

# **CMSC 455 Numerical Computations**

**Tuesday and Thursday 6:00pm to 9:00pm**

**First class Tuesday , May 31, 2017**

**PAHB 234 ??**

**WWW access <http://www.csee.umbc.edu/~squire>**

**Build your personal library of numerical code, in a language of your choice.**

**Suggested Textbook:**

**Applied Numerical Analysis 7th edition**

**by Gerald and Wheatley**

**ISBN 0-321-13304-8**

**Publisher: Addison Wesley**

**Reference: CRC Handbook of Chemistry and Physics**

**for physics, chemistry and math constants and equations**

## **Grading Policy**

Distribution	Course grade
Quiz 1 + Quiz 2 24%	A 90% - 100%
Final Exam 15%	B 80% - 89.9%
Project 31%	C 70% - 79.9%
Homework 30%	D 60% - 69.9%

UMBC rules apply to cheating/copying.

You may work together and discuss homework and the projects.

You must do your own work and not copy from anyone else!

Copying/cheating will result in a minimum punishment of a zero on

that assignment for everyone involved.

You are specifically encouraged and allowed to use code from me, my web reference, the Internet, Sourceforge, language sites, tool kits. Be sure to include attributions and use only open source or non copyrighted code.

You are allowed to use any programming language. Examples will be provided in many languages, including Matlab, Python, Java, C, Fortran, Ada, and others. You are allowed to use Mathematica and any tool kits you may need.

## **Computer usage**

You need access to UMBC "GL" machines such as linux.gl.umbc.edu

All students get an account on the UMBC gl machines.  
The projects and some homework will use the "submit" mechanism.  
All students must be able to access the WWW to get assignments.  
Modem and SSH connections are available for remote use.

**Bring your wireless laptop to class if you wish.**

**But, do not use it for EMail, browsing or IM during lecture.**

## **Jon Squire, Instructor, office hours:**

ITE 226 Tu,Th 5:00 to 5:45  
check in classroom if not in office  
EMail: squire@umbc.edu 24/7

## **Course links**

- [Syllabus - class dates and subjects, homework dates, reading assignments](#)
- [Homework assignments, Quiz info - the details](#)
- [Projects -](#)
- [Partial lecture notes, one per page](#)
- [Partial lecture notes big page for printing](#)
- [Some brief notes on Matlab](#)
- [Some brief notes on Fortran 95](#)
- [Some brief notes on Ada 95](#)
- [An Ada math library \(gnatmath95\)](#)
- [Downloadable samples, source and executables](#)
- [Finite difference approximations for derivatives](#)

## **Student Academic Integrity**

"By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are to be held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory."