## South Plains College Mathematics Department

## **Developmental Mathematics (NCBM 0105.002)**

Course Syllabus Spring 2018

Instructor: Jennifer Bartlett

Office: Levelland Campus, Math Building Room 113

Email: jkbartlett@southplainscollege.edu

Office Hours: MW 1-2:30, TR 10-11, F 9-12

**Telephone:** (806) 716-2664 or by appointment!

Course Description: NCBM 0105 - Developmental Mathematics (BASE NCBM). (1:1:0) Topics in mathematics, such as arithmetic operations, basic algebraic concepts and notation, geometry, and real and complex number systems are taught to prepare students for Beginning Algebra, MATH 0315. This course is designed for students who have tested at an ABE level of 4 or lower. This course will not satisfy graduation requirements. (copied from the current SPC catalog)

## **Learning Outcomes**

Upon successful completion of this course, the student will:

- 1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
- 2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
- 3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.
- 4. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.
- 5. Use graphs, tables, and technology to analyze, interpret, and compare data sets.
- 6. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions.

**Textbook:** No textbook is required for this course. However, the instructor may recommend a textbook for additional study.

**Attendance:** The student will be required to communicate with the instructor at least once per week for the duration of this course. Failure to communicate at least once per week with the instructor will result in the student being dropped from the course.

**Grading:** This course will be graded on a pass/fail basis. Once the student has completed the course with at least 90% mastery, the student will have earned a grade of P, indicating "passing" for the course. If the student does not achieve a 90% level of mastery, the student will have earned a grade of F and will be required to complete the course again.

**Supplies:** Access to a computer with an internet connection is required for this course.

## **Accessing the Course Diagnostic and Learning Modules:**

Creating an Account: First, the student will need to create an account at

https://southplainscollege.edready.org . Here are the steps:

- 1. Go to this website and choose the "Get Started" option. If you already have an EdReady account, then choose the "Log In" option at the upper-right corner of the screen.
- 2. Complete the brief form on the "Sign Up for EdReady" screen.
- 3. After setting up a username and password, choose the "Enter a key to add goals" option. Your key for this course is **NCBM0105\_spring2018\_Bartlett**.

**Taking the Initial Diagnostic Test:** Second, after creating the account, you will need to take the initial diagnostic test.

- Please allow at least one hour for this test. However, if you need more time or need to step away, there is an option to save and exit.
- After completing this initial diagnostic test, contact your instructor for next steps to complete the requirements for this course.

**Disability:** Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) & Lubbock Center 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College -1401 College Avenue, Box 5, Levelland, TX 79336, 806-894-9611.

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: (http://www.southplainscollege.edu/human\_resources/policy\_procedure/hhc.php)

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

Here are the 7 Units and 40 Topics for our class:

Unit	#	Topic
Whole	1	Place Value and Names for Whole Numbers
Numbers	2	Rounding Whole Numbers
	3	Comparing Whole Numbers
	4	Adding Whole Numbers and Applications
	5	Subtracting Whole Numbers and Applications
	6	Estimation
	7	Multiplying Whole Numbers and Applications
	8	Dividing Whole Numbers and Applications
	9	Properties and Laws of Whole Numbers
	10	The Distributive Property
	11	Understanding Exponents and Square Roots
	12	Order of Operations
Fractions	1	Introduction to Fractions and Mixed Numbers
& Mixed	2	Proper and Improper Fractions
Numbers	3	Factors and Primes
	4	Simplifying Fractions
	5	Comparing Fractions
	6	Multiplying Fractions and Mixed Numbers
	7	Dividing Fractions and Mixed Numbers
	8	Adding Fractions and Mixed Numbers
	9	Subtracting Fractions and Mixed Numbers
Decimals	1	Decimals and Fractions
	2	Ordering and Rounding Decimals
	3	Adding and Subtracting Decimals
	4	Multiplying and Dividing Decimals
	5	Estimation with Decimals
Ratios,	1	Simplifying Ratios and Rates
Rates, and	2	Understanding Proportions
Proportions Percents	1	Convert Percents, Decimals, and Fractions
Tercents	2	Solving Percent Problems
Real	1	Variables and Expressions
Numbers	2	Integers
	3	Rational and Real Numbers
	4	Adding Integers
	5	Adding Real Numbers
	6	Subtracting Real Numbers
	7	Multiplying and Dividing Real Numbers
	8	Associative, Commutative, and Distributive Properties
	9	Order of Operations
Solving	1	Solving One-Step Equations Using Properties of Equality
Equations		, – , , – , , , , , , , , , , , , , , ,