

# Math 4401: Numerical Analysis Syllabus

5<sup>th</sup> Period, Fall Semester 2020

Tim Olson, Professor

Office... Zoom baby Zoom, ( text [olsontch@ufl.edu](mailto:olsontch@ufl.edu) )

Office Hours: 7<sup>th</sup> period MWF but by appointment fairly flexible.

## Topics:

1. Numerical Equation Solving Methods
2. Interpolation Methods
3. Least Squares Approximation
4. Numerical Approximation of Integrals
5. Numerical Approximation of Derivatives
6. Methods for solving Differential Equations
7. Methods for solving Partial Differential Equations

## Suggested Books:

- Introduction to Numerical Analysis, by Kendall Atkinson
- *Students: Please note that this course will be participating in the UF All Access program. Login at the following website and Opt-In to gain access to your required course materials - <https://www.bsd.ufl.edu/AllAccess> – UF All Access will provide you with your required materials digitally at a reduced price and the charge will be posted to your student account. This option will be available starting 1 week prior to the start of the semester and ending 3 weeks after the first day of class.*

## Grading Policy:

- There will be 3 in-class tests worth 20% apiece
- There will be 2 projects worth 20 % apiece
- There will be an optional cumulative final if you would like to improve your grade

**Honesty and Honor Code:** Students should be aware of the honor code of the university and must behave appropriately

**Class Recordings:** We will be recording our classes for those who cannot attend for some reason, for you to refer to, and for those with conflicts of one type or another. In accordance with University policy, I must include the following statement.

*Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep*

*your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voice recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials by students or any other party is prohibited.*

#### **Class Attendance and make-up exams:**

**"Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>."**

#### **Accommodations for Disabilities:**

**"Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester."**

#### **Additional Grading Info:**

**<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.**

#### **Instructor Review Info:**

**"Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>."**

#### **Campus Resources:**

##### **Health and Wellness**

##### **U Matter, We Care:**

**If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or 352 392-1575 so that a team member can reach out to the student.**

**Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.**

##### **Sexual Assault Recovery Services (SARS)**

**Student Health Care Center, 392-1161.**

**University Police Department, 392-1111 (or 9-1-1 for emergencies).**

**<http://www.police.ufl.edu/>**

#### **Academic Resources**

**E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.**

**Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.**

**<http://www.crc.ufl.edu/>**