RESEARCH CLINIC

General information

Supervisor:	Paul F. Hudson (p.f.hudson@luc.leidenuniv.nl)
Title of clinic:	***Summit to Sea*** (Muddy Boots & Muddy Waters)
Number of students:	3 to 4
Major *(if applicable and approved by the Major Convener)*:	Elective or EES (or any major if you have a good attitude and a willingness to get *wet and dirty*)
(Pre)requisites *(if applicable)*:	Earth Systems Science (100-level), or by permission of instructor (talk to me!)

Research context

This semesters special edition of **Muddy Boots & Muddy Waters** is entitled "***Summit to Sea***", and (topographically) extends within the Netherlands from near the highest points in southern Limburg to the lowest points at the coast, in Scheveningen.
We will examine soils and sediments within coastal and riverine environments, including oxbow lakes in hilly Limburg (near Belgium border) and coastal dunes landscapes in Scheveningen. The RC project consists of a combination of field work, laboratory work, and/or report writing and database analysis (tailor designed for each student).
New 1: one student will take the lead in coordination of the LUC Science Lab and Mud Room, including related equipment.
New 2: This year's version will also implement a "***team science***" approach. That is, different levels of students (3rd, 2nd, 1st) will work together and mentor each other on a common research project.

Some riparian field work may require overnight stay and will be coordinated with student schedule. Specific field work activities to include extracting sediment/soil cores from wetlands, installation of hydrologic monitoring equipment and data loggers, among other. Field work will occur with Hudson, other LUC staff and LUC students.
No prior experience with field or lab work is required, although a willingness to get muddy (and possibly wet!) is a bonus.
Students will need access to a reliable bike.
Ability to work in a team setting (with LUC students and professors) and good communication skills are essential.

Specific Tasks

Tasks and activities (some combination, specific tasks to be worked out in consultation with students):
• field work assistance, installation of monitoring and sampling instruments, coring wetlands, soil sampling in the dunes, surveying river channels
• laboratory analysis will include particle size determination of wetland soils, characterization of organic material and soil carbon calculation, and statistical analysis to compute various indices of hydrologic processes.
• data input and basic statistical characterization in spreadsheet,
• report writing,
• general support of research activities,
• **Science Lab and Mud Room coordination**: one student to serve as coordinator for Science Lab and Mud Room.