Subject (English)	Introduction to Fisheries Science	Semester	Fall	Day/Slot	Fri. 2nd 10:30-12:00
科目名 (日本語)	水産科学概論				
Course Code	ABG3008	Course Numbering	ABS-APS255E	Period	Oct. 4, 2019 – Jan. 24, 2020
Instructor (Post)	Yoshihiro. Ochiai, *et al.* (Prof.)			Campus	Aobayama Shin Campus
				Building	Aobayama Commons
Faculty	Faculty of Agriculture	Credits	2	Class Room	Lecture Room 9

Class subject	Introduction to Fisheries Science

Object and summary of class

This course provides an overview of the fishery science. Students will learn the fishery science on the basis of marine biology in a broad sense from molecules to ecosystems.

Keywords	Fisheries science, basics & outlines

Goal of study

The goal is to understand the fishery science basically from ecology, physiology, genetics, molecular biology and evolution, and to appreciate the fishery science as the applied marine biology.

Contents and progress schedule of class

Topics on marine ecology and oceanography

Lab Marine Plant Ecology

Oct. 4 ---- “Introduction to rocky subtidal communities” (Y. Agatsuma)

Nov. 8 ---- “The ecology of floating seaweeds” (M. Aoki)

Lab Fisheries Biology & Ecology

Oct. 18 ---- “How to know the fish age” (S. Katayama)

Nov. 1 ---- “How to know the fish migration” (S. Katayama)

Lab Biological Oceanography

Oct. 11 ----“Marine environment for marine organisms” (W. Sato-Okoshi)

Oct. 25 ---- “Plankton and benthos in the ocean” (W. Sato-Okoshi)

Topics on biology and biochemistry of aquatic organisms

Lab Aquacultural Biology

Nov. 15 ---- “Immunity in marine invertebrates” (K. Takahashi)

Nov. 29 ---- “Manipulation of reproduction in bivalve mollusks” (M. Osada)

Lab Marine Biochemistry

Nov. 22 ---- “Food chemistry of fish and shellfish” (Y. Ochiai)

Dec. 6 ---- “Function of marine lipids” (T. Yamaguchi)

Topics on fish genetics and biotechnology

Lab Marine Life Science & Genetics

Dec. 13 ---- “Fish development and biotechnology“ (T. Suzuki)

Dec. 20 ---- “Genetic conservation and sustainable use of resources in aquatic organisms“ (M. Nakajima)

Lab Integrative Aquatic Biology

Jan. 10 ---- “Conservation genetics for fishery resources -1” (M. Ikeda)

Jan. 24 ---- “Conservation genetics for fishery resources -2” (M. Ikeda)

Preparation	Refer to the recent topics in each field.
Record and evaluation method	Attendance and report. The report should be directly submitted to the instructor of each lecture by the next lecture.
Textbook and references	No textbook. Reference books will be introduced.
Self study	Summarize the content of each class promptly.
In addition	Questions, comments, and requests accepted. Send them to the representative instructor, Prof. Ochiai: yochiai@tohoku.ac.jp