

## **Sets and Logic**

MHF 3202, Section: 8768

**Class Periods:** MWF 7, 1:55—2:45

**Location:** Matherly 116

**Academic Term:** Spring 2022

### **Instructor:**

Douglas Cenzer

[cenzer@ufl.edu](mailto:cenzer@ufl.edu)

(352) 294-2350

Office Hours: M3 W5 F4 or by appointment, Little Hall 310 and/or online

### **Course 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. 3 credits

### **Course Pre-Requisites / Co-Requisites**

A UF math course at the 2000 level or above with a minimum grade of C.

### **Course Objectives**

Students who successfully complete the course will be able to read, write and present theorems and proofs.

### **Required Textbooks and Software**

- How to Prove It (3d Edition) by Daniel Velleman

### **Course Schedule (Tentative)**

Week 1, January 5--7:	Chapter 1.1-1.2
Week 2, January 10--14:	Chapter 1.3—1.5
Week 3, January 19--21:	Chapter 2.1—2.2
Week 4, January 24--28:	Chapter 2.3, Review, Exam 1
Week 5, Jan. 31—Feb. 4:	Chapter 3.1—3.3
Week 6, February 7--11:	Chapter 3.3—3.5
Week 7, February 14--18:	Chapter 3.6—3.7,4.1
Week 8, February 21--25:	Chapter 4.2, Review, Exam 2
Week 9, Feb. 28—March 4:	Chapter 4.3--4.4
Week 10, March 14—18:	Chapter 4.5, Chapter 5.1
Week 11, March 21--25:	Chapter 5.2--5.3
Week 12, March 28—April 1:	Chapter 5.5, Review, Exam 3
Week 13, April 4--8:	Chapter 6.1—6.2
Week 14, April 11-15:	Chapter 6.3—6.4
Week 15, April 18--20:	Exam 4, Review
April 28:	Final Exam, 12:30—2:30, Matherly 116

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

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

### ***Evaluation of Grades***

Grades will be based on written homework problems, daily participation, and in-class exams. The Final Exam is a make-up

<b>Assignment</b>	<b>Total Points</b>	<b>Percentage of Final Grade</b>
Homework	20 each	20%
Daily Participation	40	20%
Exams (4)	25 each	60%
		100%

### ***Grading Policy***

<b>Percent</b>	<b>Grade</b>	<b>Grade Points</b>
90.0 - 100.0	A	4.00
85.0 - 89.9	A-	3.67
80.0 - 84.9	B+	3.33
75.0 - 79.9	B	3.00
71.0 - 74.9	B-	2.67
67.0 - 70.9	C+	2.33
60.0 - 66.9	C	2.00
57.0 - 59.9	C-	1.67
54.0 - 56.9	D+	1.33
51.0 - 53.9	D	1.00
48.0 - 50.9	D-	0.67
0 - 49.9	E	0.00

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 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.

### ***Course Evaluation***

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu/evals>. 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/>.

### ***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://www.dso.ufl.edu/sccr/process/student-conduct-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 TAs in this class.

### ***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 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** at 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, 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, 392-2010 or 392-6420. General study skills and tutoring.  
<https://teachingcenter.ufl.edu/>.

**Writing Studio, 302 Tigert Hall**, 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).

**On-Line Students Complaints:** <http://www.distance.ufl.edu/student-complaint-process>.

