

**Stat 404: Effective Statistics Communication**  
Poster Presentation  
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**Background**

Many people have recognized the importance for statisticians of developing good communication skills. To teach these skills to their undergraduate majors, the University of Michigan Statistics Department has created Stat 404: Effective Statistics Communication.

**Aim**

The aim of the course is to give students the opportunity to learn and practice the communication of statistical information to statisticians and non-statisticians both orally and in writing.

**Course Description**

Stat 404 is a one-semester, two-credit seminar for undergraduate statistics majors and minors. A statistics project class, either sampling or experiments, is a prerequisite. Students write and speak about previous statistics work; there are no new methods taught in the class. This class satisfies the Upper Level Writing Requirement (ULWR) of the University of Michigan's College of Literature, Science and the Arts.

**Grades**

Grades are based on homework (30%), class participation (30%), and a final project (40%). The final project is a team project to demonstrate mastery of as many of the communication skills as possible. It includes an oral presentation and a written report. The students are asked to focus on content, organization, and execution to produce effective communications.

**Course Topics**

The major topics covered by the course include

- General principles
- Ethics
- Written reports
- Oral presentations
- Visual aids
- Outlines
- Outline alternatives
- Graphs
- Professional correspondence
- Resumes

**Re-writing**

Re-writing is encouraged as an important and necessary tool to achieve effective writing. Students are required to re-write one assignment and permitted to re-write any others that they choose in order to improve their grades. In the most recent course every student chose to re-write at least one assignment. There were 55 re-written assignments and 78% (43) of these resulted in better grades.

**The Instructor**

Mary Ann Ritter is an adjunct lecturer in the Statistics Department of the University of Michigan. In addition to teaching Statistics 404, she occasionally lectures about reliability engineering. She has over 20 years experience at General Motors in executive positions in strategic planning, production and engineering. She has an S.M. degree in management from MIT as well as a B.S. in mathematics and an M.S. in statistics from Stanford University.