

Sergei S. Pilyugin

Courses

MAA 4102 Intro  
Real Analysis/ 1  
(Fall 2024)

MHF 3202 Sets  
and Logic (Fall  
2024)

MAA 4402/5404  
Intro to Complex  
Variables  
(Summer 2024)

MAA 4103/5105  
Intro Real Anal 2  
(Spring 2024)

MAT 6932  
Special Topics:  
Population  
Persistence and  
Dynamical  
Systems (Spring  
2024)

Publications

Research

Schedule

Related Links

## MAA 4102 Intro Real Analysis/ 1 (Fall 2024)

- **Instructor**: Sergei S. Pilyugin
- **Course web page**: [https://people.clas.ufl.edu/pilyugin/courses/maa4102\\_f2024/](https://people.clas.ufl.edu/pilyugin/courses/maa4102_f2024/)
- **Announcements**: Lectures will be delivered live in LIT 0233. Quizzes will be given in class. Take home

midterms will be posted and collected in Canvas.

- **Homeworks**: TBA.
- **Prerequisites**: MAC 2313 (Calculus 3).
- **Time and Room**: MWF 3 (9:35 – 10:25 a.m.) in LIT 0233.
- **Literature**: M. Spivak, Calculus (4th ed.), Publish or Perish Inc. (ISBN: 9780914098911).
- **Critical dates**: 08/22 classes begin, 12/04 classes end. Midterms: M1 – due on 09/27, M2 – due on 10/25, M3 – due on 12/04. Quizzes: Q1 – 09/04, Q2 – 09/20, Q3 – 10/16, Q4 – 11/08, Q5 – 11/22.
- **Holidays**: 09/02 Labor Day, 10/18 Homecoming, 11/11 Veterans Day, 11/25–30 Thanksgiving break.
- **Office Hours**: MWF 4 (10:40 a.m.-11:30 a.m.) in LIT 0458, or in zoom (see info in canvas) by appointment. Please, use e-mail: [pilyugin@ufl.edu](mailto:pilyugin@ufl.edu) for general inquiries or canvas messaging tool for all private communication including all questions regarding scores/grades. For more details, see my [schedule](#).

### Description and Objectives of the Course:

What is the difference between the real analysis and the calculus courses that you have taken previously? In real analysis, we revisit familiar concepts (real numbers, sequences, functions, limits, continuity, differentiation and integration, etc), but the material is treated in a more accurate and rigorous way. So, the main difference is that we have PROOFS here.

### Tentative Weekly Schedule:

- W1: Properties of numbers, basic inequalities;
- W2-3: Various number systems, intro to proofs, mathematical induction;
- W4-5: Functions and graphs;
- W6-7: Limits and continuity;
- W8: Properties of continuous functions;
- W9: Supremum and infimum;
- W10: Uniform continuity;
- W11-12: Derivatives and differentiation techniques;

CLAS IT

College of Liberal Arts  
and Sciences

UF Mathematics

University of Florida

W13-14: Mean value theorems, L'Hopital's rule, inverse functions, convexity/concavity.

- Grading System:

3 take home midterms (20% each, posted and collected in Canvas); 5 quizzes (10% each, best 4 count, in class) based on homework assignments. There will be no final exam. The resulting score determines the letter grade according to the following table

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D
Score	100 – 93	92 – 89	88 – 83	82 – 77	76 – 71	70 – 66	65 – 60	59 – 55	54 – 50	49 – 40

- Course policies:

- Closed-book policy: No use of calculators, or books will be allowed during in-class quizzes.

- Grading disputes: Any issues or questions about the grading of exams must be brought to the instructor's attention within one week after the exams are returned to the class.

- Excused absences: In certain circumstances, a student will be able to make up a missed quiz. These circumstances could include medical situations, family emergencies, travel for University activities (eg. band, debating club, etc), and religious observances. In these cases the student must inform the instructor before or within one week after the missed work and **provide written documentation**. All make ups must be taken no later than the last day of classes.

- Policy on class attendance: 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> Most students benefit a great deal from attending class regularly. Arriving late and/or leaving early, reading the newspaper, looking at your cell phone, etc. disrupts the class and is rude and unprofessional.

- UF Honor Code: "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 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 TA's in this class."

- Diversity statement: The University of Florida and the Department of Mathematics are committed to diversity and inclusion of all students. We recognize the diversity of backgrounds and learning needs of our students and strive to create a more inclusive and welcoming environment for everyone. We strongly believe that an inclusive learning environment promotes higher academic achievements.

- For students with disabilities: "Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://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.”

- Online evaluations : Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://gatorevals.aa.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.
- U Matter, We Care : Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

© 2024 **University of Florida**, Gainesville, FL 32611; (352) 392-3261. Page Updated: July 22, 2024

This page uses **Google Analytics** ([Google Privacy Policy](#))

