

9 out of 10 Seniors Prefer This Freshman Seminar

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Pomona's Freshman Seminar

- ▶ is a program of seminars for all first-year students in their first semester at the College
- ▶ is taught by faculty from across the disciplines
- ▶ engages students in rigorous reading, writing, and discussion on varied topics
- ▶ The goal of ID1 is to prepare students to participate fully and successfully in the intellectual community that is Pomona College.
- ▶ Critical writing is an essential component of that participation, and to that end ID1 is a writing-intensive course.

Course Logistics

- ▶ 15 students
- ▶ class meets twice a week for 75 minutes
- ▶ students rank seminars based on course descriptions
- ▶ no stats background (varied math background)
- ▶ can't drop or switch seminars once placed in a particular course

9 out of 10 Seniors Recommend This Freshman Seminar: Statistics in the real world

The main idea behind this course is to get the participants (that's you) to leave in December questioning every number you come across: in the media, at sporting events, when researching for another class, when carrying out your own research, etc. Certainly there are some good numbers out there, but I hope that you will start asking yourself questions like "where did that come from?", "what if we looked at it from another angle?", "what if we knew the rest of the information/data?" We'll look at sources that range from journalism to scholarly writing to fiction, and we'll see how statistics are used and misused. As in many ID1 courses, the goal is for you to become critical inquirers.

<http://pages.pomona.edu/~jsh04747/courses/id1/id1f07.htm>

Course Structure

- ▶ 4 sections: Randomness & Variability, Psephology, Statistical Diagnoses, Did O.J. Do It?
- ▶ 3-4 papers, each turned in as a draft and final version (including additional one-one-one meetings)
- ▶ a few additional one-page written assignments (no homework or exams)
- ▶ weekly readings from a large variety of sources
- ▶ daily news article
- ▶ class period is almost exclusively discussion

Discussions

- ▶ each student signs up to lead a discussion twice during the semester (in pairs)
 - ▶ once they are responsible for summarizing the readings
 - ▶ once they are responsible for keeping the discussion going during the class period
- ▶ both students are required to email written notes on the day before they present
- ▶ all students are graded on their participation in class discussions throughout the semester

Standard Readings

- ▶ *Seeing Through Statistics*, Utts
- ▶ *A Mathematician Reads the Newspaper*, Paulos
- ▶ *Chance & STATS* articles
- ▶ *Statistics, a Guide to the Unknown*, Peck et al.
- ▶ *Freakonomics*, Levitt & Dubner
- ▶ *Moneyball*, Lewis

Fiction

- ▶ “How much shall we bet?” *Cosmicomics*, Calvino
- ▶ *Rosencrantz & Guildenstern are Dead*, Stoppard
- ▶ “The Babylon Lottery” *Ficciones*, Borges
- ▶ *The Gambler*, Dostoevsky

Movies

- ▶ **Magic Town**, 1947, James Stewart & Jane Wyman
- ▶ **12 Angry Men**, 1957, Henry Fonda

Win, Lose, or Therapy

- ▶ Game show using several medical articles on Hormone Replacement Therapy (HRT)
- ▶ teams of 3 students each
- ▶ each team is responsible for 2 articles
- ▶ get a point for:
 - ▶ correctly answering a question
 - ▶ asking a good question that can't be answered

Difficulties

- ▶ Cohesive structure
- ▶ Readings at the right level
- ▶ Composing creative paper topics
- ▶ **Grading papers**

Thanks

- ▶ isostat listserve for **many** good ideas for readings and other resources
- ▶ CAUSE for this webinar as well as cartoons that go along with the scheduled readings (course website)