

**City University of Hong Kong
Course Syllabus**

**offered by Department of Infectious Diseases and Public Health
with effect from Semester B 2020/21**

Part I Course Overview

Course Title:	<u>Evidence Based Veterinary Medicine</u>
Course Code:	<u>VM3004</u>
Course Duration:	<u>1 semester</u>
Credit Units:	<u>3 credits</u>
Level:	<u>B3</u>
Proposed Area: <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and Humanities <input type="checkbox"/> Study of Societies, Social and Business Organisations <input type="checkbox"/> Science and Technology
Medium of Instruction:	<u>English</u>
Medium of Assessment:	<u>English</u>
Prerequisites: <i>(Course Code and Title)</i>	<u>Completion of Year 1 and Semester A of Year 2</u>
Precursors: <i>(Course Code and Title)</i>	<u>Nil</u>
Equivalent Courses: <i>(Course Code and Title)</i>	<u>Nil</u>
Exclusive Courses: <i>(Course Code and Title)</i>	<u>Nil</u>

Part II Course Details

1. Abstract

(A 150-word description about the course)

This course promotes the approach to evidence-based practice in veterinary medicine and critical evaluation of scientific literature to support clinical activities and decision making. Basic skills in critical assessment of clinical literature for use in practice will be taught including: searching the scientific literature, and critically assessing and applying information from the literature to answer clinical questions. Students will practice the concepts by conducting critical assessments of journal articles as well as answering a PICO question using a systematic literature review strategy. By the end of the course, students will be able to critically assess scientific literature and apply evidence-base thinking to answer clinical veterinary questions.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Describe a structured approach to evidence-based veterinary medicine		✓		
2.	Demonstrate an understanding of basic clinical research in order to be able to design and evaluate research studies. This includes hypothesis building, study design, sampling populations, quantifying diseases, assessment of bias in studies, diagnostic interpretation, and clinical decision making		✓	✓	
3.	Apply an understanding of the scientific research methods and of the hierarchy of evidence in order to critically review and evaluate literature			✓	
4	Understand and apply principles of clinical governance, and practise evidence-based veterinary medicine. Specifically, collect, organise, and analyse information in order to address specific veterinary problems or questions.				✓

* If weighting is assigned to CILOs, they should add up to 100%.

100%

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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 self-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.

3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.						Hours/week (if applicable)
		1	2	3	4			
Lectures	Introduction to topics	✓	✓					17 hours
Tutorials	Tutorials deepening the topic matter knowledge including critical assessments of the literature and study design			✓	✓			22 hours

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.						Weighting*	Remarks
	1	2	3	4				
Continuous assessment 100%								
Critical appraisal of the literature			✓				25%	Each student will participate in evaluation and active discussions on 5 research papers
Midterm Exam	✓	✓					40%	
Knowledge generation – answering a PICO question			✓	✓			35%	Students will work in groups to answer a PICO question
							100%	

* The weightings should add up to 100%.

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C)	Failure (F)
1. Critical appraisal of the literature	Able to review and evaluate literature and present assessment to the class	Display high competence in evaluating scientific and professional literature	Display good competence in evaluating scientific and professional literature	Display basic competence in evaluating scientific and professional literature	Display a lack competence in evaluating scientific and professional literature
2. Midterm	Understand general concepts of evidence-based veterinary medicine	Students achieve an 86% or greater on the examination of the class and laboratory material	Students achieve a 65% or greater on the examination of the class and laboratory material	Students achieve a 50% or greater on the examination of the class and laboratory material. (C letter grade is at least 50% or greater)	Students achieve less than 50% on the examination of the class and laboratory material
3. PICO question assessment and report	Able to competently draft a scientifically justified answer to a PICO question	Displays a high degree of competence for producing a scientifically-based response to a clinical PICO question	Displays a good degree of competence for producing a scientifically-based response to a clinical PICO question	Displays basic competence for producing a scientifically-based response to a clinical PICO question	Failure to produce a scientifically-based response to a clinical PICO question

Conversion table from percentage mark to letter grade for VM3004

<i>Letter Grade</i>	<i>Mark Range</i>		<i>Letter Grade</i>	<i>Mark Range</i>
<i>A+</i>	$\geq 96\%$		<i>C+</i>	$\geq 58-64\%$
<i>A</i>	$\geq 91-95\%$		<i>C</i>	$\geq 50-57\%$
<i>A-</i>	$\geq 86-90\%$		<i>F</i>	$\leq 49\%$
<i>B+</i>	$\geq 79-85\%$			
<i>B</i>	$\geq 72-78\%$			
<i>B-</i>	$\geq 65-71\%$			

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

Evidence-based veterinary medicine, Clinical research, Epidemiology, Study design, Critical appraisal of scientific literature

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	Mark Holmes & Peter Cockcroft (2003). <i>The Handbook of Evidence-Based Veterinary Medicine</i> . Blackwell Publishing.
2.	Dirk Pfeiffer (2010). <i>Veterinary Epidemiology: An Introduction</i> . Wiley-Blackwell.

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	http://knowledge.rcvs.org.uk/evidence-based-veterinary-medicine/ebvm-toolkit/
2.	http://www.ebvmllearning.org/acquire/where-to-find-the-evidence/other-sources-of-information/
3.	Richard B. Evans & Annette O'Connor. Statistics and Evidence-Based Veterinary Medicine: Answers to 21 Common Statistical Questions That Arise from Reading Scientific Manuscripts. <i>Vet Clin Small Anim</i> 37 (2007) 477-486, doi:10.1016/j.cvsm.2007.01.006
4.	Veterinary Clinics of North America: Small Animal Practice, Volume 37, Issue 3, Pages 409-616 (May 2007), Evidence-Based Veterinary Medicine, Edited by Peggy L. Schmidt, http://www.sciencedirect.com/science/journal/01955616/37/3
5.	Ian Dohoo, Wayne Martin, Henrik Stryhn (2009). <i>Veterinary Epidemiologic Research</i> . 2 nd Edition, VER Inc.