

Intro Real Analysis, Fall 2024  
MAA 4102/5104  
Class Periods: MWF, Period 8, 3:00 - 3:50 pm  
Location: Little Hall 221

**Instructor:** Robin Tucker-Drob

**Email:** r.tuckerdrob@ufl.edu

**Office Hours:** Monday and Wednesday, 8:30 - 9:20 am in Little 416 (or by appointment).

**Textbook:** Michael Spivak, *Calculus*, 4th edition.

**Course Description and objectives** This course is a proof based introduction to real analysis. We will cover the definitions and results from single variable calculus in a rigorous manner. Students will learn to read, write, and create mathematical proofs.

**Attendance Policy, Class Expectations, and Make-Up Policy:**

University policy regarding class attendance, make-up exams, assignments, and other work can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

**Tentative weekly schedule:**

Week 1: Properties of numbers; inequalities

Weeks 2–3: Number systems; proofs; induction

Weeks 4–5: Functions and graphs

Week 6: Limits

Week 7: Continuity

Week 8: Properties of continuous functions

Week 9: Suprema and infima

Week 10: Uniform continuity

Weeks 11–12: Derivatives

Week 13: Mean value theorems and L'Hopital's rule

Week 14: Convexity and concavity; inverse functions

**Evaluation of Grades:** Most homework assignments and exams will consist in students writing proofs.

There will be 3 in-class exams, and approximately 8 homework assignments throughout the term. Each exam will count for 20 percent of your final grade, and the homework will collectively count for the remaining 40 percent, with each homework assignment weighted equally.

More information on UF grading policy may be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

### **Students Requiring Accommodations:**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

### **Course Evaluation**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

### **University Honesty Policy**

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code.” On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you

are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

**Academic Integrity** All work that you hand in must be written by you and in your own words. You may discuss homework with others, but if you collaborate or receive help on any homework problem(s) then you must indicate on your homework precisely who helped you and to what extent. If your work uses information obtained from any sources, then these sources must be properly cited and you must indicate exactly which information comes from which source. You may not copy work done by others, either in or out of class; copying work is an act of scholastic dishonesty and any student who copies work will be prosecuted to the full extent allowed by university policy.

### **Software Use**

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

**Student Privacy** There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

### **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>, and 352-392-1575.
- Student Health Care Center: 352-392-1161.
- University Police Department: 352-392-1111 (or 9-1-1 for emergencies), or <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](mailto:Learning-support@ufl.edu). <https://lss.at.ufl.edu/help.shtml>.
- Career Resource Center, Reitz Union, 352-392-1601. Career assistance and counseling. <https://www.crc.ufl.edu/>.
- Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 352-392-2010 or 352-392-6420. General study skills and tutoring. <https://teachingcenter.ufl.edu/>.
- Writing Studio, 302 Tigert Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. <https://writing.ufl.edu/writing-studio/>.
- Student Complaints Campus: [https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).
- Online Students Complaints: <http://www.distance.ufl.edu/student-complaint-process>.