



Program: Doctor of Veterinary Medicine
Course title Research Project
Course code VSCL 607

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 3 Course Specification

Section 1 General Information

1. Course Code and Title

In Thai สพวค ๖๐๗ โครงการวิจัย
In English VSCL 607 Research Project

2. Number of Credits

6 (0-18-6)
(Theory 0 hrs. Practice 18 hrs. Self-Study 6 hrs./week)

3. Curriculum and Course Type

3.1 Curriculum Bachelor Degree Program (Thai)
3.2 Course Type Specific Course ☒ Compulsory Course ☐ Electives

4. Course Coordinator and Lecturer

4.1 Course Responsible Lecturers

4.1.1 Assoc. Prof. Kampon Kaeoket	Department of Clinical Sciences and Public Health
Telephone Number 081-655-8273	e-mail address: kampon.kae@mahidol.edu
4.1.2 Assoc. Prof. Shutipen Buranasinsup	Department of Pre-clinic and Applied Animal Science
Telephone Number 089-6104954	e-mail address: shutipen.bur@mahidol.edu

4.2 Lecturers

All lecturers of Faculty of Veterinary Science, Mahidol University

5. Semester/Class Level

5.1 Semester 1 - 2 / Class Level 6
5.2 Number of Students Allowed Approximately 80 Students

6. Pre-requisite

VSCL 406 Integrated Veterinary Research Process
VSCL 458 Laboratory Animal Medicine

7. Co-requisites

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8. Study Site Location Faculty of Veterinary Science, Mahidol University

9. Date of Preparation/Latest Revision of the Course Specifications

Day 15 Month June Year 2022

Section 2 Aims and Objectives

1. Course Goals

Organize the experienced learning that results in students having awareness of the moral and ethics in conducting of research, writing research proposal, conducting research and writing research reports in an international format for publication under the supervision of advisors. Able to present research results at academic conferences

2. Objectives of Course Development/Revision

2.1 Course Objectives

This course aims to provide knowledge and abilities as follows:

- 2.1.1 Having moral and ethics in conducting of research
- 2.1.2 Understanding the research methodology and able to conducting research
- 2.1.3 Able to analyze, criticize and conclude the results of research
- 2.1.4 Able to writing research reports in an international format for publication
- 2.1.5 Able to present the research in poster or oral format at academic conference

2.2 Course-level Learning Outcomes: CLOs

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

- 1. CLO1 Recognize in moral and ethics in conducting of research
- 2. CLO2 Explain the research methodology and able to conducting research
- 3. CLO3 Analyze, criticize and conclude the results of research
- 4. CLO4 Writing research reports in an international format for publication
- 5. CLO5 Presenting the research in poster or oral format at academic conference

Section 3 Course Description and Implementation

1. Course Description

การเขียนข้อเสนอโครงการวิจัย การทำวิจัย การเขียนเชิงวิชาการ การนำเสนอผลงานวิจัย คุณธรรมและจริยธรรมของนักวิจัย

Proposal writing, research practice, academic writing, presentations, moral and ethics of researchers

2. Number of hours per semester

Theory (hours)	Practice (hours)	Self-study (hours)
-	540	180

3. Number of Hours per Week for Individual Advice

Able to directly appointment with advisor

Section 4: 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:

1. CLO1 Recognize in moral and ethics in conducting of research
2. CLO2 Explain the research methodology and able to conducting research
3. CLO3 Analyze, criticize and conclude the results of research
4. CLO4 Writing research reports in an international format for publication
5. CLO5 Presenting the research in poster or oral format at academic conference

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				
	advisor act as role model	Prob lem base	Self stud y	experi- ence	prac- tice	presenta- tion	knowled ge	behav- ior	presenta- tion	assign- ment	prac- tice
CLO1	x							x			
CLO2	x	x	x	x	x		x		x	x	x
CLO3						x	x		x	x	
CLO4					x	x	x		x	x	
CLO5						x	x		x	x	

SECTION 5 LESSON PLAN AND EVALUATION

1. Lesson Plan

Teaching Period	Topics/Details	Number of hours		Methods: Teaching Media	Lecturer
		Theory*	Practice**		
1 - 9	Conducting research		162	Conducting research	
10	Presenting the progress of research		18	ppt	
11 - 27	Conducting research		306	Conducting research	
28	Presenting the research by poster format		18	Poster	
29 - 30	Presenting the research by oral format		36	ppt Research reports	
	Total hours of the entire semester	-	540		

2. Plan for Assessment of Expected Course-Level Learning Outcomes (CLOs)

2.1 Measurement and Evaluation of learning achievement

A. Formative Assessment

The assessment is performed during the course to measure the progress and development of students' learning by observing the behavior change and improvement of students' behavior and performance. The assessment results will be notified to the students (feedback) so that the students are constantly able to improve themselves. The assessment results are not included with the test scores at the end of the course.

B. Summative Assessment

(1) Tool and weight for measurement and evaluation

Learning Outcomes	Evaluation Method*					Weight (Percentage)
	knowledge	behavior	presentation	assignment	practice	
CLO1 Recognize in moral and ethics in conducting of research		5				5

CLO2 Explain the research methodology and able to conducting research	10		5	5	5	25
CLO3 Analyze, criticize and conclude the results of research	5		5	5		15
CLO4 Writing research reports in an international format for publication	5		5	20		30
CLO5 Presenting the research in poster or oral format at academic conference	10		10	5		25
รวม						100

(2) Measurement and evaluation

The measurement and evaluation use either the criteria-based or group-based system, according to the conditions and methods for academic results evaluation of the Faculty of Veterinary Science, Mahidol University. The grading symbols are: A, B+, B, C+, C, D+, D, and F. Students must receive a 'D' grade or above to pass the criteria.

(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.

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. Students' Appeal

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. 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.

Section 6 Teaching Resources

1. Required Texts

- 1) กัลยา วาณิชยชัย. การใช้ SPSS for windows ในการวิเคราะห์ข้อมูล (ฉบับปรับปรุง). ภาควิชาสถิติ คณะพาณิชยศาสตร์และการบัญชี จุฬาลงกรณ์มหาวิทยาลัย, 2017.
- 2) Bland, Martin. An introduction to medical statistics. Oxford University Press (UK), 2015.
- 3) Petrie, Aviva, and Paul Watson. Statistics for veterinary and animal science. John Wiley & Sons, 2013.

2. Suggested Materials

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3. Other Resources (if any)

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Section 7 Evaluation and Improvement of Course Implementation

1. Strategy for Course Effectiveness Evaluation by Students

At the end of each course, it is required for the students to assess the teaching of each instructor based on the following criteria: punctuality, good role model, application of morals and ethics for the instruction, ability to convey knowledge and encourage students to learn, giving opportunities for students to ask questions and to comment during the study.

The overall outcomes of each course will also be assessed by the students for the following issues: the instructor's knowledge and competency, the course's effectiveness, student's satisfaction with the study, and other comments from students. The evaluation is conducted through online platform.

2. Strategy for Teaching Evaluation

The instructors or the course coordinators are assigned to conduct the evaluation as follows.

2.1 the students' evaluation for the instruction and overall outcomes of the course in accordance to criteria mentioned in No. 1 – Strategy for Course Effectiveness by Students.

2.2 The instructors must perform self-assessment for the following criteria.

- (1) Appropriate time spent to prepare for the teaching.
- (2) The instructor's satisfaction with the teaching results.
- (3) Solutions or recommendations for the program's teaching improvement or self-improvement for the next class/academic year.

3. Teaching Improvement

Prior to each academic year, there are meetings/seminars for the instructors of each course to plan to improve the course's teaching and learning management based on the following information.

- (1) the students' academic performance
- (2) the students' evaluation results
- (3) the instructors' assessment results

4. Verification of Standard of Learning Outcome for the Course

The verification of the standard of the Learning Outcome for the Course is conducted by the course coordinators based on the following aspects.

1. The goals of the learning outcomes are clear and feasible.
2. The learning experience is aligned with the expected goals.
3. The learning experience encourages the students to research and practice self-learning skills.
4. The evaluation methods are appropriate to assess the expected goals and learning experience.
5. The program applied the educational theory and the results from the previous evaluation to plan for improvement.

At the end of each academic year, the course coordinators, instructors, the Program Committee, and the Teaching and Learning Development Committee will consider the assessment results and the Learning Outcome for the Course to plan for the improvement of the next academic year.

Appendix

Relations between the course and the program

Table 1 Relations between the course and the PLOs

Course Name	PLOs							
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
Research Project (Course Code) VSCL 607					P, R			

Table 2 Relations between CLOs and PLOs

(Course Code) VSCL 607	PLOs							
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
CLO1 Recognize in moral and ethics in conducting of research					5.3			
CLO2 Explain the re-search methodology and able to conducting research					5.1			
CLO3 Analyze, criticize and conclude the re-sults of research					5.2			
CLO4 Writing research reports in an interna-tional format for publi-cation								
CLO5 Presenting the re-search in poster or oral format at academic conference					5.4			