

MAT 313 Abstract Algebra

Tues and Thurs 2:30 PM – 3:50 PM Earth and Space Sci 079

Instructor: Prof. Marie-Louise Michelsohn

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Office Hours : Tues 11 :30 AM - 2 :30 PM

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Office Hours :

This is an advanced mathematically rigorous mathematics course. Topics may include:

1. Groups, Symmetry Groups, Finite Groups, Cyclic Groups, Permutation Groups, Subgroups, Normal Subgroups, Cosets and Factor Groups, Group Homomorphisms, The Fundamental Theorem of Abelian Groups
2. Rings, Integral Domains, Ideals and Factor Rings, Ring Homeomorphisms, Polynomial Rings and Factorization, Divisibility in Integral Rings
3. Fields, Vector Spaces, Extension Fields, Algebraic and Transcendental Extensions, Finite Fields

Textbook: Contemporary Abstract Algebra (9th edition) by Joseph Gallion,

Grades will be based on 3 Exams of equal weight. Tentative dates are Oct 12, Nov. 21 and Dec 19.

Homework will be collected weekly and is advisory only.

Disabilities: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services or call (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services.

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website.

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that disrupts their ability to teach, compromises the safety of the learning environment, or inhibits students ability to learn