## South Plains College Common Course Syllabus: NCBM 0105 Revised December 2022

**Department:** Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

Course Number: NCBM 0105

**Course Title:** Developmental Mathematics

Available Formats: hybrid and internet

Campuses: Levelland, Downtown Center, and Plainview Center

**Course Description:** 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 any of the corequisite courses.

**Prerequisite:** Maximum ABE score of 4 on the TSIA1 or a maximum diagnostic score of 3 on the TSIA2.

Credit: 1 Lecture: 0 Lab: 3

**Textbook:** None, use of online system required

Supplies: Please see the instructor's course information sheet for specific supplies.

## This course partially satisfies a Core Curriculum Requirement: No

**Student Learning Outcomes:** Upon completion of this course and receiving a passing grade, the student will be able to:

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.

**Student Learning Outcomes Assessment:** Student must take a written end of semester assessment covering the information covered in EdReady in class.

**Course Evaluation:** EdReady will evaluate the mastery of each student and give a score between 0 and 100 **and** student grade on the written end of semester assessment.

**Attendance Policy:** The student will be required to communicate with the instructor at least **once** per week and work in EdReady each week for the duration of the course. Failure to do so will result in the student possibly being dropped from the course.

Plagiarism violations include, but are not limited to, the following:

1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;

2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;

3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or

4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

- 1. Obtaining an examination by stealing or collusion;
- 2. Discovering the content of an examination before it is given;

3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;

- 4. Entering an office or building to obtain an unfair advantage;
- 5. Taking an examination for another;
- 6. Altering grade records;
- 7. Copying another's work during an examination or on a homework assignment;
- 8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
- 9. Taking pictures of a test, test answers, or someone else's paper.

**Student Code of Conduct Policy**: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: <a href="https://www.southplainscollege.edu/syllabusstatements/">https://www.southplainscollege.edu/syllabusstatements/</a>.

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: <u>https://www.southplainscollege.edu/emergency/covid19-faq.php</u>.

**SPC Bookstore Price Match Guarantee Policy:** If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and

format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

### Instructor Information and Suggested Course Schedule Non-Course Based Math Spring 2023 NCBM 0105-605 T 2:30 – 3:45 B 004

Instructor:Gina Becker, BSE, M EdEmail:gbecker@southplainscollege.edu				Phone:	806.716.4684 MW Downtown B018	
			<u>e.edu</u>	Office:		
<b>Office hou</b> <b>Monc</b> 8:15 – 10:45 –	<b>lay*</b> 9:30	<b>Tuesday*</b> 8:15 – 9:30 10:45 – 11:00 12:45 – 1:00 2:15 - 2:30	8:15	<b>lesday*</b> – 9:30 – 11:00	<b>Thursday*</b> 8:15 – 9:30 10:45 – 11:00 12:45 – 1:00 *or by a	<b>Friday*</b> 8:15 – 9:30

You may ALWAYS work ahead of the schedule (and it is really recommended).

**Textbook:** None, use of EdReady required. The link will be found in your course in Blackboard.

**Supplies:** Access to a computer with an internet connection is required for this course. Please bring it with you to class each week. You should also bring paper and pencil with you to class. We will work through specific problems and you will need to show your work on your paper.

For the final assessment (final exam), please bring an adequate supply of pencils. A calculator is <u>not</u> permitted on the final assessment (final exam).

**Blackboard:** Blackboard is the online course management system that will be utilized for this course. This course is supplemented online, so all access to course information and your instructor is through the Internet. This course syllabus, as well as <u>all</u> course materials can be accessed through Blackboard.

Login at <u>https://southplainscollege.blackboard.com/</u>. The user name and password should be the same as the MySPC and SPC email. User name: first initial, last name, and last 4 digits of the Student ID Password: Original CampusConnect Pin No. (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or by telephone 806-716-2180.

**Attendance Policy:** The student will be expected to arrive on time and work through the problems provided by the instructor for the topics of the day. The student will also be expected to make weekly progress in the EdReady course. If the student does not attend class or work through the topics in EdReady, the student may receive a recommendation to withdraw from the course.

## Grading:

1. EdReady will evaluate the student's mastery of each math concept and provide the student with a score between 0 and 100.

- 2. The student's goal is to earn an EdReady score of at least 90, which should provide a strong background of mathematical understanding for the final assessment (final exam).
- 3. At the end of the semester, the student will take a written assessment (final exam) that will determine the student's final course grade for this NCBM 0105 course.
- 4. The student will schedule a time with the instructor to meet face-to-face for the written assessment (final exam).
- 5. Performance on this final exam assessment will result in a pass or fail grade for the course.
- 6. The student must score at least a 70% on the final exam assessment to pass the NCBM 0105 course.
- 7. A grade of 'P' is assigned for a passing grade, while a grade of 'F' for a failing grade.
- 8. In order to be fully prepared for the final assessment, it is strongly recommended that the student master enough topics in the EdReady system to obtain a score of at least 90.

Course Completion Deadline: All coursework must be completed by Friday, May 4th.

## Accessing the Course:

Inside your Blackboard course, you will find a link to **EdReady.** After clicking this link, you should find an area on the screen to enter a goal key. The area should look similar to:



Your goal key for this course is: **Becker0105Spring23** This goal key is case-sensitive, so make sure to provide the correct upper- and lower-cases of the letters. Once into the correct goal, you will take an initial diagnostic test.

# Taking 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.

## The following 11 Units will be covered in EdReady:

- 1. Whole Numbers Unit with 12 different topics
- 2. Fractions & Mixed Numbers Unit with 9 different topics
- 3. Decimals Unit with 5 different topics
- 4. Ratios, Rates, and Proportions Unit with 2 different topics
- 5. Percents Unit with 2 different topics
- 6. Real Numbers Unit with 9 different topics
- 7. Solving Equations and Inequalities Unit with 1 topic
- 8. Exponents and Polynomials Unit with 5 topics
- 9. Factoring Unit with 5 topics
- 10. Geometry Unit with 2 topics
- 11. Radical Expressions and Quadratic Equations with 2 topics

# **SPC Tutors**

Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors, and view tutoring locations. http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

#### Tutor.com

You also have 180 FREE minutes of tutoring with tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tutor.com link on the left-hand tool bar and grab a session with a tutor. You can access tutor.com tutors during the following times:

Monday – Thursday: 8pm-8am

6pm Friday – 8am Monday morning

Week	Day	Date	Lesson Topic / Assignment
1	Mon-Fri	January 16-21	<ul> <li>Log in to the course using the link in Blackboard.</li> <li>Use the goal key Becker0105Spring23 to get started in the course.</li> <li>Complete the initial diagnostic test.</li> </ul>
2	Mon-Fri	January 23 -27	<ul> <li>Complete Topics 1-6 in the Whole Numbers Unit</li> <li>1. Place Value and Names for Whole Numbers</li> <li>2. Rounding Whole Numbers</li> <li>3. Comparing Whole Numbers</li> <li>4. Adding Whole Numbers and Applications</li> <li>5. Subtracting Whole Numbers and Applications</li> <li>6. Estimation</li> </ul>
3	Mon-Fri	January 30 -February 3	<ul> <li>Complete Topics 7-12 in the Whole Numbers Unit</li> <li>7. Multiplying Whole Numbers and Applications</li> <li>8. Diving Whole Numbers and Applications</li> <li>9. Properties and Laws of Whole Numbers</li> <li>10. The Distributive Property</li> <li>11. Understanding Exponents and Square Roots</li> <li>12. Order of Operations</li> </ul>
4	Mon-Fri	February 6 - 10	<ul> <li>Complete Topics 1-5 in the Fractions &amp; Mixed Numbers Unit</li> <li>1. Intro to Fractions and Mixed Numbers</li> <li>2. Proper and Improper Fractions</li> <li>3. Factors and Primes</li> <li>4. Simplifying Fractions</li> <li>5. Comparing Fractions</li> </ul>
5	Mon-Fri	February 13 - 17	<ul> <li>Complete Topics 6-9 in the Fractions &amp; Mixed Numbers Unit</li> <li>6. Multiplying Fractions and Mixed Numbers</li> <li>7. Dividing Fractions and Mixed Number</li> <li>8. Adding Fractions and Mixed Numbers</li> <li>9. Subtracting Fractions and Mixed Numbers</li> </ul>
6	Mon-Fri	February 20 - 24	<ul> <li>Complete the 5 topics in the Decimals Unit</li> <li>1. Decimals and Fractions</li> <li>2. Ordering and Rounding Decimals</li> <li>3. Adding and Subtracting Decimals</li> <li>4. Multiplying and Dividing Decimals</li> <li>5. Estimation with Decimals</li> </ul>
7	Mon-Fri	February 27 – March 3	Complete the 2 topics in the Ratios, Rates, and Proportions Unit 1. Simplifying Rations and Rates 2. Understanding Proportions
8	Mon-Fri	March 6 - 10	Complete the 2 topics in the Percent Unit

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			<ol> <li>Convert Percent, Decimals, and Fractions</li> <li>Solving Percent Problems</li> </ol>
9	Mon-Fri	March 20 - 24	<ul> <li>Complete Topics 1-5 in the Real Numbers Unit</li> <li>1. Variables and Expressions</li> <li>2. Integers</li> <li>3. Rational and Real Numbers</li> <li>4. Adding Integers</li> <li>5. Adding Real Numbers</li> </ul>
10	Mon-Fri	March 27 - 31	<ul> <li>Complete Topics 6-9 in the Real Numbers Unit</li> <li>6. Subtracting Real Numbers</li> <li>7. Multiplying and Dividing Real Numbers</li> <li>8. Associative, Commutative, and Distributive Properties</li> <li>9. Order of Operations</li> </ul>
11	Mon-Fri	April 3 - 7	Complete the 1 topic in the Solving Equations Unit 1. Solving One-Step Equations Using Properties of Equality
12	Mon-Fri	April 10 - 14	Complete Topics in the Exponents and Polynomials Unit 1. Introduction to Single Variable Polynomials 2. Adding and Subtracting Polynomials 3. Multiplying Polynomials 4. Multiplying Special Cases 5. Dividing by a Polynomial
13	Mon-Fri	April 17 - 21	Complete Topics in the Factoring Unit 1. Greatest Common Factor 2. Factoring Trinomials 3. Factoring Special Cases 4. Factoring Cubes 5. Solve Quadratic Equations by Factoring
14	Mon-Fri	April 24 - 27	Complete Topics in the Geometry Unit 1. Figures in 1 and 2 Dimensions 2. Perimeter and Area
15	Mon-Fri	May 1 - 4	<ul> <li>Complete Topics in the Radical Expressions and Quadratic Equations Unit</li> <li>1. Complex Numbers</li> <li>2. Operations with Complex Numbers</li> <li>This course must be completed by Friday, May 4 in order to schedule your final exam.</li> <li>Schedule your Final Exam</li> </ul>
16		May 8-12	Final Exam