## Grading Scheme

General Notes. You will get a letter grade for each single homework, quiz, workshop. At the end of the semester the 10 homework grades will be averaged to get a homework grade, and similarly the 5 quiz grades will give an average quiz grade, and the 4 workshop grades will give an average workshop grade. Every student will also get a letter grade on her/his individual project. The final grade will be determined from the average homework grade (weight 40%), the average quiz grade (weight 10%), the average workshop grade (weight 20%), the individual project grade (weight 30%).

Example: A student gets A,A,F, B+,A,C+, B,B+,A, A-,B,B, C,B,C on the fifteen homework submissions; also B,A,B,A,C on quizzes and C,B,A,B in the workshops. Then the average homework grade is

(4\*4+1\*3.7+2\*3.3+4\*3+1\*2.3+2\*2+1\*0)/15 = 2.44 i.e. a C+. The average quiz grade is 3.2, so a B.

The average workshop grade is 3.0, for a second B.

Then if the students ends up with a C for the project, the final grade will be  $0.4*2.44+0.1*3.2+0.2*3.0+0.3*2\approx 2.496$ , a C+, while an A for the project translates into  $0.3*2.96+0.2*3.2+0.2*3.0+0.3*4\approx 3.096$ , a B.

**Homeworks.** There will be a total of 10 homeworks, assigned on the Tuesdays and the Thursdays of the first five weeks of classes. The homeworks assigned on Tuesdays will have two submission dates, before and after a discussion in class. Late homeworks are not accepted under any circumstances. Each assignment consists of four exercises, of varying difficulty, but each one contributes one unit to the homework grade. For example, if you complete only two exercises out of the four, your letter grade will be a C. You could also get partial credit for one or more of the exercises.

In grading an exercise, in addition to the correctness of the solution, the neatness of the presentation and the success in communicating the relevant ideas will be also taken into account. It is strongly encouraged that you make a draft of the solution, before writing the final version on the original assignment sheet.

Quizzes. There will be five quizzes, given in class, during each of the first five Tuesday lectures of the course. The quizzes will vary in form and content. Some exercises will be of the type "check the correct", some will ask for examples, some will ask about stuff that was just covered in lectures, and some may ask for things yet to be discussed, or things discussed long ago.

**Workshops.** There will be four workshops, during the first lecture of the second, third, fourth, and fifth week of the semester. These will be class activities, where students input will be required. The workshop grade will be as follows: F - missed;

C - present, but not much input;

B - present, contributed to the liveliness of the discussion with ideas, questions and answers:

A - in addition to the above, submitted a written report of the workshop activity. Usually this will be a paragraph or two summarizing the problems discussed. Also I will expect you to add two sentences, showing that the writer has somewhat carefully and thoughtfully read the lecture notes for the week before the workshop. The report should be sent by e-mail, no later than 24 hours after the conclusion of the workshop, and could be in plain text, or a pdf file.

**Projects- General points.** The individual projects will be graded on a scale 0–40 points, as follows:

0-2 points for initial selection of the project (5/26/2008);

0-6 points for a writing a plan of the project (6/1/2008);

0-6 points for a draft version of the project (6/11/2008):

0-12 points for the written final version of the project (6/18/2008);

0-12 for presenting the project in class on the final week;

0-2 bonus points, for voted "best project";

Delays will result in points loss.

The total number of points is then divided into 10, and turned into a letter grade, for example 34 points will give 3.4, i.e. a B+ as a project letter grade. The written final version should be around 6 typed pages long. Any format that could be transformed into a PDF file and posted on the class web-page is acceptable; I could advise you on how to do good math typesetting.

There will be six 20-minutes presentations plus 5 minutes questions sessions each on Monday, June  $23^{rd}$ . The remaining presentations, if any, will be on the next day.

**Projects - Written version.** Maximal number of points for the final version is 12. They will be distributed as follows:

- 4 points for submitting a printed copy, and an electronic copy, on or before the deadline, Thursday, 19 June, 6pm.
- 2 points for information processing the paper shows that the student has gained an understanding of the subject, and could clearly and harmoniously communicate the essential points of the theory.
- 3 points for presenting the topic in a well-organized, self-contained manner, with good use of mathematical language.
- 3 points for original contribution Asking well-posed questions, that are naturally tied to, but not answered in the general available theory about the project. Then a partial or significant advance toward answering the questions.

**Projects - Presentation.** Maximal number of points for the oral presentation is 12. They will be distributed as follows:

- 4 points for the enthusiastic willingness to present the project on the assigned time.
- 3 points for presenting the topic in a well-organized, well-paced, entertaining manner.
  - 3 points for answering the questions at the end of the presentation.
  - 2 points for asking questions about the other students' projects.