Course	Research and Development for Agro-Biomedical Science II
Course No.	01ER402
Credits	2 Credits
Grade	1st Year
Timetable	Spring AB
Instructor	Hsinyu Lee, Tsai-Kun Li, Chang-Chuan Chan, Ming-Ju Chen, Tang-Long Shen, Han-Yi E. Chou
Course Overview	In this course, students learn the principles and methodologies of research related to Agro-Biomedical Science through a specific research theme in a lab managed by instructors. The instructors from National Taiwan University will nurture the expertise of Health and Food sciences. Student must submit the report of research progress which will be evaluated by the instructor who hosts the student.
Remarks	Conducted in English at National Taiwan University. For students of International Joint Degree Master's Program in Agro-Biomedical Science in Food and Health
Course Type	Practical training and experiments
Link between Course Objectives and Activities	Through field and laboratory-based practicum, students will improve their ability to judge R&D issues in the line of Food and Health science, and will acquire the abilities to plan and implement R&D that applies research that is actually laboratory-testable. Students will also maintain abilities for project management through connection of their various activities in lab. Students will consult with faculty regarding their practicum work, which will be compiled into a report at the end of the course.
Academic Goal	1. To be able to survey the research topics of instructors. 2. To be able to explain subjects and methods of each experiment/analysis. 3. To be able to explain and discuss about results and interpretation of each experiment/analysis. 4. To be able to explain the purpose of each experiment and analysis in the current research topic. 5. To be able to explain the significance of the current research topic from the standpoint of Agro-Biomedical Science.
Course Schedule	Students need to stay in the lab hosted by one instructor listed below, and participate the practices in the lab. Theme 1: Signal Transduction (Hsinyu Lee) Theme 2: Drug and health food product development (Tsai-Kun Li) Theme 3: Environmental Epidemiology and Global Health (Chang-Chuan Chan) Theme 4: Animal-based foodstuff (Ming-Ju Chen) Theme 5: Applied microbiology (Tang-Long Shen) Theme 6: Stem cell and nanobiotechnology (Han-Yi E. Chou)
Course Prerequisites and Advisories	
Grading Philosophy (Percentage/ Criteria/ Methodology)	Participation to lab actvities (50%), Report (50%). Theme of report is "Summary of your research in the lab, and its relation to Agro-Biomedical Science". Grading Criteria is A+, A, A-, B+, B, B-, and C+/C/C- (Failure).
Self-Directed Learning Other Than Coursework	Discussion with instructors and lab members
Textbooks, References and Supplementary Materials	Introduced by instructors in class
Office Hours	Name: Hsinyu Lee

	E-mail: hsinyu@ntu.edu.tw Name: Tsai-Kun Li E-mail: tsaikunli@ntu.edu.tw Name: Chang-Chuan Chan E-mail: ccchan8082@gmail.com Name: Ming-Ju Chen E-mail: cmj@ntu.edu.tw Name: Tang-Long Shen E-mail: shentl@ntu.edu.tw Name: Han-Yi E. Chou E-mail: hyechou@ ntu.edu.tw
Other (i.e. Expectations on Classroom, Conduct and Decorum etc.)	
Related Courses	Research and Development for Agro-Biomedical Science I (UT) Agro-Biomedical Science Laboratory Seminar II (NTU) Fusion of Field and Laboratory Studies (NTU) Biomedical Translation Boot Camp (NTU) Field to Laboratory Practices with Data Management & Data Mining (UB) Integrative Unit with Omic & Bioinformatic Tools (UB)
Keywords	Lab, Experiments, Analyses