Bossier Parish Community College
Master Syllabus

Course Prefix and Number: MATH 099   **Credit Hours:** 3-3-0

Course Title: Beginning Algebra II

Course Prerequisites: Math placement test score or a grade of "C" or higher in MATH 098.

Textbook(s): Martin-Gay, Elayn. <u>Developmental Mathematics</u>, 4th edition. Prentice Hall, 2019. ISBN: 9780134896014

Course Description: A continuation of Beginning Algebra I including exponents and polynomials; factoring polynomials; rational expressions and equations, solving quadratic equations; graphing quadratic functions; roots and radicals.

Learning Outcomes:
At the end of this course, the student will:
- A. perform operations on polynomials;
- B. factor polynomials;
- C. simplify rational expressions and solve rational equations;
- D. simplify radicals and solve radical equations; and
- E. solve and graph quadratic equations.

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. simplify expressions by using the power rule; (A)
2. simplify expressions by using the product rule; (A)
3. simplify expressions by using the quotient rule; (A)
4. simplify expressions by using the zero exponent rule; (A)
5. simplify expressions with negative exponents; (A)
6. add polynomial expressions; (A)
7. subtract polynomial expressions; (A)
8. multiply polynomial expressions; (A)
9. divide polynomial expressions by monomial expressions; (A)
10. factor polynomial expressions by GCF; (B)
11. factor polynomial expressions by grouping; (B)
12. factor trinomials; (B)
13. factor difference of perfect squares; (B)
14. factor sum/difference of perfect cubes; (B)
15. factor polynomials using multiple rules; (B)
16. simplify rational expressions; (C)
17. multiply rational expressions; (C)
18. divide rational expressions; (C)
19. add and subtract rational expressions with like denominators; (C)
20. add and subtract rational expressions with unlike denominators; (C)
21. identify values that create undefined rational expressions; (C)
22. solve rational equations; (C)
23. evaluate radical expressions; (D)
24. simplify radical expressions; (D)

25. add and subtract radical expressions; (D)
26. multiply radical expressions; (D)
27. divide radical expressions; (D)
28. rationalize the denominator of a radical expression; (D)
29. evaluate rational exponents; (D)
30. solve radical equations; (D)
31. solve quadratic equations by factoring, the square root method, and/or the quadratic formula; (E) and
32. solve application problems involving quadratic equations; (E)
33. identify the following parts of a parabola: vertex, axis of symmetry, and x- and y-intercepts; (E)
34. graph quadratic equations by plotting points. (E)

Course Requirements: All students are required to take a comprehensive final exam. 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. All students are required to utilize ProctorU services for the administration of the final exam.

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
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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

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