

Course Title	Small Ruminant and Pig medicine				
Course Code	VET-305				
Course Type	Required				
Level	Undergraduate				
Year / Semester	Year 3/ Semester 1 (Fall)				
Teacher's Name					
ECTS	6	Lectures / week	3	Tutorials / week	2
Course Purpose and Objectives	<p>The main objectives of the course are:</p> <ul style="list-style-type: none"> • Small Ruminant: This course is designed to build on the background of knowledge from the principles of husbandry, nutrition, pathogenesis, pathology, epidemiology and control of parasitological, microbiological, metabolic and other diseases. The course intends to emphasize practical and clinical aspects of differential diagnosis, disease management and treatment and control on a herd and individual basis. The course will focus on definition, etiology, clinical presentation, diagnosis and management. • At the end of the course, the student should: be familiar with diagnosis of diseases of sheep based on clinical signs, differential diagnosis and interpretation of laboratory tests, be familiar with treatment of the individual and flock programs of preventative medicine, have a basic understanding of goat production and economics and the "backyard goat" • Pig: The material covered in this lecture course is intended to provide a theoretical basis on which newly qualified graduates can recognize, investigate, treat and control the more significant diseases of pigs in Europe. • At the end of the course students should: possess essential information to enable diagnosis, treatment, prevention and control of significant pig diseases in the individual, group or herd; be familiar with concepts of herd health, bio-security, & population medicine. 				

Learning
Outcomes

The following list provides the learning objectives that will be covered in the lectures, lab practical sessions and tutorials of each week:

SMALL RUMINANTS:

Week 1

LOBs covered during lectures:

Discuss the following **conditions and diseases of the gastrointestinal system**, definition, etiology, clinical presentation, diagnosis and management:

1. Malocclusion
2. Pharyngeal lesions
3. Foot-and-Mouth Disease
4. Contagious Ecthyma (Orf)
5. Bluetongue
6. Esophageal Obstruction
7. Megaesophagus
8. Bloat
9. Simple Indigestion
10. Rumen Acidosis
11. Reticulitis, Rumenitis, and Parakeratosis
12. Traumatic Reticuloenteritis
13. Rumen Impaction
14. Abomasitis and Abomasal Ulcers
15. Abomasal Hemorrhage
16. Abomasal Impaction
17. Abomasal Emptying Defect
18. Azalea, Laurel, and Rhododendron Toxicity
19. Diarrhea in Lambs and Kids - Enterotoxigenic Escherichia coli, Rotavirus, Cryptosporidium, Salmonella,
20. Nutritional Diarrhea
21. Giardia
22. Clostridium perfringens
23. Johne's Disease
24. Intussusception
25. Intestinal Atresia
26. Peritonitis
27. Rectal Prolapse

Discuss the following **diseases of the liver**, definition, etiology, clinical presentation, diagnosis and management:

28. Liver Abscess
29. Pregnancy Toxemia and Fatty Liver Syndrome
30. White Liver Disease
31. Copper Toxicosis
32. Toxic Hepatitis

Week 2

LOBs covered during lectures:

Discuss the following **internal parasites**, definition, etiology, clinical presentation, diagnosis, and management:

33. NEMATODE INFECTION
34. CESTODE INFESTATION
35. CYSTICERCOSIS
36. COCCIDIAL INFECTION
37. LIVER FLUKE INFECTION
38. LUNGWORM INFECTION
39. Discuss the following diseases of the respiratory system, definition, etiology, clinical presentation, diagnosis, and management:
40. Rhinitis
41. Oestrus ovis Infestation
42. Enzootic Nasal Tumor
43. Sinusitis
44. Retropharyngeal Abscesses
45. Pharyngitis
46. Laryngitis and Tracheitis
47. Mycoplasma Pneumonia of Sheep
48. Mycoplasma Infection in Goats
49. Parainfluenza Type 3
50. Respiratory Syncytial Virus
51. Aspiration Pneumonia
52. Ovine Progressive Pneumonia
53. Caseous Lymphadenitis
54. Coccidioidomycosis
55. Tuberculosis
56. Pleuritis and Pleural Abscesses
57. Thoracic Cavity Tumors
58. Atypical Interstitial Pneumonia
59. Hydrogen Cyanide Toxicity
60. Nitrate-Nitrite Toxicosis

Week 3

LOBs covered during lectures:

Discuss the following **male and female reproductive organ conditions and diseases** definition, etiology, clinical presentation, diagnosis, and management:

61. Epididymitis in Older and young Males
62. Orchitis
63. Testicular Hypoplasia and Degeneration
64. Paraphimosis
65. Vaginal Prolapse
66. Uterine Prolapse
67. Metritis and Endometritis
68. Pyometra
69. Pregnancy Toxemia
70. Hypocalcemia
71. Plant Toxicity
72. Heat Stress
73. Pseudopregnancy
74. Vaginitis

75. Bacterial Abortion
76. Fungal Abortion
77. Protozoal Abortion
78. Virus-Induced Abortion

Week 4

LOBs covered during lectures:

Discuss the following **diseases of the endocrine system**, definition, etiology, clinical presentation, diagnosis, and management:

79. Pituitary Adenoma
80. Pituitary Carcinomas
81. Pituitary Abscess Syndrome
82. Goiter
83. Primary Hyperparathyroidism
84. Renal Secondary Hyperparathyroidism

Discuss the following **diseases of the integumentary system**, definition, etiology, clinical presentation, diagnosis, and management:

85. Contagious Ecthyma (Sore Mouth/Orf/ Contagious Pustular Dermatitis)
86. Malignant Contagious Ecthyma
87. Ulcerative Dermatitis
88. Sheep Pox and Goat Pox
89. Scrapie
90. Vesicular Stomatitis
91. Dermatophilosis (Streptothricosis, Lumpy Wool Disease, Rain Scald, Rain Rot)
92. Fleece Rot (Water Rot, Weather Stain)
93. Malignant Edema (Swelled Head, Bighead)
94. Actinobacillosis
95. Staphylococcal Dermatitis (Eye Scab, Impetigo)
96. Caseous Lymphadenitis
97. Dermatophytoses (Ringworm, Lumpy Wool, Club Lamb Fungus)
98. Lice (Pediculosis)
99. Mange Mites
100. Psoroptic Mange (Common Sheep Scab)
101. Sarcoptic Mange (Scabies)
102. Demodectic Mange
103. Pemphigus Foliaceus
104. Copper Deficiency
105. Papillomas (Warts, Fibropapillomatosis)
106. Squamous Cell Carcinomas

Week 5

LOBs covered during lectures:

Discuss the following **diseases of the musculoskeletal system**, definition, etiology, clinical presentation, diagnosis, and management:

107. Arthrogryposis
108. Myotonia Congenita

- 109. Fractures
- 110. Septic Arthritis
- 111. Mycoplasmal Polyarthritis
- 112. Osteomyelitis
- 113. Caprine Arthritis-Encephalitis
- 114. Lyme Disease
- 115. Rickets and Osteomalacia
- 116. Osteodystrophia Fibrosa
- 117. Infectious Footrot
- 118. Laminitis

Discuss the following **diseases of the urinary system**, definition, etiology, clinical presentation, diagnosis, and management:

- 119. Clostridium perfringens Type D
- 120. Adenovirus Infection
- 121. Toxic Diseases
- 122. Pyelonephritis
- 123. Amyloidosis
- 124. Glomerulonephritis
- 125. Cystitis
- 126. Obstructive urolithiasis

Week 6

LOBs covered during lectures:

Discuss the following **diseases of the neurologic system**, definition, etiology, clinical presentation, diagnosis, and management:

- 127. Bacterial Meningitis and Encephalitis
- 128. Clostridium perfringens Enterotoxemia
- 129. Lentiviral Encephalitis: Caprine Arthritis-Encephalitis and Maedi-Visna
- 130. Sulfur Toxicosis
- 131. Lead Toxicosis
- 132. Sodium Toxicosis and Water Deprivation (Salt Poisoning)
- 133. Pseudorabies (Aujeszky's Disease, Mad Itch)
- 134. Rabies
- 135. Scrapie
- 136. West Nile Virus Encephalitis
- 137. Listeriosis
- 138. Otitis Media and Interna
- 139. Botulism
- 140. Enzootic Ataxia (Swayback)
- 141. Spastic Paresis

Discuss the following **diseases of the mammary gland**, definition, etiology, clinical presentation, diagnosis, and management

- 142. Mastitis
- 143. Udder Edema

FIG:

Week 7**LOBs covered during lectures:**

Discuss the following **diseases of the musculoskeletal system**, definition, etiology, clinical presentation, diagnosis, and management

- 144. Splay leg
- 145. Arthrogryposis
- 146. Kyphosis and scoliosis
- 147. Congenital porphyria
- 148. Porcine stress syndrome
- 149. Osteochondrosis: leg weakness in pigs
- 150. Slipped epiphysis of the femoral head
- 151. Chronic septic arthritis
- 152. Foot and mouth disease

Week 8**LOBs covered during lectures:**

Discuss the following **diseases of the respiratory system**, definition, etiology, clinical presentation, diagnosis, and management

- 153. Enzootic pneumonia
- 154. Progressive atrophic rhinitis
- 155. Pleuropneumonia of pigs
- 156. Glasser's disease
- 157. Porcine pasteurellosis
- 158. Swine influenza
- 159. Inclusion body rhinitis
- 160. Porcine reproductive and respiratory syndrome
- 161. Porcine respiratory coronavirus
- 162. Postweaning multisystemic wasting syndrome
- 163. Metastrongylosis

Week 9**LOBs covered during lectures:**

Discuss the following **diseases of the gastrointestinal system**, definition, etiology, clinical presentation, diagnosis, and management

- 164. Transmissible gastroenteritis
- 165. Vomiting and wasting disease
- 166. Porcine epidemic diarrhoea
- 167. Rotavirus infection
- 168. Clostridium perfringens type C infection (haemorrhagic enterotoxaemia)
- 169. Clostridium perfringens types A and B
- 170. Enteric colibacillosis: enteric diseases caused by Escherichia coli
- 171. Salmonellosis
- 172. Swine dysentery
- 173. Spirochaetal colitis and diarrhoea
- 174. Coccidiosis
- 175. Cryptosporidia
- 176. Ascariasis

Week 10**LOBs covered during lectures:**

Discuss the following **diseases of the skin**, definition, etiology, clinical presentation, diagnosis, and management

- 177. Sarcoptic mange
- 178. Demodectic mange
- 179. Pig pox
- 180. Greasy pig disease (exudative epidermitis)
- 181. Ringworm
- 182. Pityriasis rosea

LOBs covered during lectures:

Discuss the following **diseases of the nervous system**, definition, etiology, clinical presentation, diagnosis, and management

- 183. Teschen disease and Talfan disease
- 184. Classical swine fever
- 185. Aujeszky's disease (pseudorabies)
- 186. Rabies
- 187. Congenital tremor
- 188. Tetanus
- 189. Botulism
- 190. Streptococcus suis infection
- 191. Glasser's disease
- 192. Water deprivation: 'salt poisoning'

Week 11**LOBs covered during lectures:**

Discuss the following **diseases of the urogenital system and mammary gland**, definition, etiology, clinical presentation, diagnosis, and management

- 193. Cystitis and pyelonephritis
- 194. Urolithiasis (urethral urolithiasis)
- 195. Metritis
- 196. Mastitis
- 197. Mastitis–metritis–agalactia syndrome

Discuss the following **polysystemic diseases**, definition, etiology, clinical presentation, diagnosis, and management

- 198. Classical swine fever
- 199. African swine fever
- 200. Foot and mouth disease
- 201. Swine vesicular disease
- 202. Malignant catarrh fever
- 203. Porcine reproductive and respiratory syndrome
- 204. Postweaning multisystemic wasting syndrome
- 205. Porcine dermatitis and nephropathy syndrome

	206. Anthrax 207. Leptospirosis 208. Swine erysipelas 209. Tuberculosis		
Prerequisites	None	Required	None
Course Content	<p>Sheep and goat:</p> <ul style="list-style-type: none"> • Oral oesophageal diseases • Diseases of the Gastrointestinal System • Internal Parasites • Diseases of the Respiratory System • Diseases of the Endocrine System • Diseases of the Integumentary System • Diseases of the Musculoskeletal System • Diseases of the Urinary System • Diseases of the Neurologic System • Diseases of the Mammary Gland <p>Pig:</p> <ul style="list-style-type: none"> • Diseases of the respiratory system • Diseases of the gastrointestinal system • Diseases of the skin • Diseases of the central nervous system • Diseases of the urogenital system & udder • Polysystemic diseases 		
Teaching Methodology	Lecture based learning and small group tutorial sessions		
Bibliography	1. <u>Sheep and Goat medicine, 2 nd, Pugh</u> 2. <u>Veterinary treatment of sheep and goats</u> 3. <u>Handbook of pig medicine, 1st, Jackson</u> 4. <u>Pig Health, Carr</u> 5. Diseases of sheep. W.B. Martin and I.D. Aitkin. 6. Manual of sheep diseases. Hindson and Winter. 7. Herd Health. Radostits.		
Assessment	Final written exam 100%		
Language	English		