## Salisbury University Department of Mathematical Sciences

## MATH 230 : Fundamental Concepts II Syllabus (Tentative)

**Description:** Continuation of the process begun in MATH 130 of preparing prospective elementary school teachers to teach mathematics. Like MATH 130, it fosters a thorough understanding of fundamental mathematics and emphasizes the ability to communicate this. 3 Hours Credit: Meets three hours per week. Meets General Education IVB or IVC.

**Prerequisites:** C or better in MATH 130.

Credit: Credit may only be received for one of MATH 104 and MATH 230

Intended Audience: For students in the Elementary Education program.

- **Objective:** A continuation of MATH 130. To provide students with a thorough understanding of the mathematical concepts covered in grades one through eight, using approaches that support professional (NCTM) standards. To move prospective elementary school teachers through the mathematical content into the ability to explain mathematical ideas and relationships. To develop the ability to (a) explain mathematical concepts in everyday, but correct, language appropriate for the listener; and (b) to demonstrate mathematical ideas using physical models and/or activities. Participation in active learning (group work, use of manipulatives, etc.) is expected. Non-routine problem solving is included regularly throughout the semester.
- Textbooks: *Reconceptualizing Mathematics*, 4th edition by Judith Sowder, Larry Sowder, and Susan Nickerson

Topic Weeks

- Free tutoring is available for this course in the Spring and Fall semesters.
- •