COURSE OUTLINE

1. Study programme information

1.1 Higher education institution	West University of Timișoara
1.2 Faculty / Department	Chemistry, Biology and Geography / Department of Geography
1.3 Sub-department	Geography
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				**Cadaster**			
2.2 Course convenor/ Lecturer				Dr. Ing. Ionut-Daniel Boba			
2.3 Teaching assistant				Dr. Ing. Ionut-Daniel Boba			
2.4 Year of study	II	2.5 Semester	1	2.6 Type of assessment	E	2.7 Course type	DS/DA

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

3.1 Number of hours per week	4	of which: 3.2 lecture	2	3.3 seminar/laboratory	2
3.4 Total hours in the curriculum	42	of which: 3.5 lecture	14	3.6 seminar/laboratory	28
Time distribution:					**hours**
Studying textbooks, course materials, bibliography and notes					25
Further research in libraries, on electronic platforms and in the field					20
Preparing seminars/ laboratories, homework, research papers, portfolios and essays					20
Tutoring					12
Examinations					6
Other activities ……					

3.7 Total hours of individual study	**83**
3.8 Total hours per semester	**125**
3.9 Number of credits	**5**

4. Prerequisites (if applicable)

4.1 based on curriculum	
4.2 based on competencies	

5. Conditions (if applicable)

5.1 for the course	• computer / laptop with audio-video system for the teacher and students • half of the courses taught online using Google Classroom and Google Meet (50%)
5.2 for the seminar/laboratory	• complete fulfilment of tasks of laboratory work and projects • laboratory equipped with computer / laptop with audio-video system for the teacher and students • applications will be taught in laboratory and in the field (70%) and online using Google Classroom and Google Meet (30%)

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

Knowledges	• Understanding the importance of cadaster and topographic/cadaster measurements for a sustainable development • Knowledge on analysis, diagnosis, prognosis for optimisation strategies for topographic measurements • Knowledge on technical data in field measurements, interpretation and evaluation of results. • Knowledge on software used in cadastre • Understanding the importance of systematic registration of properties in land registry • Knowledge of the main legislative norms in force regarding the cadastre and real estate advertising in the context of a prospective socio-economic development
Skills	• handling measuring equipment and the ability to interpret the resulting data; • prepare a cadastral documentation by going through all the mandatory stages • ability to work with specific software • The ability to read and interpret analogue cadastral and topographic plans and to use them in digital format in order to make measurements more efficient
Responsibility and autonomy	• Apply working strategies for efficiency and responsibility based on principles, norms and values according to the ethical code of conduct • Apply efficient and collaborative working techniques in a multiskill set and multidisciplinary environment, respect for multiculturalism and diversity as well as acceptance for difference of opinion • Self-assessment of the need for professional development aiming to increase the labor market adaptability

7. Content

7.1 Lecture	Teaching methods	Observations
Fundamentals of cadastre. Definition and purpose. The functions and classification. The role of the cadastre in the sustainable development of a territory.	Lecture, Interactive presentations, heuristic conversation, problematization and hands-on examples	2 hours
Sporadic and general cadastre and specific interventions for each.		2 hours
The cadastral plan. Methods of drawing up the cadastral plan.		2 hours
Measurements and cadastral techniques. Measuring devices. The importance of measuring devices in carrying out cadastral work.		2 hours
The legal side of the cadastre. Real estate advertising.		2 hours
The registration procedure in the cadastre and land register records.		2 hours
Cadastral legislation.		2 hours

Bibliography

1. Bârliba, Luminița, Calinovici, I. - Topografie, Editura Solness, Timișoara, 2005;
2. Boș, N. - Cadastru și cartea funciară, Editura All Back, București, 2009;
3. Boș, N. - Cadastru general, Editura All Beck, București, 2003;
4. Boș, N. - Cartea funciară și expertiza tehnică topo – cadastrală, Editura All Beck, București, 2003;
5. Ciolac, Valeria, Ritt, C., Ciotlaus, A., Leu, I., Nelu, I., Budiu, V. - Topografie și cadastru agricol, Editura Didactică și Pedagogică R.A., Bucureşti 1999;
6. Cucu, Cristina - Legislaţia cadastrului şi publicităţii imobiliare – comentarii şi explicaţii, Editura All Beck, Bucureşti, 2007;
7. Leu, I., Nelu, I., Budiu, V., Ritt, C., Ciotlaus, A., Ciolac, Valeria - Topografie şi cadastru, Editura Universul, Bucureşti, 2002;
8. Nicolae-Posescu, Manuela – Topographie-edition bilingue, Tome I, Editura Matrix Rom, Bucuresti, 1999;
9. Novac, Gh. - Cadastru, Editura Mirton, Timişoara, 2009;
10. Pădure, I. - Cadastru funciar, Ed. Risoprint, Cluj-Napoca, 2005;
11. Ritt, C. - Măsurători Terestre și Cadastru funciar, Editura Eurobit, Timișoara, 2002;
12. Tomoioagă, Gh., Tomoioagă, Daniela - Cadastru general și de specialitate, Editura Matrix Rom, București, 2005;
13. ***Agenţia Naţională de Cadastru şi Publicitate Imobiliară - Ordinul nr 700/09.07.2014 privind

Regulamentul de avizare, recepţie şi înscriere în evidenţele de cadastru şi carte funciară, publicat în Monitorul Oficial, Partea I, nr. 571 din 31.07. 2014;
14. ***Centrul de perfecţionare, insruire şi formare a specialiştilor în cadastru agricol „PIFCA", Asociaţia Evaluatorilor Funciari din Romania „AEF" Romania - Ghidul expertului tehnic judiciar din domeniul topografiei, cadastrului şi geodeziei, Editura Excelsior Art EdiLex, Timişoara, 2014;
15. *** - Legea cadastrului şi publicităţii imobiliare nr. 7/1996, republicată în 2006, publicată în Monitorul Oficial, Partea I, nr. 201 din 03.03.2006;
16. *** - Legea nr. 1 din 01.01.2000 pentru reconstituirea dreptului de proprietate asupra terenurilor agricole şi celor forestiere, solicitate potrivit prevederilor Legii fondului funciar nr. 18/1991 şi ale Legii nr, 169/1997;
17. *** - Legea fondului funciar nr. 18/1991, publicată în Monitorul Oficial, Partea I, din 19.02.1991;
18. *** - Legea 247/2005 din 19.07.2005, privind reforma în domeniile proprietăţii şi justiţiei, precum şi unele măsuri adiacente, publicată în Monitorul Oficial, Partea I,nr. 653 din 22.07.2005;
19. *** - Legea 165/2013 din 16.05.2013, privind măsurile pentru finalizarea procesului de restituire în natură sau prin echivalent a imobilelor preluate în mod abuziv în perioada regimului comunist în Romania, publicată în Monitorul Oficial, nr. 278 din 17,05,2013;

7.2 Seminar / laboratory	**Teaching methods**	**Observations**
Glossary of terms and abbreviations used in the cadastre. Maps and plans. Planimetry. Plan elevation of land surfaces. Topographic elevations. Land destinations. Categories of use	Scientific explanation, case studies, demonstration, problem-solving applications, Teamwork, results marketing and presentation, application development	4 hours
General stages of carrying out cadastral work		2 hours
Measuring devices used in the cadastral technique. Handling measuring devices. Observation of field measurements and data interpretation.		6 hours
Practical application at the headquarters of a cadastral company to download and interpret the cadastral data measured on the ground through specialized IT programs.		6 hours
Types of cadastral documentation and their content.		2 hours
The registration procedure in the cadastre and land register records.		2 hours
Visit OCPI Timis to understand the mechanism of cadastre and land register records and their publicity		2 hours
Supporting and debating the assigned reports		4 hours

Bibliography
1. Boba, I., D. - Meteorologie şi climatologie. Îndrumător de lucrări practice, Editura Presa Universitară Română, Timişoara, 2001;
2. Brebu, P., Ritt, C., Popescu, C. - Ghid pentru lucrările de cadastru funciar, Editura Eurobit, Timişoara, 2002;
3. Ciolac, Valeria, Popescu, C., A., Ritt, C., Şmuleac, A. - Lucrări practice de topografie agricolă, Editura Eurobit, Timişoara, 2007;
4. Cucu, Cristina - Legislaţia cadastrului şi publicităţii imobiliare – comentarii şi explicaţii, Editura All Beck, Bucureşti, 2007;
5. David, Viorica, Sturza, Mihaela, Novac, Gh., Herban, S., Baciu, Anca - Măsurători terestre, Volumele I şi II, Editura Politehnica, Timişoara, 2007;
6. Ienciu, I., Oprea, Luciana - Prelucrarea automată a datelor analitice şi grafice din topografie şi cadastru, Editura Aeternitas, Alba Iulia, 2009;
7. Oprea, Luciana – Cadastru. Îndrumător de proiect și practică cadastrală, Editura Aeternitas, Alba Iulia, 2009;
8. Ungur, A., Koncsag, E. - Cadastru general - îndrumător de lucrări aplicative, Seria Didactica, Universitatea „1 Decembrie 1918", Alba Iulia, 2009;
9. ***Agenţia Naţională de Cadastru şi Publicitate Imobiliară - Ordinul nr 700/09.07.2014 privind Regulamentul de avizare, recepţie şi înscriere în evidenţele de cadastru şi carte funciară, publicat în Monitorul Oficial, Partea I, nr. 571 din 31.07. 2014;
10.*** - http://www.ancpi.ro;
11.*** - http://www.legislatie.just.ro;

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 cadastre facilitates the acquisition of basic knowledge in carrying out specialized studies, both from a theoretical and a practical point of view. Such applied training makes students compatible with the job market in the field of cadastre and land surveying, technical-cadastral records and real estate advertising.

9. Assessment

Type of activity	9.1 Assessment criteria	9.2 Assessment methods	9.3 Weight in the final mark
9.4 Lecture	Understanding and assimilation of cadastre knowledge	Continuous evaluation Based on individual and group discussions	20%
		Final evaluation, written test.	60%
9.5 Seminar / laboratory	Explanation and interpretation Project presentation	Presentation and evaluation of projects	20%
9.6 Minimum performance standard			
• Students can obtain grade 5, if they demonstrate acceptable fulfilment of at least 50% of the requirements for the exam and the minimum requirements from the practical work activities, at which attendance is mandatory, as well as the completion of cartographic assignments and the elaboration and presentation of projects.			

Date

12.09.2025

Course convenor's signature

Dr. Ing. IONUT-DANIEL BOBA

Date of approval in the department

Head of department's signature