Updated September 11, 2020

Fall AY2020

Biotechnology

Registration Code	0064311	**Credits**	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Thu. / 3 (13:00～14:30)		
Instructor	CARTAGENA Joyce Abad		
Target Schools (Programs)	Hu(J)・La(S)・Ec(S)・Sc(P・C・B)・En(C・Au)・Ag(B)		

●Goals and Objectives of the Course

1. To provide basic knowledge on biological processes that will help students understand the science behind the technologies
2. To present examples of actual technology used in the industry
3. To discuss the benefits and drawbacks of Biotechnology to humanity and the environment
4. To provide a venue for students to express their opinions regarding the issues related to Biotechnology

●Course Prerequisites

None

●Course Contents/Plan

I. Introduction: The nature of Biotechnology
1. Basic Science of Biotechnology
2. Technologies and Tools in Biotechnology I
3. Technologies and Tools in Biotechnology II

II. Products of Biotechnology:
1. Microbial Biotechnology
2. Plant and Animal Biotechnology
3. Aquatic Biotechnology and Bioremediation
4. DNA Fingerprinting and Forensic Analysis
5. Medical Biotechnology

III. Biotechnology Regulations

IV. Ethics and Biotechnology

●Course Evaluation Methods (may be modified)

Attendance and class participation 30%
Group presentation 20%
Home work 20%
Examination 30%

●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 contact the instructor as soon as possible either by email or thru NUCT.

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

4. Academic honesty and original work
Cheating and copying (including plagiarism) will not be tolerated in this class.

5. Course Withdrawal
Students who wish to withdraw from the course will have to submit a duly accomplished Course Withdrawal Request by November 19, 2020.

Textbook	None
Reference Book	Introduction to Biotechnology 4/e 2019 (Pearson) ISBN 9780134650197 *or older edition Authors: W.J. Thieman and M.A. Palladino
Reference website	TBA
Message	All teaching materials will be provided thru NUCT. For inquiries, don't hesitate to send an email to joyce@agr.nagoya-u.ac.jp