

## The IE component of ST505.

Starting with those students that entered in Fall 2010 or later, the General Education requirements were modified to include an integrative experience (IE) component (see <http://www.umass.edu/gened/forStudents/requirements2010Later.html>.) The department of Mathematics and Statistics has four upper level courses with an IE component that meet the IE requirement; ST505, ST491P (project course) M455 and M56. Note that unlike most of your GenEd courses, these upper level courses have prerequisites. ST505 is meant to meet the IE requirement for those doing the Statistics concentration or in other concentrations but with statistical interests.

ST505 has always included an applied component involving analysis of interesting data sets from a variety of disciplines. This will continue to be the case but there will now also be a special IE project. These will be done in groups of three students (perhaps two depending on how the numbers work out) with the subject matter content attached in some way to one of the students earlier Gen Ed courses. In addition, beyond the usual things involved in analyzing real data the project will require:

1. A careful examination/reflection of the context in which the data arose and associated background along with a discussion of why the problem is of interest in a general sense.
2. A full discussion of what the results mean from the perspective of how those results may change ones thinking about the problem at hand or suggest future changes, such as a change in management policy or a suggested change in behavior. Included here should be a discussion of how the data used arose and any cautions that might be needed in how it is used to answer the original question of interest.
3. Presentation of the results to the class. Some time in the last two weeks of class there will be two evening sessions with 4-5 projects presented in each session. You have to be at the session where your group presents. Attendance at the other session will be optional. The ST505 students will be excused from 2 or 3 classes during the last week or two of classes, at which time the 697R students will continue with some topics you are not responsible for.

How exactly will this work?

- Students will submit a list of the Gen Ed courses they have taken at the beginning of the course.
- A collection of data/problems will be listed by me. Students can express ranked preferences. If you have a data set/problem that you think may contribute to a project contact me.
- I will assign students to projects/groups based on prior GenEd courses in combination with preferences.

- A report of at least 3 pages, common for the group, will be handed in by **Date 1** (TBA but around mid October). This will provide general background and discussion of the problem. This will become part of the final report, with changes as needed.
- A group summary of what analyses have been run and a statistical summary of the results will be handed in by **Date 2** (TBA, but before Thanksgiving).
- The last part of the project is a subject matter interpretation of the results and the implication of those results. The final written version of this part should be at a minimum 1 1/2 to 3 pages. The group will work on this part jointly up to the presentations. But after the presentation the final write up of this part of the project is to be done separately by each individual.
- Presentations as described above (most likely early in week of Dec. 3).
- The full report is due by Sat. Dec 15 (the last day of exams) at the latest. You should be able to finish earlier but this will give you flexibility depending on your exam schedule. As noted above the write up of the last part of the project should be individually done. This can incorporate discussion from the presentation sessions.