

COURSES

RESEARCH

UF NUMBER  
THEORY

PERSONAL WEB  
PAGE

# SYLLABUS MAS 4301 FALL 2022

This syllabus is subject to change. Created Sunday, August 21, 2021. Updated Sunday, August 21.

## TENTATIVE VERSION

Section	Period	Meeting Time	Room
1074	MWF 6th	12:50 – 1:40pm	LIT 205

## Dr. Frank Garvan

408 Little Hall  
(352) 294-2305  
fgarvan@ufl.edu

## Office Hours

4th period Wednesday, Friday or by appointment.  
Consult CANVAS course page for ZOOM LINK and send an email to Dr.G. to arrange meeting in advance.

## Prerequisites

Grade of B or better in MAS 3300 or MHF 3202, or a grade of C or better in MAS 4105.

## Textbook

*Contemporary Abstract Algebra*, 9th Edition, by Joe Gallian.

## Course Description

MAS 4301 is a 3 credit course on Abstract Algebra which focuses mainly on group theory and ring theory. Topics include sets and mappings, groups and subgroups, homomorphisms and isomorphisms, permutations, rings and domains, arithmetic properties of domains, and fields. This course requires

facility in writing proofs.

### Course Objectives and Goals:

- For the student to master the definitions and theory of groups and rings.
- For the student to write clear and logical proofs.

### Tentative Weekly Course Schedule

- WEEK 1: Preliminaries
- WEEK 2: Groups
- WEEK 3: Finite Groups and Subgroups
- WEEK 4: Cyclic Groups
- WEEK 5: Permutation Groups
- WEEK 6: EXAM 1; Isomorphisms
- WEEK 7: Cosets and Lagrange's Theorem
- WEEK 8: External Direct Product
- WEEK 9: Normal Subgroups and Factor Groups
- WEEK 10: Group Homomorphisms
- WEEK 11: EXAM 2; Fundamental Theorem of Finite Abelian Groups
- WEEK 12: Rings
- WEEK 13: Integral Domains
- WEEKS 14 and 15: Ideals
- WEEK 16: EXAM 3

### Assessment

Assessment will be based on the following

Daily Quizzes	5%
Homework Reports	5%
Exam 1	30%
Exam 2	30%
Exam 3	30%

Short quizzes will be given each day (starting in Week 2). The lowest 3 will be dropped. Weekly homework will be assigned. Starting in Week 2 each student will write a weekly report for each homework (submit by canvas). It will be checked for submission but not graded. One homework will be dropped.

### Optional Comprehensive Final Exam

Any missed exam can be replaced by the Optional Comprehensive Exam.  
Lowest exam score can be replaced by the Optional Comprehensive Exam.

## In Class Exams

- Exam 1: Monday, September 26
- Exam 2: Monday, October 31
- Exam 3: Monday, December 5
- Optional Comprehensive Final Exam: Thursday December 15, 12:30 PM – 2:30 PM

## Grading

Grading scale: A 93%; A- 88%; B+ 83%; B 80%; B- 77%; C+ 73%; C 63%; D 60%

## Attendance

Attendance counts as part of each Daily Quiz.

## Make-up exams, quizzes and homework

- Any missed exam can be replaced by the Option Comprehensive Final Exam.
- Any missed daily quiz or homework report can be dropped with the proper documentation.

## UF Grading Policies

See [THIS LINK](#)

## Accommodations for students with disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Getting Started with the Disability Resource Center](#)  
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.

## Online course evaluation process

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>.



© 2022 **University of Florida**, Gainesville, FL 32611; (352) 392-3261. Page Updated: August 21, 2022

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

