

MATH 5002
Algebraic Patterns and Functions II
(RM-MSMSP)

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Course Meetings: Class will be held every Wednesday, 4:30-8:00 PM, through Wednesday, 5/2, except Wednesday, 3/21 (Spring Break). This may have to be adjusted due to schedules of various school districts.

Course Objectives and Philosophy: The main objective of this course is to strengthen the participant's knowledge of mathematics, particularly the mathematics related to algebra and functions.

This course is a continuation of the mathematical topics and concepts presented in Algebraic Patterns and Functions I. Some of the topics to be covered include logarithmic functions and properties of logarithms, parametric equations, systems of equations, matrix algebra, linear programming, and an extensive look at trigonometry. All of these topics will be addressed through an emphasis on real world problems and applications, and data collection activities.

It needs to be clearly understood by every participant in this class, that the primary emphasis of this course is improving mathematical understanding. We realize that sound pedagogy and implementation of mathematical concepts is very important to mathematics teachers of all levels, and we hope that we use these approaches as a model for our teaching; however, applying the mathematical content to the participant's middle school class is not the primary objective.

Grading Policy:

Homework Assignments: Fourteen homework assignments will be given and collected throughout the semester. These assignments will be graded and will be worth 25 points each, with the lowest homework grade dropped at the end of the semester. Assignments are due before class begins on Wednesday. However, for assignments turned after this time there will be a 5 point penalty. No assignments will be accepted after the beginning of class the following Wednesday. You are able to work together in doing homework assignments, however, copying someone's assignment will not be tolerated. If this occurs, all participants involved will receive no credit on the assignment.

Attendance/Class Participation: In a course such as this, which has no tests or quizzes, and which will contain many in-class problems, data collection activities, and discussions regarding pedagogy and implementation, attendance and participation by everyone is essential. We have 16 class meetings during the semester. I understand that circumstances may arise that would cause you to miss a class, or possibly two, during the semester. However, each class missed after the second absence, will result in your grade being dropped a letter grade; that is, a grade of an A- will become a B- after the third absence, then it will drop to a C- after the fourth, etc. In addition, more than two absences during the semester will cause revocation of the entire \$1000 stipend from NSF.

It is also important that everyone arrives on time, since class will begin promptly at 4:30. Excessive tardies and/or having to leave class before 8:00 PM could also result in your grade being lowered, and possibly a revocation of the stipend.

Final Grade: Your final grade will be determined by the percentage of these points you have actually received.

A: 90% - 100%, B: 80% - 89%, C: 70% - 79%, D: 60% - 69%, F: Below 60%

Note: The bottom 2 percentage points of each letter grade will be assigned a "minus", and the top 2 percentage points will be assigned a "plus".

Important Dates at UCD:

- 1/31 is the last day to drop a class with a full refund and no transcript notation.
- 4/2 is the last day to drop a class without a petition from the dean.
- 4/13 is the last day to drop a course for CLAS students. Treated as an absolute deadline.

Final Comment: Please turn off all pagers and cell phones at the beginning of class!