

MATH 301 - Scientific Computing, Fall 2018
Albee 100, TTh 1:30 - 2:50 pm

Instructor: Dr. Stefan Mendez-Diez

Office: Albee 315

Office Phone: 758-7265

Email: smendezdiez@bard.edu (Responses may take up to 24 hrs and are not guaranteed on weekends. Please plan accordingly).

Office Hours: M 2-3 pm, W 9:30-10:30 am, Th 10-11 am, or by appointment (I'm generally not available on Fridays).

Textbook: *Numerical Computing with MATLAB*, by Cleve Moler. Available at <https://www.mathworks.com/moler/chapters.html>

Course Description:

This course will explore how to solve continuous problems using numerical methods. We will discuss the theory of numerical computation, as well as how to utilize the theory to solve real problems using the computer software package MATLAB. Topics covered will include floating point arithmetic, linear algebra and curve fitting.

Communication:

All course material will be posted on the course website. Urgent announcements may be sent out via campus email. It is your responsibility to regularly check your campus email and the website for updates. The website for the course can be found at:

faculty.bard.edu/smendezdiez/F18/math301/

Attendance:

You are expected to attend class and actively participate.

Homework:

Homework problems will be assigned roughly every week and listed on the website. You should check website regularly for announcements and other important tools. Homework problems will be due one week after they are assigned. You are strongly encouraged to work on assignments with your classmates. However, your solutions should be written by yourself and in your own words. Indicate in writing anyone you worked with or received help from. **No late assignment will be accepted.**

Examinations:

There will be two exams consisting of an in-class portion and a take-home programming portion. There will also be a final project. No make-up exams will be given without medical or college-approved documentation. Athletes must give an advance notice of a team conflict. The in-class exams will be closed-book and closed-notes. The tentative exam dates are:

Exam 1: Thursday, Oct 18

Exam 2: Tuesday, Dec 4

Final Projects Due: Tuesday, Dec 18

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| Final Grades: | Homework Assignments | 30% |
| | Midterm Examinations (Each) | 20% |
| | Final Project | 30% |

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|-----------|-----------------|-----------|----------------|----------|----------------|
| A | 93 - 100 | B- | 80 - 82 | D | 60 - 69 |
| A- | 90 - 92 | C+ | 77 - 79 | F | 0 - 59 |
| B+ | 87 - 89 | C | 73 - 76 | | |
| B | 83 - 86 | C- | 70 - 72 | | |

Accommodations:

• Students with documented learning and/or other disabilities are entitled to receive reasonable classroom and testing accommodations. If you need accommodations, please adhere to the following guidelines:

- ▶ **Discuss your needs with the instructor at the beginning of the semester.**
- ▶ **Provide documentation as appropriate.**
- ▶ **Contact the instructor at least one week prior to each quiz, exam or instance of accommodation.**

• If you need to miss a class for any reason (sports team, religious holiday, etc.), it is your responsibility to contact the instructor and find out about the material and assignments you missed.

Academic Integrity:

Consult Academic Dishonesty and Plagiarism or the Bard College Student Handbook regarding this matter.