ENvironmental Engineering
Seminars

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Schedule of seminars

See course homepage, pls.
www.strom.fsv.cvut.cz

Complexity of Environment

1st lectures on the scope of ENE and SD

- Humans manipulate with the natural resources to gain certain goal (usually economic)

- The scale of the goals is often no more local

- Awareness of the potential consequences
    - Range of issues that need to be examined

Complexity of Environment

- Multidisciplinary
    - Difficult tasks – experts

- Interconnectivity (cause effect chains)

- Long response times

- Uncertainties

- Difficult to communicate

- Need of a decision supporting TOOL

Environmental Impact Assessment

EIA - definition

…an evaluation procedure that helps planners and decision-makers to understand the environmental **impacts** of a proposed project or activity

…a technique for drawing together, in a **systematic way**, expert qualitative assessment of a project's **environmental effects**

1. **Planning tool**
2. **Decision making instrument**

The task – study an existing EIA report

1. Get know each other within your groups (today)
2. Find an example of any finished EIA report (landfill, highway, mine, factory, pipeline etc.)
   - preferably from country of a team member (but should be in English)
   - It is a team work – everybody must agree with the choice
3. Get familiar with the report
4. Propose and evaluate an alternative solution
5. Presentation

(1) Get to know each other

-Change the contact information (emails, phone no., room no., etc.)

-Agree on the form of communication and group meetings (facebook, shared google document, dropbox etc.)

-Set the group leader (not compulsory)

-Redistribute the sub-tasks for the next deadline

(1) Find an EIA example

- EIA reports on internet (public)

- Usually Ministries of Environment

- Select EIA, not SEA (Strategic environmetal assessment)

- Team work!

-POWER PLANTS IN FINNLAND FORBIDDEN!

(task 1) Get familiar with the report

DEADLINE 1: today

-Within a consultation introduce the EIA report (what project, where, when?)

-Why was EIA necessary?

-What are the key environmental factors?

-Who are the key stakeholders?

-EIA report reference (incl. www link)

-FORM: up to you (slides, notes on the paper, oral, reference on the paper)

-ATTANDANCE: at least one representative per group

-PENALTIES: no show = -10 p. per person

      not prepared = -1 to -5 p. per person

(2) Variant solution

-Identify **major environmental Impacts**.

-**Come up with alternative solution**

-Your variant does not have to be very realistic

-Make yourself the experts for the key environmental problems (at least 5 issues)

- -each of you an expert for one issue: eg. water management, flora and fauna, noise, social aspects, unemployment, recreation, air quality, economy etc.
- - decribe qualitatively the impact of the variants on the environment

(task 2) Variant solution

DEADLINE 2: 28.3. !!! (already next week)

-Describe the your alternative solution

-Present your methodology on the impacts quantification

-Show the result (eg. points per each key problem)

-How does your variant compares to the winning variant from the report?

-FORM: up to you (slides, notes on the paper, oral)

-ATTANDANCE: at least one representative per group

-PENALTIES: no show = -10 p. per person

      not prepared = -1 to -5 p. per person

(task 3) Alternatives comparison

-Compare quantitatively the impacts of different alterantives
- -EIA solution
- -Your alternative
- -No go scenario
- Evaluate separately for the construction phase and the operation phase
- Evaulate 5 selected env. impacts for each phase
- Methodology of comparison: up to you, one possible way will be shown during the seminar

-FORM: up to you (slides, notes on the paper, oral)
-ATTANDANCE: at least one representative per group
-PENALTIES: no show = -10 p. per person
      not prepared = -1 to -5 p. per person

(4) Report and presentation

-Prepare one brief report per group

-Contents:

    -Title page (authors)

    -Introduction of the project

    -Scoping – why was EIA necessary

    -Key environmental problems (with brief description of the significance)

    -Other environmental problems

    -Stakeholders

    -Considered alternatives

    -Your alternative incl. quantified impact on the environment and comparison with the winning alternative

    -Summary

    -Proposed division of percents/points per team member

    -References

(task 4) Report and presentation

-Form of the report (one per group!):

- app. 10 - 20 pages, 12 p., 1.5 spacing

-It is very brief, therefore use your own words only! **Copy and paste will be penalized** (we will check)!

-Include **references** if appropriate!

-English and grammar will not be evaluated (but we must at least understand what you write)

-Printed final version before the exam

DEADLINE 4:

Draft report (no report = -10 p., less than 50 %: -9 to -1 p.)

-Text structure, table of contents

-List of environmental problems, Brief description of the alternative solutions, Table with alternatives comparison

5. Report and presentation

-Form of the presentation:

-**15.6. 2019** (all groups) – starting from 2 pm

-10 – 15 minutes presentation

-Preferably if more of you speak, but not necessarily (no reductions for non-speakers)

-After the presentation app. 5 min of discussion. We may ask the team members for various details to see that all of you are familiar with the report (reductions up to -10 p. are possible).

-All team members must be present (or excused in advance). No show without prior excuse -20p.

Points

-Exam = max 100 p.

-Assessment (report + presentation):

    -20 p. per team member (eg. 5 members = 100 p.) minus reductions

    -Team can redistribute points according to contribution of each member (your selfevaluation will be attached to the final report)

    -Max. 30 p./person, min. 0 p./pers. (no negative points)

    -Management of the group is your business! We will accept your evaluation.

    -Attendance on seminars of all is not compulsory, even though welcomed. One per group must come regularly. Everybody must be present during presentation.