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**Salisbury University Department of Mathematical Sciences****MATH 442/562 : Abstract Algebra II  
Syllabus (Tentative)**

**Description:** Modern abstract algebra including such topics as rings, polynomials and fields. Other topics may include algebraic coding, Boolean algebras, symmetry and mathematical crystallography, applications of finite fields to computer science. 4 Hours Credit: Meets four hours per week.

**Prerequisites:** C or better in MATH 441.

**Intended Audience:** All majors in the mathematical sciences and any students who wish to pursue graduate study in mathematics or its applications, physics or computer science.

**Objective:** To develop the foundations for modern algebra. The primary focus will be on constructing proofs and writing in mathematics. The standard theory of a second semester algebra course will be presented.

**Textbooks:** *Abstract Algebra: An Introduction*, 3rd Edition by Thomas W. Hungerford

**Topic**