

## Division of Applied Biosciences

No.	Title	Instructor	Credits	Semester	Notes
DA01	Advanced Genetics I	Kentaro YOSHIDA, Yoshihiro INOUE	2	Oct-Mar	☆ ◎
DA02	Advanced Genetics II	Kentaro YOSHIDA, Yoshihiro INOUE	2	Apr-Sep	★ ◎
DA52	Crop Evolutionary Genomics	Ryohei TERAUCHI	2	Oct-Mar (intensive)	☆
DA53	Genome Bioinformatics	Ryohei TERAUCHI	2	Oct-Mar (intensive)	★
DA05	Plant Pathology (Advanced Course) I	Yoshitaka TAKANO	2	Oct-Mar	☆
DA06	Plant Pathology (Advanced Course) II	Kazuyuki MISE, Akira MINE	2	Apr-Sep	★
DA45	Sociobiology of Insects	Kenji MATSUURA, Mamoru TAKATA	2	Oct-Mar	★
DA08	Evolutionary Ecology of Insects	Kenji MATSUURA, Mamoru TAKATA	2	Apr-Sep	★
DA09	Advances in Insect Physiology	Takaaki DAIMON, Takahiro OHDE, Toshiya ANDO	2	Oct-Mar (intensive)	☆
DA50	Fisheries and Environmental Oceanography I	Hirohichi MITAMURA, Kotaro ICHIKAWA, Shiho KOBAYASHI, Satoko S. KIMURA, Manabu KUME, Junichi TAKAGI	2	Oct-Mar	★
DA51	Fisheries and Environmental Oceanography II	Kotaro ICHIKAWA, Hirohichi MITAMURA, Shiho KOBAYASHI, Satoko S. KIMURA, Manabu KUME, Junichi TAKAGI	2	Oct-Mar	☆ ◎
DA12	Fisheries Biology for Marine Stock Enhancement	TBD	2	TBD	NA in AY2024
DA13	Biology of Marine Resources	Masatomo TAGAWA	2	Apr-Sep	☆
DA14	Current Topics in Marine Microbiology	Takashi YOSHIDA	2	Apr-Sep	★ ◎
DA15	Marine Microbial Physiology	Ryoma KAMIKAWA	2	Oct-Mar	☆
DA55	Aquatic Environmental Microbiology	Shigeki SAWAYAMA	1	Oct-Mar (first half)	☆
DA48	Marine Environmental Microbiology	Satoshi NAKAGAWA	2	Apr-Sep	★
DA18	Marine Bio-products Technology	TBD	2	TBD	NA in AY2024
DA19	Biochemistry of Aquatic Life	Tatsuya SUGAWARA	2	Apr-Sep	★
DA20	Function of Marine Organisms	Kenji SATO	2	Apr-Sep	◎
DA58	Aquatic Cell Engineering	Masato KINOSHITA	2	Oct-Mar	
DA22	Ecology of Marine Living Resources	Reiji MASUDA, Yoshiaki KAI, Keita SUZUKI, Yumi HENMI	2	Apr-Sep (intensive)	☆
DA23	Advanced Animal Breeding and Genetics	Norihide YOKOI, Yukio TANIGUCHI, Shinichiro OGAWA	2	Oct-Mar	☆
DA24	Animal Genomics	Norihide YOKOI, Yukio TANIGUCHI, Shinichiro OGAWA	2	Oct-Mar	★
DA25	Reproductive Biology	Shuntaro IKEDA	2	Oct-Mar	☆
DA26	Developmental and Genetic Engineering	TBD	2	Oct-Mar	NA in AY2024
DA43	Molecular Embryology in Mammals	Shuntaro IKEDA	2	Apr-Sep	★
DA57	Advances in Animal Nutrition	Masayuki FUNABA	2	Apr-Sep	★
DA28	Metabolism and its Regulation of Animals	Masayuki FUNABA	2	Apr-Sep	☆
DA29	Animal Physiology and Anatomy	Takeshi Ohta, Miki SUGIMOTO	2	Oct-Mar	★
DA56	Animal Pathophysiology	Takeshi Ohta, Kinuko UNO	2	Oct-Mar	☆
DA31	System Science for Animal Production	Kazato OISHI	2	Oct-Mar	☆
DA32	Animal Production in Tropics	Hajime KUMAGAI	2	Apr-Sep	★
DA49	Advanced Course on Entomological Sciences	Takaaki DAIMON and other instructors	2		NA in AY2024
DA34	Special Lecture for Applied Biosciences I	Haruhiko FUJIWARA	1	Apr-Sep (intensive)	
DA35	Special Lecture for Applied Biosciences II	Masanori OKAMOTO	1	Oct-Mar (intensive)	
DA36	Special Lecture for Applied Biosciences III	Seishi YAMASAKI	1	Apr-Sep (intensive)	
DA40	Special Lecture for Applied Biosciences IV	Takuro HORII	1	Oct-Mar (intensive)	
DA41	Special Lecture for Applied Biosciences V	Yasuhiko TAGO	1	Apr-Sep (intensive)	
DA42	Special Lecture for Applied Biosciences VI	Shun WATANABE	1	Apr-Sep (intensive)	
DA46	Special Lecture for Applied Biosciences VII		1		NA in AY2024

No.	Title	Instructor	Credits	Semester	Notes
DF01	Seminar in Plant Genetics	Kentaro YOSHIDA, Yoshihiro INOUE	1.5 1.5	Apr-Sep Oct-Mar	◎
DF02	Seminar in Crop Evolution	Ryohei TERAUCHI, Yasuo YASUI, Hiroaki ADACHI, Toshiyuki SAKAI	1.5 1.5	Apr-Sep Oct-Mar	
DF03	Seminar in Plant Pathology	Yoshitaka TAKANO, Kazuyuki MISE, Akira MINE, Ru ZHANG	1.5 1.5	Apr-Sep Oct-Mar	◎
DF04	Seminar in Insect Ecology	Kenji MATSUURA, Mamoru TAKATA	1.5 1.5	Apr-Sep Oct-Mar	◎
DF05	Seminar in Insect Physiology	Takaaki DAIMON, Takahiro OHDE, Toshiya ANDO, Naoki MATSUDA	1.5 1.5	Apr-Sep Oct-Mar	
DF06	Seminar in Fisheries and Environmental Oceanography	Hiromichi MITAMURA, Kotaro ICHIKAWA, Shiho KOBAYASHI,	1.5 1.5	Apr-Sep Oct-Mar	
DF07	Seminar in Marine Biology	Masatomo TAGAWA, Kouji NAKAYAMA	1.5 1.5	Apr-Sep Oct-Mar	
DF08	Seminar in Marine Molecular Microbiology	Takashi YOSHIDA, Ryoma KAMIKAWA	1.5 1.5	Apr-Sep Oct-Mar	
DF09	Seminar in Marine Environmental Microbiology	Shigeki SAWAYAMA, Satoshi NAKAGAWA	1.5 1.5	Apr-Sep Oct-Mar	
DF10	Seminar in Marine Bio-products Technology	Tatsuya SUGAWARA, Yuki MANABE	1.5 1.5	Apr-Sep Oct-Mar	
DF11	Seminar in Marine Biological Function	Kenji SATO, Masato KINOSHITA, Tomoko ASAI	1.5 1.5	Apr-Sep Oct-Mar	
DF12	Seminar in Animal Breeding and Genetics	Norihide YOKOI, Yukio TANIGUCHI, Shinichiro OGAWA	1.5 1.5	Apr-Sep Oct-Mar	
DF13	Seminar for Reproductive Biology	Shuntaro IKEDA, Shinnosuke HONDA	1.5 1.5	Apr-Sep Oct-Mar	◎
DF14	Seminar in Nutritional Science of Animals	Masayuki FUNABA, Shozo TOMONAGA	1.5 1.5	Apr-Sep Oct-Mar	
DF15	Seminar in Animal Physiology and Anatomy	Takeshi Ohta, Miki SUGIMOTO, Kinuko UNO	1.5 1.5	Apr-Sep Oct-Mar	
DF16	Seminar of Animal Husbandry Resources	Hajime KUMAGAI, Kazato OISHI, Yoko TSUKAHARA	1.5 1.5	Apr-Sep Oct-Mar	
DF17	Seminar in Coastal Marine Ecology	Reiji MASUDA Yoshiaki KAI, Keita SUZUKI, Yumi HENMI	1.5 1.5	Apr-Sep Oct-Mar	◎
DG01	Research in Plant Genetics	Kentaro YOSHIDA, Yoshihiro INOUE	3 3	Apr-Sep Oct-Mar	◎
DG02	Research in Crop Evolution	Ryohei TERAUCHI, Yasuo YASUI, Hiroaki ADACHI, Toshiyuki SAKAI	3 3	Apr-Sep Oct-Mar	
DG03	Research in Plant Pathology	Yoshitaka TAKANO, Kazuyuki MISE, Akira MINE, Ru ZHANG	3 3	Apr-Sep Oct-Mar	◎
DG04	Research in Insect Ecology	Kenji MATSUURA, Mamoru TAKATA	3 3	Apr-Sep Oct-Mar	◎
DG05	Research in Insect Physiology	Takaaki DAIMON, Takahiro OHDE, Toshiya ANDO, Naoki MATSUDA	3 3	Apr-Sep Oct-Mar	
DG06	Research in Fisheries and Environmental Oceanography	Hiromichi MITAMURA, Kotaro ICHIKAWA, Shiho KOBAYASHI,	3 3	Apr-Sep Oct-Mar	
DG07	Laboratory Course in Marine Biology	Masatomo TAGAWA, Kouji NAKAYAMA	3 3	Apr-Sep Oct-Mar	
DG08	Laboratory Course in Marine Molecular Microbiology	Takashi YOSHIDA, Ryoma KAMIKAWA	3 3	Apr-Sep Oct-Mar	
DG09	Laboratory Course in Marine Environmental Microbiology	Shigeki SAWAYAMA, Satoshi NAKAGAWA	3 3	Apr-Sep Oct-Mar	

No.	Title	Instructor	Credits	Semester	Notes
DG10	Laboratory Course in Technology of Marine Bio-products	Tatsuya SUGAWARA, Yuki MANABE	3 3	Apr-Sep Oct-Mar	
DG11	Laboratory Course in Marine Biological Function	Kenji SATO, Masato KINOSHITA, Tomoko ASAI	3 3	Apr-Sep Oct-Mar	
DG12	Laboratory Course in Animal Breeding and Genetics	Norihide YOKOI, Yukio TANIGUCHI, Shinichiro OGAWA	3 3	Apr-Sep Oct-Mar	
DG13	Laboratory Course for Reproductive Biology	Shuntaro IKEDA, Shinnosuke HONDA	3 3	Apr-Sep Oct-Mar	◎
DG14	Laboratory Course in Nutritional Science of Animals	Masayuki FUNABA, Shozo TOMONAGA	3 3	Apr-Sep Oct-Mar	
DG15	Laboratory Course in Animal Physiology and Anatomy	Takeshi Ohta, Miki SUGIMOTO, Kinuko UNO	3 3	Apr-Sep Oct-Mar	
DG16	Laboratory Course of Animal Husbandry Resources	Hajime KUMAGAI, Kazato OISHI, Yoko TSUKAHARA	3 3	Apr-Sep Oct-Mar	
DA44	History of Ichthyology	TBD	1	TBD	NA in AY2024
DG17	Laboratory Course in Coastal Marine Ecology	Reiji MASUDA Yoshiaki KAL, Keita SUZUKI, Yumi HENMI	3 3	Apr-Sep Oct-Mar	◎
DZ00	Master's Thesis				

#### Requirements by Division of Applied Biosciences

- 1) Earn at least 30 credits including 6 credits by seminar and 12 credits by laboratory course given by your laboratory.
- 2) In order to take other laboratories' seminars or special laboratory works, get permission from your supervisor and the instructor.
- 3) In order to take other divisions' courses (including other graduate schools' courses) and earn them as credits, notify your division's office at the time of registration, getting permission from your supervisor beforehand.
- 4) Retaking subjects you have previously completed is not permitted, even if it is an intensive course with a different instructor in a different year. The only exception is retaking seminars and laboratory courses of your own laboratory.
- 5) Subjects with "☆&★ marks" are held every 2 years alternately.  
Subjects with "☆ marks" are held in this academic year and those with "★ marks" in next academic year.
- 6) Subjects with "◎ marks" may be given in English when any of international students wish to attend.
- 7) If you enroll in April and aim to complete the course in March, register for the "Master's Thesis" during your 2nd (fall) semester as a M2 student. / If you enroll in October and aim to complete the course in September, register for the "Master's Thesis" during your 1st (spring) semester as a M2 student.