

Fundamentals of Biology I			
Registration Code	0061311	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 3 (13:00~14:30)		
Instructor	CARTAGENA Joyce Abad		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course The objective of this course is to introduce the key concepts of basic biology and provide the foundation for specialized courses. Furthermore, this course aims to encourage students to think like scientists and develop scientific reasoning and literacy skills.</p> <p>●Course Prerequisites None</p> <p>●Course Contents (will not appear on the syllabus booklet but on our website)</p> <p>I. THE LIFE OF THE CELL The Chemical Basis of Life The Molecules of Cells A Tour of the Cell The Working Cell How Cells Harvest Chemical Energy Photosynthesis: Using Light to Make Food</p> <p>II. CELLULAR REPRODUCTION AND GENETICS The Cellular Basis of Reproduction and Inheritance Patterns of Inheritance Molecular Biology of the Gene How Genes Are Controlled DNA Technology and Genomics</p> <p>III. CONCEPTS OF EVOLUTION How Populations Evolve The Origin of Species Tracing Evolutionary History</p> <p>IV. THE EVOLUTION OF BIOLOGICAL DIVERSITY Microbial Life: Prokaryotes and Protists The Evolution of Plant and Fungal Diversity The Evolution of Invertebrate Diversity The Evolution of Vertebrate Diversity</p> <p>V. PLANTS: FORM AND FUNCTION Plant Structure, Growth, and Reproduction Plant Nutrition and Transport Control Systems in Plants</p> <p>●Evaluation methods Attendance and class participation 30% Home works 20% Examinations 50%</p>			

●Notice for students

1. Course webpage

NUCT (Nagoya University Collaboration and Course Tools; <https://ct.nagoya-u.ac.jp/portal>) is an online system that will be used for this course. PowerPoint slides, other learning materials (such as videos, websites, etc.) and home works will be accessible through this page.

2. Attendance

In case of emergency or absence from class, students should notify the instructor as soon as possible either by email or phone.

3. Make-up exam

Make-up exams may be given on condition that the student can provide acceptable reasons for his/her absence.

4. Personal electronics policy

Personal electronic devices should not be visible or audible during class time.

5. Academic honesty and original work

Cheating and copying (including plagiarism) will not be tolerated in this class.

6. Course withdrawal

Students who wish to withdraw from the course will have to submit a duly accomplished Course Withdrawal Request by November 28, 2019.

7. Reading assignments

Students are expected to read one to two chapters of the textbook every week, and come to class prepared for discussion.

Textbook	Campbell Biology Concepts and Connections 9/e 2019 (Pearson New International Edition) ISBN-10: 1292229470 *or older edition Authors: J. Reece, M. Taylor, E. Simon, J. Dickey
Reference Book	