

## Instructor Information

**Name:** Dr. Chamberlain

**Office:** Digital

**Contact:** Canvas (preferred) or dchamberlain31@ufl.edu.

**Office Hours:** TBD first week of classes

## Course Information

**Catalog Description:** Examples of sets, operations on sets, set algebra, Venn diagrams, truth tables, tautologies, applications to mathematical arguments and mathematical induction. Taking one, but not both, of MAS 3300 or MHF 3202 is required of mathematics majors. MHF 3202 can also be very useful for prospective and in-service secondary and middle school teachers.

**Goal:** This course will provide students with the tools to argue logically, persuasively, and succinctly.

**Objectives:** By the end of the semester, students will be able to:

- Recognize the truth-value of statements and arguments.
- Write valid and sound mathematical proofs.
- Explain basic and advanced mathematical techniques to prove statements.
- Analyze a presented proof for its validity, ability to convince, and conciseness.
- Review their own proofs and the proofs of others.

**Textbook:** This course will use the open-source textbook "Book of Proof"

<https://www.people.vcu.edu/~rhammack/BookOfProof/>. *Students are not required to purchase a textbook for this course.*

**Assignments:** There will be three types of assignments. A short description and grade percentage is provided below. Please see Canvas for detailed assignment rubrics. **Note:** *Homework will be assigned for each topic. This is suggested work to prepare you for the exams but will not be graded.*

- **Presentations** – 2 @ 10 points each (20% of grade)  
Students are expected to present proofs during class time. Students will volunteer to present from a running list of proofs (available on Canvas). Students will get up to 10 points based on peer feedback. Your peers will be grading you in 5 ways: logic, persuasion, succinctness, presentation, main idea.
- **Presentation Feedback** – 4 check-ins @ 5 points each (20% of grade)  
Students are expected to provide feedback on at least 80% of others' presentations. Students lose 1 point per 10% lower than the 80% threshold.

- **Exams** – 4 @ 15 points each (60% of grade)  
Students will be expected to write and review proofs during their take-home exams. ***Collaboration, especially with other students or the internet, is not allowed.***

**Grading Scale:** Grades will be determined by total number of points at the end of the semester.

<b>Points</b>	<b>Letter</b>	
100–90	A	University policy stipulates that a minimum grade of a C must be achieved to obtain Gordon Rule or General Education credit. UF grading policies are at <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</a> .
89–87	B+	
86–80	B	
79–77	C+	
76–70	C	
69–60	D	
59–0	E	

**Attendance, Late, and/or Missed Work Policies:** Requirements for late and/or missed work in this course are consistent with university policies that can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

- **Attendance:** While attendance is not graded, you are expected to keep notes for all proofs presented during class. It is your responsibility to learn about any missed proofs.
- **Presentations:** Presentations are made on a voluntary basis. If you have a university-approved excused absence on the day you are supposed to present, your presentation date will be rescheduled. Otherwise, it will count as a 0.
- **Exams:** All exams are take-home and will be available for a window of time. Students without a university-approved excuse will lose 5 points per day the exam is late. Students with a university-approved excused absence will schedule a 1-hour verbal exam with the professor.

## University Policies

**Students with Disabilities:** Students with disabilities should do the following:

- Register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation.
- Email [dchamberlain31@ufl.edu](mailto:dchamberlain31@ufl.edu) your accommodation letter along with any additional information.

**Academic Honesty:** 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://catalog.ufl.edu/ugrad/1617/advising/info/student-honor-code.aspx>) 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 in this class.

**Online Course Evaluation:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.ua.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 evaluations are available to students at <https://gatorevals.ua.ufl.edu/public-results/>.

**Video Recording Consent:** 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 voices 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 is prohibited.