

University of California, Santa Cruz
Department of Applied Mathematics and Statistics
Baskin School of Engineering
Spring 2005

AMS 5: Statistics

- **Lectures:** TuTh 2–3.45pm, in the Jack Baskin Auditorium room 101 (we’ll generally use the time as follows: lecture/discussion 1 from 2–2.50pm, break from 2.50–2.55pm, lecture/discussion 2 from 2.55–3.45pm).
- **Instructor:** David Draper, Baskin Engineering (BE) 135; telephone 459–1295; email draper@ams.ucsc.edu (due to the volume of email I receive I can’t guarantee quick response to any message you send me).
- **Web Page:** We’ll have a course web page, which is being set up now: its URL is

<http://www.soe.ucsc.edu/classes/ams005/Spring05/>

- **Instructor Office Hours:** will be announced soon (initially my office hours will be held in BE 135; depending on how many people show up, we’ll often move to a bigger space nearby called Jack’s Lounge).
- **TAs:** The TAs for the class are

Ethan Arenson <ethan@ams.ucsc.edu>
Angela Pignotti <pignotti@ams.ucsc.edu>
Weining Zhou <zhouwn@ams.ucsc.edu>

Their office is BE 142, and their office hours will also be announced in class soon.

- **Discussion Sections:** These have already been arranged, and you were required to enroll in one of them as part of taking the class.

Section	Day	Time	Place	Capacity	TA
01A	M	6.30–7.40pm	Baskin 165	38	Angela
01B	Tu	noon–1.10pm	Baskin 165	38	Weining
01C	Tu	7.30–8.40pm	Baskin 165	38	Weining
01D	W	9.30–10.40am	Baskin 165	38	Angela
01E	Th	noon–1.10pm	Baskin 165	38	Weining
01F	Th	6.00–7.10pm	Baskin 165	38	Angela
01G	F	8.00–9.10am	Baskin 165	38	Ethan
01H	F	12.30–1.40pm	Baskin 165	38	Ethan

The content of the course will be presented in three weekly meetings: the TuTh lectures and a 70-minute discussion section. Eight discussion sections will be given each week, and it's your responsibility to attend one of these (quizzes that are a part of the grade will be given in these discussion sections). To keep the class sizes roughly uniform (at 25–30 people) I ask you to regularly go to the section you're enrolled in, but from time to time you can go to another one if you need to.

As you can see from the table above, discussion sections are given every day of the week from Monday to Friday. However, as far as the discussion sections in this course are concerned, we'll be using a different calendar: discussion section week 1 runs from Wed 30 Mar through Tue 5 Apr inclusive, discussion section week 2 runs from Wed 6 Apr through Tue 12 Apr inclusive, and so on, with one exception right at the end of the quarter which I'll explain later (Mon 30 May is a holiday, so we have to do something a bit different during the last week of classes). There are two conclusions to be drawn from this: (a) required attendance in discussion sections begins tomorrow, Wed 30 Mar, and (b) new content in the discussion sections will begin every Wednesday this quarter.

- **Individual tutoring:** There will be a relatively small number of hours of individual tutoring available for those that most need it. You should get the great majority of your help in this course by coming to class, discussions sections, and the office hours that the TAs and I will give; it's best to regard the modest availability of individual tutoring as a last resort after these other resources prove insufficient. If you feel you must have individual tutoring, please see me to request this. Tutoring is also available for qualified students through the Multicultural Engineering Program (MEP); see mep.soe.ucsc.edu for details.
- **Reader:** Given the size of the class and the number of handouts I anticipate, it looks like the best plan will be for me to prepare a reader which will include all of the handouts. This will be available as soon as it's ready (in the next week or so) in class at xerox cost.

General Content

Statistics is the **study of uncertainty**: how to measure it, and what to do about it. It comes up in two kinds of things people do:

- *Science* (knowledge for its own sake), and
- *Decision-making* (putting that knowledge to work to make a choice among different possible actions).

Science is mostly about *facts* (“until 1999, when physicists decided to make it a definition instead of something to be measured, the speed of light was thought to be about 299,792,458 meters/second, give or take about 2 meters/second”) and *relationships* (like

