

Introduction to Life Sciences B

Undergraduate / Graduate	Undergraduate	Registration Code	0065311
Course Category	Contemporary Liberal Arts (Natural Sciences)	Credits	2.0
Term (Semester) / Day / Period	Fall Semester / Fri / 3 (13:00~14:30)		
Instructor	VASSILEVA Maria		
Contact e-mail of the Instructor	mnvassileva@ilas.nagoya-u.ac.jp		
<p>●Goals of the Course The Earth is full of living organisms in a variety of environments, and humans coexist there. In addition, most of the foods we consume, including agricultural products, are derived from the living organisms. From microorganisms to animals and plants, and from molecular-level events in cells to global environmental events in forests and oceans, the field of life science has expanded greatly. Furthermore, life science is the basis for many important issues in our daily lives, such as regenerative medicine, genome editing, functional foods, environmental purification, and bioenergy. In this lecture, students will learn the basic knowledge of modern life science, and deepen their understanding of what kind of research is currently being conducted at universities and companies.</p> <p>●Objectives of the Course In this course students will learn about the genetic makeover of life, from both micro- and macro- perspective. Students will explore what inheritance is, what is its molecular basis and how it impacts living organisms. We will also look at how genetics shapes evolution of living forms on Earth, and their interaction with the changing environment. This knowledge will allow students to understand and critically evaluate popular information related to biological themes, from biotechnology to environmental issues.</p> <p>●Course Contents or Plan Introduction to inheritance Molecular basis of genetics The process of evolution Ecology and biodiversity</p> <p>●Course Prerequisites and Related Courses No prerequisites, everyone is welcome. Even students who have not studied biology in high school, or who do not like the subject, are welcome to join.</p> <p>●Course Evaluation Method and Criteria Students' progress is evaluated through quizzes (50%) and projects (50%). Withdrawal (W) grade: Students are not required to make a formal withdrawal request to withdraw from the course. Students who do not fulfill grading requirements for a passing grade will receive a W grade.</p> <p>●Study Load (Self-directed Learning Outside Course Hours) Students will have to review the lecture material after class and complete weekly quizzes, as well as work on individual or team projects.</p> <p>●How to Respond to Questions For any questions, email the course instructor Prof. Vassileva at the provided email address</p> <p>●Notice for students The classes will be accessible as much as possible both in person and online. Exact format will be announced on NUCT.</p> <p>●Message from the Instructor Office hours can be requested any time over email</p> <p>●Courses taught by Instructors with practical experience</p>			
Textbook	None. All materials will be provided by the instructor.		
Reference Book	None. All materials will be provided by the instructor.		
Reference website for this Course	Designated NUCT course site		