



Republic of the Philippines
OFFICE OF THE PRESIDENT
COMMISSION ON HIGHER EDUCATION

CHED MEMORANDUM ORDER (CMO)

No. 15

Series 2007

**SUBJECT: POLICIES STANDARDS AND GUIDELINES FOR DOCTOR IN VETERINARY
MEDICINE (DVM) PROGRAM**

In accordance with the pertinent provision of Republic Act (RA) No. 7722, otherwise known as the "Higher Education Act of 1994," and by virtue of Resolution No. 045-2007 of the Commission *en banc* dated January 22, 2007 and for the purpose of rationalizing the undergraduate veterinary medicine education in the country with the end view of keeping at apace with the demands of global competitiveness, the following Policies, Standards and Guidelines (PSG) are hereby adopted and promulgated by the Commission.

ARTICLE I

INTRODUCTION

Section 1. Rationale and Background

The science and practice of veterinary medicine has developed into a complex discipline that involves, among others, the varied aspects of basic animal biology, animal agriculture and medicine, wildlife medicine, aquatic medicine, companion animal medicine, food hygiene, biotechnology, and public health. The *Organization Internationale des Epizooties* (OIE) has identified more than 33 areas of employment in which a Doctor of Veterinary Medicine can engage. These areas are listed under Article III Section 3 (2).

The Filipino veterinarian, as a member of the global community of animal health professionals, should no longer be dealing with only domestic concerns in animal production and health, but also with those affecting the world animal population as a whole. The end of the Cold War era gave way to new age of globalization that quite literally removed the "walls" separating nations. Technological advancements in communication and transportation enable fast travel and freer trade of live animals and animal products across international borders. This means, for instance, that animals affected with "mad cow disease" in Europe or with bird flu in China could have serious impact on the Philippine animal industry and public health. While many important animal diseases have been successfully eliminated, new ones are emerging and re-emerging including those affecting aquatic animal species with greater impact on animal and human population.

In the face of all these development, the Filipino veterinarian must constantly update professional knowledge and skills, be capable of carrying out his defined duties of safeguarding animal health, public health, and the environment. He must also be able to effectively communicate with international colleagues on matters of animal disease treatment, prevention, and control.

At present there are 20 schools of veterinary medicine in the Philippines, and each one must satisfy a set minimum standard of quality to be able to graduate competent and globally competitive veterinarians; hence, this common policies and standard for the Doctor of Veterinary Medicine Program.

ARTICLE II

AUTHORITY TO OPERATE

Only institutions of higher learning shall operate the Doctor of Veterinary Medicine (DVM) program with proper authority granted by the Commission on Higher Education (CHED) and by the respective Boards in case of chartered State Universities and Colleges (SUCs) and Local Universities and Colleges (LUCs).

ARTICLE III

PROGRAM SPECIFICATIONS

Section 2. Degree – Doctor of Veterinary Medicine

Section 3. Program description

3.1 Objective

To educate and produce veterinarian graduates with knowledge and professional skills to be able to carry out the duties of safeguarding animal health, public health, and the environment, and to be capable of utilizing effectively the tools of communication in the pursuit of further knowledge and in information dissemination of such in both local and international setting.

3.2 Specific professions/careers/occupations or trades that the graduates of these programs may go into:

- | | |
|----------------------------------|--------------------------------------|
| 1. disease control | 18. food inspection |
| 2. exotic diseases | 19. food hygiene |
| 3. epidemiology | 20. veterinary medicine |
| 4. quarantine | 21. environmental protection |
| 5. economics | 22. consumer protection |
| 6. livestock and animal products | 23. laboratories |
| 7. import animal production | 24. nutrition |
| 8. artificial breeding | 25. parasitology |
| 9. livestock marketing | 26. publications |
| 10. international cooperation | 27. teaching |
| 11. aquaculture | 28. clinical health care |
| 12. wildlife | 29. professional organizations |
| 13. zoos | 30. livestock industry organizations |
| 14. laboratory animals | 31. legislation |
| 15. animal welfare | 32. administration |
| 16. zoonoses | 33. research and development |
| 17. food technologist | |

ARTICLE IV

COMPETENCY STANDARDS

(Competency Standards for DVM program – See ATTACHMENT A)

ARTICLE V. CURRICULUM

Section 4. Curriculum description

The program for the degree of Doctor of Veterinary Medicine (DVM) should be a six-year course consisting of a 2-year preparatory veterinary medicine curriculum including general education courses and a 4-year professional veterinary medicine curriculum with a minimum total of 232 units. There should be a minimum of 4,500 class hours (i. e. lecture, laboratory and field of practice), excluding those for the 2-year preparatory veterinary medicine program. The courses in the curriculum should include the following areas:

- 4.1 Two-year preparatory veterinary medicine including general education courses – not less than 73 units
- 4.2 Basic Animal Sciences – not less than 23 units
- 4.3 Veterinary Medical Sciences – not less than 136 units consisting of pre-clinical and clinical course.

Each course should have a syllabus. In addition, each laboratory course should have a laboratory manual or guide.

Section 5 Curriculum outline

5.1 Two-year preparatory veterinary medicine including General Education (GE) courses: 73

<u>Courses</u>	<u>Units</u>
English	6
Filipino	6
Social Sciences	12*
General Inorganic Chemistry	4
General Organic Chemistry	4
Biochemistry	3
Zoology	5
Botany	3
Humanities	3
Life and Works of Rizal	3
Mathematics	6
Computer Science	3
Philosophy	3
Physics	3
Principles of Management	3
Electives	6**

* May consist of subjects such as Political Science, Psychology, Anthropology, Economics, History and the like provided that the following topics are taken up in appropriate subjects: Taxation and Agrarian Reform, Philippine Constitution and Population Education.

** Principles of Accounting, Writing of Scientific Paper, Agribusiness, Sociology, Statistics for Biological Sciences, Animal Ecology, Animal Welfare, Introduction to Molecular Biology, Principles of Ecology and other courses consistent with the above and the mission and vision of the college.

5.2 Basic Animal Science Courses: 23

<u>Courses</u>	<u>Units</u>
Principles of Animal and Economics Production	3
Principles of Animal Nutrition	3
Principles of Breeding and Genetics	3
Poultry Production and Flock Health Mgt.	3
Swine Production and Health Mgt.	3
Ruminant Production and Health Mgt.	3
Equine Production and Health Management	3
Elective (any of the following):	2
• Aquaculture	
• Farm Structures	
• Biology and Husbandry of Lab. Animals	
• Exotic Animal	

5.3 Veterinary Medical Science Courses: 136

<u>Courses</u>	<u>Units</u>
Veterinary Anatomy	15
Gross Anatomy 1 and 2	8
Embryology	3
Histology	4
Veterinary Microbiology	12
General Microbiology	4
Fundamentals of Immunology	3
Bacteriology and Mycology	3
Virology	2
Veterinary Pathology	12
Veterinary Pathology 1	3
Veterinary Pathology 2	4
Clinical Pathology	3
Elective	2
• Special Pathology	
• Surgical Pathology	
• Toxicology	
• Nutritional Pathology	
• Fish Pathology	
Veterinary Public Health	8
Epidemiology	3
Zoonoses	2
Food Hygiene	3
Veterinary Physiology	11
General Physiology 1	4
Systemic Physiology	4
Reproductive Physiology/Endocrinology	3
Veterinary Parasitology	8
Entomology and Protozoology	4
Helminthology	4
Veterinary Pharmacology	8
Basic Pharmacology	4
Clinical Pharmacology	4

Veterinary Medicine		20
General Principles of Vet. Med.	2	
Canine and Feline Medicine	4	
Ruminant Medicine	2	
Equine Medicine	2	
Poultry Medicine	2	
Swine Medicine	2	
Theriogenology	2	
Jurisprudence, Ethics and Economics And Business Methods	2	
Aquatic, Wildlife and Exotic Medicine	2	
Veterinary Surgery		12
Principles of Surgery	3	
Principles of [Elementary] Radiology/ Endoscopy/ Ultrasonography	3	
Small Animal Surgery	3	
Large Animal Surgery	3	
Veterinary Clinics (Diagnostics and Extension)		26
Clinical Orientation 1	2	
Clinical Orientation 2	2	
Clinicopathological Conference	2	
Clinics 1 (Internship)	6	
Clinics 2 (Field Experience)	14	
Thesis Work		4
Thesis 1	2	
Thesis 2	2	

5.4 Sum total of units of the curriculum

Two-year preparatory veterinary medicine including General Education	73
Basic Animal Science	23
Veterinary Medical Science Courses	136
Total	= 232

Section 6 Sample program of study

Sample Curriculum Pre-Veterinary Medicine Curriculum (2-Years)

FIRST YEAR

First Semester Subject	Units	No. of Hours		
		Lec	Lab	Total
English 1 - Communication Skills I	3	3	0	3
Math I - College Algebra	3	3	0	3
Zoology - Fundamentals of Zoology	5	3	6	9
Botany - Veterinary Botany	3	2	3	5
Filipino 1 - Komunikasyon sa Filipino	3	3	0	3
Social Science 1*	3	3	0	3
NSTP	(3)			(3)
P. E. 1	(2)			(2)
Total	19	17	9	26

Second Semester	Units	No. of Hours		
Subject		Lec	Lab	Total
English II - Communication Skills 2	3	3	0	3
Filipino II - Panitikang Filipino	3	3	0	3
Chem. I - Inorganic Chemistry	4	3	6	9
Physics I - Introductory Physics	3	2	3	5
Social Science 2*	3	3	0	3
Math II - Introductory Statistics	3	2	0	3
NSTP	(3)			(3)
P. E. 2	(2)			(2)
Total	19	16	9	26

SECOND YEAR

First Semester	Units	No. of Hours		
Subject		Lec	Lab	Total
Social Sciences 3*	3	3	0	3
Chem. II - Organic Chemistry	4	3	6	9
Philosophy I - Philosophy of Man	3	3	0	3
Elective 1**	3	3	0	3
Elective 2**	3	3	0	3
P. E 3	(2)			
Total	16	15	6	21

Second Semester	Units	No. of Hours		
Subject		Lec	Lab	Total
Social Sciences 4	3	3	0	3
Biochemistry - Gen. Biochemistry	3	3	6	9
Computer Science I -Intro. to Computer Science	3	2	3	5
Humanities - Art, Man and Society	3	3	0	3
Principles of Management	3	3	0	3
Life and Works of Rizal	<u>3</u>	<u>3</u>	<u>0</u>	<u>3</u>
P. E 4	(2)			
Total	18	17	9	26

* May consist of subjects such as Political Science, Psychology, Anthropology, Economics, History and the like provided that the following topics are taken up in appropriate subjects: Taxation and Agrarian Reform, Philippine Constitution and Population Education.

** Elective courses can be chosen from any of the following subjects:
Principles of Accounting, Writing of Scientific Paper, Statistics for Biological Sciences, Agribusiness, Sociology, Animal Ecology, Animal Welfare, Introduction to Molecular Biology, Principles of Ecology, Principles and Methods of Teaching

Professional Veterinary Medicine Curriculum Leading to the
Degree of Doctor of Veterinary Medicine (4 Years)

FIRST YEAR

First Semester	Units	No. of Hours		
Subject		Lec	Lab	Total
Principles of Animal and Economic Production	3	3	0	3
Principles of Breeding and Genetics	3	3	0	3
Gross Anatomy 1	4	2	6	8
Embryology	3	2	3	5
General Physiology	4	2	6	8
Total	17	12	15	27

Second Semester	Units	No. of Hours		
Subject		Lec	Lab	Total
Swine Production and Health Mgt.	3	2	3	5
Principles of Animal Nutrition	3	2	3	5
Gross Anatomy 2	4	2	6	8
Systemic Physiology	4	3	3	6
Histology	4	2	6	8
Exotic and Laboratory Production Management	3	3	0	3
Total	21	14	21	35

SECOND YEAR

First Semester	Units	No. of Hours		
Subject		Lec	Lab	Total
Ruminant Production and Health Mgt.	3	2	3	5
Basic Pharmacology	4	3	3	6
General Microbiology	4	3	3	6
Fundamentals of Immunology	3	3	0	3
Veterinary Pathology 1	3	2	3	5
Entomology and Protozoology	4	2	6	8
Total	21	15	18	33

Second Semester	Units	No. of Hours		
Subject		Lec	Lab	Total
Poultry Production and Flock Health Management	3	2	3	5
Equine Production and Health Mgt.	3	2	3	5
Clinical Pharmacology	4	3	3	6
Bacteriology and Mycology	3	2	3	5
Helminthology	4	2	6	8
Veterinary Pathology 2	4	3	3	6
Total	21	14	21	35

THIRD YEAR

First Semester	Units	No. of Hours		
		Lec	Lab	Total
Epidemiology	3	2	3	5
Clinical Pathology	3	2	3	5
Principles of Surgery	3	2	3	5
Reproductive Physiology/Endocrinology	3	2	3	5
Veterinary Virology	2	2	0	2
General Principles of Veterinary Medicine	2	2	0	2
Elective***	2	1	3	4
Clinical Orientation 1	2	0	6	6
Total	20	12	24	36

Second Semester	Units	No. of Hours		
		Lec	Lab	Total
Subject				
Zoonoses	2	2	0	2
Poultry Medicine	2	2	0	2
Swine Medicine	2	2	0	2
Canine and Feline Medicine	4	4	0	4
Ruminant Medicine	2	2	0	2
Equine Medicine	2	2	0	2
Small Animal Surgery	3	2	6	8
Principles of Radiology/ Endoscopy Ultrasonography	3	1	6	3
Clinical Orientation 2	2	0	6	6
Total	22	17	18	31

FOURTH YEAR

First Semester	Units	No. of Hours		
		Lec	Lab	Total
Large Animal Surgery	3	1	6	7
Food Hygiene	3	2	3	5
Jurisprudence, Ethics and Economics and Business Methods	2	2	0	2
Theriogenology	2	2	3	5
Thesis 1	2	-	-	-
Clinics 1 (Internship)	6	-	-	-
Aquatic, Wildlife and Exotic Medicine	2	2	0	2
Elective ****				
Total	20	9	30	39

***HEIs may choose from any of the following:
Aquaculture, Farm Structures, Biology and Husbandry of Laboratory and Exotic Animal.

**** HEIs may choose from any of the following:
Special Pathology, Surgical Pathology, Toxicology, Nutritional Pathology, Fish Pathology

Second Semester Subject	Units	No. of Hours		
		Lec	Lab	Total
Clinics 2 (Field Experience)	14	-	-	
Clinicopathological Conference	2	2	0	2
Thesis 2	2	0	6	6
Total	18	2	6	8

ARTICLE VI

COURSE SPECIFICATIONS

(See Attachment – B)

ARTICLE VII

OTHER REQUIREMENTS

Section 7. Program Administration

7.1 Qualification of a Dean

- a. Must have concurrent regular faculty appointment.
- b. Preferably Master's Degree holder in any Veterinary Medicine Field
- c. With at least three (3) years teaching experience and two (2) years on research and/or extension work in veterinary medicine or related field; and
- d. Must be a PRC registered Veterinarian.

7.2 Qualification of a Unit/Department Chair

- a. Must at least be a Masters Degree holder in any Veterinary Medicine discipline relevant to the department?
- b. With at least three (3) years teaching experience and two (2) years on research and/or extension in veterinary medicine field; and
- c. Must be a PRC registered Veterinarian.

Section 8. Faculty

8.1 Qualifications

An institution offering a DVM degree program should at least have a 12 regular faculty members, all of whom have an updated license with the Professional Regulatory Commission (PRC). It should have at least one instructor in each of the following fields: V. Anatomy, V. Physiology, V. Pharmacology, V. Microbiology, V. Pathology, V. Parasitology, V. Medicine, V. Virology, V. Clinics, V. Surgery, V. Public Health and Animal Science (Zootechnics). A faculty member should have a good scholastic record, good moral character and proper psychological attitudes, at least masters degree holder and / or with practical/work experience where applicable. Fifty percent of the faculty members must have at least a graduate degree in any of the field above.

There should be a ratio of one full-time faculty member for every 15 students, exclusive of the General Education teaching staff.

8.2 Load – The maximum teaching load of a regular faculty is 15 units per semester.

8.3 Faculty Development - The veterinary medicine institution must develop and implement a system of faculty development for professional advancement of the faculty members for the professional subjects.

8.4 Employment Status – At least 50% of the full-time faculty to teach the professional courses should have a permanent or regular status.

Section 9 Library

9.1 Library Personnel

1. Qualification of Head Librarian
 - a. PRC Registered librarian;
 - b. Appropriate or relevant professional training
2. Number of Staff
 - a. One full time professional librarian for every 1,000 students
 - b. A ratio of one (1) librarian to 2 staff/clerk

9.2 Book Collection

1. Professional Book Collection

The ratio of textbooks and reference books for student be 1:10 and 1:20 respectively, for each of the following areas: Macroscopic Anatomy I, Macroscopic Anatomy II, Embryology, Histology; General Microbiology, Veterinary Microbiology, Virology, Immunology, General Pathology, Systemic Pathology, Clinical Pathology, Epidemiology, Zoonoses, Food Hygiene, Veterinary Entomology and Protozoology, Veterinary Helminthology, General Physiology, Systemic Physiology, Endocrinology and Reproduction, Basic Pharmacology, Clinical Pharmacology, General Medicine, Canine and Feline Medicine, Ruminant Medicine, Equine Medicine, Poultry Medicine, Swine Medicine, Theriogenology, Jurisprudence and Ethics, Principles of Surgery, Small Animal Surgery, Large Animal Surgery, Diagnostic Imaging, Special Medicine, Principles of Animal Production, Animal Breeding, Animal Nutrition, Swine Production and Health Management, Ruminant Production and Health Management, Poultry Production and Flock Health Management, and Equine Production and Health Management.

The institution must subscribe to a minimum of 5 scientific journals dealing in any of the areas of veterinary medicine as described above.

2. Periodical Collection
 - a. Newspapers
 - b. On-line subscriptions to Journals may be credited (international and 2 local)
 - c. Magazines
 - d. Bulletins
 - e. Reviews

9.3 Library Space

- a. The library space should accommodate at least five percent (5%) of the total enrollment at any one time
- b. Library hours – 8:am to 5:00 pm during week days and half-day during Saturdays

9.4 Internet access within the library is encouraged

Section 10 Facilities and Equipment

10.1 Veterinary Schools shall own its sites to conform with CHED standards, buildings code and city/provincial ordinances.

10.2 The school site and building shall have adequate equipment, safety measures and procedures in the following:

- a. Fire escape
- b. Fire alarm systems
- c. Campus security force

10.3 Classroom – The standard classroom shall be a minimum of 30 square meters for a class of 25 students and 56 square meters for a class of 50 students. Classrooms must be well –lighted and well ventilated. They should contain the necessary equipment and furniture such as chairs, instructor’s podium, and black/white boards.

10.4 Laboratory Requirements

a. Laboratory Rooms – The veterinary medicine institution should have the following laboratory units for instruction and research activities:

1. Gross Anatomy
2. Histology-Embryology
3. Physiology-Pharmacology
4. Parasitology
5. Microbiology-Public Health
6. Pathology
7. Surgery

b. Laboratory space requirements are as follows:

1. Laboratory space of 2 square meters per student with a total area of 70 square meters.
2. The laboratory rooms should be well ventilated and well-lighted, contain the specific laboratory equipment and must be provided with adequate water supply.

c. Veterinary hospital and diagnostic laboratory

1. A veterinary teaching and diagnostic laboratory hospital must be available on the third year of the four-year professional curriculum of the DVM degree program, complete with basic facilities for small and large animals.
2. This building component should have a floor area of at least 250 square meters consisting of rooms for reception, consultation, pharmacy, diagnostic, treatment, small animal surgery, large animal surgery, kennels, isolation, x-ray, clinical pathology and necropsy. Provisions for large animal cases should be available.

10.5 Laboratory equipment

- a. Experimental farm - An experimental farm should be available for instructional and research purposes, complete with support facilities, sheds for large animals, pens for pigs, houses for poultry with the size and architectural design conforming with humane requirements with an area of not less than 10 hectares.
- b. The institution should provide the necessary audiovisual room and facilities with appropriate equipment in support of the teaching-learning process such as but not limited to video/overhead/slide projector, sound system, LCD projectors, and screens.

Section 11 Admission and Retention

11.1 Admission to the program

- a. Admission to the professional Doctor of Veterinary Medicine program requires:
 1. The completion of the following:
 - General Education Courses in pre-veterinary curriculum or completion of a baccalaureate degree or its equivalent.
 - Passing the National Veterinary Admission Test (NVAT)

11.2 Retention Program

- a. Must maintain a passing average per semester.
- b. Must be given a minimum residency of four years and a maximum of six years.

Section 12 Research and Extension

12.1 Research. Every veterinary medicine school shall encourage its faculty members and students to undertake research for the enhancement of veterinary medicine education program and training.

12.2 Extension. Every veterinary medicine school shall have extension services relevant to the veterinary medicine industry.

12.3 An institution must have a publication in the form of a journal, bulletin or newsletter where research results can be published. Such publication should be printed at least once a year.

ARTICLE VIII

TRANSITORY, REPEALING CLAUSE AND EFFECTIVITY PROVISION

Section 13. Transitory Provision

HEIs that have been granted permit or recognition for Doctor of Veterinary Medicine program are hereby given three (3) years from the date of effectivity hereof to fully comply with all the requirements as stipulated in this CMO. Compliance to these requirements shall also be required to State Universities and Colleges (SUCs) and Local Colleges and Universities (LCUs). In the event that the HEI fails to comply, it is given a non-extendable period of two (2) years to comply.

Section 14. Repealing Clause

All CHED issuances, rules or regulations or parts thereof, which are inconsistent with the provisions of this CMO are hereby repealed.

Section 15. Effectively Clause

This CMO shall take effect fifteen (15) days after its publication in the Official Gazette, or in two (2) newspaper of national circulation. This CMO shall be implemented beginning Academic Year 2008-2009.

Pasig City, Philippines, March 19, 2007.

FOR THE COMMISSION

(SIGNED) CARLITO S. PUNO, DPA
Chairman