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: <u>https://www.southplainscollege.edu/syllabusstatements/</u>.

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.

COURSE SPECIFIC INFORMATION FOR NCBM0105.601

Instructor: Phyllis Cormier

Email: pcormier@southplainscollege.edu

Office: Downtown Lubbock Center, Rm B016; Phone: (806)716-2797

Office hours:

Monday	Tuesday	Wednesday	Thursday	Friday
	11:30 AM – 12:30	10:20 – 10:50 AM		9:00 – 11:30 AM
4:00 – 5:30 PM		4:00 – 5:30 PM	2:30 – 3:30 PM	

Office hours are times I have set aside to work with students on any questions they have about the class. You are encouraged to come by my office during these times and ask questions to improve your understanding of the course material.

Appointments may also be made to meet face-to-face or virtual outside of these times. You may make an appointment through email, in person, or by calling. I will respond to emails within 24 hours Monday through Friday.

Class Structure: This course is a flex or hybrid course. All instructional material is on Blackboard and EdReady. We will be using a flipped classroom model. Before class, you will use the learning material in EdReady. During class, I will answer your questions over the lessons you have prepared for that day. The goal is to have a basic understanding of the material when you come to class. This will allow us to use class time to develop a deeper understanding and to clarify any points that are unclear.

Email: All students at South Plains College are assigned an SPC email account. Although personal email addresses will continue to be collected, the assigned SPC email account will be used as the official channel of communication for South Plains College. Students should make it a habit to check their student email account frequently. (Copied from SPC Student Guide.)

Textbook: There is no required textbook for this class. However, access to the EdReady website (<u>https://southplainscollege.edready.org</u>) is required.

Supplies: Access to a computer with an internet connection is required for this course. For the final assessment (final exam), please bring an adequate supply of pencils. Calculators are not allowed on the 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 all course materials can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. 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 blackboard@southplainscollege.edu or by telephone to 806-716-2180.

Student Learning Outcomes Assessment: Students must take a written end-of-semester assessment (final exam) covering the information from EdReady.

The class will cover topics from the following units of study in the EdReady system:

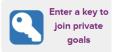
- 1) Whole Numbers
- 2) Fractions & Mixed Numbers
- 3) Decimals
- 4) Ratios, Rates, and Proportions
- 5) Percents
- 6) Real Numbers
- 7) Solving Equations
- 8) Exponents and Polynomials
- 9) Factoring
- 10) Geometry
- 11) Complex Numbers.

Course Evaluation: EdReady will evaluate the student's mastery of each math concept and provide the student with a score between 0 and 100. 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). 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. Our final is on Wednesday May 10th at 8:00 AM. Calculators are not allowed on the final exam. Performance on this final exam assessment will result in a pass or fail grade for the course. The student must score at least a 70% on the final exam assessment to pass the NCBM 0105 course. A grade of 'P' is assigned for a passing grade, while a grade of 'F' for a failing grade. 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.

Attendance/Student Engagement Policy: Consistent practice and effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed 3 absences for the semester. If this number is exceeded, the student may be dropped from the course.

Getting Started in EdReady:

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 like:



Your goal key for this course is: **Cormier0105Spring23** 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.

To maximize potential for successfully completing this course:

- Watch the video https://vimeo.com/edready/review/129791734/5c7e5aa696 To help you get started on EdReady
- Set aside time each day to concentrate on math.
- Work through your study path
 - Warm-up: Short assessment to determine preparedness for unit
 - Presentation: Lecture video to explain the concept
 - Worked examples: Examples are given and details for the solution are explained
 - Topic text: Like an online textbook
 - Practice: Examples for you to try. If you miss a problem, a brief explanation is given before allowing another attempt on the same problem.
 - Review: Examples for you to try, but in the review, the feedback is given after all of the examples have been attempted.
- Work problems without a calculator.
- Take a test to determine if you have mastered the topic after you have studied the material.
- Ask questions.

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 tools option from the left-hand menu bar. Click on the Tutor.com link and you will automatically be logged in for free tutoring. You may access tutor.com tutors during the following times:

Monday – Thursday: 8pm-8am 6pm Friday – 8am Monday morning

For questions regarding tutoring, please email <u>tutoring@southplainscollege.edu</u> or call 806-716-2538.

Suggested Course Schedule: The following schedule shows the minimum you should complete each week. It is recommended that you work ahead of schedule.

Week		Lesson Topic/ Assignment	
1	Jan $17 - 20^{th}$	1. The instructor will post the syllabus and information	
		regarding initial steps for beginning the course.	
		2. Use the single sign on link to access EdReady.	
		3. Enter the goal key for our course and take the initial	
		diagnostic test.	
2	Jan 23 rd	This will be our first class meeting. Be prepared to discuss the	
2	Juli 25	following:	
		Complete the first 5 topics in the Whole Number Unit	
		1. Place Value and Names for Whole Numbers	
		2. Rounding Whole Numbers	
		3. Comparing Whole Numbers	
		4. Adding Whole Numbers and Applications	
	+ th	5. Subtracting Whole Numbers and Applications	
3	Jan 30 th	Complete topics $6 - 11$ in the Whole Number Unit	
		6. Multiplying Whole Numbers and Applications	
		7. Dividing Whole Numbers and Applications	
		8. Properties and Laws of Whole Numbers	
		9. The Distributive Property	
		10. Understanding Exponents and Square Roots	
		11. Order of Operations	
4	Feb 6 th	Complete topics $1-5$ in the Fractions and Mixed Numbers unit	
		1. Intro to Fractions and Mixed Numbers	
		2. Proper and Improper Fractions	
		3. Factors and Primes	
		4. Simplifying Fractions	
		5. Comparing Fractions	
5	Feb 13 th	Complete topics 6 – 9 in the Fractions and Mixed Numbers unit	
0	100 10	6. Multiplying Fractions and Mixed Numbers	
		7. Dividing Fractions and Mixed Numbers	
		8. Adding Fractions and Mixed Numbers	
		9. Subtracting Fractions and Mixed Numbers	
6	Feb 20 th	Complete the 5 topics in the Decimal Unit	
0	1.60.20	1. Decimals and Fractions	
		2. Ordering and Rounding Decimals	
		3. Adding and Subtracting Decimals	
		4. Multiplying and Dividing Decimals	
		Complete the 2 topics in the Ratios, Rates, and Proportions Unit	
		1. Simplifying Ratios and Rates	
		2. Understanding Proportions	
7	Feb 27 th	Complete the 2 topics in the Percent unit	
		1. Convert Percents, Decimals, and Fractions	
		2. Solving Percent Problems	
8	Mar 6 th	Complete topics $1-5$ in the Real Number unit	
		1. Variables and Expressions	
		2. Integers	
		3. Rational and Real Numbers	
		4. Adding Integers	
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		5. Adding Real Numbers	
*	Mar 13 th	Spring Break week	
9	Mar 20 th	Complete topics 6 – 9 in the Real Number unit	
		6. Subtracting Real Numbers	
		7. Multiplying and Dividing Real Numbers	
		8. Associative, Commutative, and Distributive Properties	
		9. Order of Operations	
10	Mar 27 th	Complete the 1 topic in the Solving Equations and Inequalities unit	
		1. Solving One-Step Equations Using Properties of Equality	
11	Apr 3 rd	Complete the 5 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 Monomial	
12	Apr 10 th	Complete the 5 topics in the Factoring unit	
		1. Greatest Common Factor	
		2. Factoring Trinomials	
		3. Factoring: Special Cases	
		4. Special Cases: Cubes	
		5. Solve Quadratic Equations by Factoring	
13	Apr 17 th	Complete the 2 topics in the Geometry unit	
		1. Figures in 1 and 2 Dimensions	
		2. Perimeter and Area	
14	Apr 24 th	Complete the 2 topics in the Radical Expressions and Quadratic	
		Equations unit	
		1. Complex Numbers	
		2. Operations with Complex Numbers	
15	May 1 st	Review for Final Exam	
16	Finals Week	Final Exam Wednesday May 10 th 8:00 – 10:00 AM	