

STORYBOARD
BLENDED LEARNING COURSE DEVELOPMENT
VET 3221: Veterinary Therapeutics

Weekly units/topics	Intended unit learning outcomes	Activity where students engage with this unit outcome	Where and how is this unit outcome assessed?	Learning Resources
Unit 1: Chemotherapy Week 1:	Day 1 General principals of antimicrobial therapy	<ul style="list-style-type: none"> • Read class notes & the book • A live online chat • Join a discussion forum dedicated to the topic • Watch a movie on sensitivity test 	<ul style="list-style-type: none"> • Self-assessment quiz 	Class notes & Antimicrobial therapy in veterinary medicine (2013): edited by Steeve Giguère, John F. Prescott, Patricia M. Dowling), fifth edition, John Wiley & Sons, Inc
	Day 2- Mechanism of action of antimicrobials & β -lactam antibiotics, peptide antibiotics	<ul style="list-style-type: none"> • Read class notes & the book • Join a discussion forum dedicated to the topics • Read about protein synthesis and post a summary (half a page) in the discussion forum 	<ul style="list-style-type: none"> • Self-assessment quiz 	Class notes & Antimicrobial therapy in veterinary medicine (2013): edited by Steeve Giguère, John F. Prescott, Patricia M. Dowling), fifth edition, John Wiley & Sons, Inc
	Day-3 Lincosamides, pleuromutilins, streptogramins & macrolides	<ul style="list-style-type: none"> • Read class notes & the book • A live online chat • Join a discussion forum dedicated to the topics 	<ul style="list-style-type: none"> • Self-assessment quiz 	Class notes & Antimicrobial therapy in veterinary medicine (2013): edited by Steeve Giguère, John F. Prescott, Patricia M. Dowling), fifth edition, John Wiley & Sons, Inc
Week 2 Chemotherapy	Day 1- Aminoglycosides,	<ul style="list-style-type: none"> • Read class notes & the book • A live online chat 	<ul style="list-style-type: none"> • Self-assessment quiz 	Class notes & Antimicrobial therapy in veterinary

	tetracyclines & dosage calculation	<ul style="list-style-type: none"> Join a discussion forum dedicated to the topics Two exercises on calculating dosages 		medicine (2013): edited by Steeve Giguère, John F. Prescott, Patricia M. Dowling), fifth edition, John Wiley & Sons, Inc
	Day- 2 chlorempenicol, sulphonamides, diaminopyrimidines, fluoroquinolones	<ul style="list-style-type: none"> Read class notes & the book A live chat session Join a discussion forum dedicated to the topics 	Self-assessment quiz	Class notes & Antimicrobial therapy in veterinary medicine (2013): edited by Steeve Giguère, John F. Prescott, Patricia M. Dowling), fifth edition, John Wiley & Sons, Inc
	Day 3 miscellaneous antimicrobials	<ul style="list-style-type: none"> Read the book Join a discussion forum dedicated to the topics Group individual report 	<ul style="list-style-type: none"> Graded quiz for weeks 1 and 2 topics, Individual report 	Antimicrobial therapy in veterinary medicine (2013): edited by Steeve Giguère, John F. Prescott, Patricia M. Dowling), fifth edition, John Wiley & Sons, Inc
Week 3	Day 1- Alternatives to antimicrobials	<ul style="list-style-type: none"> Read the paper and the book & write a 1-2 pages reports A live chat session Join a discussion forum dedicated to the topics 	Self-assessment quiz	Antimicrobial therapy in veterinary medicine (2013): edited by Steeve Giguère, John F. Prescott, Patricia M. Dowling), fifth edition, John Wiley & Sons, Inc & https://doi.org/10.1186/s13567-018-0561-7
	Day 2- Antifungals	<ul style="list-style-type: none"> Read the book Group assignment Join a discussion forum dedicated to the topics 	<ul style="list-style-type: none"> Group report Presentation 	Class notes

	Day 3- Antibiotic resistance & its management	<ul style="list-style-type: none"> • Read the book • Group assignment • A live chat session • Join a discussion forum dedicated to the topics 	<ul style="list-style-type: none"> • Group report • Presentation 	<p>(1) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4378521/</p> <p>(2) Antibiotics vs. bacteria: fighting the resistance : https://www.youtube.com/watch?v=oLPAodRN1b0&feature=youtu.be</p>
Week 4	Day 1- Antivirals	<ul style="list-style-type: none"> • Read class note • Join a discussion forum dedicated to the topics 	Self-assessment quiz	Class notes
	Day 2 – Anthelmintic drugs	<ul style="list-style-type: none"> • Read the notes • Join a discussion forum dedicated to the topics • A live chat session 	Self-assessment quiz	Class notes
	Day 3 - Resistance to anthelminthics & management	<ul style="list-style-type: none"> • Group assignment • Join a discussion forum dedicated to the topic • 	<ul style="list-style-type: none"> • Group report • Presentation • Graded quiz for weeks 3 and 4 topics 	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3655236/
Week 5	Day 1 -Acaricides	<ul style="list-style-type: none"> • Read class notes • Group assignment • Join a discussion form dedicated to the topic • A live chat session 	<ul style="list-style-type: none"> • Group report • Presentation • Self-assessment quiz 	Class notes

	Day 2 - Resistance to acaricides & its management	<ul style="list-style-type: none"> • Group assignment • Join a discussion forum dedicated to the topic • 	<ul style="list-style-type: none"> • Group report • Presentation • Self-assessment quiz 	http://dx.doi.org/10.1016/j.vetpar.2014.03.006
	Day 3 - Antiprotozoan drugs & dosage calculation	<ul style="list-style-type: none"> • Read class notes • An exercise on calculating dosages will be done • Join a discussion forum dedicated to the topics 	Self-assessment quiz	Class notes
Week 6	Day 1- Antiseptics & disinfectants	<ul style="list-style-type: none"> • Read class notes • Group assignment • Join a discussion forum dedicated to the topics 	<ul style="list-style-type: none"> • Group report • Presentation 	Class notes
	Day 2 - Rational use of drugs	<ul style="list-style-type: none"> • Read class notes • Join a discussion forum dedicated to the topics • A live chat session 	Self-assessment quiz	https://www.dovepress.com/rational-drug-use-evaluation-based-on-world-health-organization-core-d-peer-reviewed-fulltext-article-DHPS
	Day 3 - Antineoplastic drugs	<ul style="list-style-type: none"> • Click the link and read about cell cycle and cancer • Read class notes • Join a discussion forum dedicated to the topics 	Graded quiz for weeks 5 and 6 topics	https://onlinelibrary.wiley.com/doi/full/10.1002/path.3022
Week 7	Day 1- Immunomodulators	<ul style="list-style-type: none"> • Read class notes • Join a discussion form dedicated to the topic • A live chat session 	Self-assessment quiz	Class notes &

	Day 2- Presentation of group assignments by students	<ul style="list-style-type: none"> Each group of students will present to their classmates The lecturer will be present Reports will be submitted at least three days before the presentation 	Reports will be graded	-
	Day 3 – Presentation of group assignments by students	<ul style="list-style-type: none"> Each group of students will present to their classmates The lecturer will be present Reports will be submitted at least three days before the presentation I 	Reports will be graded	-
Week 8	Sensitivity test	<ul style="list-style-type: none"> Attend the lab for a practical session Write individual report 	Individual Report will be graded	lab
	Sensitivity test	<ul style="list-style-type: none"> Attend the lab for a practical session Write individual report 	Individual report will be graded	lab
	CAT	-	CAT combining all the weeks	-
Component 2: Anaesthetics Week 9 Part 1: History of Anaesthesia and the various aesthetic techniques	Day 1: The history and practice of veterinary anesthesia and analgesia	Students will attend an online participative session however students will also be given a quiz at the end of the week	An online quiz (E-tivity 1) will be given at the end of the week. Students will be encouraged to contribute in all discussions by awarding points to those who contribute during online teaching and learning session. After watching the YouTube	Reading 1- Tranquilli WJ, Thurmon JC, Grimm KA. Lumb and Jones" Veterinary Anaesthesia and Analgesia. 4th edition. Iowa: Blackwell publishing, 2007. Local Anesthesia (You tube Video) https://www.youtube.com/
	Day 2: Anesthetic Techniques	Students will attend an online participation session however students will also be given a quiz at the end of the week. Student will watch You tube videos of technicians undertaking the various		

Week 9 Part 2: Pre and Peri Anaesthetic care		anesthetic techniques and later followed by discussions	video, every student will be requested to answer few questions (E-tivity 1) related to the videos.	watch?v=MoZzcWyuNk8 Regional Anesthesia/ Nerve Block https://www.youtube.com/watch?v=UtWUzkHnLTk General Anesthesia https://www.youtube.com/watch?v=5zfG7BCtvvE
	Day 3: Pre-Operative assessment	Students will attend an online participative session however they will be engaged through break out rooms during online course delivery	An online quiz (E-tivity 2) will be given at the end of the week. Students will be encouraged to contribute in all discussions by awarding points to those who contribute during online course delivery sessions	Reading 2- Guidelines to physical examination in Cats and Dogs. Brief notes by Dr Denis MAJYAMBERE of the University of Rwanda- Department of Veterinary Medicine. Reading 3- Kraus B., 2017. Anesthesia and Analgesia for the Veterinary Practitioner of Canine and Feline. ISBN: 978-0-9743262-7-6.
	Day 4: Anesthetic equipment	Students will be engaged through break out rooms during online course delivery		
	Day 5: Patient monitoring during anesthesia/ Peri-anesthetic care	Students will be engaged through break out rooms during online course delivery		
Week 10: Post aesthetic care and Introduction to analgesia and Anaesthesia	Day 1: Post- Operative Care	Students will be engaged through break out rooms and provide feedback	An online quiz (E-tivity 2) will be given at the end of the week. Students will be encouraged to contribute in all discussions by awarding points to those who contribute during online	Reading 3- Kraus B., 2017. Anesthesia and Analgesia for the Veterinary Practitioner of Canine and Feline. ISBN: 978-0-9743262-7-6

			course delivery sessions	<p>The 7 steps of PBL (Document attached)</p> <p>Evaluation form 1- Individual in-session presentation.</p> <p>Evaluation form 2- PPT presentation/ minutes submitted</p>
	Day 2: Student Groups' Assignment	Lecturer will meet and explain the exercise of group assignments and the 7 steps of PBL; and later students will meet in groups and work on assignments that will be presented to other students in the next week.	<p>Every student in the group will present on the topic assigned (E-tivity 3) to each other in groups and evaluation will be done using a rubric attached a separate sheet</p> <p>In addition, every group will submit minutes of their meetings and an overall power point presentation at the end of the session, which will be evaluated using a rubric attached as a separate sheet</p>	
	Day 3: Student Groups' Assignment	Continue self/ group work of assignments	Continue self/ group work of assignments	
Week 11 Part 1: Analgesia, sedation and other pre-medications	Day 1: Analgesia and Pain Management	Group 1 students present to other students under the lecturer's guidance	<p>Every student in the group will present on the topic assigned (E-tivity 3) to each other in groups and evaluation will be done using a rubric attached a separate sheet</p> <p>In addition, every group will submit minutes of their meetings and an overall power point presentation at</p>	<p>Reading 4- Plumb DC. Plumb's Veterinary Drug Handbook. 5th edition. Iowa: Blackwell publishing, 2005.</p> <p>Reading 3- Kraus B., 2017. Anesthesia and Analgesia for the Veterinary Practitioner of Canine and Feline. ISBN: 978-0-9743262-7-6</p>

Week 11 Part 2: Intravenous/ Inhalant Anaesthetics			the end of the session, which will be evaluated using a rubric attached as a separate sheet	
	Day 2: Pre-medication and sedation	Group 2- 4 students present to other students under the lecturer's guidance	<p>Every student in the group will present on the topic assigned (E-tivity 3) to each other in groups and evaluation will be done using a rubric attached a separate sheet</p> <p>In addition, every group will submit minutes of their meetings and an overall power point presentation at the end of the session, which will be evaluated using a rubric attached as a separate sheet</p>	
	Day 1: Intravenous anesthetics	Group 5 students present to other students under the lecturer's guidance	<p>Every student in the group will present on the topic assigned (E-tivity 3) to each other in groups and evaluation will be done using a rubric attached a separate sheet</p> <p>In addition, every group will submit minutes of their meetings and an overall</p>	<p>Reading 4- Plumb DC. Plumb's Veterinary Drug Handbook. 5th edition. Iowa: Blackwell publishing, 2005.</p> <p>Reading 5- BSAVA Manual of Canine and Feline Anesthesia and Analgesia 3rd edition 2016. ISBN 978</p>

			power point presentation at the end of the session, which will be evaluated using a rubric attached as a separate sheet	1 905319 61 9
	Day 2: Inhalant anesthetics	Group 6- 8 students present to other students under the lecturer's guidance	<p>Every student in the group will present on the topic assigned (E-tivity 3) to each other in groups and evaluation will be done using a rubric attached a separate sheet</p> <p>In addition, every group will submit minutes of their meetings and an overall power point presentation at the end of the session, which will be evaluated using a rubric attached as a separate sheet</p>	
Week 12: Neuro-Muscular Blockers and Use of anaesthetics for euthanasia in small animals and domestic birds	Day 1: Neuro-Muscular Blockers/ Local anesthetics	Group 9 students present to other students under the lecturer's guidance	<p>Every student in the group will present on the topic assigned (E-tivity 3) to each other in groups and evaluation will be done using a rubric attached a separate sheet</p> <p>In addition, every group will submit minutes of their</p>	<p>Reading 4- Plumb DC. Plumb's Veterinary Drug Handbook. 5th edition. Iowa: Blackwell publishing, 2005.</p> <p>Reading 5- BSAVA Manual of Canine and Feline Anesthesia and Analgesia 3rd edition 2016. ISBN 978</p>

			meetings and an overall power point presentation at the end of the session, which will be evaluated using a rubric attached as a separate sheet	1 905319 61 9
	Day 2: Use of anesthetics for euthanasia in small animals and Domestic birds	Group 10 students present to other students under the lecturer's guidance	<p>Every student in the group will present on the topic assigned (E-tivity 3) to each other in groups and evaluation will be done using a rubric attached a separate sheet</p> <p>In addition, every group will submit minutes of their meetings and an overall power point presentation at the end of the session, which will be evaluated using a rubric attached as a separate sheet</p>	<p>Reading 4- Plumb DC. Plumb's Veterinary Drug Handbook. 5th edition. Iowa: Blackwell publishing, 2005.</p> <p>Reading 5- BSAVA Manual of Canine and Feline Anesthesia and Analgesia 3rd edition 2016. ISBN 978 1 905319 61 9</p>
	Day 3: Course Wrap up and Evaluation	<p>All students and Lecturers will meet to wrap up the course, review if learning outcomes have been addressed and discuss how to continue improving knowledge on subject matter.</p> <p>At the end of the session, students</p>	N/A	

		will be sent a form of course evaluation by email. It should be re-sent back in 2 days.		
Week 12:	End of Trimester Exams			