



Applied Mathematics & Statistics, and Scientific Computation Program

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DATA ANALYSIS PROJECT GUIDELINES

The Data Analysis Project (AMSC 762) is designed to test the students' skills in the following 3 aspects:

- Formulating and justifying the appropriate model for the data
- Choosing the proper algorithms to analyze the data based on the selected model
- Producing a well-written report which contains both analysis results and theoretical/empirical support.

Students must request permission to enroll in AMSC 762 from AMSC coordinator. AMSC 762 is only open to Master's Non-thesis and Doctoral students in the Applied Statistics area, for whom the resulting Project serves as a Qualifying Exam component. Students who wish to enroll in AMSC 762 should have taken classes in the AMSC program for at least one semester.

PART I.

At the beginning of the semester the student will register for AMSC762. At present the section is 0101. Before attempting the "project", the student will be required to listen to 4 seminar presentations from JPSM online media. These one hour lectures given by different faculty in the campus statistical consortium, elaborate on how data is analyzed in various fields.

Once the student has completed the lectures, he/she will write a short summary of what was learned and then meet with the AMSC director to discuss the various methods.

The lectures can be found at: www.jpsmclasses.umd.edu.

The login is at the upper right corner

LOGIN: username: amsc
password: csma

PART II.

- **STUDENT will notify the AMSC Coordinator at least three weeks prior to the Project date.**
- **AMSC Coordinator** will contact Advisor and distribute Project data to the student.
 - (Advisor will send data to be analyzed to jsadler@math.umd.edu)
- **Advisor** will give description of Scientific Problem
- **Advisor** will describe the techniques by which data sets were sampled
- **Advisor** will ensure that student receives no unauthorized assistance on the assignment.
 - (Student Honor Pledge)

- **Student** will be given 2 weeks to:
 - analyze data & write analyses
- Student will schedule project defense (give an oral presentation of the implications of the findings; applications in administration, industry, etc. before a 2 person committee whose members are knowledgeable about statistics. (advisor + at least 1 AMSC faculty and approved by AMSC Director).
 - (https://amsc.umd.edu/images/DoctoralDegreeResources/AS_DataAnalysisProject.pdf)
- **Student** will submit data to AMSC Coordinator
- **AMSC Coordinator** will collect written data project findings and submit to student's advisor.