

Department Curriculum Map

Department	
Department Name	Graduate Institute of Microbiology and Public Health (GIMPH)
Division	© Master (Microbiology and Public Health Division)

Education Goals	Number	Content	
	A	To cultivate professionals in veterinary microbiology to improve the diagnostics as well as the control and prevention of animal infectious diseases and accelerate the commercialization of biotechnology research results.	
	B	To foster professionals in the research and administration of veterinary public health to ensure national health and food safety.	
Student Core Competencies	Number	Content	Corresponding Education Goal Number
	A	Professional knowledge in microbiology and public health.	AB
	B	The ability to conduct experiments in microbiology, public health, biochemistry, and molecular biology research.	AB
	C	The ability to read research articles in both English and Chinese.	AB
	D	The ability for logical thinking and the attitude for lifelong learning.	AB

※ Note:

1. Complete the map separately for each division, including Bachelor's, Master's, and Doctoral program. For example, Forms 2 and 3 must be completed for Bachelor's program in Management Information Systems, and also for Master's program in for Bachelor's program in Management Information Systems.
2. Codes for Education Goals and Core Competencies must be in uppercase English alphabet letters.
3. Education Goals and Core Competencies can be specific to the division in question.

Date: 2024/8/20

Curriculum Plan

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Course Title	Plans (Notes)				Corresponding Number of Education Goal	Course Offering Unit	Remarks
	1	2	3	4			
College Core Courses (not required if none)							
Required Courses							
Advanced Microbiology	M	A	Y	6	A40 C20	B15 D25	GIMPH (Microbiology Division) First grade
Seminar in Veterinary Microbiology (I)	M	C	Y	2	A25 C25	B25 D25	GIMPH (Microbiology Division) First grade
Thesis	M	C	Y	6	A25 C25	B25 D25	GIMPH (Microbiology Division) Second grade
Seminar in Veterinary Microbiology (II)	M	C	Y	2	A25 C25	B25 D25	GIMPH (Microbiology Division) Second grade
Advanced Veterinary Public Health	M	A	Y	4	A30 C25	B20 D25	GIMPH (Public Health Division) First grade
Seminar in Veterinary Public Health (I)	M	C	Y	2	A25 C25	B25 D25	GIMPH (Public Health Division) First grade
Thesis	M	C	Y	6	A25 C25	B25 D25	GIMPH (Public Health Division) Second grade
Seminar in Veterinary Public Health (II)	M	C	Y	2	A25 C25	B25 D25	GIMPH (Public Health Division) Second grade

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Course Title	Plans (Notes)				Corresponding Education Goal Number	Course Offering Unit	Remarks
	1	2	3	4			
Elective Courses							
Research Methods in Veterinary Microbiology (I)	M	B	Y	2	A30 B20 C20 D30	GIMPH (Microbiology Division)	First grade
Advanced Clinical Virology	M	AB	S	2	A30 B30 C20 D20	GIMPH (Microbiology Division)	Fall semester of first grade
Cytokines	M	A	S	2	A20 B30 C25 D25	GIMPH (Microbiology Division)	Fall semester of first grade
Animal Cell Culture and Its Application	M	AB	S	2	A30 B40 C20 D10	GIMPH (Microbiology Division)	Fall semester of first grade
Applied Molecular Genetics	M	A	S	2	A30 B30 C20 D20	GIMPH (Microbiology Division)	Fall semester of first grade
Advanced Vaccine Technology	M	A	S	2	A25 B30 C15 D30	GIMPH (Microbiology Division)	Spring semester of first grade
Cellular Immunology	M	A	S	2	A20 B30 C15 D35	GIMPH (Microbiology Division)	Spring semester of first grade
Protein Structure and Function	M	A	S	2	A30 B20 C15 D35	GIMPH (Microbiology Division)	Spring semester of first grade
Writing Biomedical Research Papers in English	M	A	S	2	A20 B10 C40 D30	GIMPH (Microbiology Division)	Fall semester of first grade

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Course Title	Plans (Notes)				Corresponding Education Goal Number	Course Offering Unit	Remarks
	1	2	3	4			
Advanced Molecular Biology	M	A	Y	4	A40 B15 C35 D10	GIMPH (Microbiology Division)	First grade
Special Topics on Monoclonal Antibody Techniques	M	B	S	2	A20 B30 C20 D30	GIMPH (Microbiology Division)	Fall semester of second grade
Research methods in Veterinary Microbiology (II)	M	B	Y	2	A30 B20 C20 D30	GIMPH (Microbiology Division)	Second grade
Seminar in Animal Virology (I)	M	A	Y	2	A20 B30 C30 D20	Dept. of Veterinary Medicine	First grade
Seminar in Aquatic Animal Virology (I)	M	A	Y	2	A20 B30 C30 D20	Dept. of Veterinary Medicine	First grade
Advanced Medical Biochemistry	M	A	S	2	A30 B25 C25 D20	Dept. of Veterinary Medicine	Fall semester of first grade
Molecular Virology	M	A	S	2	A30 B25 C25 D20	Dept. of Veterinary Medicine	Spring semester of first grade
Molecular Immunology	M	A	S	2	A25 B25 C25 D25	Dept. of Veterinary Medicine	Fall semester of first grade
Monoclonal Antibody Techniques	M	B	S	2	A30 B30 C15 D25	GIMPH	Spring semester of first grade
Special Topics in Animal Parasitology	M	A	S	2	A25 B25 C30 D20	Dept. of Veterinary Medicine	Spring semester of first grade

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	1	2	3	4			
Seminar in Aquatic Animal Virology (II)	M	A	Y	2	A30 B20 C20 D30	Dept. of Veterinary Medicine	Second grade
Advanced Scientific Presentation	M	A	S	2	A10 B35 C25 D30	GIMPH (Microbiology Division)	Fall semester of first grade
Advanced Directed Reading	M	A	S	2	A10 B35 C20 D35	GIMPH (Microbiology Division)	Spring semester of first grade
Research in Veterinary Public Health (I)	M	C	Y	4	A30 B20 C25 D25	GIMPH (Public Health Division)	First grade
Environmental Toxicology	M	A	S	3	A20 B30 C25 D25	GIMPH (Public Health Division)	Fall semester of first grade
Analysis of Epidemiologic Data	M	A	S	2	A20 B30 C25 D25	GIMPH (Public Health Division)	Fall semester of first grade (Class A)
Analysis of Epidemiologic Data	M	A	S	2	A20 B30 C25 D25	GIMPH	Fall semester of first grade (Class B) * There are Class A and B. Class B is taught in English.
Laboratory Diagnostic Technique	M	A	Y	4	A15 B35 C30 D20	GIMPH (Public Health Division)	First grade (Class A)

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	1	2	3	4			
Laboratory Diagnostic Technique	M	A	S	3	A40 B20 C20 D20	GIMPH	Fall semester of first grade (Class B) * There are Class A and B. Class B is taught in English.
One Health	M	A	S	2	A30 B20 C25 D25	GIMPH (Public Health Division)	Spring semester of first grade
Principles of Epidemiology	M	A	S	2	A40 B10 C10 D40	GIMPH (Public Health Division)	Fall semester of first grade
Meat Hygiene	M	A	S	3	A20 B30 C25 D25	GIMPH (Public Health Division)	Spring semester of first grade
Administration of Public Health	M	A	S	1	A30 B20 C25 D25	GIMPH (Public Health Division)	Fall semester of first grade
Zoonoses	M	A	S	2	A30 B20 C30 D20	GIMPH (Public Health Division)	Spring semester of first grade
Infectious Disease Epidemiology	M	A	S	2	A30 B20 C25 D25	GIMPH (Public Health Division)	Spring semester of first grade (Class A)
Infectious Disease Epidemiology	M	A	S	2	A40 B20 C20 D20	GIMPH	Spring semester of first grade (Class B) * There are Class A and B. Class B is taught in English.

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	1	2	3	4			
Applied Epidemiology	M	A	S	2	A20 B30 C20 D30	GIMPH (Public Health Division)	Spring semester of first grade (Class A)
Applied Epidemiology	M	A	S	2	A20 B30 C20 D30	GIMPH	Spring semester of first grade (Class B) * There are Class A and B. Class B is taught in English.
Analytical Methods in Sero-epidemiology	M	A	S	2	A25 B25 C25 D25	GIMPH (Public Health Division)	Spring semester of first grade
Medical Biostatistics	M	A	S	2	A25 B25 C25 D25	GIMPH (Public Health Division)	Fall semester of first grade
Preventive Medicine	M	A	S	2	A30 B20 C25 D25	GIMPH (Public Health Division)	Fall semester of first grade
Emerging Infectious Diseases in Humans and Animals	M	A	S	2	A30 B20 C25 D25	GIMPH (Public Health Division)	Fall semester of first grade * Distance learning courses.
Emerging Infectious Diseases in Humans and Animals	M	A	S	2	A40 B20 C20 D20	GIMPH	Fall semester of first grade * There are Class A and B. Class B is taught in English.

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	1	2	3	4			
Advanced Medical Biostatistics	M	A	S	2	A25 B25 C25 D25	GIMPH (Public Health Division)	Spring semester of first grade
Diagnostic in Meat Hygiene	M	A	S	2	A20 B30 C25 D25	GIMPH (Public Health Division)	Spring semester of first grade
The Principle and Practice of Molecular Diagnostic Techniques	M	AB	S	2	A20 B30 C30 D20	GIMPH (Public Health Division)	Fall semester of first grade * 1 credit for lecture and 1 credit for internship.
Seminar in Veterinary Pharmacology	M	A	Y	4	A30 B20 C25 D25	Dept. of Veterinary Medicine	First grade
Special Topics in Laboratory Animal Science	M	A	S	3	A20 B30 C25 D25	Dept. of Veterinary Medicine	Fall semester of first grade
Special Topics in Meat Hygiene	M	A	S	2	A30 B20 C25 D25	Dept. of Veterinary Medicine	Fall semester of first grade
Medical Statistics and Experimental Design	M	AB	S	2	A20 B30 C25 D25	Dept. of Veterinary Medicine	Fall semester of first grade * 1 credit for lecture and 1 credit for internship.
Molecular Mechanisms of Bacterial Pathogenesis	M	A	S	2	A30 B30 C20 D20	Dept. of Veterinary Medicine	Spring semester of first grade *Prerequisites: Veterinary Microbiology

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Special Topics on Comparative Medicine	M	A	S	2	A25 B20 C30 D25	Dept. of Veterinary Medicine	Spring semester of first grade
Avian Pathology	M	A	S	2	A30 B30 C10 D30	Dept. of Veterinary Medicine	Spring semester of first grade
Advanced Microbiology	M	A	Y	6	A40 B15 C20 D25	GIMPH (Microbiology Division)	First grade
WTO (II)	M	A	S	3	A30 B20 C25 D25	Graduate Institute of International Politics	Spring semester of first grade
Research in Veterinary Public Health (II)	M	C	Y	4	A20 B30 C25 D25	GIMPH (Public Health Division)	Second grade
Prevention of Animal Husbandry Pollution	M	A	S	2	A20 B30 C25 D25	GIMPH (Public Health Division)	Fall semester of second grade
Seminar in Animal Virology (II)	M	A	Y	2	A30 B20 C20 D30	Dept. of Veterinary Medicine	Second grade
Diagnostic Pathology	M	A	Y	4	A30 B30 C20 D20	Graduate Institute of Veterinary Pathobiology	First grade
Special Topics in Animal Pharmacology	M	A	Y	2	A25 B25 C25 D25	Dept. of Veterinary Medicine	Second grade

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Research Methods in Public Health (I)	M	B	Y	2	A30 B20 C20 D30	GIMPH (Public Health Division)	First grade
Research Methods in Public Health (II)	M	B	Y	2	A30 B20 C20 D30	GIMPH (Public Health Division)	Second grade
Fundamental Microbiology	M	A	S	2	A40 B40 C10 D10	GIMPH	Spring semester of first grade *In English

The English version is provided for reference only.
In case of any discrepancies between the English and Chinese versions, the Chinese version shall prevail.

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