

# VM4202: AQUATIC VETERINARY MEDICINE

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## Effective Term

Semester B 2025/26

## Part I Course Overview

### Course Title

Aquatic Veterinary Medicine

### Subject Code

VM - Jockey Club College of Veterinary Medicine and Life Sciences

### Course Number

4202

### Academic Unit

Infectious Diseases and Public Health (PH)

### College/School

Jockey Club College of Veterinary Medicine and Life Sciences (VM)

### Course Duration

One Semester

### Credit Units

2

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

Completion of Year 4 courses with C grade or above

### Precursors

Nil

### Equivalent Courses

Nil

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

This course will build on the previous aquaculture and aquatic animal health course (VM2106). It will focus on diagnostic and treatments used for fish diseases, which will prepare student for the clinical year rotation in aquatic animal medicine.

The main viral, bacterial, parasitic, fungal, and environmental diseases of fish species will be presented using a case-based problem teaching approach. Students will learn how to treat and prevent these diseases. Other topics covered will include legislation, regulations, and policies on aquatic animal veterinary practice, as well as current issues on aquatic animal welfare.

### Course Intended Learning Outcomes (CILOs)

| CILOs | Weighting (if app.)   | DEC-A1 | DEC-A2 | DEC-A3 |
|-------|---|--------|--------|--------|
| 1     | Obtain and analyze medical histories to determine appropriate diagnostic tests for fish cases | x      | x      |        |
| 2     | Formulate diagnoses based on the interpretation of diagnostic test results from fish cases    | x      | x      |        |
| 3     | Recommend appropriate treatments, including drug dosages, for common diseases of fish cases   | x      | x      |        |
| 4     | Develop prevention strategies for common diseases of fish                                     | x      |        |        |
| 5     | Discuss the laws, regulations, and policies that impact aquatic animal veterinary practice    | x      |        |        |
| 6     | Demonstrate integration of the principles of veterinary case management                       | x      | x      | x      |

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

#### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

### Learning and Teaching Activities (LTAs)

| LTAs | Brief Description        | CILO No.   | Hours/week (if applicable) |                                 |
|------|--------------------------|--|----------------------------|---------------------------------|
| 1    | Lectures                 | Students will participate in lectures that provide aquatic animal medicine principles and case studies | 1, 2, 3, 4                 | 3 hrs / wk for 8 weeks          |
| 2    | Case simulation exercise | Team based learning exercise   | 1, 2, 3, 4, 5, 6           | 2 hour case simulation exercise |

### Assessment Tasks / Activities (ATs)

|   | ATs             | CILO No.   | Weighting (%) | Remarks ("-" for nil entry)                    | Allow Use of GenAI? |
|---|-----------------|------------|---------------|--|---------------------|
| 1 | Midterm exam    | 1, 2, 3, 4 | 30            | Written test                                   | No                  |
| 2 | Case simulation | 1, 2, 3, 4 | 20            | computer interaction exercise and presentation | Yes                 |

**Continuous Assessment (%)**

50

**Examination (%)**

50

**Examination Duration (Hours)**

2

**Assessment Rubrics (AR)****Assessment Task**

1. Midterm Exam

**Criterion**

Students will demonstrate their knowledge of the material covered in the classroom on aquatic animal medicine by communicating it effectively in written format .

**Excellent (A+, A, A-)**

Students achieve an 92% or greater on the examination of the class.

**Good (B+, B, B-)**

Students achieve a 61% or greater on the examination of the class.

**Fair (C+, C, C-)**

Students achieve a 50% or greater on the examination of the class. (C letter grade is at least 50% or greater). See additional information for AR regarding mark range below, as in the BVM programme only C+ and C grades are awarded.

**Marginal (D)**

Not applicable for the BVM programme.

**Failure (F)**

Students achieve less than 50% on the examination of the class and laboratory material.

**Assessment Task**

2. Case assignment

**Criterion**

Students will demonstrate their knowledge of the material covered in the classroom and laboratory sessions on aquatic animal medicine by communicating it effectively in written and oral format.

**Excellent (A+, A, A-)**

Students achieve an 92% or greater on the examination of the class.

**Good (B+, B, B-)**

Students achieve a 61% or greater on the examination of the class.

**Fair (C+, C, C-)**

Students achieve a 50% or greater on the examination of the class. (C letter grade is at least 50% or greater). See additional information for AR regarding mark range below, as in the BVM programme only C+ and C grades are awarded.

**Marginal (D)**

Not applicable for the BVM programme.

**Failure (F)**

Students achieve less than 50% on the examination of the class and laboratory material.

**Additional Information for AR****Mark Range**

The following is the mark range for each letter grade that must be used for assessment of any examinations or coursework of BVM courses (VM- and GE-coded) offered by PH and VCS.

| Letter Grade | Mark Range | Letter Grade | Mark Range |
|--------------|------------|--------------|------------|
| A+           | ≥92%       | C+           | 54-60.99%  |
| A            | 87-91.99%  | C            | 50-53.99%  |
| A-           | 82-86.99%  | F            | <50%       |
| B+           | 75-81.99%  |              |            |
| B            | 68-74.99%  |              |            |
| B-           | 61-67.99%  |              |            |

**Part III Other Information****Keyword Syllabus**

Aquatic animal medicine; treatment and prevention of fish diseases

**Reading List****Compulsory Readings**

| Title |  |
|-------|--|
| 1     | Selected reading material fish diseases assigned throughout the course |

**Additional Readings**

| Title |  |
|-------|--|
| 1     | Holmes K. and Pitham T. 2011. Manual of Koi Health 2nd. Firefly Books Inc. Buffalo, NY.                                      |
| 2     | Stoskopf, MK. Fish Medicine. 1993. WB Saunders Company, Philadelphia, Pennsylvania.  |
| 3     | Leatherland, J. F., Woo, P. T. K., & Bruno, D. W. 1995. Fish diseases and disorders (V1-3). Wallingford, Oxon, UK: CABI Pub. |
| 4     | Noga, E, J., 2014. Fish Disease Diagnosis and Treatment 2nd ed. Wiley Blackwell, Daryaganj, New Delhi.                       |