Math 212 – 28 (CRN:01364) College Math Preparations Academic Term: Winter 2016

Level 2: Beginning Algebra Email: sadeghibijan@fhda.edu

Instructor: Bijan Sadeghi Office Hours: TTh 3:00-4:00PM

4:00 – 6:15, TTh, MLC 109

Application of linear functions, quadratic functions and linear systems to problems. Emphasis on the development of models of real world applications and interpretation of their characteristics.

Prerequisite: Qualifying score on the Math Placement Test within the last calendar year; or Mathematics 210 with a grade of C or better.

Philosophy: The overall objective of the developmental mathematics sequence is to build confidence in students with respect to their ability to think clearly about a problem, apply mathematical techniques to solve it, and to support the method and solution. The developmental sequence also seeks to enable students to appreciate how mathematics has developed as a human activity around the world. To this end, throughout the developmental sequence, students will experience a variety of problems, from antiquity to modern times; develop a variety of problem-solving strategies; translate applied problems into a mathematical format; apply appropriate mathematical tools to formulate a solution and justify the result; develop basic mathematical and critical thinking skills; develop a geometric intuition for measurement and units as well as fluency in the logic behind symbolic manipulation.

- **Student Learning Outcome:** 1) Evaluate real-world situations and distinguish between and apply linear and quadratic functions models approximately. 2) Analyze, interpret, and communicate results of linear and quadratic models in a logical manner from four points of view – visual, formula, numerical, and written. 3) Demonstrate an appreciation and awareness of applications in their daily lives.

Course Objectives:

- Systematic problem solving methods.
- Explore the function concept algebraically, numerically, verbally and graphically.
- Develop linear function models to solve problems.
- Use systems of two linear equations to solve problems.
- Explore the graphical and numerical characteristics of linear relationships and describe their meaning in the context of a problem.
- Explore the graphical and numerical characteristics of quadratic relationships and describe their meaning in the context of a problem.
- Develop quadratic function models to solve.
- Use inequalities to solve real world problems.
- Investigate how mathematics has developed as a human activity around their world.

Textbook: Intermediate Algebra, by Robert Blitzer, 5th edition, Pearson Edition.

Homework: MyMathLab, Coursecompass.com, online homework system required in this class.

COURSE ID: sadeghi35463

Quizzes: Will be given weekly and will be based on that week's homework.

Exams: There will be three midterm exams. Exams cannot be made up. The final exam is required and it is comprehensive.

Grading: Based on total points accumulated as follows:

Midterms (100 points each) = 300 points; Homework = 100 points;

Quizzes = 100 points; Final = 200 points. TOTAL X=700

The letter-grade is as follows:

X>=400 " D"; X >= 490 "C"; X>=520 "C+"; X>=550" B-"; X>= 570 "B";

X>= 600"B+"; X>= 620 "A-"; X>= 640 "A"; X>= 670 "A+"

Jan.	1.1-1.4 5	1.4-1.5 7	1.5-1.6 12	2.1-2.3 14
Jan.	2.3-2.4 19	Review 21 **EXAM 1**	2.4-2.5 26	3.1-3.2 28
Feb.	4.1,4.4 2	5.1-5.2 4	Review 9 **EXAM 2**	5.3-5.4 11
Feb.	5.4-5.5 16	5.5-5.6 18	5.6-5.7 23	Review 25
Mar.	Review 1 **Exam 3**	7.1,7.7 3	8.1-8.3 8	8.1-8.3 10
Mar.	8.1-8.3 15	Review 17	22	Final 4-6 24

Important dates:

Jan. 16 Last day to add quarter-length classes.

Jan.17 Last day to drop for a full refund or credit

Jan.18 Last day to drop a class with no record or grade

Jan.29 Last day to request pass/no pass grade

Feb.26 Last day to drop with a “W”.