General Material and Guidelines

Instructor: Prof. Parviz Moin, moin@stanford.edu, room 500-500B, (650) 723-9713.
Teaching Assistant: Sandipan Kumar Das, skdas@stanford.edu, room 520-520L3, (650) 725-6076.

Computer and Computing: This course involves a fair amount of scientific computation and programming. The students who have experience with programming will find the course significantly less labor intensive. To thoroughly understand the subject and gain a working knowledge of scientific computing, you need to practice and experience numerical difficulties as well as the power of numerical methods. This course provides such exposure.

You may use personal computers or any other computer that you can get your hands on. Although you will write some programs yourself, you will also need some "canned" programs (e.g. MATLAB functions, *Numerical Recipes* subroutines, etc). The computer programs in *Numerical Recipes* are available in FORTRAN or C and may be purchased from the bookstore. Also available at the bookstore is *Numerical Recipes Example Book* that uses these programs. A specific version of all the canned programs that you need for this course is also available in FORTRAN and can be obtained from the class web page.

Homework problems usually involve plotting data. It is highly recommended that you become familiar with a plotting package for your computer as soon as possible (for example, MATLAB, EXCEL, etc.).

Required Text: Parviz Moin, *Fundamentals of Engineering Numerical Analysis*, Cambridge University Press.

Optional Supplemental Reference: Press et al, *Numerical Recipes: The Art of Scientific Computing*, Second Edition, Cambridge University Press, FORTRAN or C version.

The main reason for recommending *Numerical Recipes* is the availability of reasonably well documented accompanying computer programs and examples in FORTRAN as well as in other languages.

Requirements: There will be weekly homework sets (45%), one midterm (20%), and a final exam (35%).

Homework sets will be collected <u>in class</u> every Monday. <u>No late</u> homework sets will be accepted. The homework problems all involve computer programming. It is very important to get started early. This advice cannot be overemphasized. Please follow the instructions in handout 4 for preparation of your homework solutions to be handed in. A complete list of the exercises assigned during the week will be posted on the web each Wednesday after class. These assignments are due on the following Monday.

Lectures: MW 11:00-12:15, Skilling Auditorium (SkAud). There will be no scheduled workshops. However, please leave the 11:00-12:15 slot on Friday open in your schedule for possible rescheduled lectures.

Preliminary Office Hours:

<table>
<tr><th></th><th>Monday</th><th>Tuesday</th><th>Wednesday</th><th>Thursday</th><th>Friday</th><th>Saturday</th></tr>
<tr><td>8:00-9:00</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>9:00-10:00</td><td>Moin</td><td></td><td>Moin</td><td></td><td></td><td></td></tr>
<tr><td>10:00-10:30</td><td>Moin</td><td rowspan="2"></td><td>Moin</td><td rowspan="2"></td><td rowspan="2">Sandipan</td><td rowspan="2"></td></tr>
<tr><td>10:30-11:00</td><td></td><td></td></tr>
<tr><td>11:00-12:00</td><td>Class</td><td></td><td>Class</td><td></td><td>Sandipan</td><td></td></tr>
<tr><td>12:00-12:15</td><td>Class</td><td rowspan="2"></td><td>Class</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>12:15-1:00</td><td></td><td></td></tr>
<tr><td>1:00-1:30</td><td rowspan="2"></td><td></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2">Sandipan</td></tr>
<tr><td>1:30-2:00</td><td>Sandipan</td></tr>
<tr><td>2:00-3:00</td><td></td><td>Sandipan</td><td></td><td>Sandipan</td><td></td><td>Sandipan</td></tr>
<tr><td>3:00-4:00</td><td></td><td>Sandipan</td><td></td><td>Sandipan</td><td></td><td>Sandipan</td></tr>
<tr><td>4:00-4:30</td><td></td><td rowspan="2"></td><td></td><td rowspan="2"></td><td></td><td rowspan="2"></td></tr>
<tr><td>4:30-5:00</td><td>Sandipan</td><td>Sandipan</td><td>Sandipan</td></tr>
<tr><td>5:00-6:00</td><td>Sandipan</td><td></td><td>Sandipan</td><td></td><td>Sandipan</td><td></td></tr>
</table>

WWW: All the course material (handouts, calendar, announcement, etc.) is available from http://www.stanford.edu/class/me200c/. The course calendar (due dates, readings, etc.) is updated daily after class. Please visit the 'announcements' section regularly for general class announcements and possible clarifications on the problem sets. The class mailing list (me200c-students@lists.stanford.edu) will also be used for this purpose. You will be automatically subscribed to this list once you enroll in the class through Axess. Please do so as soon as possible.

Disk/Print Quota: Your Leland account will receive 50 MB of extra disk quota and 250 extra sheets of print quota that you can use for the coursework. You will receive the additional disk and printing quota within two business days of officially enrolling in the class (effective only this quarter).