Template for developing modules

NOTES ABOUT THE USE OF THIS FORM:

- *This form is designed to be completed on a computer. Cells in the table below will expand to accommodate any amount of text … but we suggest that you keep the narrative as succinct as possible!*
- *Please keep the use of formatting to a minimum. Importing formatted text onto a virtual learning platform presents challenges!*
- *This form assumes that the "unit of learning" is a module. The module, in turn, would be included in a "course" (which is not referred to here). Each module will have a series of components which have been called "units" – they may be called something different in your design (like "weeks", or "sections") and you are free to change the terminology.*
- *In the section about the authors of and contributors to the course, we have provided space for 5 co-authors (or co-contributors). If there were more than six people on the team, please add additional rows to the table.*
- *Please ensure that you use student-friendly language. So the intended learning outcomes will be framed using the word "you", and not "the student". (This may be at odds with what you understand to be "academic" language. The aim, in online and blended learning, is to use language that includes the student to the greatest extent possible.)*
- *Please note that module-level outcomes should be "overarching" outcomes onto which the unit-level outcomes map. You should have a few (maybe 4) module-level outcomes, and a very few (two or three at the most) unit-level outcomes for each unit.*
- *The unit-level template should be copied so that there is a copy of the template for EACH unit/week/section. Thus, if there are 15 units/weeks/sections in a module, you will copy the template 14 times and complete each copy for one unit/week/section.*
- *In the unit-level template, there is a space for a detailed description of student and teacher engagement with the unit. Here we would expect to see a "blow-by-blow" account of how the unit "hangs together". What happens first? And then? What resources would students need to access for each part of the unit's work? Where would they find these? Where is collaboration expected to happen? How is it scaffolded? And so on? What happens in class? What happens online? How do these elements build on each other? How long should students spend on each part of the unit?*

  *This is NOT a list of things that students (or teachers) do. It is a **detailed description** of the process.*

  *We have used a generic set of headings in the template. You are free to change the headings to suit the particular unit, but you are **not** free to ignore any of the required information.*

  *Be sure, when completing the unit-level template to contextualise the content … by which we mean that content needs to be grounded in real life – even mathematical equations need to be demonstrably linked to real life! A student needs to know **why** they are engaging with the content.*

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MODULE LEVEL TEMPLATE

Details of Module team ***(In case there are more than 3 members, add new rows)***	
Module Team Leader	Pie NTAMPAKA BVM, MVSc
Responsible for:	Facilitating Clinical biochemistry and clinical toxicology
Module Team Member	Margaret TUMUSIIME , MSc
Responsible for:	Facilitating Haematology and cytology
Module Team Member	
Responsible for:	

Course details			
Module title:	Veterinary Clinical Pathology and Toxicology		
Academic level:	Level 4 veterinary students	Number of credits:	15
Class contact time (hours):	90		
Private/online study hours:	60	Number of weeks of study:	12 weeks
Total student learning hours:	150	Number of units of study:	3

Programme(s) which might include this Module:	Veterinary medicine
Pre-requisite student abilities and knowledge:	Anatomy, physiology, histology, biochemistry, genetics, systemic pathology, pharmacology and therapeutics.
Pre-requisite (or co-requisite) modules:	N/A

Aim of the module:	The module aims at developing theoretical and practical understanding of veterinary clinical pathology and toxicology. Students will be taken through theoretical and practical concepts of veterinary clinical pathology and toxicology.
Brief description of module:	The subject will mainly cover appropriate means of collecting and processing samples for laboratory diagnosis specifically for blood, urine, faecal, skin, body exudates as well as various organ biopsies e.g. lymph nodes, liver, swellings etc. It will also cover the concepts of veterinary toxicology as well as the clinical approach of diagnosis and treatment of intoxications in domestic animals.
Intended learning outcomes:	**At the end of this module, you will be able to:** 1. Understand the concepts of clinical pathology and toxicology and their importance in veterinary medicine 2. Collect and process samples for the diagnosis of animal diseases 3. Accurately interpret laboratory findings, diagnose and prescribe appropriate therapy based on laboratory findings 4. Diagnose and prescribe appropriate treatment for the most common animal toxicoses
Indicative content:	7.3. Indicative content This module comprises three components: Haematology, Clinical Biochemistry and Veterinary Toxicology. Following is the indicative content for each of the three components. **Haematology** •Selection and submission of materials for laboratory diagnosis •Sample collection techniques •Erythrocytes -The concept of erythron -Red blood cell synthesis and destruction -Evaluation of erythron (RBC, Packed Cell Volume, Haemoglobin, Reticulocytes, RBC indices) -Erythrogram and haemogram interpretation •The leukocytes -Description of cells in peripheral blood -Kinetics and function of leukocytes -Response of leukocytes to disease -WBC enumeration, WBC differential counts and interpretation •The Platelets -Platelet production (megakaryocytopoiesis) -Platelet function -Numerical and function platelet abnormalities and their diagnosis -Coagulation mechanism and coagulation disorders -Diagnosis of bleeding disorders **Clinical Biochemistry** •Kidney function -Urinalysis -Kidney function tests •The liver -Liver function tests: indications / limitations •Clinical biochemistry of the muscle •Clinical biochemistry of the pancreas,

	•Blood chemistry -Plasma / serum proteins -Plasma /serum lipids -Carbohydrates -Water and electrolyte balance -Acid/ bases •Practical clinical biochemistry: -Colorimetric methods of analysis (blood glucose, total proteins, Urea,…) -Urinalysis **Clinical Toxicology** •General principles of veterinary toxicology -Toxicokinetics and toxicodynamics -General approach to diagnosis and treatment of intoxications •Toxicology of selected toxicants -Toxicology of insecticides -Toxicology of herbicides, fungicides and rodenticides -Biotoxins -Poisonous plants -Industrial poisoning
Form of final/summative assessment:	Presentation (10%), online quizzes (20%), CAT (20%), Final exam (50%)

Assessment of module-level learning outcomes	
Module-level learning outcome	Module assessment task
1. Understand the concepts of clinical pathology and toxicology and their importance in veterinary medicine	Do the e-tivity 1.1, e-tivity 1.2, e-tivity 1.3
2. Collect and process samples for the diagnosis of animal diseases	Do the e-tivity 2.1, e-tivity 2.2, e-tivity 2.3
3. Accurately interpret laboratory findings, diagnose and prescribe appropriate therapy based on laboratory findings	Do the e-tivity 3.1, e-tivity 3.2, e-tivity 3.3
4. Diagnose and prescribe appropriate treatment for the most common animal toxicoses	Do the e-tivity 4.1, e-tivity 4.2, e-tivity 4.3

Significant features or elements of module
The module is taught to veterinary students and will equip you with knowledge and skills that are needed to determine causes of pathological disorders occurring when an animal is still alive and treat or control them.

Student profile in the context of this module:	
What is the target group of students who would do this module?	Level 3 veterinary students
What **skills** should a *student* have **already** mastered before starting this Module?	Anatomy, physiology, histology, biochemistry, genetics, systemic pathology, pharmacology and therapeutics
What **prior knowledge** of the subject matter should a *student* have?	N/A

Tutor support:	
What **skills** and **prior knowledge** of the subject matter should *facilitators* have **already** mastered before starting to teach this Module?	Pathology, biochemistry
What **skills** do *support staff* need in order to support the delivery of this module?	ICT skills,

Quality assurance matters		
How will feedback on module be obtained from students?	Feedback will be received through filling evaluation form	
How will student feedback be used to improve module?	The feedback will be used to improve on weaknesses as the improvement will be continuous. Major changes will be made between two academic years.	
A certificate, signed by the university's Director of Teaching, Learning and Enhancement, confirming that the module meets the requirements of the UR QA rubric is attached.		Yes ☐ No ☒

Unit-level overview	**Unit/week/section**	**1.**
Topic name:	Haematology and cytology	
Aim of the topic:		
This topic covers:	•	
Intended learning outcomes:	*At the end of this **topic**, you will be able to:* 1.	

UNIT/WEEK/SECTION-LEVEL TEMPLATE

Overview of student activity:	You will be engaged through presentation, E-tivities, discussion

Constructive alignment of unit level outcomes with module level outcomes, learning activities and assessment *(Pressing <Tab> at the end of the table will provide additional rows in the table, if required.)*			
Intended unit learning outcomes:	No of module-level outcome	Activity where students engage with this outcome	Where and how is this outcome assessed?
At the end of this unit, you will be able to:			
1.	1	How engagement will be done : assignments, quiz, etc	Oral Presentation, etc
2.	1		
3.	1		
4.	1		

Detailed explanation of ALL student and teacher engagement with the unit: *(This should be presented in the order that the activities take place. So if students do work online **before** coming to the lecture, that should be shown ahead of what happens in class.* *If there is more than one opportunity for face-to-face contact, or more than one online task, there should be a separate section for each instance, and they should be presented in the template in the same order that students encounter them.)* ***Content** – such as lecture material – can EITHER be shown here OR added as **clearly identifiable** addenda to the document. If you plan to use addenda, you should ensure that these are cross-referenced in this section.)*			
Module-level outcomes addressed:			
Purpose of the unit/week/section:			
Aim			
Over to you: *(a description of the process of the section)*			
How students will learn it ?			
Pre-topic activity:		Number of hours	
Reading materials to read before, etc (indicate hours. If not say not applicable			
Face to face time: *(if applicable)*		Number of hours	
Online activity:		Number of hours	
What should students do?	Specify timeline		
Where do they do it?			
By when should they do it?			
E-moderator/tutor role e.g. supervising , evaluating			
How are the learning outcomes in this unit assessed?		Number of hours	
How does this section link to other sections of the module?			

= Total number of hours	

Some important questions	
Which learning resources/ references will scaffold the students' learning?	References, links, books, etc
How are students enabled to access the resources?	e.g., visit library. Click on the link
Where in this unit are students expected to work collaboratively?	Personal computer or from a computer lab
How has an inclusive approach been incorporated in this unit?	Work in groups, etc
How will feedback on unit be obtained from students?	After one chapter I will be collecting feedback
How will student feedback be used to improve unit?	
At which point(s) will students receive formative feedback on the work they have done in the unit?	

END OF UNIT/WEEK/SECTION-LEVEL TEMPLATE

You should copy sufficient unit templates so that there is one for each unit of your module in the space below.