

SYLLABUS

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (EIA) COURSE ENV-200 Syllabus Fall 2015

Lecturer: Zheenbek Kulenbekov, PhD, Assistant Professor

E-mail: kulenbekov_z@auca.kg

Class meets twice a week:

Tuesday 15:35-16:50 lecture

Thursday 15:35-16:50 seminar

Description of the course

Environmental impact assessment is a planning process that aims to predict, evaluate and mitigate the impact on the environment of a proposed project, program or policy prior to its commencement, and to approve only environmentally acceptable undertakings. EIA is hence a mechanism for avoiding or mediating some of the potential costs of development. The purpose of this course is to help students develop a comprehensive and critical understanding of the theory and practice of EIA in the world including Central Asia countries. The course examines EIA in general and in specific jurisdictions. It also examines the technical and policy issues involved in the production and the appraisal of environmental impact assessments. Using a broad definition of "environment", various components of EIA are addressed, with an emphasis on principles, legal and institutional frameworks, stages in the process, and specific analytical techniques. Additionally, the course will focus on the ecology of human societies and the social impact of development on communities and regions. The ecology of human societies is about connections between ecological and human social, cultural, and organizational processes. It is a very broad and general subject that crosses numerous scientific disciplines. Together, readings and lectures will provide you with a "big picture" of what human ecology and social impact are about from an interdisciplinary point of view. This learning process will help us generate a new appreciation for the complex world in which we live.

Course Objectives:

- To provide a basic understanding of the EIA process as it is used for research, planning, project or program evaluation, monitoring, and regulatory enforcement.
- To introduce students to the legal, economic, social, administrative and technical process of preparing and/or evaluating environmental impact documents.
- To relate the uses of scientific research to practical situations in project planning and decision making.
- To provide experience and training in environmental planning and related professions.

Anticipated Outcomes:

Upon completion of this course students will be able to:

- Critically review a world including Central Asia countries environmental impact statements or comparable document for completeness and adequacy.
- Prepare portions of environmental documents through administrative and legal requirements and standards of professional practice.
- Fully participate in interdisciplinary environmental report preparation teams.
- Analyze proposed development project plans for possible environmental effects and prepare appropriate initial studies.
- Utilize EIA documents for policy development, project planning or for legal or political action planning.
- Acquiring a better understanding of theoretical ideas in a broad and general way the ecology of human societies and the social impact of development on communities and regions.

Methodology: The course is presented as a series of lectures and discussion sections. All given lectures and seminars, quizzes as well as relevant textbooks and other teaching materials are available for students in the e-course of AUCA's webpage. At the end of each lecture the questions are discussed and several additional topics for independent studying during the seminars will be offered to students. Students will make two 15-minutes presentations (both individual and group presentations) on these additional topics. Every presentation will be assessed by the Instructor in accordance with the grading scheme presented below. In case of group presentation the number of points is divided between the students prepared presentation proportionally. Majority of assignments will be intended to facilitate the work in groups. Students practice in lab works. Every student should provide an interpretation of his/her own observation in written format (max 1.5 page in word extension).

Evaluation and Assessment: The students' performance is assessed on the basis of their participation during the lectures, including the familiarity with the reading material, note-taking, making assignments, oral presentations and written exams. Students are expected to pass all the above in order to obtain a credit for the semester.

Examination: The students will take two exams: the first one is a mid-term test and the second one is an essay-type examination. The test consists of questions on short definitions and multiple-choice questions. Exam papers are composed of essay type questions, which require in-depth answers on the topics studied. No books, papers etc. can be used during the exam. Exam questions are compiled from the questions discussed during the lectures. Evidence of using additional sources of information related to the course content will be marked in the form of additional points for examination paper.

Grading scheme: All grades will be awarded in accordance with the scheme given below. *Your points for the class work cannot exceed the maximum of 40.*

ASSIGNMENT POINTS

| | |
|--|--|
| Mid-term test and final examination | 20 and 30, total 50 (maximum) |
| 1presentation, class and lab assignments | 10 (maximum for each), total 30 |

| | |
|-----------------------------------|-----------------|
| | |
| Active participation, note-taking | 5 each 2 |
| Bonus for attending classes | 10 |

Withdrawal of grades in case of poor attendance without reason

Minus 5 for each failure to attend

| | | |
|-----------------|-----------------|-----------------|
| A 100-95 | B- 76-71 | D+ 47-42 |
| A- 94-89 | C+ 70-60 | D 41-36 |
| B+ 88-83 | C 59-54 | D- 35-30 |
| B 82-77 | C- 53-48 | F < 30 |

WORK AND ATTENDANCE: The work and attendance of all students will be monitored. Students are expected to attend all lectures and seminars. Attendance is regarded as a part of the course. This is for the benefit of the students and helps to ensure that they are coping with the work and managing to comprehend all the information and complete all the tasks given to them. Students must come to class on time not to disturb others, being more than 10 minutes late is counted as an absence. Students are not allowed to use any mobile devices or portable computers in class. Students are not allowed to use any mobile devices or portable computers in class, this is considered as a “negative” participation and participation points be deducted for that.

DOCUMENTATION OF REASONS FOR ABSENCE: Any valid reasons for absence should be reported to the Instructor as soon as possible. Legitimate excuses are the following: illness, confirmed by a doctor's note next class; a death in the family; participation in conferences or seminars with preliminary notification of the Instructor and submission of the relevant supporting documents. Unless the correct procedure is followed no allowances can be made.

READINGS

The core textbook for this course is:

John Glasson, Riki Therivel and Andrew Chadwick. Introduction to environmental impact assessment: 3rd edition. Routledge is an imprint of the Taylor & Francis Group. This edition published in the Taylor & Francis e-Library, 2005.

Rabel Burdge, Frank Vanclay. Social Impact Assessment: A Contribution to the State of the Art Series., 1996.

Recommended readings and other course materials (including lecture slides) including the textbook will be available in the e-course. Because of the interactive nature of the classes, it is especially important that students attend lectures having completed the assigned readings.

COURSE CONTENT

The course schedule is subject to change.

| Weeks | Subjects | Lab and Field works |
|---------|--|--|
| Week 1 | Description of the course and Syllabus Objectives of Environmental and Social Impact Assessment (ESIA) Introduction and principles | <u>Case study:</u> KGZ_CAREC Transport Corridor 1 (Bishkek–Torugart Road) -eia-draft-01 |
| Week 2 | Nature and classification of environmental effects Origins and development | |
| Week 3 | Methods supporting ESIA practice UK and KGZ agency and legislative context | Selection and preparation of soil samples (<u>AUCA outside</u>) |
| Week 4 | Screening procedures Scoping and environmental baseline assessment Starting up; early stages | The unified method of preparation of soil extracts (<u>AUCA inside</u>) |
| Week 5 | Predicting environmental impacts Determining impact significance Impact prediction, evaluation and mitigation | Water sampling and preservation (<u>AUCA outside</u>) |
| Week 6 | Managing project impacts Post decision monitoring Participation, presentation and review | Qualitative analysis of water samples and soil extracts (<u>AUCA inside</u>) |
| Week 7 | Public participation in ESIA Cumulative environmental effects Monitoring and auditing: after the decision | |
| Week 8 | Mid Term Exam | |
| Week 9 | Strategic environmental assessment The effectiveness of ESIA: Retrospect and prospect An overview of UK and KGZ practice to date | Practicing with air quality monitoring and background level of gamma radiation (AUCA outside) |
| Week 10 | Case studies of ESIA in practice | |
| Week 11 | Comparative practice. Improving the effectiveness of project assessment | |
| Week 12 | Widening the scope: strategic environmental assessment | |
| Week 13 | Final examination | |