DEVELOPMENTAL MATHEMATICS BASICS

Date   08/04/2010

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COURSE NUMBER: MAT 031

PREREQUISITE(S):   None

CO-REQUISITE(S):   MAT 032

COURSE DESCRIPTIONS   Developmental Mathematics Basics is intended for students who need assistance in basic arithmetic skills. Based on assessment of student needs, instruction includes performing the four arithmetic operations with whole numbers, fractions, decimals and percents.

TEXTBOOK(S):   Martin-Gay, Elayn, Basic College Mathematics with Early Integers, Upper Saddle River, New Jersey, Prentice-Hall, 2007.

REFERENCE(S):   None

OTHER REQUIRED MATERIALS, TOOLS, AND EQUIPMENT: Students need a loose-leaf notebook, paper, pencils, and a highlighter.

METHOD OF INSTRUCTION: The course is taught through lectures, discussions, and individual assignments. Students are encouraged to work collaboratively. **Students do not use a calculator in MAT 031.** The Learning Center (E-2) provides tutoring to enhance the students' learning.

GRADING SYSTEM:
93	-	100	=	A
85	-	92	=	B
75	-	84	=	C
Below		75	=	F

GRADE CALCULATION METHOD:
Tests	=	60%
Homework, Quizzes, and Class Participation	=	10%
Final Exam	=	30%
	=	100%

ATTENDANCE POLICY: The student is responsible for punctual and regular attendance in all classes and other required class activities. The College does not grant excused absences; therefore, students are urged to reserve their absences for emergencies. When illness or other emergencies occur, the student is responsible for notifying instructors and completing missed work if approved for late submission by instructors.

The student is tardy if not in class at the time the class is scheduled to begin and is admitted to class at the discretion of the instructor.

Instructors maintain attendance records. However, it is the student's responsibility to withdraw from a course. A student enrolling in and attending at least one course session remains enrolled until the student initiates a withdrawal.

Withdrawal Policy: During the first 75% of the course, a student may initiate withdrawal and receive a grade of W. A student cannot initiate a withdrawal during the last 25% of the course. Extenuating circumstances require documentation and approval by the appropriate department head and academic dean.

Absences for Religious Holidays: Students who are absent from class in order to observe religious holidays are responsible for the content of any activities missed and for the completion of assignments occurring during the period of absence. Students who anticipate their observance of religious holidays will cause them to be absent from class and do not wish such absences to penalize their status in class should adhere to the following guidelines:

1. Observance of religious holidays resulting in three or fewer consecutive absences: Discuss the situation with the instructor and provide written notice at least one week prior to the absence(s). Develop (in writing) an instructor-approved plan, which outlines the make up of activities and assignments.

2. Observances of religious holidays resulting in four or more consecutive absences: Discuss the situation with the instructor and provide the instructor with written notice within the first 10 days of the academic term. Develop an instructor-approved plan, which outlines the make up of activities and assignments.

CLASSROOM CONDUCT: **ACADEMIC DISHONESTY**: Students are expected to uphold the integrity of the College's standard of conduct, specifically in regards to academic honesty. All forms of academic dishonesty including, but not limited to, cheating on assignments/tests, plagiarism, collusion, and falsification of information will call for disciplinary action. Disciplinary action imposed may include one or more of the following: written reprimand, loss of credit for assignment/test, termination from course, and probation, suspension, or expulsion from the College. For further explanation of this and other conduct codes, please refer to the Student Handbook.

CELLULAR PHONES AND PAGERS/BEEPERS: Cellular phones, pagers and beepers are not permitted to be turned on or used within the classroom. Use of these devices during classroom time will be considered a violation of the student code as it relates to "disruptive behavior."

CLASS/LAB PROCEDURES: Each instructor determines specific class policies and procedures about make-up tests and quizzes. These are described in the instructor's information sheet.

ACCOMMODATIONS: Students who need special accommodations in this class because of a documented disability should notify Student Disability Services. You may contact Student Disability Services by calling, (864) 592-4818, toll-free 1-800-922-3679; via email through the Spartanburg Community College web site at www.sccsc.edu/SDS/; or by visiting the office located in the Dan Lee Terhune Student Services Building, room 112 of the Spartanburg Community College campus. By contacting Student Disability Services early in the semester, students with disabilities give the College an opportunity to provide necessary support services and appropriate accommodations.

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COURSE OUTCOMES & OBJECTIVES:

Upon satisfactory completion of this course, the student will be able to:

I. **Solve problems involving whole numbers.**
   A. Demonstrate knowledge whole number concepts, including place value, rounding, and the four basic operations.
   B. Solve application problems involving addition, subtraction, multiplication, and division of whole numbers.
   C. Use order of operations to simplify expressions with whole numbers.

II. **Solve problems involving integers and variables.**
   A. Evaluate algebraic expressions.
   B. Translate phrases into variable expressions.
   C. Graph and compare integers; find absolute values and opposites.
   D. Add, subtract, multiply, and divide integers.
   E. Use order of operations to simplify expressions with integers.

III. **Solve problems involving positive and negative fractions and mixed numbers.**
   A. Demonstrate knowledge of basic fraction concepts.
   B. Use divisibility rules to assist in working with fractions.
   C. Identify prime and composite numbers.
   D. Find factors and prime factorizations of whole numbers.
   E. Find the least common multiple of a group of numbers.
   F. Convert between improper fractions and mixed numbers or whole numbers.
   G. Write fractions in simplest form.
   H. Write equivalent fractions.
   I. Compare fractions and mixed numbers and graph them on a number line.
   J. Add, subtract, multiply, and divide positive and negative fractions and mixed numbers.
   K. Simplify complex fractions.
   L. Simplify expressions involving order of operations.
   M. Solve application problems involving fractions and mixed numbers.

IV. **Solve problems involving positive and negative decimals.**
   A. Read and write decimals.
   B. Convert between decimals and fractions.
   C. Compare decimals.
   D. Round decimal numbers.
   E. Add, subtract, multiply and divide decimals.
   F. Simplify expressions involving order of operations.
   G. Solve application problems involving decimals.

V. **Answer questions about percents, decimals, and fractions.**
   A. Convert percents to decimals and fractions.
   B. Convert decimals and fractions to percents.

GENERAL EDUCATION OUTCOMES:

Upon satisfactory completion of this course, the students should be able to demonstrate

I. their ability to express themselves effectively in quantitative and qualitative terms.

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