Bossier Parish Community College Master Syllabus

Course Prefix and Number: MATH 098 Credit Hours: 3-3-0

Course Title: Beginning Algebra I

Course Prerequisites: None.

Textbook(s): Martin-Gay, Elayn. <u>Developmental Mathematics</u>, 4th edition. Pearson, 2019. ISBN:

9780134896014

Course Description: A beginning algebra course that includes performing fundamental operations on real numbers; exponents; solving linear equations and inequalities; applications; functions; graphing linear equations; slope; systems of linear equations.

Learning Outcomes:

At the end of this course, the student will:

- A. perform operations on real numbers and variable expressions;
- B. solve linear equations and inequalities;
- C. graph linear equations and inequalities;
- D. solve a system of linear equations; and
- E. execute basic rules of exponents.

To achieve the learning outcomes, the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

- 1. add real numbers; (A)
- 2. subtract real numbers; (A)
- 3. multiply real numbers; (A)
- 4. divide real numbers; (A)
- 5. perform mixed operations on real numbers; (A)
- 6. identify properties of real numbers; (A)
- 7. collect like terms in an algebraic expression; (A)
- 8. demonstrate the distributive property to simplify an algebraic expression; (A)
- 9. solve one step linear equations; (B)
- 10. solve multistep linear equations; (B)
- 11. solve linear equations containing parenthesis; (B)
- 12. solve linear equations containing fractions; (B)
- 13. solve linear equations containing decimals; (B)
- 14. check the solutions of linear equations: (B)
- 15. solve applications problems involving linear equations; (B)
- 16. substitute values into formulas including, but not limited to, perimeter, area, and volume; (B)
- 17. isolate specific variables within formulas; (B)
- 18. solve linear inequalities by graphing on a number line; (B)
- 19. graph linear equations using t-tables; (C)
- 20. graph linear equations from slope-intercept form; (C)
- 21. graph linear equations using the x- and y-intercepts; (C)
- 22. find the slope of a linear equation; (C)
- 23. write linear equations in slope-intercept form; (C)
- 24. write linear equations in standard form; (C)
- 25. identify the domain of a function; (C)

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26. identify the range of a function; (C)
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- 27. determine if the relation is a function; (C)
- 28. evaluating function notation; (C)
- 29. graph a linear inequality; (C)
- 30. solve a system of linear equations by graphing; (D)
- 31. solve a system of linear equations using substitution; (D)
- 32. solve a system of linear equations using addition; (D)
- 33. simplify expressions by using the power rule; (E)
- 34. simplify expressions by using the product rule; (E)
- 35. simplify expressions by using the quotient rule; (E)
- 36. simplify expressions by using the zero exponent rule; (E)
- 37. simplify expressions with negative exponents. (E)

Course Requirements: All students are required to take a comprehensive final examination. When this course is taken in an online environment, the department has established a minimum grade of 60% on the final exam required to earn a grade of "C" or higher in the course. If this minimum score is not obtained by the student, then the student shall refer to the policy outlined in the course syllabus which will supersede the course grading scale shown below.

Course Grading Scale:

90 - 100 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

0 - 59 = F

Attendance Policy: The college attendance policy is available at http://www.bpcc.edu/catalog/current/academicpolicies.html

Course Fees: This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams and/or clinical fees.

Nondiscrimination Statement: Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

Title VI, Section 504, and ADA Information Angie Cao, Student and Disabilities Services Specialist Student Services, F-254 6220 East Texas Street Bossier City, LA 71111

Phone: 318-678-6511 Email: acao@bpcc.edu

Hours: 8:00 a.m. - 4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator Teri Bashara, Director of Human Resources Human Resources Office, A-105 6220 East Texas Street

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Bossier City, LA 71111 Phone: 318-678-6056 Email: tbashara@bpcc.edu

Hours: 8:00 a.m. - 4:30 p.m. Monday - Friday, excluding holidays and weekends.

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