**Courses of Distinct program in equine medicine and surgery**

| **Title:** EquineHistology | **Credit hours** | |
| --- | --- | --- |
| **Code Number: EMS.** 126 | **Lectures** | **Practical** |
| **Prerequisite courses:** 115 | 1 | 1(2) |
| **Course Contents:**  Immune system; Digestive system; Respiratory system; Urinary system; Male and female reproductive system; Endocrine system. Comparative histology and organology. Structure in relation to function of organs of Equine. | | |

| **Title:** Equine Anatomy | **Credit hours** | |
| --- | --- | --- |
| **Code Number: EMS.** 216 | **Lectures** | **Practical** |
| **Prerequisite courses:** 126 | 1 | 1(3) |
| **Course Contents:**  A broad understanding of the development, structure and function. Anatomy of limbs; systematic and topographic. e.g., musculoskeletal, nervous, cardiovascular, immune. Structure of head & neck (topographic & systematic) of Pet animal. Developmental anatomy of systems & senses in Equine. Course content should be augmented with laboratory instruction in dissection methods | | |

| **Title:**  Equine Physiology | **Credit hours** | |
| --- | --- | --- |
| **Code Number: EMS.** 227 | **Lectures** | **Practical** |
| **Prerequisite courses:** 212 | 1 | 1(2) |
| Course Contents:  Physiological principles and techniques (laboratory) focusing on major systems within Equine.Nervous system & special senses; Autonomic nervous system; physiology of muscle & nerve; Physiology of digestion; Circulation; Respiration; Blood & body fluids. Endocrinology; Female reproduction; Physiology of mammary gland; Male physiology; Physiology of kidney; Metabolism; Growth Physiology of Equine. | | |

| **Title:** Equine Nutrition | **Credit hours** | |
| --- | --- | --- |
| **Code Number: EMS.** 317 | **Lectures** | **Practical** |
| **Prerequisite courses:**221 | 1 | 1(2) |
| **Course Contents:**  Principles of nutrition and vet. Dietetics of Equine; Chemical composition and evaluation of feedstuffs; Assimilation and utilization of nutrients. Nutrients inadequacy.; Feeding standards and Nutrients' requirements. Classification of feedstuffs; Feed supplements & additives. Feed processing. Commercial feeds and feed laws of Equine. | | |

| **Title:** Equine Pathology and Morbid Anatomy | **Credit hours** | |
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| **Code Number: EMS.** 327 | **Lectures** | **Practical** |
| **Prerequisite courses:** 313 | 1 | 1(2) |
| **Course Contents:**  Pathology of diseases affecting skin and its appendages; The musculoskeletal system; The respiratory system; The cardio-vascular system; The hemic and lymphatic systems; The digestive system; The urinary system; The genital system; The nervous system and organs of special sense; Pathology of important infectious and non-infectious diseases of Equine. Necropsy techniques. Pathology of Bacterial, Viral, Parasitic and Mycotic Diseases of Equine. | | |

| **Title:** Equine Anesthesia and Diagnostic Imaging | **Credit hours** | |
| --- | --- | --- |
| **Code Number: EMS.** 428 | **Lectures** | **Practical** |
| **Prerequisite courses:** No | 1 | 1(2) |
| **Course Contents:**  Preanesthetic; Local, regional and general anesthetics in Equine’ practice. Diagnostic imaging: principles and application of radiography, sonography and endoscopy in Equine’ practice. | | |

| **Title:** Equine Medicine and Infectious Diseases | **Credit hours** | |
| --- | --- | --- |
| **Code Number: EMS.** 518 | **Lectures** | **Practical** |
| **Prerequisite courses:** 411 | 2 | 1(2) |
| **Course Contents**  Equine’ disorders of the musculoskeletal system; The digestive; Respiratory and Cardiovascular systems; The blood and blood forming elements; The nervous, urinary and dermal systems: diagnosis, treatment and control. Clinical aspects; Epidemiology; Diagnosis and differential diagnosis of bacterial, viral, rickettsial and parasitic diseases of Equine. Prevention and control. | | |

| **Title:** Equine Orthopedic Surgery | **Credit hours** | |
| --- | --- | --- |
| **Code Number: EMS.** 528 | **Lectures** | **Practical** |
| **Prerequisite courses:**423 | 2 | 1(2) |
| **Course Contents:**  Introduction to fore and hind limbs affections of Equine. Joint and bone surgeries of Equine. | | |