

# **Course Syllabus: Advanced Mathematical Decision Making**

## **Course Description**

The prerequisite course for Advanced Mathematical Decision Making (AMDM) is Algebra II or Accelerated Geometry B/Algebra II. The course will give students further experiences with statistical information and summaries, methods of designing and conducting statistical studies, an opportunity to analyze various voting processes, modeling of data, basic financial decisions, and use network models for making informed decisions. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

This course has three sections: AMDM A is the first half of the course and includes Modules 1-3. AMDM B is the second half of the course and includes Modules 4-6. AMDM Y is the entire course and includes Modules 1-6.

This course includes the following modules:

Module 1 - Analyzing Numerical Data

Module 2 - Probability

Module 3 – Statistical Studies

Module 4 – Using Recursion in Models and Decision Making

Module 5 – Using Functions in Models and Decision Making

Module 6 – Decision Making in Finance

### **Textbook**

There is no textbook for this course.

# **Course Participation Policy**

Students should follow the Class Schedule (located in Class Information area of course) and all class work must be submitted no later than 11:59 PM on the due date.

After the due date has passed, instructors will enter zeros in the Grade Center for work not submitted by the deadline. During student breaks and towards the end of the semester, students may have the opportunity to improve their course grade by completing and submitting work with grades of zero from earlier in the semester. Zeros will remain in the Grade Center until class work is submitted and evaluated by the instructor.

The CVA term ends prior to the end of the traditional school semester. The final date work will be accepted each term is posted on the CVA website (cobbvirtualacademy.org).

## **Grading**

Grades for the course are calculated based on category percentages as follows:

Assignments = 40% Quizzes = 30% Tests = 20% Final Exam = 10%

## **Academic Integrity**

Academic integrity is the cornerstone of learning at CVA and we take the integrity and authenticity of student work very seriously. When academic integrity is maintained, students will make decisions based on values that will prepare them to be productive, meaningful, and ethical citizens.

Students are required to abide by the CVA Academic Integrity Policy. Academic dishonesty in any form will not be tolerated. The CVA Academic Integrity Policy outlines the consequences if students fail to maintain academic integrity in their course. For additional information, the CVA Academic Integrity Policy is posted on the CVA website.

### **Additional General Information**

- Students must complete the mandatory online CVA Student Orientation each term before any
  course work will be graded by the instructor. Only one Student Orientation is completed each
  term.
- All class work must be submitted through Blackboard in the format requested. Students should have access to Microsoft Office and submit assignments in that format. All CCSD students have access to the Office 365 Suite. Assignments submitted through email will not be accepted.
- The 'Grade before Final Exam' column in the student Grade Center shows the current grade for the course and is automatically calculated.
- Students in all sections of this course will take an online final exam during times indicated on the CVA website.

## **Course Specific Information**

- **Practice Assignments**: After reviewing each lesson, students will complete a practice assignment ONLINE. Each assignment has approximately 10 questions. Students can start the assignment, SAVE the assignment and come back to it at a later time. Once the assignment is complete, students should click the SUBMIT button.
- Quizzes and Tests: Quizzes and tests are password protected. To get the password for a quiz or test, the student must submit the assignments leading up to that particular quiz or test.
   Students should carefully review the feedback on graded assignments and be sure he/she understands the material prior to beginning the quiz or test.