

## APPENDIX L

### **Request for Authorization to Establish a Bachelor of Science Degree in Mathematics at East Carolina University**

#### **Introduction**

East Carolina University notified the UNC Office of the President of its intent to plan a Bachelor of Science in Mathematics (27.0301) in February 2004. ECU seeks authorization to establish the degree program effective August 2004.

#### **Program Description**

The proposed Bachelor of Science in Mathematics will expand degree offerings in the Department of Mathematics. The BS program will be housed in the Department of Mathematics in the Thomas Harriot College of Arts and Sciences within the division of Academic Affairs.

The proposed degree is for students seeking an applied degree that has a liberal arts foundation and integrates the use of mathematics with one or more additional disciplines. The curriculum is designed to prepare students in basic mathematics (e.g., calculus, linear algebra, and statistics); to expose them to applications of mathematics in one or more fields; to develop problem-solving skills; to develop scientific and communication skills for technical careers; and to prepare students for advanced degrees or professional programs. Further, this degree would also be appropriate for students majoring in one of the physical sciences who wish to acquire a second major in mathematics. Emphasis in BS programs is usually related to the physical sciences and other application areas, or to mathematics education.

#### **Program Need**

The proposed degree program will enrich the learning environment in the College of Arts and Sciences by attracting many scientifically minded students into mathematics. It is expected that this program will offer options for numerous students who seek a double major in mathematics and the sciences. It is estimated that by 2007-2008, there will be 45 students.

#### **Resources**

Faculty and resources are adequate for absorbing the expected increase of students. Required courses in the sciences are available and existing courses in mathematics have sufficient capacity to accommodate students in the new program. A recently hired assistant professor in the statistics area will enable ECU to offer the new courses in statistics. The current library holdings are adequate for the program; however, the library will purchase more books from the American Mathematical Society that are appropriate for undergraduates.

#### **Recommendation**

It is recommended that the Board of Governors approve the request to establish a Bachelor of Science in Mathematics at East Carolina University effective August 2004.