

## COURSE OUTLINE

### 1. Study programme information

1.1 Higher education institution	Universitatea de Vest din Timișoara
1.2 Faculty / Department	Chimie, Biologie, Geografie / Departamentul de Geografie
1.3 Sub-department	Geografie
1.4 Field of study	Geography
1.5 Level of study	Master's degree
1.6 Study programme / Qualification	Geographic Information Systems

### 2. Course information

2.1 Course title	<b>GIS projects management</b>						
2.2 Course convenor/ Lecturer	Prof. dr. habil. Hermann Klug						
2.3 Teaching assistant	Prof. dr. habil. Hermann Klug						
2.4 Year of study	II	2.5 Semester	1	2.6 Type of assessment	E	2.7 Course type	DS/ DO

### 3. Total estimated time (hours of didactic activities per semester)

3.1 Number of hours per week	2	of which: 3.2 lecture	1	3.3 seminar/laboratory	1
3.4 Total hours in the curriculum	28	of which: 3.5 lecture	14	3.6 seminar/laboratory	14
<b>Time distribution:</b>					<b>hours</b>
Studying textbooks, course materials, bibliography and notes					30
Further research in libraries, on electronic platforms and in the field					30
Preparing seminars/ laboratories, homework, research papers, portfolios and essays					30
Tutoring					24
Examinations					8
Other activities .....					
<b>3.7 Total hours of individual study</b>	<b>122</b>				
<b>3.8 Total hours per semester</b>	<b>150</b>				
<b>3.9 Number of credits</b>	<b>6</b>				

### 4. Prerequisites (if applicable)

4.1 based on curriculum	
4.2 based on competencies	

### 5. Conditions (if applicable)

5.1 for the course	<ul style="list-style-type: none"> <li>• at least 80% attendance at course activities to finish the course successfully</li> </ul>
5.2 for the seminar/laboratory	<ul style="list-style-type: none"> <li>• Mandatory attendance. A maximum of 3 absences (each 90 minutes) are allowed during the week of the block course</li> <li>• fulfillment of obligations for laboratory work</li> </ul>
5.3 for individual supervision	<ul style="list-style-type: none"> <li>• For each of the participants four hours of individual support and supervision is planned as remote sessions during the preparation of the final proposal.</li> </ul>

**6. Objectives of the discipline - expected learning outcomes to the formation of which contribute to the completion and promotion of the discipline**

Knowledges	<ul style="list-style-type: none"> <li>• General knowledge on development of a GIS project proposal.</li> <li>• Formulate a title and design a research proposal based on existing funding possibilities.</li> <li>• Knowledge on Gantt chart and Pert diagram, SWOT and SMART analysis.</li> <li>• Knowledge on project activities, management, organization, phases, design, implementation.</li> <li>• Knowledge on project monitoring and evaluation</li> </ul>
Skills	<ul style="list-style-type: none"> <li>• Organize limited resources and respect the deadlines using Gantt and Perth diagrams.</li> <li>• Develop and analyse a proposal according to SWOT and SMART procedures.</li> <li>• Techniques to plan, manage, and deliver GIS projects.</li> <li>• Implement budget figures, project management processes.</li> </ul>
Responsibility and autonomy	<ul style="list-style-type: none"> <li>• Self-control of the learning process, diagnosis of training needs, reflective analysis of own professional activity, correlated with the application of efficient and responsible work strategies.</li> <li>• Assuming roles / functions of leading the activity of complex professional groups or some institutions, associated with the application of efficient work techniques in a multidisciplinary team, on various hierarchical levels.</li> <li>• Execution of complex professional tasks, in conditions of autonomy and professional independence</li> </ul>

**7. Content**

<b>7.1 Lecture</b>	<b>Teaching methods</b>	<b>Observations</b>
Introduction to the course; Reviewing the own skills and ideas; Definition of the term "project" and "management"; Tasks of project manager; Finding partners through networking: Conferences, Seminars, Summer Schools, workshops as place for information exchange.	Lecture, heuristic conversation, problematization, discovery learning, case studies.	1 hour
From the idea towards the project; Possibilities to acquire funds. Local (governments), national (research authorities), international (EU, EEA, ...). Concrete examples will be given from FP 7, eContenPlus, Interreg. National contact points and project officer.		1 hour
Starting position: Requirement / Demand analysis; Formulation of goals and objectives/ the first ideas in a one paper format.		1 hour
Getting started with the proposal. The planning strategy. The planning steps: problem analysis, objectives, actors, alternatives, etc. Intervention strategies. Project activities.		1 hour
The project planning matrix. Contributing to or leading a proposal: two perspectives. Moderation in meetings and telecons.		1 hour
Steps towards a successful proposal. The guides for applicants. Talking to the national contact point. Preparing the budget. Drafting and exchanging text, figures, tables, datasets. The work packages and work tasks and their responsibilities.		1 hour
The Gantt chart and Pert diagram (Program Evaluation and Review Technique). SWOT Analysis (Strength, Weaknesses, Opportunities, Threats) SMART Analysis (Specific, Measurable, Available, Relevant, Time-bound). Evaluation criteria (Relevance, efficiency, effectiveness, impact, sustainability). The evaluation procedure: Things going on between proposal submission and (non) acceptance of a proposal.		1 hour
Project negotiations. Starting phase of a project: Project organisation and project phases (what, how, when, by whom). Analysis, design, implementation. The tasks as project coordinator or collaborator		1 hour

(coordination as partner) Kick-off meeting Financial requirements.		
Risk management Management structure and procedures: The different project teams (advisory board, technical committee, ...).		1 hour
The mid-term review as an external audit.		1 hour
Monitoring and Evaluation: The Risk Control Database.		1 hour
Quality assurance Intellectual Property Right (IPR), copyright Communication and documentation: The different types of progress reports.		1 hour
GIS in organizations. GIS developer and user.		1 hour
Reviewing the whole project cycle.		1 hour
<b>Bibliography</b> <ul style="list-style-type: none"><li>• Copies of all PPT slides presented and the practical work results will be available on the elearning platform.</li><li>• Special literature on project management will be provided as PDF (if available) or as reference. All references and also the study material will be in English language.)</li></ul>		
<b>7.2 Seminar / laboratory</b>	<b>Teaching methods</b>	<b>Observations</b>
Definition what makes a project. One page abstract about the main project ideas in a condensed and very concise format. Preparation for a conference (Where to find a conference corresponding to the ideas written down?).	Hands-on exercises, case studies, scientific explanation and demonstration, individual work, tutoring	2 hours
Financing the proposal writing phase. Getting familiar with different programmes. Each group is analysing a certain funding programme and presenting the results to their colleagues. Given a certain call text, students write down their project idea and share those ideas with other colleagues. Students prepare a meeting with elements necessary to clarify things according proposal requirements and present them in an open discussion. Problem diagrams and objective diagrams.		2 hours
Analysing the requirements of a FP 7 proposal (Environment and Climate Change) and summarize the main points presented in a PPT slide.		1 hour
Doing the proposal budget in Excel.		1 hour
Establish a Gantt chart and a Pert diagram for the FP 7 project you analysed.		1 hour
Design a template to capture the different project phases.		1 hour
Prepare a draft of a kick-off meeting for the project.		1 hour
Establish a risk control database and think about shortcomings and possible bottlenecks.		1 hour
Elaborate the costs and benefits of a GIS for planning institutions.		1 hour
Individual project - Realization of a project proposal in order to access the financing.		2 hours
Assistance for individual practical project.		1 hour
<b>Bibliography</b> <ul style="list-style-type: none"><li>• Copies of all PPT slides presented and the practical work results will be available on the e-learning platform.</li><li>• Special literature on project management will be provided as PDF (if available) or as reference. All references and also the study material will be in English language.</li></ul>		

**8. Corroborating course content with the expectations held by the representatives of the epistemic community, professional associations and typical employers in the field of the study programme**

The content of the discipline was elaborated in accordance with the curriculum and meets the teaching and scientific requirements corresponding to the similar disciplines in other universities. Stimulates student's personal involvement in identifying new national and international financing sources and provides the necessary
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knowledge to access projects in the field of GIS.

### 9. Assessment

Type of activity	9.1 Assessment criteria	9.2 Assessment methods	9.3 Weight in the final mark
9.4 Lecture	Participation in the debates initiated in the course	Continuous assessment throughout the course	40%
9.5 Seminar / laboratory	Evaluating the knowledge of how to make a project proposal	The examination is based on the results of the working group. Each group submits text documents developed and presented in the practical activity. The presentation of the results by the group as well as written documents will be part of the student's evaluation.	20%
	Quality of the content and presentation of the project	Presentation of the project	40%
9.6 Minimum performance standard			
<ul style="list-style-type: none"> <li>• Minimum mark 5 at course evaluation.</li> <li>• Minimum mark 5 at practical exam.</li> <li>• Compliance of project deadline.</li> </ul>			

Date

11.09.2023

Course convenor's signature

Prof. dr. habil. Hermann Klug

Date of approval in the department

Head of department's signature