1. COURSE TITLE*: Beginning Algebra

2. CATALOG – PREFIX/COURSE NUMBER/COURSE SECTION*: MATH 1116

3. PREREQUISITE*:

A student must meet one of the following criteria to register for this course:

- Math 1106 with a grade of B or higher
- Students with a C in 1106 must meet with an advisor before registering
- Three High school STEM or Core Math courses with grades of C or higher
- Accuplacer QAS with a score of 243 or higher

COREQUISITE(S)*: None

4. COURSE TIME/LOCATION/MODALITY: (*Course Syllabus – Individual Instructor Specific*)

5. CREDIT HOURS*: 3 **LECTURE HOURS*:** 3
LABORATORY HOURS*: 0 **OBSERVATION HOURS*:** 0

6. FACULTY CONTACT INFORMATION: *(Course Syllabus – Individual Instructor Specific)*

7. COURSE DESCRIPTION*:

This course includes the basic concepts and techniques of elementary algebra. Topics include solving first degree equations and inequalities, coordinate system graphing of linear equations and inequalities, creating the equation of a line and solving systems of linear equations. This course cannot be used to meet general education or math requirements in a program. This course may be able to be used as elective credit toward a degree. Check with an advisor.

8. LEARNING OUTCOMES*:

At the completion of this course the student will be able to:

1. Simplify rational numerical expressions using rational numbers, exponents, radicals, and order of operations;
2. Evaluate and/or simplify variable expressions;
3. Solve linear equations in one variable;

4. Solve linear inequalities in one variable;
5. Graph solution sets of equations in two variables;
6. Use slope to recognize properties of lines;
7. Use slope and points to create the equation of a line;
8. Graph solution sets of inequalities in two variables;
9. Solve a system of linear equations in two variables;
10. Demonstrate the ability to use and solve formulas and apply algebra concepts to problem solving.

9. ADOPTED TEXT(S)*:

Beginning Algebra
9th edition, Custom Print
Baratto, Customized Printing, McGraw Hill Publishing Co.
Copyright 2016
ISBN: 978-1-308-75563-2

9a: SUPPLEMENTAL TEXTS APPROVED BY FULL TIME DEPARTMENTAL FACULTY (INSTRUCTOR MUST NOTIFY THE BOOKSTORE BEFORE THE TEXTBOOK ORDERING DEADLINE DATE PRIOR TO ADOPTION) ***

10. OTHER REQUIRED MATERIALS: (SEE APPENDIX C FOR TECHNOLOGY REQUEST FORM.)**

None

11. GRADING SCALE***:

Grading will follow the policy in the catalog. The scale is as follows:

A: 90 – 100
B: 80 – 89
C: 70 – 79
D: 60 – 69
F: 0 – 59

12. GRADING PROCEDURES OR ASSESSMENTS: (***Course Syllabus – Individual Instructor Specific)***

Example 1 - By Percent	
Homework	10%
Quizzes/Tests	90%
Total	100%

Example 2		
Category	*By Total Points*	*% of Grade*
Homework (20x10)	200	10%
Quizzes/Tests (5x360)	1800	90%
Total	2000	100%

Example 3		
Category	*By Total Points*	*% of Grade*
Online Quizzes	400	100%
Online Tests (6x100)	600	15%
Notebook (2x500)	1000	25%
Midterm	1000	25%
Final	1000	25%
Total	4000	100%

13. COURSE METHODOLOGY: *(Course Syllabus – Individual Instructor Specific)*

The course design provides instruction and materials to support the course objectives. Classes may consist of a variety of means to accomplish this including but not limiting to: lectures, class discussions, small group projects, supplemental materials, and outside assignments. Practice is an important part of the learning process. For every one hour of class time, two additional hours of study time should be expected.

14. COURSE OUTLINE: *(Course Syllabus – Individual Instructor Specific)*

Chapter 0: An Arithmetic Review (Review as needed)

Chapter 1: From Arithmetic to Algebra - LO1, LO2, LO3

1.1	An Introduction to Real Numbers	(Review as needed)
1.2	Adding and Subtracting Real Numbers	(Review of Math 1106)
1.3	Multiplying and Dividing Real Numbers	(Review of Math 1106)
1.4	Transition to Algebra	(Review of Math 1106)
1.5	Evaluating Algebraic Expressions	(Review of Math 1106)
1.6	Adding and Subtracting Terms	(Review of Math 1106)
1.7	Multiplying and Dividing Terms	(Review of Math 1106)

Chapter 2: Equations and Problem Solving – LO3, LO4, LO5, LO12

2.1	Solving Equations by the Addition Property	(Review of Math 1106)
2.2	Solving Equations by the Multiplication Property	(Review of Math 1106)
2.3	Combining the Rules to Solve Equations	(Review of Math 1106)
2.4	Formulas and Problem Solving	(Review of Math 1106)
2.5	An Introduction to Inequalities	

Chapter 3: Exponents and Polynomials (Optional)

3.1	Positive Integer Exponents
3.2	Integer Exponents and Scientific Notation
3.3	An Introduction to Polynomials
3.4	Adding and Subtracting Polynomials
3.5	Multiplying Polynomials
3.6	Dividing Polynomials

Chapter 6: Graphing Linear Equations – LO6, LO7, LO8

6.1	Two-Variable Equations	
6.2	The Rectangular Coordinate System	
6.3	Graphing Linear Equations	
6.4	The Slope of a Line (Examples 1, 2, 3, 4, 5, 6)	
6.4	Direct Variation (Examples 7, 8, 9, 10)	(Optional)
6.5	Tables and Graphs	(Optional)

Chapter 7: Equations, Inequalities and Functions – LO3, LO5, LO7, LO8

7.1	The Slope-Intercept Form	
7.2	Linear Equations	
7.3	Graphing Linear Inequalities	
7.4	Introduction to Functions	(Optional)

Chapter 8: Systems of Linear Equations – LO9, LO10, LO11, LO12, LO13

8.1	Graphing Systems of Linear Equations
8.2	Solving Systems of Equations with the Addition Method
8.3	Solving Systems of Equations by Substitution
8.4	Systems of Linear Inequalities

Recommended Calendar:

Week 1:	Chapter 1
Week 2:	Chapter 1, 2
Week 3:	Chapter 2
Week 4:	Chapter 2
Week 5:	Chapter 2, 3

Week 6:	Chapter 6
Week 7:	Chapter 6
Week 8:	Chapter 7
Week 9:	Chapter 7
Week 10:	Chapter 7
Week 11:	Chapter 7
Week 12:	Chapter 8
Week 13:	Chapter 8
Week 14:	Chapter 8
Week 15:	Chapter 8
Week 16:	Finals

15. SPECIFIC MANAGEMENT REQUIREMENTS***:

16. FERPA: *

Students need to understand that their work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for demonstration purposes. Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

17. ACCOMMODATIONS: *

Students requesting accommodations may contact Ryan Hall, Accessibility Coordinator at rhall21@sscc.edu or 937-393-3431 X 2604.

Students seeking a religious accommodation for absences permitted under Ohio's Testing Your Faith Act must provide the instructor and the Academic Affairs office with written notice of the specific dates for which the student requires accommodation and must do so no later than fourteen (14) days after the first day of instruction or fourteen (14) days before the dates of absence, whichever comes first. For more information about Religious Accommodations, contact Ryan Hall, Accessibility Coordinator at rhall21@sscc.edu or 937-393-3431 X 2604.

18. OTHER INFORMATION***:

SYLLABUS TEMPLATE KEY

***** Item cannot be altered from that which is included in the master syllabus approved by the Curriculum Committee.

****** Any alteration or addition must be approved by the Curriculum Committee

******* Item should begin with language as approved in the master syllabus but may be added to at the discretion of the faculty member.