

## Laboratory Information for Statistics 352 (Winter 2008)

As noted on the syllabus, this is a course in Bayesian statistics. To quote from the Preface of the course textbook:

In the past few years, computer algorithms have been developed to draw an (approximate) random sample from the posterior distribution, without having to completely evaluate it. This removes the disadvantage of Bayesian statistics, for now it can be done in practice for problems with many parameters, and for distributions from general samples and having general prior distributions.

Therefore, in order to adequately present a modern course on Bayesian statistics, it has been decided to integrate the statistical software package R into the course. This also aligns STAT 352 with the other applied methods STAT classes.

The Department of Mathematics & Statistics has a computing laboratory featuring SUN terminals running the UNIX operating system. They all provide access to R. Students will be expected to use R to complete certain homework problems, and exam questions will require students to be able to analyze R output. In order to facilitate the learning of R, our department's laboratory instructor will be offering two lab sessions, and will be available for consultation outside of class time. There will also be occasions during which our class meetings occur in the computer lab. (These meetings will be announced in advance.)

The contact information for our lab instructor is as follows:

**Laboratory Instructor:** Sarah Carnochan Naqvi

**Office:** College West 307.29

**Email:** [carnoc@math.uregina.ca](mailto:carnoc@math.uregina.ca)

**Phone:** 337-2338

**Stat 352 Lab Website:** <http://www.math.uregina.ca/~carnoc/stat352/index.html>

### Lab Session #1

Students are required to attend ONE of the following:

- Monday, January 14: 13:30-14:20, OR
- Tuesday, January 15: 14:30-15:20.

Lab Session #1 is intended to provide an overview of the department's computing environment and the R programming language. Lab Session #2 (to be announced) will provide an introduction to MAPLE.

### R Software

The R software package is freely available from <http://cran.r-project.org/>

### LAB COMBINATION: