

Description of the Doctoral Program
Veterinary Science
Graduate School of Animal and Veterinary Sciences and Agriculture
Obihiro University of Agriculture and Veterinary Medicine

1. Education Policy of the Doctoral Program of Veterinary Science

Admission Policy

The Doctoral Program of Veterinary Science at the Graduate School of Animal and Veterinary Science and Agriculture, utilizing its educational systems which involve “fusion of veterinary medicine, animal science and agriculture” and “cooperation with overseas universities” aims to train researchers and educators who, while keeping globalization of food and agriculture in mind, have technical knowledge, creativity, and excellent research and development skills, and excellent educational abilities as well as great personality. For that purpose, we want students:

1. Who aim to be researchers and educators who can conduct international-standard, advanced research with global views on veterinary medicine, animal science and agriculture, and have good communication skills,
2. Who are eager to contribute to society domestically and globally by giving back to society their research results in the field where veterinary medicine, animal science and agriculture are fused, and by playing a central role in maintaining animal and human health, conserving the global environment and ecosystem, and developing industries and life science,
3. Who want to pursue comprehensive knowledge and advanced research on a specific area of the veterinary science program, and
4. Who have acquired basic knowledge and skills, and application skills, up to the bachelor’s level in veterinary science and related fields, and basic knowledge and skills, and application skills, up to the master’s level in other fields.

Basic policy for admission

1. General Admission

In the proficiency test in English, we will evaluate the applicant's ability to read and understand English related to veterinary science. In the proficiency test in specialized subjects, we will evaluate the applicant's ability in the specialized field. In the interview, we will evaluate the applicant's communication skills, knowledge of his/her specialized field and motivation, taking into consideration the results of the screening of application documents.

2. Special Selection for International Cooperation

In the interview, we will evaluate the applicant's communication skills, knowledge of his/her specialized field and motivation, taking into consideration the results of the screening of application documents.

Diploma Policy

In the Doctoral Program of Veterinary Science, the degree shall be conferred on persons who have taken the courses set up in the curriculum and obtained the required credits to complete the program, and have acquired the following skills that enable them to shoulder advanced research using their up-to-date knowledge and skills in the fields of veterinary medicine such as basic veterinary medicine, clinical veterinary medicine and public health, and interdisciplinary fields of the above:

1. Ethics

- Ethics based on up-to-date knowledge and skills in the fields of veterinary medicine such as basic veterinary medicine, pathological veterinary medicine, applied veterinary medicine and clinical veterinary medicine, and based on deep understanding of highly advanced medical techniques and of social activities for companion, industrial and wild animals,

2. International competence and leadership

- Abilities to conduct international-standard, advanced research in a wide range of fields of life-scientific research including the intravital micro-level, the macro-level dealing with individuals and populations, and animal production.
- Abilities to conduct international-standard, advanced research in the field of ecological research dealing with the inside of organisms, individuals and populations.
- A wide range of technical knowledge on veterinary life science, and abilities to conduct international-standard, advanced research.
- Abilities to contribute to the improvement of food safety and human and animal health utilizing highly advanced knowledge on food safety management systems and domestic and overseas safety monitoring of agricultural and livestock products, and excellent analysis and livestock management techniques in veterinary medicine and veterinary life science.

3. Communication skills:
 - Internationally competent presentation skills and communication skills necessary to explain their process of thinking and making judgments with regard to their specialty in the fields of basic veterinary medicine, pathological veterinary medicine, applied veterinary medicine and clinical veterinary medicine.
4. Technical knowledge and skills:
 - Abilities to utilize highly advanced knowledge on food safety management systems and domestic and overseas safety monitoring of agricultural and livestock products, and to utilize excellent analysis and livestock management techniques in veterinary medicine and veterinary life science; abilities to contribute to the improvement of food safety and human and animal health; global views with regard to the fields of veterinary medicine, animal science, agriculture, and their interdisciplinary fields; practical skills and leadership to meet various social needs according to the globalization of veterinary medicine, and; international-standard, advanced research skills.

Curriculum Policy

In order to have the students acquire knowledge and skills specified in the diploma policy of the Doctoral Program of Veterinary Science, we organize curriculum in accordance with the following policies:

I. Contents of Education

We offer education in the following 1 to 5 to all students, as well as in the following 6 if necessary.

1. Developing high-level of ethics as a researcher:
Students will develop a high-level of ethics as educators and researchers using e-learning and active learning.
2. Developing leadership:
 - Students will acquire advanced knowledge and skills as well as an ability to manage the whole in order to develop educators and researchers with practical skills and leadership, which enable them to satisfy social needs,
 - Students will acquire practical teaching and research skills to become excellent educators and researchers.
3. Developing international competence:
 - Students will improve their presentation, debate and academic writing skills to play an active role globally in the future,
 - Students will develop international competence through research internship and fieldwork in cooperation with overseas universities in order to acquire advanced research skills.
4. Developing comprehensive research abilities as a doctor:
 - Through common courses as well as elective courses from other degree programs, students will acquire a wide range of highly technical knowledge interdisciplinarily from the viewpoint of fusing veterinary medicine, animal science and agricultural studies,
 - In addition, students will acquire international-standard, advanced research skills that aim to resolve global issues through research supervision.
5. Students will acquire highly advanced technical knowledge and skills on veterinary medicine and related fields through core courses in order to develop researchers who can play an active role and make contributions globally.
6. Students will acquire the globally most advanced knowledge and skills on food safety, and animal and human health, involving highly advanced knowledge on food safety management systems and domestic and overseas safety monitoring of agricultural and livestock products, and excellent analysis and livestock management techniques in veterinary medicine and veterinary life science.

II. Methods of Education

1. We offer active learning for students to acquire advanced research skills at an international level and to improve advanced problem-finding and problem-solving skills to resolve global issues.
2. Students will practice the expressive and communication skills acquired through presentations and thesis writing in English at research internships and fieldwork in cooperation with overseas universities.
3. We offer practical exercises to improve leadership skills as educators and researchers who can respond to the needs of society.

III. Evaluation of Learning Outcomes

1. The evaluation methods and criteria for each course are clearly stated in the syllabus of each course and the Evaluation Criteria for Course.
2. The policies for evaluation on credit, promotion and graduation are established and announced separately in the Assessment Policy and the Evaluation Criteria for Thesis.

Assessment policy

The accomplishments of study required in 'Diploma Policy' and the progresses of study defined in 'Curriculum Policy' are examined as follows:

1. Course Credit

The accomplishment of study concerned with credits of a course is examined as follows:

- Examine whether the requirements for course credits such as attendance, submission of a report or an assignment have been met
- Examine whether the goals of a course have been met

2. Promotion

The accomplishment of study concerned with promotion is examined as follows:

- Examine whether the studies of a student have been progressed according to Curriculum Policy with the test of promotion
- Examine whether the accomplishment of study has been met the goal for each grade with the 'Screening of progress with research' or 'Mid-term screening'

3. Completion

The accomplishment of study concerned with completion is examined as follows:

- Examine whether the Diploma Policy of OUAVM has been met with the final test
- Examine whether the thesis (include the products of research work) / dissertation is worthy to award the master's / doctoral degree of OUAVM

2. Completion of programs and awarding degrees

Students are awarded the Doctoral Degree in Veterinary Science after they completed the program, i.e., those who have been enrolled in the Doctoral Program of Veterinary Science at the Graduate School of Animal and Veterinary Sciences and Agriculture of our university for four years or longer, and have earned the required 30 credits, who have received the necessary research instruction, and passed the examination of their doctoral thesis in addition to the final examinations of the courses relevant to the thesis.

However, for those who achieved excellent results, the period enrolled in the graduate school could be shortened to three years.

3. Special long term limit

This system allows students who have a job or other special considerations to complete their degree within an agreed-upon time (maximum of 8 years) beyond the standard term limit and still pay the same fee as those students who complete their degrees in the standard amount of time.

In principle, those who want to use this system have to apply for it at the time they enroll after consulting with their prospective supervisors.

4. Supervisors

Name	Position	Specialized Subject	Field of Research	Contents
△ Igarashi Makoto	Professor	Veterinary Parasitology	Diseases Control	Parasitism of protozoan parasites
△ Ishii Toshiaki	Professor	Veterinary Pharmacology	Neuropharmacology	Molecular basis of physiological and pathological manifestations in the central nervous system
△ Ishikawa Toru	Professor	Veterinary Physiology	Cell Physiology	Cellular regulatory mechanisms and structure-function relationships of ion channels and transporters involved in epithelial transport
Itoh Megumi	Professor	Farm Animal Clinical Medicine	Farm animal Internal Medicine • Hygiene	Prevention, early diagnosis, and treatment of diseases in cows, calves and other ruminants
Inoue Noboru	Professor	Veterinary Parasitic Protozoology	Parasitic Protozoology	1) Development of diagnostic, therapeutic, and preventive methods for animal trypanosomoses. 2) Epidemiological studies for animal trypanosomoses. 3) Research on the mechanisms of cell differentiation

				in African trypanosome in progress of its life cycle.
Uemura Akiko	Professor	Veterinary Surgery	Small Animal Surgery Cardiology	1) Soft tissue surgery for dogs and cats 2) Cardiology for dogs and cats 3) Research on artificial organs and biomaterials
Ohtsuka Hiromichi	Professor	Veterinary Internal Medicine	Large Animal Internal Medicine	Studies on immune function of cattle and calves
Okamura Masashi	Professor	Veterinary Microbiology	Veterinary Bacteriology	1) Control of bacterial infections through farm-to-table technology 2) Mechanisms of host specificity and tissue tropism in bacterial pathogens
 Kawazu Shinichiro	Professor	Veterinary Parasitology	Preventive Medicine for Parasitic Diseases	Development of novel vaccines, therapeutic and diagnostic approaches based on functional analysis of the parasitic genome and proteins
Kubota Akira	Professor	Toxicology	Environmental Toxicology	Study on biological effects and mode of action of anthropogenic chemicals
Kobayashi Yoshiyasu	Professor	Veterinary Pathology	Diagnostic Pathology	Pathogenesis and diagnosis of animal diseases
Sasaki Motoki	Professor	Veterinary Anatomy	Veterinary Anatomy	Functional morphology in vertebrates
Sasaki Yoshimasa	Professor	Food safety	Microbiological Risk Management	1) Microbiological risk management from farm to table 2) Antimicrobial resistance in livestock
Umemiya-Shirafuji Rika	Professor	Veterinary Parasitology	Tick Biology	1) Biology of ticks 2) Transmission mechanisms of protozoan parasites in ticks
Nambo Yasuo	Professor	Equine Reproduction	Equine Reproduction	Studies on equine reproduction, reproductive physiology and assisted reproductive technology in horses
Nishikawa Yoshifumi	Professor	Veterinary Parasitology	Infection Immunity	Study on onset mechanism of pathogenic protozoan diseases
Matsui Motozumi	Professor	Theriogenology	Diagnosis and Therapeutics for Reproductive Diseases	Pathophysiology of ovarian and uterine disorder in cow reproduction
Muroi Yoshikage	Professor	Pharmacology	Neuropharmacology	Studies on behavioral neuroscience
Yamada Manabu	Professor	Veterinary Pathology	Diagnostic Pathology	Pathological approach for pathogenesis of livestock diseases and establishment of diagnostic methods
Yokoyama Naoaki	Professor	Veterinary Parasitology	Diagnosis for Protozoan Diseases	Epidemiological survey of protozoan disease in domestic animals and development of its control strategy
Aoki Takahiro	Associate Professor	Large Animal Clinical Science	Preventive Veterinary Medicine	Development of methods for prevention and early detection of diseases associated with livestock production
Asada Masahito	Associate Professor	Veterinary Parasitology	Global Infection Control	1) Study on the mechanism of parasitism 2) Epidemiological survey of protozoan disease
Kayano Mitsunori	Associate Professor	Applied Statistics	Biostatistics	Statistics and lab/animal experiments in human and animal medicine
Kondoh Daisuke	Associate Professor	Veterinary Anatomy	Neuroanatomy	Morphological and histological studies of vertebrate olfactory organ and brain

Sasaki Mizuki	Associate Professor	Public health	Infectious Diseases	Studies on infectious diseases of wild vertebrates.
Suganuma Keisuke	Associate Professor	Veterinary Parasitology	Veterinary entomology	1) Study on the biology of livestock pests 2) Control of livestock pests and infectious disease
Takeda Yohei	Associate Professor	Infectious Disease	Virology	Study on control of viral infectious diseases

The Professor marked with  will retire on March 31, 2028. If you would like to be supervised by him/her, please consult in advance about research instruction.