UMBC UGC Change in Existing Course:
MATH 426 Mathematical Software Packages: MATLAB

Date Submitted: 12/06/15 Proposed Effective Date: Spring 2016

	Name	Email	Phone	Dept
Dept Chair or UPD	Matthias K. Gobbert	gobbert@umbc.edu	x5-2404	Math & Stat
Other Contact	Janet Burgee	jburgee@umbc.edu	x5-2401	Math & Stat

COURSE INFORMATION: (please provide all information in the "current" column, and only the information changing in the "proposed" column)

change		Current	proposed
☐	Course Number(s)	MATH 426	
☒	Formal Title	Introduction to Math Software Packages: MATLAB	Mathematical Software Packages: MATLAB
☒	Transcript Title (≤30c)	Into Math Pkgs: Matlab	Math Software Packages: MATLAB
☐	Recommended Course Preparation		
☒	Prerequisite	You must have completed MATH 152 or MATH 221 and CMSC 201 with a grade of C or better.	You must have completed MATH 221 and CMSC 104 or 201 with a grade of C or better.
☐	Credits	2	
☐	Repeatable?	☐ Yes ☒ No	☐ Yes ☐ No
☐	Max. Total Credits	2	
☐	Grading Method(s)	☒ Reg (A-F) ☒ Audit ☒ Pass-Fail	☐ Reg (A-F) ☐ Audit ☐ Pass-Fail

CURRENT CATALOG DESCRIPTION:
The student will become familiar with the usage of Matlab, an advanced numerical linear algebra package that is widely used in teaching and research. Matlab is an interactive tool for high-performance numerical computations, visualization and programming. Matlab performs complex matrix algebra, computes matrix factorizations (such as LU, QR and SVD) and eigenvalues, solves linear systems of equations, provides extensive 2-D and 3-D visualization tools, and possesses programming tools used in scripts and functions.

PROPOSED CATALOG DESCRIPTION (no longer than 75 words**):** leave blank if no changes are being proposed to the catalog description. NOTE: information about prerequisites should NOT appear in the catalog description.)
The student will become familiar with the usage of Matlab, an advanced numerical linear algebra package that is widely used in teaching and research. Matlab is a tool for high-performance numerical computations, performs complex matrix algebra, solves systems of linear equations, computes matrix factorizations and eigenvalues, provides extensive 2-D and 3-D visualization, and possesses a sophisticated integrated development environment. Students will learn basic interactive usage of the Matlab desktop, learn script and function programming, and exercise their knowledge on a variety of typical application tasks.

RATIONALE FOR CHANGE:
This request updates the title and description to more clearly represent the coverage of the course, already in use now. It also updates the pre-requisites to reflect experience with student success in the course and adjusts to changes in CMSC courses.