Course syllabus

Second Semester Academic Year 2025

1. Faculty of Veterinary Technology **Department:** Veterinary Nursing

2. Course code: 01603359 **Course title:** Emergency and Critical Animal Nursing

Course credit: 2 (2-0-4)

Prerequisite: None

Sec 230

Date/Time/Location Thursday 16.00 – 18.00

Room 1-401 Veterinary technology teaching and laboratory Building

3. Instructors

1.	Assoc.Prof.Dr.Nattakan	Meekhanon (NM)	Course coordinator
2.	Assoc.Prof.Dr.Metita	Sasdee (MS)	Co-Instructor
3.	Dr.Patrakit	Chongpaiboonpatana (PC)	Co-Instructor
4.	Dr.Prachya	Sukumolnan (PS)	Co-Instructor
5.	Dr.Piyanut	Fonghaem	Adjunct lecturer

4. Academic advising and consultation

Assoc.Prof.Dr.Nattakan Meekhanon

Room 729, Veterinary technology teaching and laboratory Building

Office hours: Monday-Friday 8.30 – 16.30 (appointment required)

Tel. 0-2579-8573-5 ext 616022 E-mail: cvtnkl@ku.ac.th

5. Course objectives

5.1 Students understand the methods and principles of assessing animals in emergency and critical conditions.

5.2 Students understand the principles of triaging animal patients.

5.3 Students understand key considerations in preparing equipment for emergency situations.

5.4 Students understand the principles and procedures of cardiopulmonary resuscitation (CPR).

5.5 Students understand appropriate management of animals in various emergency conditions.

6. Mapping of CLOs with Sub-PLOs

CLOs	Course learning outcomes: CLOs	Related Sub-PLOs (100%)				
		1	2	3	4	5
1	Apply the principles of assessing animals in emergency and critical conditions (20%)	0.5				
2	Apply the principles of triaging animal patients (20%)	0.5				

CLOs	Course learning outcomes: CLOs	Related Sub-PLOs (100%)				
		1	2	3	4	5
3	Prepare a list of equipment for emergency situations (20%)					1.5
4	Sequence the steps of cardiopulmonary resuscitation (CPR) (20%)	0.5				
5	Select appropriate nursing care for animals in various emergency conditions (15%)	0.5				
6	Collaborate effectively with team members to complete assigned tasks (5%)			0.1		

Remark: Program learning outcome: PLOs and SubPLOs

PLO1 Graduates capable performing veterinary nursing practices through the integration of professional nursing knowledge and clinical analytical reasoning

SubPLO1. Apply the fundamental principles, concepts, and processes of veterinary nursing and related animal health sciences.

SubPLO2. Perform veterinary nursing procedures with technical accuracy and safety.

SubPLO3. Perform veterinary nursing practices with ethical standards, responsibility, communication, and collaborative teamwork in accordance with relevant laws.

PLO2 Graduate perform duties in animal nutrition, rehabilitation, disease control and prevention

SubPLO4. Apply the principles of animal nutrition, immunology, and epidemiology to manage disease prevention, zoonoses control, and post-nursing care protocols.

PLO3 Graduate use and maintain veterinary nursing equipment and tools correctly according to academic principles

SubPLO5. Handle veterinary drugs, instruments, equipment, and medical supplies safely and accurately.

7. Course Description

Emergency, critical situations, triage, resuscitation, oxygen and fluid therapy. Monitoring of critical phases and parenteral nutrition.

8. Teaching and learning strategies

Lectures with multimedia, collaborative learning activities, Case-based learning, self-directed learning through textbooks, scientific articles, instructor handouts, and laboratory manuals, student presentations and reports.

9. Teaching materials

Computer projector, lecture handouts, slide presentations, medical equipment and supplies, canine and feline simulation models.

10. Assessment and Evaluation

10.1 Exam (84%)

1) Midterm Exam 35%

2) Final Exam 49%

10.2 Practical learning 6%

10.3 Assignment report/Responsibility/Group participant 8%

10.4 Class participation and behavior 2%

Total 100%

11. Achievement indicator

80% of students passed the course.

12. Course Evaluation

The grading criteria are in accordance with the University's academic regulations. Grades are determined using either the criterion-referenced or norm-referenced evaluation method. In the case of criterion-referenced grading, the following standard is applied:

Score 100-80	Grade A	Score 64-60	Grade C
Score 79-75	Grade B+	Score 59-55	Grade D+
Score 74-70	Grade B	Score 54-50	Grade D
Score 69-65	Grade C+	< Score 50	Grade F

13. Teaching textbooks and references

1. Textbooks relate with Veterinary emergency
2. Aronson, R.L. 2016. Small animal surgical emergencies 2nd edition, Willy Blackwell.
3. Aldridge, P. 2013. Practical emergency and critical care veterinary nursing 1st edition, Willy Blackwell.
4. Battaglia, M.A. 2007. Small animal emergency and critical care for veterinary technicians 2nd edition, Saunders Elsevier.
5. Dennis, M.M. and Joanna, B.M. 2006. Clinical Textbook for Veterinary Technicians, Elsevier Saunders.
6. King, G.L and Boag, A. 2007. BSVA Manual of Canine and Feline Emergency and Critical care 2nd edition.
7. Macintire, K.D. 2005. Manual of Small Animal Emergency and Critical Medicine 1st edition. Lippincott Williams & Wilkins, USA.
8. Margi, S. 2004. Principle and Practice of Veterinary Technology 2nd edition. Mosby.
9. Lecture's handout

14. Course Contents

Week	Date	Title	Instructor	Lesson Learning Outcomes (LLO)	Course Learning Outcomes (CLOs)	Teaching learning approaches	Assessment method
1	27 Nov 25 16.00- 18.00	Course orientation and Introduction to Nursing for Critical Animals (7%)	NM / PC	- Identify emergency and critical conditions in animals - Explain approaches to managing animal patients based on veterinary nursing principles	CLO1	Lecture teaching	Paper-based test
2	4 Dec 25 16.00- 18.00	Approach to the Emergency patient (Triage) Emergency room and Readiness for Veterinary Nurse Teamwork (7%)	PC	- Explain methods and principles for assessing animals in emergency and critical conditions for triage - Explain the preparation of equipment for emergency situations	CLO1	Lecture teaching	Paper-based test
3	11 Dec 25 16.00- 18.00	Management of Shock Fluid therapy and Nutrition support for Veterinary Nurse (7%)	PC	- Explain the management of different types of shock - Explain fluid and nutritional support for animals in emergency and critical conditions	CLO3	Lecture teaching	Paper-based test Assignment
4	18 Dec 25 16.00- 18.00	Cardiopulmonary - Cerebral Resuscitation (CPCR) (7%)	PC	- Explain the principles and procedures of	CLO4	Lecture teaching	Paper-based test Assignment

Week	Date	Title	Instructor	Lesson Learning Outcomes (LLO)	Course Learning Outcomes (CLOs)	Teaching learning approaches	Assessment method
				cardiopulmonary resuscitation (CPR) - Identify equipment used for resuscitation			
5	25 Dec 25 16.00- 18.00	- Emergency diagnostic and therapeutic procedures (7%)	PC	- Explain principles of sample collection for diagnosis - Explain assistance in performing emergency and critical procedures with veterinarians	CLO3	Lecture teaching	Paper-based test Assignment
6	1 Jan 26	Public holiday for New Year's Day					
7	8 Jan 26 16.00- 18.00	Cardiopulmonary-Cerebral Resuscitation (CPCR) (Demonstration using simulation models)	PC	- Prepare equipment for cardiopulmonary resuscitation (CPR) - Perform team-based cardiopulmonary resuscitation (CPR) following standard procedures	CLO4	Lecture teaching Perform hands-on practice	Paper-based test Practical examination
Midterm examination 10 – 18 January 2026 (Lecture 35%)							
8	22 Jan 26 16.00- 18.00	Ocular emergency management for Veterinary Nurse (7%)	MS	- Explain the assessment of ocular and vision-related emergencies in animals	CLO2	Lecture teaching	Paper-based test Assignment

Week	Date	Title	Instructor	Lesson Learning Outcomes (LLO)	Course Learning Outcomes (CLOs)	Teaching learning approaches	Assessment method
				- Identify equipment for managing ocular and vision emergencies - Explain the management of ocular and vision emergencies			
9	29 Jan 26 16.00- 18.00	Respiratory emergency management for Veterinary Nurse (7%)	NM	- Explain the assessment of respiratory emergencies - Identify equipment for managing respiratory emergencies - Select appropriate management for animals with respiratory emergencies	CLO2	Lecture teaching	Paper-based test Assignment
10	5 Feb 26 16.00- 18.00	Pediatric emergency management (7%)	NM	- Assess neonatal and pediatric emergencies in animals - Identify equipment and explain the management of neonatal and pediatric emergencies	CLO1	Lecture teaching	Paper-based test Assignment

Week	Date	Title	Instructor	Lesson Learning Outcomes (LLO)	Course Learning Outcomes (CLOs)	Teaching learning approaches	Assessment method
				- Select appropriate management for neonatal and pediatric emergencies			
11	12 Feb 26 16.00-18.00	Veterinary Nursing the acute Abdomen patient (7%)	NM	- Explain acute abdominal emergencies in animals - Identify equipment used in managing acute abdominal emergencies	CLO3	Lecture teaching	Paper-based test Assignment
12	19 Feb 26 16.00-18.00	Management of trauma, poison and toxin emergency patients for Veterinary Nurse (7%)	PF	- Explain the management of animals with severe trauma in emergency conditions - Explain the management of animals with toxic exposure in emergency conditions	CLO5	Lecture teaching	Paper-based test Assignment
13	26 Feb 26 16.00-18.00	Cardiovascular emergency management for Veterinary Nurse (7%)	PS	- Explain the assessment of patients and abnormal vital signs in cardiovascular emergencies and critical conditions - Explain the management of animals in cardiovascular emergency conditions	CLO2	Lecture teaching	Paper-based test Assignment

Week	Date	Title	Instructor	Lesson Learning Outcomes (LLO)	Course Learning Outcomes (CLOs)	Teaching learning approaches	Assessment method
14	5 Mar 26 16.00- 18.00	Monitoring for critical patients for Veterinary Nurse (7%)	PF	- Explain monitoring of clinical signs and vital signs in critically ill animals - Explain ongoing care and management for animals in various critical conditions	CLO2	Lecture teaching Case-based learning	Paper-based test Report
15	12 Mar 26 16.00- 18.00	Case based study (Team assignment)	NM	- Assess and triage animal patients in assigned case studies - Summarize required equipment for emergency and critical cases in assigned case studies - Select appropriate management for animals in various emergency conditions	CLO5	Oral presentation	Assignment
Final examination 16 –27 March 2026 (Lecture 49%)							

(Assoc.Prof.Dr.Nattakan Meekhanon)

7 November 2025