COMPUTER SCIENCE CURRICULUM PROPOSALS FOR FALL 2011-09-29

The Department of Mathematical and Computer Sciences is proposing a new major in Computer Science. The following is a list of associated curriculum proposals needed for the new major and a few associated changes.

NEW MAJOR PROPOSALS:

 COMPUTER SCIENCE BA/BS

 COMPUTER SCIENCE BSE

NEW COURSES NEEDED FOR THE NEW MAJOR:

 COMPSCI 347 Scientific Computing

 COMPSCI 451 Topics in Modern Applied Computing

 COMPSCI 476 Software Engineering

In addition, the Department of Mathematical and Computer Sciences has recently implemented a sequence of programming courses using the C++ programming language (COMPSCI 174 Introduction to C++, COMPSCI 222 Intermediate C++, COMPSCI 223 Advanced C++). The MCS major, four of the Mathematics Major Emphases, the Computer Science minor, the Web Site Development and Administration minor, the Actuarial Mathematics minor, and the prerequisites for several Computer Science courses currently require courses from the JAVA programming sequence (COMPSCI 172 Introduction to Object Oriented Programming with JAVA, MCS 220 Concepts of Programming, MCS 231 Concepts of Data Structures). This is an opportune time to change requirements so that students can take courses from either of these programming sequences. Thus, there are many proposals to change these requirements.

CHANGES IN MATHEMATICS MAJOR EMPHASES:

 Pure Mathematics Emphasis

 Mathematics Statistics Emphasis

 Applied Mathematics Emphasis

 Computer Mathematics Emphasis

CHANGES IN MINOR PROGRAMS:

 Computer Science Minor

 Web Site Development and Administration Minor

 Actuarial Mathematics Minor

CHANGES IN EXISTING COURSES:

 COMPSCI 222 Intermediate C++

 COMPSCI 223 Advanced C++

 COMPSCI 271 Assembly Programming

 COMPSCI 302 Computer Logic

 COMPSCI 322 Computer Languages and Compilers

 COMPSCI 332 Introduction to Artificial Intelligence

 COMPSCI 381 JAVASCRIPT AND DHTML

 COMPSCI 382 PERL AND CGI SCRIPTING

 COMPSCI 434 Operating Systems

 COMPSCI 433 Theory of Algorithms

Finally, there are two existing courses which will no longer be needed after implementing the new major and are being deleted.

 COMPSCI 443 Computer Simulation

 COMPSCI 445 Computer Modeling