S.) degree in secondary science education in Jackson County. This proposal is the result of a year of discussion among teachers and administrators from several school districts and a multi-disciplinary team of faculty members from the University of Georgia. Science is a critical literacy area for today’s high school students, and it is the portion of the Georgia High School Graduation Test on which students struggle the most. In addition, high school graduation requirements in Georgia have recently changed to require 4 years of high school science. This confluence of factors, along with significant teacher interest, has led to the development of this program to provide enhanced professional learning for secondary school science teachers in northeast Georgia. This proposal was discussed at length in several faculty meetings and has the unanimous support of the faculty.

Sincerely,

Denise S. Mewborn
Department Head
Proposal for an External Degree
The University of Georgia

Institution: University of Georgia       Date: February 5, 2009
College: Education
Department: Mathematics and Science Education
Degree: Ed. S. (stand-alone degree)
Major: Science Education
CIP Code:

Proposed Start Date: January 2010

1. Assessment
The Department of Mathematics and Science Education proposes to establish an external Ed. S. program in science education for teachers in North Georgia. The need for this program was demonstrated through teacher attendance at an Ed.S. program informational meeting held at East Jackson High School on August 21, 2008. Of the more than 40 teachers who attended this meeting, 39 teachers expressed interest in enrolling in an Ed.S. cohort program in science education and indicated a preference for having the majority of program courses taught at East Jackson County High School, a new, state-of-the-art facility. School systems represented at the meeting include Jackson County, Commerce City, Habersham County, Banks County, White County, Barrow County, and Gwinnett County. A planning team consisting of teachers, school administrators, and UGA College of Education faculty has met regularly since September 2008 to formulate a program plan that meets the needs of the North Georgia science teachers and complies with all University and Departmental requirements.

2. Admission Requirements
Program admission requirements are the same as those for the Athens-based Ed. S. program in science education. Specifically, the candidate must (a) hold a master’s degree from a regionally accredited institution and a T-5 (master’s level) certificate in science teaching (or its equivalent), (b) have a cumulative grade point average of 3.3 in all graduate work, (c) submit a Graduate Record Examination (GRE) combined score of 900 or above and verbal of 400 or above, and (d) submit 3 letters of recommendation.

3. Program Content
The curriculum of the program will include 33 hours of coursework in science, science education, research skills, and related areas, and will be identical to the Athens-based Ed.S. program in science education. The culminating experience of the program is an empirical study of a significant science education problem.
4. Student Advising
Each student will be assigned a science education faculty advisor from the Athens campus. Because this is a cohort program, regular group advising will occur during the semester as courses are conducted. In addition, each student will have a three-member committee consisting of Athens-based faculty that will supervise and approve the empirical study of a significant science education problem.

5. Resident Requirements
Residence requirements will be identical to those established for the Athens-based Ed.S. program in science education, with residence at the Jackson County site serving to meet the requirements.

6. Program Management
Information regarding the North Georgia Ed.S. program in science education will be available from the Department of Mathematics and Science Education. Application to the program will be through the UGA Graduate School using the online application process. The Department will then assign each new candidate an Athens-based faculty advisor. The candidate is expected to communicate with the advisor every semester to plan coursework and to be cleared for registration. Before being allowed to register for the first semester of coursework, the candidate must establish a MyID account and must submit the Mandatory Certificate of Immunization that is included with the acceptance letter from the graduate school.

The North Georgia Ed.S. program in science education will consist of 11 courses (33 semester hours). The courses will be taken in four areas: (a) science, (b) science education, (c) educational research, and (d) educational foundations. The program will also require a final empirical research project that is approved by an Athens-based faculty committee. Students will progress through the program as a cohort over a period of two years. The schedule of program courses is presented in the table below. Students will be informed that if they must “stop out” for a semester (due to illness, for example) that they will need to make up any missed classes at the Athens campus.

<table>
<thead>
<tr>
<th>YEAR 1 - FALL [6 hrs]</th>
<th>YEAR 1 - SPRING [12 hrs]</th>
<th>YEAR 1 - SUMMER [18 hrs]</th>
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</thead>
<tbody>
<tr>
<td>• ESCI 8200 – Science Supervision, Mentoring, and Induction (3 hrs)</td>
<td>• ESCI 4470/6470 – Special Topics in Science Teaching (3 hrs)</td>
<td>• Science (6 hrs) [6000 level or above, with advisor approval]</td>
</tr>
<tr>
<td>• ESCI 4030/6030 – Teaching Science to Students with Special Educational Needs (3 hrs)</td>
<td>• EDMS(EDEC)(QUAL) 7500– Action Research (3 hrs)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>YEAR 2 - FALL [24 hrs]</th>
<th>YEAR 2 - SPRING [27 hrs]</th>
<th>YEAR 2 - SUMMER [33 hrs]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ESCI 8120 – Science Writing and Literature Retrieval (3 hrs)</td>
<td>• EFND course (3 hrs)</td>
<td>• Science (3 hrs) [6000 level or above, with advisor approval]</td>
</tr>
<tr>
<td>• ETES 5090/7090 – Principles of Technology (3 hrs)</td>
<td></td>
<td>• ESCI 7650 – Applied Project in Science Education (3 hrs)</td>
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</table>
A course selected from the following list will be offered during Year 2 to fulfill the program’s educational foundations requirement.
EFND 7010 Comparative and International Education
EFND 7040 History of Education in the United States
EFND 7140 The Social and Cultural Contexts of Teaching

Students will fulfill the program’s science content course requirements during the summer on the Athens campus, at the UGA Marine Extension Service campus on Skidaway Island near Savannah, and possibly at other locations around the state. A number of science courses for teachers are offered with funding from the U.S. Department of Education through the Improving Teacher Quality initiative each summer. Offerings vary each year. All science electives will be approved by advisors in advance, and all students will adhere to the 6-hour limit on transfer courses.

Once established, the North Georgia Ed.S. program in science education will be reviewed annually by the Science Education Graduate Programs Committee. This standing committee is composed of science education faculty members who are also members of the UGA graduate faculty. The function of this committee is to review the status of all science education graduate programs, formulate recommendations for program improvement, and bring recommendations to the science education faculty for action.

The proposed North Georgia Ed.S. program in science education has been brought to the attention of Dr. Roger Hill, Head of the Department of Workforce Education, Leadership, and Social Foundations, Dr. Anne Bothe, Head of the Department of Communication Sciences and Special Education, and Dr. Ron VanSickle, Head of the Department of Elementary and Social Studies Education. Dr. Hill and Drs. Noel Gregg and Jennifer Lindstrom, from the Department of Communication Sciences and Special Education, are members of the program planning team and report no duplication with programs in their home departments. Dr. Hill, Dr. Gregg, and Dr. VanSickle will serve as the contact persons for the North Georgia Ed.S. program in science education in the Department of Workforce Education, Leadership, and Social Foundations, the Department of Communication Sciences and Special Education, and the Department of Elementary and Social Studies Education, respectively.

7. Library and Laboratory Resources
Library resources required by the program are those available online through the University of Georgia libraries. East Jackson High School is a new, state-of-the-art facility that provides all of the technology resources and many of the science laboratory resources needed for teaching and learning in this program. Summer courses funded through the Improving Teacher Quality initiative are held in locations with adequate and appropriate equipment for the science content being taught.

8. Budget
The budget table below shows the projected cost for the completion of the first cycle of students. Note that summer courses will be chosen by teachers to fit with their areas of specialization (e.g., biology, physics, chemistry, earth/space science) and will be chosen from among existing course
offerings, so there will be no costs associated with summer courses. The costs associated with future cycles of students are expected to be comparable. Program planning costs have been funded by a Learning Community grant from the UGA Office of STEM Education. The grant has supported meetings of science teachers, school administrators, and UGA faculty to investigate graduate programs in science education and to develop the plan for the proposed Ed.S. program.

<table>
<thead>
<tr>
<th>One Cohort of Students</th>
<th>Estimated Costs</th>
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<tbody>
<tr>
<td><strong>YEAR 1</strong></td>
<td></td>
</tr>
<tr>
<td>4 courses x $4000/instructor salary</td>
<td>$16,000</td>
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<tr>
<td>Instructor travel</td>
<td>$2,535</td>
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<tr>
<td><strong>YEAR 2</strong></td>
<td></td>
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<tr>
<td>4 courses x $4000/instructor salary</td>
<td>$16,000</td>
</tr>
<tr>
<td></td>
<td>$2,535</td>
</tr>
<tr>
<td><strong>Total Estimated Costs</strong></td>
<td><strong>$37,070</strong></td>
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9. Program Costs Assessed to Students
There are no anticipated costs to students beyond those normally associated with the Athens-based Ed.S. program in science education.

10. Accreditation
Because the proposed North Georgia Ed.S. program in science education will be equivalent in every way to the Athens-based program, accreditation will be handled by the Department of Mathematics and Science Education in the normal course of maintaining accreditation of its currently operating Ed.S. program in science education.