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| Course: | **ENVIRONMENTAL IMPACT ASSESSMENT** |
| Course id: |
| Number of ECTS: 4 |
| Teacher: | Ruzica Stricevic, Andjelka Belic |
| Course status | Elective |
| Number of active teaching classes (weekly) |
| Lectures: 3 | Practical classes: 3 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None/navesti ako ima |
| 1. Educational goal

The topic will cover procedures for environmental impact assessment of irrigation and drainage projects. Students will develop skills to plan measures aiming at eliminating or reducing adverse environmental effects and at increasing the impact and visibility of positive effects. |
| 1. Educational outcomes

Students have to be able to identify and identify all impacts on the environment, to develop and implement procedures of environmental impact assessment, to emphasize positive effects and to be able to apply mitigation measures for the negative effects in the project area. Students have to estimate the extent of the work that has to be performed. Report writing is a relevant part of this topic |
| 1. Course content

*Theoretical lecturing*[**Environmental impact assessment**](http://www.fao.org/docrep/V8350E/v8350e04.htm#the need for environmental assessment) **complexity**: o[**bjective**](http://www.fao.org/docrep/V8350E/v8350e04.htm#objective); [**environmental analysis**](http://www.fao.org/docrep/V8350E/v8350e05.htm#chapter 2: the context of environmental analysis); EIA process – resources, s[**creening**](http://www.fao.org/docrep/V8350E/v8350e06.htm#screening), [**scoping**](http://www.fao.org/docrep/V8350E/v8350e06.htm#scoping), [**prediction and mitigation**](http://www.fao.org/docrep/V8350E/v8350e06.htm#prediction and mitigation), [**management and monitoring**](http://www.fao.org/docrep/V8350E/v8350e06.htm#management and monitoring), [**auditing**](http://www.fao.org/docrep/V8350E/v8350e06.htm#auditing), p[**ublic participation**](http://www.fao.org/docrep/V8350E/v8350e06.htm#public participation), [**managing uncertainty**](http://www.fao.org/docrep/V8350E/v8350e06.htm#managing uncertainty), [**techniques**](http://www.fao.org/docrep/V8350E/v8350e06.htm#techniques)**. Environmental problems in decision making processes**: [**ICID Check-list**](http://www.fao.org/docrep/V8350E/v8350e06.htm#the icid check list); [**Major impacts of irrigation and drainage projects**](http://www.fao.org/docrep/V8350E/v8350e09.htm#chapter 4: major impacts of irrigation and drainage projects) - [**Hydrology**](http://www.fao.org/docrep/V8350E/v8350e09.htm#hydrology), [**water and air quality**](http://www.fao.org/docrep/V8350E/v8350e09.htm#water and air quality), S[**oil properties and safety erects**](http://www.fao.org/docrep/V8350E/v8350e0a.htm#soil properties and safety erects), E[**rosion and sedimentation**](http://www.fao.org/docrep/V8350E/v8350e0a.htm#erosion and sedimentation), B[**iological and ecological change**](http://www.fao.org/docrep/V8350E/v8350e0b.htm#biological and ecological change), S[**ocio-economic impacts**](http://www.fao.org/docrep/V8350E/v8350e0b.htm#socio economic impacts), E[**cological imbalances**](http://www.fao.org/docrep/V8350E/v8350e0b.htm#ecological imbalances), [**Human health**](http://www.fao.org/docrep/V8350E/v8350e0b.htm#human health); **Pre study, study and post study period of environmental impact assesment:** D[**etermining study requirements**](http://www.fao.org/docrep/V8350E/v8350e0d.htm#determining study requirements), [**Contents of the TOR**](http://www.fao.org/docrep/V8350E/v8350e0d.htm#contents of the tor), Case study.*Practical lecturing (Tutoring)* Exercises that follow the lecturing, literature review, field work, paper drafting. |
| 1. Teaching methods

Lectures and exercises. Students will accomplish a semester project and present results in oral and in writing. The work counts for 60% of the final grade. The lectures are held in English. Retake exams may be oral only. |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam | Mandatory | Points |
| Assignments | Yes | 60 | Written and Oral | Yes | 40 |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Dougherty T.C., and Hall A. W. | Environmental Impact assessment of irrigation and drainage projects | FAO Irrigation and drainage paper. No.53. Rome | 1995 |
|  | UNDP | Handbook and Guidelines for Environmental Management and Sustainable Development | UNDP, New York. | 1992 |
|  | Wathern P. (ed.). | Environmental Impact Assessment: Theory and Practice. | Routledge, London | 1988 |
|  | Mock J.F. and Bolton P. | The ICID Environmental Checklist to Identify Environmental Effects of Irrigation, Drainage and Flood Control Projects.  | HR Wallingford, Wallingford, UK. | 1993 |
|  | World Bank | Environmental assessment source book Vol 1, Policies, procedures and cross-sectoral issues. Technical paper 139. | World Bank, Washington D.C., USA. | 1991 |
|  | World Bank | Environmental assessment source book. Vol II. Sectoral guidelines. Technical paper 140 | World Bank, Washington D.C., USA. | 1991 |
|  | Jones M. G. | Environmental Impact Assessment, | IHE, Delft. | 1987 |
|  |  |  | Internet sources (articles, reports, presentations). |  |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationMASTER ACADEMIC STUDIES - AGRICULTURAL WATER MANAGEMENT (LOLAqua) |
| Table 5.2 Course specification |