

Fundamentals of Biology II			
Registration Code	0054223	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-II (1st year, Spring Semester) / Thu. / 2 (10:30~12:00)		
Instructor	VASSILEVA Maria		
Target Schools (Programs)	Sc(P·C·B)·En(C·Au)·Ag(B)		
<p>●Goals and Objectives of the Course Goals: This course`s main focus is to provide students with working understanding on how the human body functions, and connect it to health and disease. Short introduction is given on basic concepts of ecology. The course emphasizes on conceptual understanding of the biological topics discussed, rather than on memorization of terms and facts. Course assignments are prepared with the goal of providing an opportunity to practice conceptual and analytical thinking. Objectives: Students will gain the the ability to use their understanding of human physiology to take informed decisions in everyday health-related situations. Ecology section will allow students to critically evaluate agricultural and ecological issues. Students will have a regular opportunity to engage in discussions, and hone their teamwork skills on team projects.</p> <p>●Course Prerequisites There is <u>no prerequisite knowledge for this course</u>. Even students who didn`t take Fundamentals of Biology 1, or didn`t study Biology in high school, are encouraged to join. Exchange students are also welcome.</p> <p>●Course Contents/Plan</p> <ol style="list-style-type: none"> 1. Introduction to the basics of life 2. Animal anatomy and physiology <ol style="list-style-type: none"> 2.1 Unifying concepts of animal structure and function 2.2 Nutrition and digestion 2.3 Gas exchange 2.4 Circulation 2.5 The immune system 2.6 Control of water balance 2.7 Hormones and the endocrine system 2.8 Reproduction and embryonic development 2.9 Nervous system 2.10 The senses 2.11 How animals move 3. Introduction to Ecology <ol style="list-style-type: none"> 3.1 The biosphere: an introduction to Earth`s diverse environments 3.2 Behavioral adaptations to the environment 3.3 Population ecology 3.4 Communities and ecosystems 3.5 Conservation biology <p>●Course Evaluation Methods Evaluation is based on in-class participation (10%), group assignments (10%), individual written assignments (10%) and two exams (total of 70%). * Students who do not intent to complete the course need to submit a Course Withdrawal Form. This can be done at any time during the course.</p> <p>●Notice for Students * Students are expected to read the appropriate textbook chapter before class. Classes emphasize discussions and problem-solving questions, thus coming prepared is essential. *Weekly written assignments - summary of the upcoming class material in the form of mindmap - are the core assignments for this course. Exams emphasize on analytical and problem-solving skills.</p>			

Textbook	1. Campbell Biology: Concepts & Connections; Pearson, ISBN 978-1292229478 (The same textbook as in Fundamentals of Biology I)
Reference Book	OpenStax Biology 2e Free downloadable textbook (http://openstaxcollege.org) This is an excellent alternative to the main textbook for the course.
Reference website	
Message	* Mastering Biology (www.masteringbio.com) is an online system that accompanies the main textbook for this course. <u>This system will not be integrated into the course assessment methods.</u>