

BACHELOR 'S PROGRAMME
2ND YEAR OF STUDY, 2ND SEMESTER

COURSE TITLE	WATER RESOURCE MANAGEMENT
COURSE CODE	JHM2305
COURSE TYPE	full attendance/ tutorial
COURSE LEVEL	1 st cycle (bachelor's degree)
YEAR OF STUDY, SEMESTER	2 nd year of study, 1 st semester
NUMBER OF ECTS CREDITS	6
NUMBER OF HOURS PER WEEK	4 (2 lecture hours + 2 seminar hours)
NAME OF LECTURE HOLDER	Associate Professor Ionut MINEA
NAME OF SEMINAR HOLDER	Associate Professor Ionut MINEA
PREREQUISITES	Advanced level of English
A	GENERAL AND COURSE-SPECIFIC COMPETENCES
	<p>General competences:</p> <p>→ Acquiring the adequate professional and transversal competencies, according to the specific requirements of the subject and the qualifications listed in the National Index of Higher Education Qualifications (RNCIS) for Hidrology-Meteorology specialization</p> <p>Course-specific competences:</p> <p>→ Identification of the main hydrological resources in Romania</p> <p>→ Use specific data base in hydrological studies</p>
B	LEARNING OUTCOMES
	<p>→ Calculate statistical parametres based on measurements or hydrological year books</p> <p>→ Design managements plans on water resources management for a given hydrographic basin or geographic region</p>
C	LECTURE CONTENT
	<p>Introduction - water on Earth and the importance of water for man and his environment</p> <p>Considerations on the notions of: resource, management and capitalization. Appearance forms of water on Earth.</p> <p>The volume of water in nature</p> <p>Planetary Ocean Resources (I)</p> <p>Planetary Ocean Resources (I)</p> <p>Inland water resources - groundwater resources</p> <p>Continental water resources - water resources of rivers</p> <p>Inland water resources - water resources from lakes and swamps</p> <p>Glacial water resources and ice caps</p> <p>Water resources of the Black Sea</p> <p>Romania's water resources. Current issues and their management (I)</p> <p>Romania's water resources. Current issues and their management (II)</p> <p>Pollution of water resources - sources of pollution</p> <p>Pollution of aquatic units in Romania</p>
D	RECOMMENDED READING FOR LECTURES
	<ol style="list-style-type: none"> 1. Amăriucăi M. (2000) <i>Gestionarea și valorificarea resurselor hidrosferei și atmosferei</i>, Ed. Univ. Al.I.Cuza, Iași. 2. Acatrinei G. (1994) <i>Poluarea și protecția mediului ambiant</i>, Iași. 3. Cojocaru I. (1995) <i>Surse, procese și produse de poluare</i>, Ed. Junimea, Iași. 4. Giurma I, Crăciun I. (2010) <i>Managementul integrat al resurselor de apă</i>, Ed. Politehniun, Iași. 5. Romanescu G. (2000) <i>Resursele Oceanului Planetar</i>, Ed. Univ. Stefan cel Mare, Suceava.
E	SEMINAR CONTENT
	<p>Identifying the way to capitalize of surface water resources within the local space. Field trip in the area of the accumulation lakes in Nicolina basin (Ezăreni and Ciurbești)</p> <p>Identifying the way to capitalize groundwater resources in the local space. Field application in the area of the experimental station of Ciurea (Tinoasa-Ciurea basin)</p> <p>Morphometric elements of aquatic units</p> <p>Mapping groundwater resources</p> <p>Computer-assisted modeling for the assessment of hydrological resources in a river basin</p> <p>The Black Sea - economic and geopolitical role in south-eastern Europe</p> <p>Drinking water - ways to analyze the quality of drinking water</p> <p>Ways of graphic representation of water chemistry</p>

	Identifying the main sources of pollution of water resources in the local area.	
F	RECOMMENDED READING FOR SEMINARS	
	<p>1. Gâstescu, P., Murarescu, O., Dinu, I., Breţcan, P., (2002), <i>Hidrologie continentală</i>, Ed. Roza Vânturilor, Târgovişte.</p> <p>2. Giurma, I., Crăciun, I., Giurma, Catrinel, Raluca, (2003), <i>Hidrologie și hidrogeologie- aplicații</i>, Univ. Tehnică "Gh Asachi", Iași.</p> <p>3. Minea I. (2012) <i>Bazinul hidrografic Bahlui – studiu hidrologic</i>, Ed. Univ. Al.I.Cuza Iasi.</p> <p>4. Minea I., Romanescu G., (2007) <i>Hidrologia mediilor continentale. Aplicații practice</i>, Casa Edit. Demiurg, Iași.</p> <p>5. Mustata G. (2000) <i>Hidrobiologie</i>, Ed. Univ. Al. I. Cuza, Iasi.</p> <p>6. Pantazica M. (1974) <i>Hidrografia Campiei Moldovei</i>, Ed. Junimea, Iasi.</p> <p>7. Pişotă, I., Zaharia, Liliana, (1995), <i>Hidrologie – lucrări practice</i>, Ed. Univ. Bucureşti.</p> <p>8. Romanescu G., Ştefan M. (2012) <i>Geografia Mării Negre</i>, Ed. Transversal, Târgovişte.</p> <p>9. Sorocovschi, V., Buta, I., (1994), <i>Hidrometrie (măsurători și calcule hidrologice)</i>, Univ. Babeş-Bolyai, Cluj-Napoca.</p> <p>10. Trufaş C (2003) <i>Hidrochimie</i>, Ed. Agora, Bucureşti.</p> <p>Vespremeanu E. (2004), <i>Geografia Mării Negre</i>, Ed. Universitatii Bucuresti</p>	
G	EDUCATION STYLE	
	LEARNING AND TEACHING METHODS	Lecture, explanation, problematization, practical application
	ASSESSMENT METHODS	Examination + Seminar Grades
	LANGUAGE OF INSTRUCTION	English