

Course Unit Descriptor

Study Programme: PhD in Biology		
Course Unit Title: Methods in bryology		
Course Unit Code: DNB031		
Name of Lecturer(s): Ass. Prof. Milos Ilic, PhD		
Type and Level of Studies: PhD studies		
Course Status (compulsory/elective): elective		
Semester (winter/summer): winter/summer		
Language of instruction: English		
Mode of course unit delivery (face-to-face/distance learning): face-to-face		
Number of ECTS Allocated: 15		
Prerequisites: -		
Course Aims: Acquiring knowledge about methodology in different aspects of bryological researches with particular emphasis on choosing the appropriate method.		
Learning Outcomes: Students are able to independently use different methods in bryophyte researches.		
Syllabus: <i>Theoretical lectures</i> Morphology of bryophytes; Diversity and ecological characteristics of bryophytes; Bryophyte roles in ecosystem functioning; Defining research goals and selecting adequate sampling sites; Field sampling methods; Laboratory techniques: Slide preparation; Field and laboratory identification of bryophytes; Herbaria and bryophyte collections; Quantitative approach in bryophyte ecology; Quantitative sampling of ground bryophytes; Quantitative sampling of epiphytic bryophytes; Quantitative sampling of epilithic and epixylic bryophytes; Diversity measures; Basic statistical methods in bryophyte researches; Multivariate analysis; Statistical methods in bryophyte community detection. <i>Practical lectures</i> Defining research goals as well as choosing the appropriate methodological approach in accordance with the candidate's interests and the topic of the doctoral thesis.		
Required Reading: 1. Veljić, M., Vukov, D., Sabovljević, M. 2018. Biologija briofita I: morfologija i sistematika. Biološki fakultet Univerziteta u Beogradu, Prirodno-matematički fakultet Univerziteta u Novom Sadu. Beograd-Novı Sad. 2. Vanderpoorten, A., Goffinet, B. 2009. Introduction to bryophytes. Cambridge University Press 3. Goffinet, B., Shaw, J. 2000. Bryophyte biology. Cambridge University Press. New York 4. Glime, J. M. 2017. Bryophyte ecology. Available online at: http://www.bryoecol.mtu.edu/ Smith, A. (ed.) 1982. Bryophyte ecology. Springer Netherlands. 5. Atherton, I., Bosanquet, S., Lawley, M. 2010. Mosses and liverworts of Britain and Ireland-a field guide. British Bryological Society, UK. 6. Casas, C., Brugues, M., Cros, R. M., Sérgio, C. 2006. Handbook of mosses of the Iberian Peninsula and the Balearic Islands. Illustrated keys to genera and species. Barcelona. 7. Casas, C., Brugues, M., Cros, R. M., Sérgio, C., Infante, M. 2009. Handbook of liverworts and hornworts of the Iberian Peninsula and the Balearic Islands. Illustrated keys to genera and species, Barcelona. 8. Smith, A. J. E. 1990. The Liverworts of Britain and Ireland. Cambridge University Press, Cambridge. 9. Smith, A. J. E. 2004. The Moss Flora of Britain and Ireland. Cambridge University Press, New York.		
Number of active classes	Lectures: 5	Practical work: 5
Teaching Methods: Lectures, consultations, field and laboratory work, student essay.		
Knowledge Assessment (maximum of 100 points): Oral exam: 50 Essay: 50		