

| Study program | | Study cycle | First study cycle | | |
|------------------------------------|--|--|--------------------------------------|---------------|---|
| | | Orientation | Regional and Spatial Planning | | |
| SUBJECT | | | | | |
| Subject name | | Climate and water in regional and spatial planning | | | |
| Subject code | Semester | Subject status | ECTS credits | Contact hours | |
| RPP- 305-2 | V | mandatory | 5 | 125 | |
| Prerequisites | | | | | |
| Assigned professors and assistants | Subject Leader | Dr. Sc. Aida Korjenić, associate professor Dr. Sc. Edin Hrelja, assistant professor | | | |
| | Teaching Assistants | MA Amina Sivac, senior assistant | | | |
| Subject objectives | <p>The main objectives are:</p> <ul style="list-style-type: none"> - Exploring and acquiring knowledge about the application of climatic resources in regional and spatial planning; - Exploring and acquiring knowledge about the application of the water resources in the regional and spatial planning; - Exploring and acquiring knowledge about the content and structure of sets of thematic climatic and hydrological maps for the purposes of identification and evaluation of hydro-climatic potential in the regional and spatial planning; - Exploring and acquiring knowledge about the application of modern GIS models and techniques of remote sensing in the evaluation of hydro-climatic potential in regional and spatial planning; - Exploring and acquiring knowledge about water and climate resources for the purpose of regional and spatial planning in Bosnia and Herzegovina | | | | |
| SUBJECT CONTENT | | | | | |
| # | Teaching units | Contact hours | | | |
| | | L | P | S | C |
| 1. | Hydro-climatic basis of regional and spatial plans. Methodological concept of identification and evaluation of basic hydro-climatic parameters in spatial plans of different levels of regional and spatial planning. | 2 | 1 | 1 | |
| 2. | The main climatic elements and their application in spatial plans of different levels of regional and spatial planning. Solar radiation and duration of sunshine - evaluation and implementation in regional and spatial plans. Application of annual and seasonal isohel maps in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 3 | 2 | 1 |
| 3. | Valorisation of air temperatures in regional and spatial plans. Application of annual and seasonal maps of isotherms in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 3 | 2 | 1 |
| 4. | Valorisation of humidity and cloudiness in regional and spatial planning. Application of annual and seasonal isohygro and isoneph maps - in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 2 | 1 | |
| 5. | Valorisation of precipitation in regional and spatial planning. Application of annual and seasonal isohyet maps in regional and spatial planning. Practical analytical work of students on selected examples. Valorisation of wind in regional and spatial planning. Application of annual season maps of wind speed and direction in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 3 | 2 | 1 |
| 6. | Weather disasters in regional and spatial plans. Application of annual and seasonal maps of weather disasters in regional and spatial planning. Practical analytical work of students on selected examples. Valorisation of climate types in regional and spatial plans. Development and implementation of climate types maps in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 2 | 1 | 1 |
| 7. | The first test | 2 | | | |

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| 8. | The main hydrological parameters and their application in regional and spatial plans of different levels of planning. Thematical hydrological mapping in regional and spatial plans of different levels of planning. | 2 | 1 | 2 | |
| 9. | River basin and river networks and their application in regional and spatial planning. | 2 | 2 | 2 | 1 |
| 10. | Water supply in regional and spatial plans of different levels of planning. Water supply of the population and economy in regional and spatial plans of different levels of planning. | 2 | 3 | 1 | 1 |
| 11. | Valorisation of watercourses in regional and spatial plans. Application of maps of streams and river profiles in regional and spatial planning. Practical analytical work of students at selected examples. | 2 | 2 | 1 | 1 |
| 12. | Valorisation of lakes in regional and spatial planning. Application of maps of lakes in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 2 | 1 | 1 |
| 13. | River sources - valorisation and application in regional and spatial plans. Application of maps of sources in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 2 | 2 | 1 |
| 14. | Defining and valorisation of water protection zones in regional and spatial planning. Implementation of measures to protect water protection zones in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 2 | 1 | 1 |
| 15. | Waste water in regional and spatial planning. Surveying and mapping sewage. Measures to protect the population and adequate economic branches of wastewater in regional and spatial planning. Practical analytical work of students on selected examples. | 2 | 2 | 1 | |

STUDENT WORKLOAD (HOURS)

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|----------------------|----|----------------|----|---------------|----|-----------------|-----|
| Contact Hours (L+P) | 60 | Practical work | 15 | Seminars | 20 | Exam study time | 10 |
| Literature – reading | 10 | Written papers | | Other (state) | 10 | TOTAL | 125 |

| LITERATURE | | EVALUATION OF KNOWLEDGE AND CRITERIA | | | |
|---|--|--------------------------------------|---------------------------|----------------|----|
| | | PARAMETERS | Maximum Points | Minimum points | |
| Required | | 1. | Attendance | 5 | 3 |
| 1. Đorđević, J. (2004.): Tipologija fizičko-geografskih faktora u prostornom planiranju. Beograd. | | 2. | Participation on lectures | 5 | 3 |
| 2. Kicošev, S., Dunčić, D. (1998.): Geografske osnove prostornog planiranja, Institut za geografiju PMF Novi Sad, Novi Sad. | | 3. | Midterm exams | 40 | 22 |
| 3. Marinović – Uzelac (1989): Teorija namjene površina u urbanizmu. Zagreb. | | 4. | Seminar | 10 | 6 |
| 4. Gavrilović, Lj. (1988): Hidrologija u prostornom planiranju, Prirodno-matematički fakultet, Univerzitet u Beogradu, Beograd. | | 5. | Students project | | |
| | | 6. | Final exam | 40 | 21 |
| | | Total | | 100 | 55 |
| Recommended | | | | | |
| 1. Korjenić, A., Temimović, E. (2016): Praktikum iz Hidrografije kopna I, Prirodno-matematički fakultet u Sarajevu, Sarajevo. | | | | | |
| 2. Dorić, B. (1988): Geografske osnove prostornog planiranja, Zavod za urbanizam Vojvodine. Novi Sad. | | | | | |