



## Course Descriptor VTMD292 Veterinary Histology and Embryology Lab

<b>Proposed Academic Year</b>	2021 - 22	<b>Last Reviewed Academic Year</b>	2021
<b>Course Code</b>	VTMD292	<b>Course Title</b>	Veterinary Histology & Embryology Lab
<b>Credit hours</b>	1	<b>Level of study</b>	Undergraduate
<b>College / Centre</b>	CAHS	<b>Department</b>	Vet. Medicine
<b>Co-requisites</b>	VTMD222	<b>Pre-requisites</b>	BIOL181

### 1. COURSE OUTLINE

This course is the practical part of the histology and embryology theory course that deals with the microscopic structures of cells, tissues, and organs of different animal species. Also, the embryonic development of every organ in the body will be discussed.

### 2. AIMS

This course aims to provide the students in the lab tissue identification with a detailed knowledge and understanding of the cell and tissue and different organs. Also the course aims to give the students the practical knowledge of early embryonic development of different animal species.

### 3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS

<b>Learning Outcomes (Definitive)</b>	<b>Teaching and Learning methods (Indicative)</b>	<b>Assessment (Indicative)</b>
Upon successful completion of this course, students will be able to:		
1. Perform laboratory identification of the cells & tissues of different organs	Lecture and Demonstration Lab Work ,Group work	Lab work sheet, Pre lab assignment
2. Perform through experiment ultrastructure of the cells	Lecture and Demonstration Lab Work ,Group work	Lab work sheet, Pre lab assignment Quiz
3. Analyze the stages of embryonic development	Lecture and Demonstration Lab Work ,Group work	Lab work sheet, Pre lab assignment Practical Examination
4.		

### 4. ASSESSMENT WEIGHTING

<b>Assessment</b>	<b>Percentage of final mark (%)</b>
Assignment	20%
Lab Report	20%
Mid-term Examinations	20%
Final Examination	40%
<b>TOTAL</b>	<b>100%</b>

### 5. ACHIEVING A PASS



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Students will achieve **1** credit hours for this course by passing **ALL** of the course assessments [*Lab reports, Midterm exam and final examination*] and achieving a **minimum overall score of 50%**

**NB \*Ensure that ALL learning outcomes are taken into account**

<b>6. COURSE CONTENT (Indicative)</b>	
General Histology	
Digestive system	
Respiratory system	
Cardiovascular system	
Nervous system	
Urinary system	
Reproductive organs	
Skin and sense organs	
Avian species	
General Embryology	
Special Embryology	
<b>TOTAL HOURS</b>	<b>42</b>
Plus <b>RECOMMENDED INDEPENDENT STUDY HOURS</b>	<b>15</b>
<b>TOTAL COURSE HOURS</b>	<b>57</b>

## 7. RECOMMENDED REFERENCES

### Core text/s:

- B. Young, J. W. Heath (Editors): Functional Histology, 4th Ed. Churchill Livingstone, USA.
- Thomas F. Fletcher (Ed): Veterinary Developmental Anatomy, Alvin Weber Company.(2004).
- V.P. Eroschenko (Editors): Atlas of Histology with Functional Correlations, 9th Ed. Lippincott Williams & Wilkins.

### Library + online resources:

Online veterinary Museum of royal veterinary college

### Open Educational Resources:

- <http://vanat.cvm.umn.edu/>