MATH 1002

Division: Natural Science and Mathematics
Department: Mathematics
Course: MATH 1002
Title: Intermediate Algebra Refresher
Catalog Description:

This course is a review of selected topics from Intermediate Algebra. Basic concepts involving graphs, linear equations, algebraic manipulation, systems of equations, polynomials, factoring, roots, radicals, quadratic equations, inequalities, exponential and logarithmic functions are covered. The course is designed to meet the n eeds of individuals who have had Algebra before, but may not have had any math experience for two or more years. The goal of the class is to prepare a student to meet placement requirements to take College Algebra (MATH 1050). Taught in pre-semester blocks see current course schedule.

General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 1; Lecture: 1; Lab: 0
Clock/Hour Requirements: 0
Offered for Non-Credit: No
Prerequisites: Two years of High School Algebra or MATH 1010

Justification:

For a variety of reasons, many students come to Snow College having had a period of time elapse since their last math experience. As they take the placement tests, the results direct them into MATH 1010. Yet with a li ttle review, these same students could meet the requirements to enter College Algebra (MATH 1050) or other general education level math courses, and not have to wait a full semester before doing so. This course fulfills t his need. This course will be taught in a one to two week period preceding the start of a regular semester. Similar courses are offered at other in-state institutions.

Student Learning Outcomes:

Students will know the major concepts of Intermediate Algebra, and be able to employ problem solving techniques in Algebra areas. The students will revive the skills and knowledge that they understood or were t aught in the past. The primary outcome is to make a student eligible to enroll in Math 1050 (College Algebra).

Content:

Topics covered will depend on the needs of the class members (a pretest will be administered to ascertain areas of emphasis) and will be selected from the list below:

1. The Real Number System
2. Linear Equations and Inequalities in One Variable
3. Linear Equations in Two Variables
4. Exponents and Polynomials
5. Factoring and Applications
6. Rational Expressions and Applications
7. Equations of Lines and Functions
8. Systems of Linear Equations
9. Inequalities and Absolute Value
10. Roots, Radicals and Root Functions
11. Quadratic Equations, Inequalities, and Functions
12. Inverse, Exponential, and Logarithmic Functions

General Education Outcomes:

6) Apply computational skills to a variety of contexts.

Students solve 20-50 homework problems and questions per topic. The students will see numerous examples i nvolving computations that are applied to real life situations. They receive scores and feedback on their a ssignments to help them improve their skills.

Key Performance Indicators:

Homework problems: 15% of the final grade

Quizzes: 10% of the final grade

Tests/special project: 50% of the final grade

Comprehensive final exam: 25% of the final grade, this would be followed by taking the Accuplacer test to determine course placement

Percentages are approximate.

Representative Text and/or Supplies:

Beginning and Intermediate Algebra, current edition, Lial, Miller, and McGinnis

Optimum Class Size: 20
Maximum Class Size: 36

Signatures:

I hereby submit this course syllabus:

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Jonathan Bodrero, M.S., Assistant Professor

I hereby find this course consistent with the goals and resources of the Mathematics Department:

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Kari Arnoldsen, PhD, Professor, Chair

I hereby find this course consistent with the goals and resources of the Natural Science and Mathematics Division:

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Dan Black, EdD, Associate Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

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Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

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Michelle Olsen, MLS, Campus Librarian (Richfield Campus)