

Implementation of Environmental Engineering Study Course in RTU

Dr. Hab.Sc.Ing. **Dagnija Blumberga**, professor

Dr.Sc.Ing. **Claudio Rochas**, lecturer

M.Sc. **Ilze Dzene**, lecturer

Riga Technical University

Organisation of Course

- 2 credit points
- voluntary study course for any student (teacher, professor)
- spring semester every year
- requirement to receive Certificate of study course
 - Test
 - Presentation of course work

Structure of Study Course

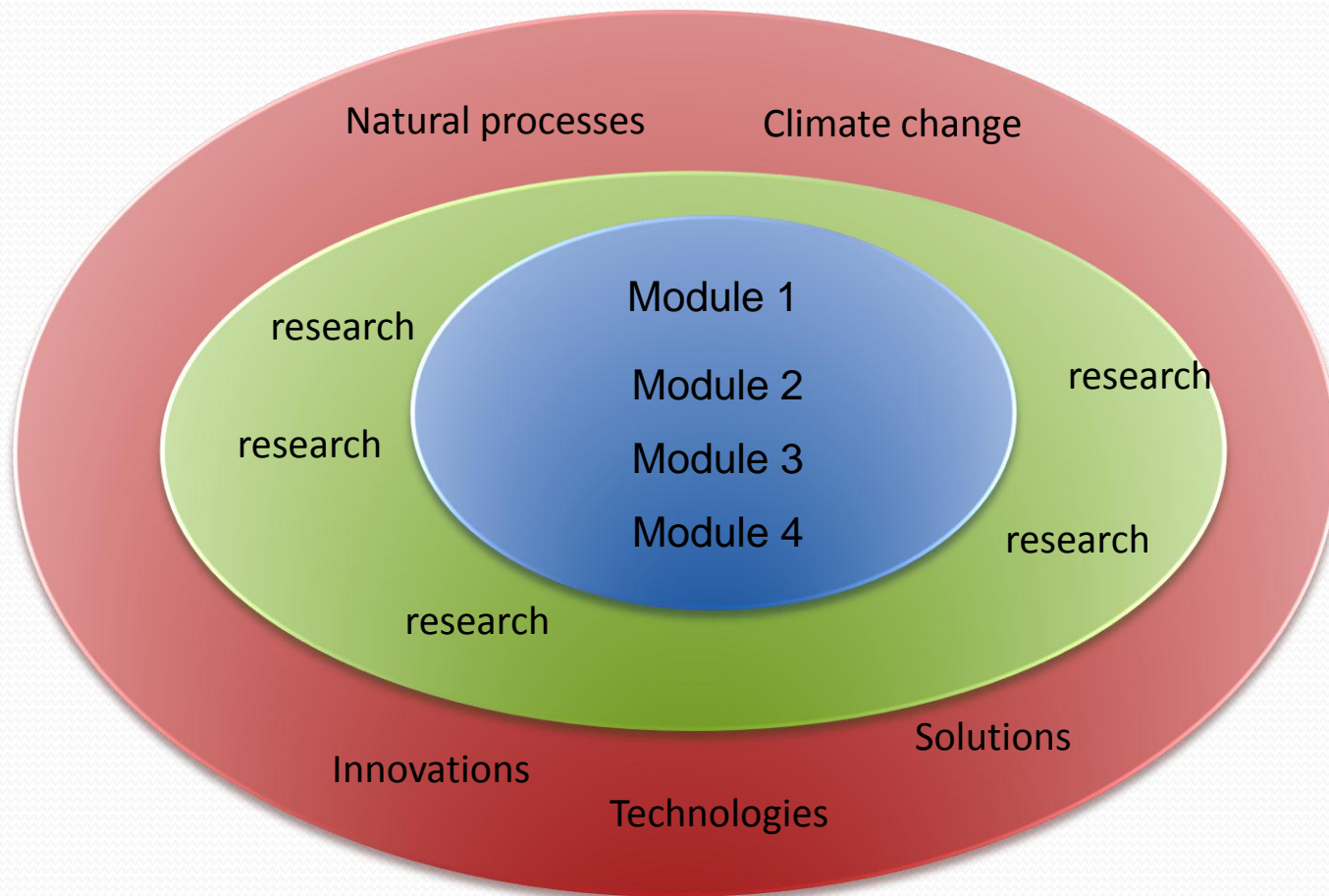
- 8 lectures (16 hours)
- 4 practical classes (16 hours):
 - Green Patrols
 - Role games
 - Open discussions during presentation of course work

Lectures

Content of lectures (1)

- 4 modules:
 - Sources of pollution of air, water and soil
 - Solutions to prevent pollution
 - Environmental impact assessment
 - Climate changes and mitigation

Content of lectures (2)



Practical classes



Green Patrols – on-site visit (1)

- Team work outside the university
- Mapping of waste
- Discussions with persons who are polluting
- Discussions with municipalities responsible for area

Green Patrols – on-site visit (2)

- Benefits:
 - Formation of identity and environmental consciousness
 - Training on job
 - Training to work in group
 - Training to convince somebody of environmental protection

Role games (1)

- 2 role games:
 - Strategy by Dennis Meadows
 - Climate change by Harvard Law School

Role games (2)

Gains:

- increased interest about environmental problems between participants - opening of minds to environmental problems
- Development of discussion culture
- Training on work in groups

Course work (1)

- Groups work of students
- Topics selected by students according to their speciality or particular interest
- Topics in connection with 4 modules presented during lectures
- Report is written by group of students (introduction includes description of work done by each partner in group)
- Presentation of findings and discussions with other students (Power Point slides)

Course work (2)

Gains:

- Development of environmental problems connected with specialities of students
- Development of skills to write report about findings which are coming from case study
- Presentation skills
- Training on work in groups

Results

Pilot project in spring 2006

- More than 70 students and teachers participated
- Participants from:
 - 6 faculties of RTU;
 - Universities: LU, LLU;
 - high schools: Bank Highschool, Turiba, Defence Academy, Policy Academy, College of Olaine

Results

- Students were very happy about this course (only positive answers in survey)
- Improvements done by teaching staff of Institute of Energy Systems and Environment of RTU
- We are ready (by support of Study Department) to continue: spring 2009 this course will be in the list of voluntary courses

Welcome

More info

[www. videszinatne.lv](http://www.videszinatne.lv)

or

Phone/Fax: +371 67089908

anna.voloscuka@rtu.lv