

<b>Study Programme : BSc in Ecology</b>			
Degree level: Bachelor degree			
<b>Course Title: Invertebrate zoology</b>			
<b>Professor: dr Smiljka Šimić, dr Snežana Radenković</b>			
<b>Required/Elective Course: Required</b>			
<b>Number of ECTS: 7</b>			
<b>Prerequisites:</b>			
<b>Course Objective:</b> Introduction to classification, morpho-phunctional, anatomical characteristics of invertebrates, developments, types of life cycles and ecology of species with economic and medical importance; distribution and role of invertebrates in the nature.			
<b>Course Outcome:</b> Achieving knowledge in invertebrate zoology as basic course for further subjects on higher level of study (phylogeny, entomology, animal behaviour and ecology,...).			
<b>Course Content:</b>			
<p><i>Theoretical part</i> Invertebrate Zoology is a course designed to present the diversity of life-forms represented in the animal kingdom through study of classification, morpho-phunctional and anatomical characteristics of invertebrates, types of development, life cycles, distribution, ecology of economical and medical important species and role of invertebrates in ecosystems. A second major concern for an invertebrate course is to present the animal phyla in the context of the evolutionary development of animal complexity. Comparing the body plans of the phyla from the "lower" invertebrates to those of the "higher" invertebrates allows one to consider the likely evolutionary paths that have been "explored" by animals in their evolutionary trek through phenotypic space. A lot of lecture time is dedicated to comparison of the various body plan and organ systems (such as body symmetry, excretory, respiratory, circulatory, and nervous systems), especially in relation to evolutionary developments and advancements in form and function.</p> <p><i>Practical part</i> Laboratory for this class is accomplished using a combination of laboratory work as well as field trips to local natural areas. The laboratory section is a series of hands-on dissections of the larger invertebrates, microscopic work on the smaller invertebrates, and observations of form, function, and behavior of live representatives. There are also field trips to see invertebrates in their native habitats.</p>			
<b>Reading List:</b>			
<ol style="list-style-type: none"> <li>1. Brajković, M. (2004): Zoologija invertebrata I i II Zavod za udžbenike i nastavna sredstva, Beograd.</li> <li>2. Krunić, M. (1994): Zoologija invertebrata I i II. Zavod za udžbenike i nastavna sredstva, Beograd.</li> <li>3. Matoničkin, I., Habdija, I., Primc-Habdija, B. (1998): Beskralješnjaci: biologija nižih avertebrata. Školska knjiga, Tiskara, Zagreb, Nova Gradiška.</li> <li>4. Matoničkin, I., Habdija, I., Primc-Habdija, B. (1999): Beskralješnjaci: biologija viših avertebrata. Školska knjiga, Grafički zavod Hrvatske, Zagreb.</li> <li>5. Pechenik, J.A. (1996): Biology of the Invertebrates. WCB.</li> </ol>			
<b>Total hours:</b>			
Lectures: 3	Practicals: 3	Other:	Student research work:
<b>Methods of instruction:</b>			
Video presentation, dry mounts, wet mounts, dissections and virtual dissections of different representatives of invertebrates.			
<b>Assessment (maximum number of points 100)</b>			
<b>Requirements</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Active participation in lectures		Practical exam	19
Active participation in practicals		Oral exam	46
Test(s) or			
Pre-exam testing	35		