



Program: Doctor of Veterinary Medicine
Course title: Clinical Clerkship in Aquatic Animal I
Course code: VSCL 675

Academic degree level ☒ Bachelor ☐ Graduate Diploma ☐ Master
☐ Higher Graduate Diploma ☐ Doctor
Faculty / College / Institute: Faculty of Veterinary Science
Department of Clinical Sciences and Public Health

TQF 4 Specification of Field Training Experience

Section 1 General Information

1. Course Code and Title

In Thai สพวค ๖๗๕ คลินิกปฏิบัติสัตว์น้ำ ๑
In English VSCL 675 Clinical Clerkship in Aquatic Animal I

2. Number of Credits 3 (0-9-3)

(Theory 0 hours , Lab/Practice 9 hours Self-study 3 hours / week)

3. Curriculum and Course Type

3.1 Program of Study Doctor of Veterinary Medicine

3.2 Course Type ☒ Compulsory Course ☐ Electives

4. Course Coordinator and Advisor of Field Training Experience

4.1 Course Coordinator

Asst.Prof.Dr.Wanna Sirimanapong 02-4415242 ext.1520 wanna.sir@mahidol.ac.th

Dr.Prawporn Thaijongrak 02-4415242 prawporn.tha@mahidol.ac.th

4.2 Advisor of Field Training Experience

Asst.Prof.Dr.Wanna Sirimanapong

Dr.Prawporn Thaijongrak

5. Semester/The training experience required in the curriculum

5.1 Semester 1 / Class Level or year 6

5.2 Class capacity approximately number of 80 students

6. Pre-requisite VSCL 554

7. Co-requisites -

8. Date of Preparation/Latest Revision of Field Training Experience Specification

12 July 2022



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Section 2 Aims and Objectives

1. Field Experience Goals

1. Veterinary skill practice in aquatic animals; diagnosis, treatment, and prevention in aquatic medicine
2. Explain management and good aquaculture practices for aquatic animal in the aquatic animal practice farm
3. Explain pathogenesis, diagnosis, treatment, and prevention of aquatic diseases
4. Integrate the advantages and disadvantages in aquatic animal practice farm management and solve the problem, mismanagement, water quality and aquatic animal diseases etc.

2. Objectives of Course Development/Revision Field Experience Course

2.1 Course Objectives

This course aims to provide students with an understanding of aquatic diseases and veterinary skill practice in aquatic animals leading to diagnosis, treatment, and control of diseases in aquatic animal practice farm

2.2 Course-level Learning Outcomes: CLOs

On completion of the course, the students will be able to 5 CLOs

1. CLO1 Analyze aquaculture management related to aquatic animal health in training center
2. CLO2 Explain pathogenesis, diagnosis, treatment, and prevention of common diseases in aquatic animal farm
3. CLO3 Explain aquaculture health management related to improve the productivity of aquaculture industries
4. CLO4 Veterinary skill practice in basis aquatic medicine
5. CLO5 Explain the problem solving in diseases and mismanagement in aquatic animal



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Section 3 Development of the expected learning outcomes

1. A brief summary of the knowledge or skills expected to develop in students; the course-level expected learning outcomes (CLOs)

On completion of the course, students will be able to:

- CLO1 Analyze aquaculture management related to aquatic animal health in training center
- CLO2 Explain pathogenesis, diagnosis, treatment, and prevention of common diseases in aquatic animal farm
- CLO3 Explain aquaculture health management related to improve the productivity of aquaculture industries
- CLO4 Veterinary skill practice in basis aquatic medicine
- CLO5 Explain the problem solving in diseases and mismanagement in aquatic animal

2. How to organize learning experiences to develop the knowledge or skills stated in number 1 and how to measure the learning outcomes

CLOs	Teaching and learning experience management					Learning outcomes measurements			
	Internship in hospital	Practice in farm	Practice in fish market	Practice in aquatic feed mill	Clinical skill practice	MCQ/ practice exam	Group work	Individual work presentation	Rubrics Scoring
CLO1 Analyze aquaculture management related to aquatic animal health in training center		X	X			X	X	X	10
CLO2 Explain pathogenesis, diagnosis, treatment, and prevention		X	X		X		X	X	10



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of common diseases in aquatic animal farm									
CLO3 Explain aquaculture health management related to improve the productivity of aquaculture industries		X	X	X	X		X	X	10
CLO4 Veterinary skill practice in basis aquatic medicine	X			X	X	X	X	X	10
CLO5 Explain the problem solving in diseases and mismanagement in aquatic animal	X	X	X	X	X		X	X	10

Section 4 Description and Implementation

1. Course Description

ทักษะปฏิบัติด้านเวชศาสตร์สัตว์น้ำ การจัดการน้ำและดิน การเพาะขยายพันธุ์สัตว์น้ำ การบริหารยา การจัดการทางด้านโภชนาการ การชันสูตรโรค การรักษา

Clinical practices in aquatic animals, soil, and water quality management; aquatic animal propagation, drug administration, nutritional management, disease investigation and treatment

2. Student Activity

- 2.1 Perform duties as assigned by the supervised veterinarians
- 2.2 Practice skills according to the topics specified in the internship notebook.
- 2.3 Analyze the causes and solutions of animal production, diseases, or case studies encountered during the internship.
- 2.4 Learn and practice working with others in the workplace where students take internships.



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3. Reports or Assignments

Assignment	Submission date
-Practice Report - Case study report/ including problem solving methods used during the practice -Oral presentation with the abilities to use ICT media	At the end of each clinical practice

4. Monitoring of the Student Learning Outcome in Field Training Experience/students' job training at an establishment

- 4.1 Attend the student's presentation
- 4.2 Examine the students' report
- 4.3 Site visit or make phone calls to and inquire about students' information during the internship
- 4.4 Contact directly the mentor veterinarians at the field training places

5. Duties and Responsibilities of the Field Mentor at the Field Training Activities/ a job training

- 5.1 Plan activities for developing students' skills
- 5.2 Provide advice to students about the rules, regulations, practices, and duties of the field-mentor veterinarians.
- 5.3 Participate in the assessment of the training using the criteria as determined by each program

6. Duties and Responsibilities of Advisor /Field Supervisor

- 6.1 Coordinate and participate in the planning for the students' practice with the field-mentor veterinarians of each place
- 6.2 Plan to provide student advisory to assess and give advice on the field practice activities
- 6.3 Evaluate the students after completing the field practice



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7. Preparation in Guiding and Assisting Students

- 7.1 Provide clarification of the field practice plan and supporting documents
- 7.2 Assign tasks with clarification of the assignment's details and specify the submission date
- 7.3 Inform students the contact information to approach for advisory or assistance

8. Facilities and Support Needed in the Field Training/ on the Job

- 8.1 Provide students with a secure student accommodation during the field practice
- 8.2 Provide students with meals during the field practices

Section 5 Planning and Preparation

1. Selection of Field experience

- 1.1 It is an establishment related to animal production and processing or the business of producing food of animal origin.
- 1.2 It should be a business/organization that is certified for standardization by government agencies.
- 1.3 It should be located where it is secured and convenient to travel.
- 1.4 There should be a veterinarian or academic supervising the student's internship.

2. Student Preparation

- 2.1 Clarification of the training program and recommending practices that should and should not be made known to students
- 2.2 Assign tasks, clarify the details of the work and the submission deadline
- 2.3 Test/review knowledge on topics necessary for the practice, such as zoonotic diseases, epidemiology, food safety systems and standards, and disease investigation.
- 2.4 Test/review skills needed for students to take the practice, such as sample collecting for laboratory tests and production quality inspection according to the food safety and animal welfare principles.

3. Advisor / Field Supervisor Preparation



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Working altogether to determine the objectives expected from the field practice, the learning outcomes that wanted to emphasize, practice guidelines, and assessment methods

4. Preparation of Mentor at field experience places

- 4.1 Clarify the objectives that students should acquire during the field practice to the mentor veterinarians or the field-practice supervisors
- 4.2 Inform the mentor veterinarians or the field-practice supervisors of the establishment of the topics and assessment criteria students should acquire during the field practice
- 4.3 Inform the contact channels/information to approach the course coordinators

5. Risk Management

- 5.1 Select an establishment or a reliable agency located in the area that is convenient for transportation and safe for students to take the field practice
- 5.2 Arrange a shuttle bus/ transportation for students between the Faculty of Veterinary Science, Mahidol University, and the practice sites.
- 5.3 Arrange accommodation by coordinating with the responsible personnel of the establishment
- 5.5 Contact students during the practice through various channels and inform students of the contact information to reach the advisors in case of emergency or acquire assistance
- 5.6 Liaise with the field mentor veterinarians and field supervisors during the students' field practice

Section 6 Student Assessment



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1. Assessment Criteria

Evaluation Method	Weight (Percentage)
Veterinary skill practice assessment	70
Practice exams	20
Behavior assessment in group work	10
Total	100

2. Student Performance Evaluation Process

2.1 Measurement and Evaluation of learning achievement

A. Formative Assessment

- 1) Assessment of the field practice results
- 2) Assessment from the case study report

B. Summative Assessment

(1) Tool and weight for measurement and evaluation

Learning Outcomes	Evaluation Method*				Weight (Percentage)
	MCQ/practice exam	Group work	Individual work presentation	Rubrics Scoring	
CLO1 Analyze aquaculture management related to aquatic animal health in training center	X	X	X	10	20
CLO2 Explain pathogenesis, diagnosis, treatment, and prevention of common diseases in aquatic animal farm		X	X	10	20



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CLO3 Explain aquaculture health management related to improve the productivity of aquaculture industries		X	X	10	20
CLO4 Veterinary skill practice in basis aquatic medicine	X	X	X	10	20
CLO5 Explain the problem solving in diseases and mismanagement in aquatic animal		X	X	10	20
Total					100

(2) Measurement and evaluation

According the MUVS' measurement and evaluation conditions, either it is the criteria or norm-reference used to assess the students' performance, the assessment results will be assigned as grading symbols: A, B+, B, C+, C, D+, D, and F. Students should receive at least the 'D' grade to pass the course.

(3) Re-examination (if the course allows any.)

In case that students received an 'F' grade, the course coordinator and the program's Teaching and Learning Development Committee should, altogether, agreed to allow the students to take the re-examination or extra-course work to pass the course with the following conditions. For the course with the mean score is higher than 75.00 and the minimum score is not less than 45.00. Students must receive the score higher than 47.50 to take to re-examination or extra-course work.



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For the course with the mean score between 60.00 – 74.99, students must receive the score higher than 40.00. However, when the mean score is less than 60.00, students, then, should receive the score higher than 40.00 in order to take the re-examination or extra-course work. Once students took the re-examination (extra-course work) and the course coordinator had considered the students' re-examination/course work to pass the criteria, then the students will receive the 'D' grade. While waiting for the re-examination or extra-course work result, the students' score should be indicated as 'I' grade.

3. Responsibilities of the Field Training Mentor in Student Evaluation

Evaluation Method	Weight (Percentage)
Veterinary skill practice assessment	10

4. Responsibilities of the Faculty in Charge of Field Training in Student Evaluation

Evaluation Method	Weight (Percentage)
Minimum requirement book	5
Clinical clerkship in aquatic animal book and individual presentation	10
Oral examination	10
Veterinary skill practice assessment	40
Case report & VDO	10
Grand round presentation	5
Practice exams	10

5. Summary of Evaluation Diversification

Small group meetings with the field mentor veterinarians and field practice supervisors for further discussion and to conclude the assessment result.

6. Students' Appeals

Should the students have any suspicion or appeals to the teaching and learning activities and the grade assessment, students could make the appeal by filling in the form at MUVS' Academic Affairs. The appeal will be proposed to the course coordinator to consider the request.



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If the appeal could not be addressed at this point, it will be further process by the program's Teaching and Learning Development Committee. In case that the committee suggested further investigation should be done, the appeal will be purposed to the faculty's appealing committee to address the issue.

Appendix

Relations between the course and the program

Table 1 Relations between the course and the PLOs

Course Name Clinical Clerkship in Aquatic Animal I (Course Code) VSCL 675	PLOs							
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
	M	P	P					

Table 2 Relations between CLOs and PLOs

(Course Code) VSCL675	PLOs							
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
CLO1 Analyze aquaculture management related to aquatic animal health in training center			3.1 3.2					
CLO2 Explain pathogenesis, diagnosis, treatment and prevention of common diseases in aquatic animal farm	1.1 1.2		3.1 3.2					
CLO3 Explain aquaculture health management related to improve the productivity of aquaculture industries			3.1 3.2					
CLO4 Veterinary skill practice in basis aquatic medicine			2.1 2.5					
CLO5 Explain the problem solving in diseases and mismanagement in aquatic animal			2.1 2.5 3.1 3.2					



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