Department of Bioproductive Science (Plant Science)(Animal Science)(Applied Biology)(Applied Biochemistry)

Course Title Instructor Credit Semester Class Day & Period	Course Description
Plant Protection Tomohide Natsuaki Tamotsu Murai Masaru Ogasawara 2 credits Intensive course	Plant protection is the science and practice of managing pests, diseases and weeds that damage crops and other plants. These agents can cause economically damages on not only farmer livelihoods directly but also the quality of life of the citizens. In this class plant protection specialists will cover entomology, microbiology, plant pathology, weeds science and more recent invasive alien species. The range of information resources on plant protection covers all subjects in the area, from taxonomy to the molecular biology, ecology, distribution and control of organisms.
Plant Production in Japan Yoshiharu Wada Kenji Yamane Takayuki Kashiwagi Takeshi Kurokura 2 credits Intensive course	Agriculture in Japan is mainly characterized by rice production in paddy field, double-cropping of rice and barley, and intensive culture of horticultural crops in plastic houses. Quality of the products is quite high to meet demands of consumers. This lecture provides basic physiology and advanced technology for plant production in Japan. Especially we focus on major crops (i.e., rice, wheat, soy bean), and horticultural crops (i.e., apple, orange, strawberry, tomato and mum).
Sustainable Agriculture under Different Soil Characteristics Hideaki Hirai 1 credit 2nd semester (offered biennially in odd years) Thu., 9-10 periods (Intensive course)	In this lecture, characteristics of soils developed under dry or semi-dry climate are introduced from the standpoint of sustainable use by agriculture. Salinization and/or alkalization are discussed. Moreover, characteristics of soils developed under humid climate are also introduced. Shifting cultivation is one of the examples, which is indigenous agriculture using the said soils, but shortening of fallow period induces soil degradation so that soil conservation method should be developed to avoid soil erosion. I would like to introduce participatory soil conservation method developed in the sloping land, northeastern Thailand, based on my research work. Finally, the tragedy of the commons will be discussed together with students.
Animal Behavior and Sensory System Shoei Sugita Masato Aoyama 2 credits Intensive course	As a master course student of animal science, it is necessary to understand differences of sensory system and nervous system among the many species of domestic animals. Because specific behaviors of animals are limited how their sensory system and its related central nervous developed. In this lecture, character of nervous system and sensory system of several kinds of domestic animal will be introduced.
Advanced Life Science Ryo Fukui 1 credit 2nd semester Tue., 1 or 2 period	Graduate students in this class will learn advanced yet most fundamental subjects in modern life science through term-to-term instructions of basic concepts as well as comprehensive learning assignments and visualized study materials. The lecture is designed to assist non-English-speaking young students to review basic biology in detail and use English properly in performing multi-disciplinal researches and writing their scientific papers.