### **COURSE OUTLINE**

## 1. **Study programme information**

1.1 Higher education institution	West University Of Timisoara
1.2 Faculty / Department	Chemistry, Biology, Geography / Geography
1.3 Sub-department	-
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	1 Course title		GIS projects management				
2.2 Course convenor/ Lecturer		Prof. dr. habil. Hermann Klug					
2.3 Teaching assis	tant		Prof. dr. habil. Hermann Klug				
2.4 Year of study	II	2.5 Semester	Ι	2.6 Type of assessment	E	2.7 Course type	DI/DA

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

3.1 Number of hours per week	4	of which: 3.2	2	3.3 seminar/laboratory	2	
		lecture				
3.4 Total hours in the curriculum	56	of which: 3.5	28	3.6 seminar/laboratory	28	
		lecture				
Time distribution:					ore	
Studying textbooks, course materials	s, bibli	ography and notes			20	
Further research in libraries and on electronic platforms						
Preparing seminars/ laboratories, homework, research papers, portfolios and essays						
Tutoring						
Examinations						
Other activities						
3.7 Total hours of individual 94						
study						
3.8 Total hours per semester	8 Total hours per semester 150					
3.9 Number of credits	3.9 Number of credits 6					

## 4. **Prerequisites (if applicable)**

4.1 based on curriculum	
4.2 based on	
competencies	

## 5. **Conditions (if applicable)**

5.1 for the course	•	at least 80% attendance at course activities to finish the course successfully;
5.2 for the seminar/laboratory	•	Mandatory attendance. A maximum of 3 absences (each 90 minutes) are allowed during the week of the block course fulfillment of obligations for laboratory work
5.3 for individual supervision	•	For each of the eight participants four hours of individual support (in total 32 hours) and supervision is planned as remote sessions during t he preparation of the final proposal.

## 6. Accumulated specific competencies

Professi	To be an effective project manager you consist of a network of people knowing and assisting you in performing proposals and realising accepted proposals. You organize scarce resources, work under tight deadlines with the help of Gantt charts and Perth diagrams. You can analyse your proposal according to SWOT and SMART procedures and you contribute to or control project change and generate maximum team performance according to partner
onal	
compet	skills and input. Through real life examples you learn how to successfully plan, manage, and
encies	deliver projects. You also learn how to implement budget figures, project management
	processes, develop leadership skills and respond to real-world scenarios. At the end of the
	course, you have access to templates and checklists for effective and efficient use back at the
	office or in your future business.
	• Self-control of the learning process, diagnosis of training needs, reflective analysis of
	own
Transve	• professional activity, correlated with the application of efficient and responsible work
rsal	strategies.
1541	• Assuming roles / functions of leading the activity of complex professional groups or
compet	some
-	• institutions, associated with the application of efficient work techniques in a
encies	multidisciplinary team, on various hierarchical levels.
	• • Execution of complex professional tasks, in conditions of autonomy and professional
	independence

## 7. Course objectives (as resulting from the accumulated specific competencies)

7.1 General objectives	An effective project manager must build a team of specialists to assist in achieving the objectives and finalize the project. Students will learn to organize their limited resources and respect the deadlines using Gantt and Perth diagrams. They will be able to consider the proposal accordingly to the SWOT and SMART procedures to help control changes of the project and to ensure the maximum performance of the team in accordance with the partner skills.
7.2 Specific objectives	Through real life examples students will learn how to plan, successfully manage and carry out projects. You will also learn how to plan budgets, management processes, to develop leadership skills as well as responding to reality-based scenarios. At the end of the course, master students will have access to templates and checklists

#### 8. **Content**

8.1 Lecture	Teaching methods	Observations
1. 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.	
2. 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		
3. Starting position: Requirement / Demand analysis; Formulation of goals and objectives/ the first ideas in a one paper format.		
4. Getting started with the proposal. The planning strategy. The planning steps: problem analysis, objectives, actors, alternatives, etc. Intervention strategies. Project activities		
5. The project planning matrix. Contributing to or leading a proposal: two perspectives. Moderation in meetings and telecons.		
6. 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.		
7. 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 8. 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 (coordination		
as partner) Kick-off meeting Financial requirements		
9. Risk management Management structure and procedures:		
The different project teams (advisory board, technical		
committee,)		
10. The mid-term review as an external audit		
11. Monitoring and Evaluation: The Risk Control Database		
12. Quality assurance Intellectual Property Right (IPR),		
copyright Communication and documentation: The different		
types of progress reports		
types of progress reports		
13.GIS in organizations. GIS developer and user		
14. Reviewing the whole project cycle		
Bibliography		
Copies of all PPT slides presented and the practical work result	ts will be available on the	elearning

Copies of all PPT slides presented and the practical work results will be available on the elearning platform.

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.

8.2 Applications / Hands on	Teaching methods	Observations
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?)		
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		
Analysing the requirements of a FP 7 proposal (Environment and Climate Change) and summarize the main points presented in a PPT slide		

Doing the proposal budget in Excel		
Establish a Gantt chart and a Pert diagram for the FP 7 project you analysed		
Design a template to capture the different project phases		
Prepare a draft of a kick-off meeting for the project		
Establish a risk control database and think about shortcomings and possible bottlenecks		
Elaborate the costs and benefits of a GIS for planning institutions		
Individual project - Realization of a project proposal in order to access the financing	Individual work, homework, practical application	
Assistance for individual practical project	Tutoring	

#### Bibliography

Copies of all PPT slides presented and the practical work results will be available on the elearning platform.

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.

# 9. 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 knowledge to access projects in the field of GIS.

#### 10. Assessment

Type of	10.1 Assessment criteria	10.2 Assessment methods	10.3 Weight
activity			in the final
			mark
10.4 Lecture	Participation in the debates	Continuous assessment throughout	40%
	initiated in the course	the course	
10.5 Seminar /	Evaluating the knowledge of	The examination is based on the	20%
laboratory	how to make a project	results of the working group. Each	
	proposal	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.	
	Quality of the content and	Presentation of the project	40%
	presentation of the project		
10.6 Minimum p	erformance standard		
Grade 5 at lectur	e		
Grade 5 at practical exam			
Compliance of p	roject deadline		

Date 16.09.2022

Course convenor's signature

Teaching assistant's signature

Klug Hermann

Date of approval in the department

Head of department's signature