Math 111 College Algebra CRN 40273 Spring 2019 MTWHF 8-8:50 am WOH 126 John Barrett barretj@linnbenton.edu Linn-Benton Community College, Albany Campus John Barrett, barretj@linnbenton.edu WOH 103

Textbook: Lippman, David, Precalculus, an investigation of functions, 2nd edition, Open Course Library Project..

This text is available on the Moodle Math 111_JB website and online. Graphing technology is required.

Grades are based on the usual percentage break-down: 90/80/70/60. There will be three quizzes (each worth 50 points) and three exams (each worth 100 points) throughout the term, in addition to the final exam (which is worth 200 points). The lowest exam score (not the final exam) and the lowest quiz score will be dropped. There will be in-class projects and homeworks throughout the term, each worth 10 points. The final exam will be on Monday 10 June 8-9:50 am in the classroom. One side of a 3.5-by-5 inch notecard may be used for notes during exams and quizzes. One side of an 8.5-by-11 inch paper may be used for notes on the final exam. Total points earned will be divided by total points possible to obtain a percentage that will be assigned a letter grade by the instructor. No make-up exams or quizzes will be given.

Office hours are Tuesdays and Thursdays after class 8:55-9:25 am in WOH 103. Tutoring is available in the Learning Center.

Acts of academic dishonesty are serious offenses and will be penalized to the maximum extent allowed by the college.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbentonadvocate.symplicity.com/public report.

The LBCC community is enriched by diversity and recognizes that each individual has worth and makes contributions for the good of the college as a whole. Each person has a right to think, learn and work together in a supportive, tolerant and respectful environment.

LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in the class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR Website for steps on how to apply for services or call 541-917-4789.

Questions are always welcome before, during and after lecture. Attendance is expected. Students are encouraged to acquaint themselves with another classmate for missed materials, collaboration and the like. Every instructor at LBCC and, indeed, all those working at the college are here to help you as a student realize your goals and potential.

Outcomes: Students will become adept at solving a variety of equations and inequalities, including rational, exponential, radical, logarithmic, polynomials and linear systems. In addition, students will learn to interpret graphical information, such as transformations, inverses, asymptotes. The class will also construct appropriate models for real world applications. Advanced methods for thinking and learning efficiency will be highlighted throughout the course.

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Week	М	Т	W	Th	F	Topic
1		intro/Lec	Lec	Lec	W	8.3 Complex numbers and matrices
2	Lec	Lec	Lec	Lec	Q	1.1-1.3, 2.1-2.2 linear models and functions
3	Lec	Lec	Lec	Lec	Т	3.2-3.3 quadratic functions and parabolas
4	Lec	Lec	Lec	Lec	lec	3.4 Fundamental Theorem of Algebra
5	Lec	Lec	Lec	Lec	Q	3.1, 3.5-3.6 even and odd functions, concavity
6	Lec	Lec	Lec	Lec	Т	3.7 Rational functions
7	Lec	Lec	Lec	Lec	lec	1.4, 1.6 Composition and inverse functions
8	Lec	Lec	Lec	Lec	Q	4.1-4.3 exponentials and logarithms
9	Х	Lec	Lec	Lec	Т	4.4-4.6 Modeling with exponentials and logs
10	Lec	Lec	Rev	Rev	Rev	1.5 Graph transformations, review
11	Final					

This is a brief synopsis and is subject to change at the instructor's discretion

This course develops skills in handling functions, focusing on polynomial, rational, exponential, logarithmic and related piecewise functions. Also complex numbers, matrices, the algebra of functions as well as applications are discussed. Students will gain experience with graphing technology, model construction and analysis and acquire problem-solving skills. Successful students will improve geometric and algebraic understanding, providing a solid basis for continued study of mathematics.