Department of Environmental Science

Stockholm University

Syllabus

for course at advanced level

Project in Environmental Biogeochemistry
Miljöbiogeokemiskt projekt

7.5 Higher Education Credits
7.5 ECTS credits

Course code:	MI8018
Valid from:	Spring 2020
Date of approval:	2018-10-01
Department	Department of Environmental Science
Main field:	Environmental Science
Specialisation:	A1F - Second cycle, has second-cycle course/s as entry requirements

Decision

Prerequisites and special admittance requirements

Admission to the course requires knowledge equivalent to Environmental Biogeochemistry, 7.5 credits, (MI8017), and English 6.

Course structure

Examination code	Name	Higher Education Credits
HELA	Report	7.5

Course content

a.The course discusses interactions between biogeochemical cycles and anthropogenic (human-induced) perturbations in naturals systems with focus on the local-regional scale. The course is gives as a project building on knowledge provided in Environmental Biogeochemistry (MI8017). The course gives, dependent on the choice of topic for the project, a deeper understanding within one or more of the following areas:

• Biogeochemical processes in soil, inland waters, coastal ocean, sediments and lower atmosphere.
• Interactions between biogeochemical cycles of several elements, and their seasonal and regional variations.

• Key anthropogenic perturbations and their interactions with regional biogeochemical cycles.
• Effects of natural processes and perturbations on the fate and bioavailability of contaminants.
• The role of biogeochemistry in environmental management concepts and tools, such as in ecosystem services and the EU Water Framework Directive.

Learning outcomes

Upon completion of the course, students are expectedto be able to:

• demonstrate a deeper understanding within on or more of the areas above
• critically analyze and evaluate scientific literature in biogeochemistry
• compile and present a scientific report orally and written
• critically evaluate and give constructive feedback to peers.

Education

Instruction consists of lectures, seminars and an individually conducted project that is presented orally and

written. Participation in seminars and any associated integrated instruction is compulsory. In the event of special circumstances, the examiner may, after consultation with the teacher concerned, grant a student exemption from the obligation to participate in certain compulsory instruction

Forms of examination

a. The course is examined as follows: Knowledge assessment takes the form of written project report, oral presentation and critical evaluation and constructive feedback on presentations given by peers.

b. Grades will be set according to a seven-point scale related to the learning objectives of the course:
A = Excellent
B= Very good
C = Good
D = Satisfactory
E = Adequate
Fx = Fail, some additional work required
F = Fail, much additional work required

d. In order to pass the course, students must receive a passing grade and participate in all mandatory instruction.

e. Students who receive afailing grade on a regular examination are allowed to retake the examination as long as the course is still provided. The number of examination opportunities is not limited. Other mandatory course elements are equated with examinations. A student who has received a passing grade on an examination may not retake the examination to attain a higher grade. A student who has failed the same examination twice is entitled to have another examiner appointed, unless there are special reasons to the contrary. Such requests should be made to the department board.

The course includes at least two examination opportunities (if necessary:for each course unit) per year when the course is given. At least one examination opportunity will be offered during a year when the course is not given.

f. Students awarded the grade Fx are given the opportunity to improve their grade to E. The examiner decides the supplementary assignments to be performed and the pass mark criteria. The supplementary assignments will take place before the next examination session.

Interim

Students may request that the examination be conducted in accordance with this course plan even after it has ceased to be valid. However, this may not take place more than three times over a two year period after course instruction has ended. Requests must be made to the departmental board. The provision also applies in the case of revisions to the course plan(and the revisions of the course literature).

Misc

The course is part of the Masters programme in Environmental Science focussing on Atmosphere, Biogeosphere and Climate but can also be read as a separate course.

Required reading

The course literature is decided by the department board and published on the Department of Environmental Science and Analytical Chemsitry's website at least two months before the start of the course.