Organization of Homeworks and Project
– 2012-2013 –

In practice

- Subgroups are formed
- Four topics are identified in class: software, QC, families, environment. These topics will serve as the basis of the theory classes as well as the homework assignments. Via these topics a complete picture is given about common practices in genetic epidemiology.
- Homework assignments are data analysis driven or literature driven.
- Each homework assignment (4 in total; may be reduced – upon mutual agreement), will be made in the formed subgroups. A single group report is handed in (due date communicated in class) and a group score is given.
- Each homework report is presented in class (in front of all students; see course schedule) and a class discussion is initiated. Presentation slides are made available to all students, via the course website. Hints are given to further improve the homework. The discussions will lead to a further understanding of relevant concepts in genetic epidemiology.
- Homeworks 1 – 4, possibly corrected or completed with new insights, are merged into one final project, with a clear story that is in line with genetic epidemiology thinking. An individual report is handed in as final project.
- This project is taken as the basis of an oral exam.

Homework assignment styles in more detail:

Literature-driven homework
This homework style involves looking for the relevant documents (such as software manuals, supporting papers) on the www to address the questions of interest. The idea is to extract / summarize from these documents the information that is needed to answer a list of questions, as provided in the homework assignment.

Data analysis driven homework
This homework style involves analyzing either real-life data or simulated data that will be provided in class. A variety of questions will be given and as well as indications about software tools and functions that can be used to solve these questions. The report consists of these answers. At this point, no flowing text is required. The style is "question/answer".

Resources available
- Special sessions with the TA for this course to ask for more details about
  - The content of the homework
  - The application of certain software tools
  - The ways to interpret the obtained results
  - …
- Course notes and the www.
- A good number of references relevant to this course can be retrieved from:
  http://www.nslij-genetics.org/ld/
- You may find the following list of software package useful as well:
  http://www.nslij-genetics.org/soft/

Reports
- Restrict the literature based group reports to maximally the equivalent of six single-spaced typed pages of text, excluding figures, tables and bibliography. The report should contain an introduction, a description of what the paper/project does, and how this fits into the broader scientific context or the genetic epidemiology course. The report should also have a conclusion and if citations are made to other papers, there should also be a bibliography. Only one report per group is needed.
- The individual-based final report serves as a "written exam" and should be no more than the equivalent of 20 spaced typed pages of text, including figures, tables and bibliography. The report should consist of a flowing text (no longer questions/answer style). During the oral exam, specifically refer to extensions made to the group reports and motivate these. Additional questions are asked, starting from the report, going into more depth regarding the "four" topics covered in this class.

Grading

HW1	HW3	HW3	HW4	Project /Oral Exam	Total score
10	20	20	20	20/10	100