

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)		

●Objective of the Course

This course's main focus is to provide students with working understanding on how human body functions and to build student's capacity to take informed decisions in everyday health-related situations. Further, short introduction is given on basic concepts of ecology, to allow students to critically evaluate agricultural and ecological issues.

The course emphasizes on conceptual understanding of the biological topics discussed, rather than on memorization. Course assignments are prepared with the goal of providing an opportunity to practice conceptual and analytical thinking. Students will have a regular opportunity to engage in discussions, and hone their teamwork skills on team projects.

●Course Prerequisites

None

●Course Contents

1. Introduction to the basics of life
2. Animal anatomy and physiology
 - 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
 - 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

●Evaluation Methods

Evaluation is based on in-class participation (10%), group assignments (10%), individual written assignments (10%) and exams (total of 70%).

* Students who do not intent to complete the course need to submit a Course Withdrawal Form.

●Notice for Students

* Mastering Biology (www.masteringbio.com) is an online system for this course's textbook. This system will not be integrated into the course assessment methods.

* Students are expected to read the appropriate textbook chapter before class; coming prepared is essential.

Textbook	<ol style="list-style-type: none"> 1. Campbell Biology: Concepts & Connections, 7th Ed. or later Jane B. Reece / Martha R. Taylor / Eric J. Simon / Jean L. Dickey Benjamin Cummings, 2011 2. OpenStax Biology
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	Free downloadable textbook (http://openstaxcollege.org) This is an excellent alternative to the main textbook for the course.
Reference Book	