### TEMPLATE FOR COURSE SPECIFICATION

#### HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

### **COURSE SPECIFICATION**

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	University of Kirkuk\ Veterinary Medicine College
2. University Department/Centre	Parasitology
3. Course title/code	Parasitology /CVM3101 / CVM3201
4. Modes of Attendance offered	Third class
5. Semester/Year	First and Second Semester \ 2021-2022
6. Number of hours tuition (total)	90
7. Date of production/revision of this specification	1\9\2021

#### 8. Aims of the Course

- 1. Teaching veterinary parasites with its theoretical and practical parts, through which the student is introduced to the meaning of the parasite, the types of parasitic relationships, the types of parasites and their role in causing disease pests and changes that would affect the vital activities of the animal and then influence or reduce its productivity of meat, milk, wool, as well as eggs for domesticated birds.
- 2. Teaching and training students on the latest methods used in diagnosing types of parasitic infections. Within the college there is a laboratory dedicated to the branch, which includes a number of microscopes and glass slides, which are used to cover the practical part of the parasite material.
- 3. Informing students about the types of ancient and modern treatments used in the treatment of parasitic infections, how these treatments are given and the side effects caused by some types of these drugs.
- 4. Informing students of how to set the necessary plans to reduce or control parasitic infections to some extent through the work of vaccines or biological control in addition to other methods that would reduce the seriousness of these infections.

# 9. Learning Outcomes, Teaching, Learning and Assessment Method

## 1. ognitive goals.

- A1- Teaching the student the concept of parasitology and its general principles.
- A2- Knowledge, understanding and comprehension of the scientific subject curriculum.
- A3- To classify the theoretical and practical needs for the development of learning and teaching in the appropriate manner with the scientific subject.
- A 4- Identify the different types of pathogenic parasites of animal species.
- A5- Identifying the life cycles of parasites to identify the ways they are transmitted to animals.
- A6- Knowing the pathological changes that accompany infection with different parasites and the pathological symptoms, as well as identifying the different methods of treatment.
- B. The skills goals special to the course.
- B1 Teaching the student how to diagnose different parasites and their different stages during their life cycle.
- B2 Teaching the student how to use different microscopes and diagnose slides for the types of parasites.
- B 3 Teaching the student the technique of preserving some parasitic worms.
- B4 Urging students to bring samples and parasitic models from massacres.

Teaching and Learning Methods

- 1) The lectures.
- 2) Discussions during and after the lecture.
- 3) Motivation through questions and answers.
- 4) Homework
- 5) Preparing scientific reports

Assessment methods

- 1) Daily and monthly (theoretical) tests.
- 2) Discussing scientific reports
- 3) Questions and answers

  - C. Affective and value goals
    C1. Semester and final theory exams by 65%
    C2. Semester and final practical exams by 30%
    C3. Learning triangle (knowledge, skill, behavior) at 5%

Teaching and Learning Methods

- Implementation methods: a teacher who listens to the learners while they sit in front of him, and they listen to him, and he must have the ability to indoctrinate and absorb information.
- Conversational methods: the teacher must possess a high scientific ability and the attendees have information on the topic of the discussion.
- The discovery method: the teacher observes the activities of the learners who are taking examples individually or collectively.

#### Assessment methods

- 1. Semester and final theory exams with a rate of 95%
- 2. Extra-curricular activities (reports, making wall posters) by 5%

- D. General and rehabilitative transferred skills (other skills relevant to employability and personal development)
- D1. Teamwork: Working in harmony with a group or team.
- D2. Initiative Motivation to work: the ability to take the initiative, determine the hypothesis, and put forward ideas and solutions.
- D3. Planning & organization: The ability to develop plans and programs that are feasible for implementation.
- D4. Flexibility: adapting to situations.
- D5. Time management: The ability to work on specific dates.

	10. Course Structure				
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessme nt Method
1	5	Introductio n	TH/ -Introduction and definitions of termsEffects of parasites on their hosts Transmission of parasite infestationLife cyclesImmunology. P/ - General laboratory diagnosis of parasitism - Stool and Blood examination.	3 hours theory 2 hours practice	
2	5	Phylum: Nematoda	Families: Scarodidae and Hetrakidae. Parascaris equorum+ Toxocara canis +Oxyuris	3 hours theory 2 hours practice	

			equi Ascaridia galli +Hetrakis gallinarum .		
3	5	Phylum: Nematoda	Subuluridae, Oxyuridae and RhabditidaeSubulura brumptii - Strongylidae copulatory bursa, Strongylus vulgaris+S. equines -Chabertia ovina, Ancylostoma caninum, Bunostomum sp	3 hours theory 2 hours practice	
4	5	Phylum: Nematoda	Strongyloides, Trichonematidae and AncylostomatidaeHaemonchus contortus, (male and female)Ostertagia(3 sp) Dictyocalus filarial(male)	3 hours theory 2 hours practice	
5	5	Phylum: Nematoda	Trichostrongylidae, Dictyocaulidae and Metastrongyloidae Habronema (male,female), Thelazia, Setaria digiata(female)	3 hours theory 2 hours practice	
6	5	Phylum: Nematoda	Trichuridae and Trichinellidae. - Trichinella spiralis(larval stage).	3 hours theory 2 hours practice	
7	5	Phylum: Nematoda	Spriuroidae and Fillariidae Trichuris trichura.	3 hours theory 2 hours practice	
8			Mid-term exam.		Theoretical (25) and practical (10) exams + reports (5)
9		Phylum: Platyhelmint hes	-Family: Taeniidae.  - Moniezia expansa, (Mature seg,scolex) M.bendeni, Avitellina (mature and gravid) Thysaniezia, (mature and gravid)	3 hours theory 2 hours practice	
10		Phylum: Platyhelmint hes	-Anoplocephaliadae and Thysanosonidae. - Raillietina (mature and gravid) R.tetragona scolex,	3 hours theory 2 hours practice	

		R.echinobothrida(scolex)		
11	Phylum: Platyhelmint hes	-Davaineidae and Dipylidiidae R.cesticillus(scolex), Dipylidium caninum (mature and gravid), Hymenolepis nana	3 hours theory 2 hours practice	
12	Phylum: Platyhelmint hes	Hymenolepididae and Mesocestoidae Taenia spp (eggs+(mature and gravid)+scolex) of T.pisiformis,proto scolex, of Coenurus cerebralis	3 hours theory 2 hours practice	
13	Phylum: Platyhelmint hes	Diphllobothriidae Echinococcus granulosus +protoscolex of Hydatid cyst+Mesocestoides lineatus (mature and gravid), Spirometra (mature)	3 hours theory 2 hours practice	
14	Phylum: Trematoda	Families: Fasciolidae and Dicrocoelidae Fasciola hepatica, Life cycle, Fasciola gigantica  2 Dicrocoelium dendriticum, Metagonimus yokcagawi Paramphistomatidae(3 genuses)	3 hours theory 2 hours practice	
15	Phylum: Trematoda	-Parmaphistomatidae and Schistosomatidae Schistoma (male,female) In copulation,eggs of S.mansoni,eggs, S.japonicum+cercaria	3 hours theory 2 hours practice	
		Final-term exam.		theory and practice exam (40 +60)

10. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teachin g Metho	Assessment Method

			d	
1	Phylum: Protozoa	Introduction and definitions of terms protozoal examintions.	3 hours theory 2 hours practice	
2	Phylum: Protozoa	- Family: Trypanosomatidae - Trypanosoma brucei, T.equiperdium, T.evansi T.cruzi,	3 hours theory 2 hours practice	
3	Phylum: Protozoa	- Family: Trichomonadae. -T.vaginalis , T. foetus	3 hours theory 2 hours practice	
4	Phylum: Protozoa	- Family: Monocercomonadidae. -Anaplsma .	3 hours theory 2 hours practice	
5	Phylum: Protozoa	<ul><li>Family: Eimeriidae.</li><li>Eimeria (life cycle),</li><li>Toxoplasma gondii</li></ul>	3 hours theory 2 hours practice	
6	Phylum: Protozoa	- Family: Sarcocystidae - Sarcocystis,	3 hours theory 2 hours practice	
7	Phylum: Protozoa	- Families: Cryptoseoridiidae and Plasmodiidae - Plasmodium gallinaceum ,Cryptoseoridium	3 hours theory 2 hours practice	
8		Mid-term exam.		Theoretical (25) and practical (10) exams + reports (5)
9	Phylum: Protozoa	- Family: Babesiidae, - Babesia:B.canis,B.motasi	3 hours theory 2 hours practice	
10	Phylum: Protozoa	- Family: Theileriidae. - Theileria	3 hours theory 2 hours practice	
11	Phylum: Arthropoda	Families: Ioxdidae, Argasidae, and Sarcoptidae, - Hard ticks, Hyalomma, Rhipicephalus, Boophilus and larva Soft tick( Argas persicus)	3 hours theory 2 hours practice	
12	Phylum: Arthropoda	Families: Psoroptidae, Tabanidaeand Culicidae, - Demodex folliculorum,	3 hours theory 2 hours practice	

		5		
		Dermanyssus gallinae		
		Psorptes, Sarcoptes		
13	Phylum: Arthropoda	Families: Psychodidae, Simuliidae and Oestridae - Menacanthus straminus, Haematopinus suis Ctenocephalides canis, Families: Haematopinidae, Linognathidae, Superfamilies, Ischnocera, Amblycera - Oesteridae, Oestrus ovis, Hypoderma bovis, Gastrophilus intestinalis Xenopsylla cheopis, Cimex lectularis	3 hours theory 2 hours practice	
14	Phylum: Arthropoda	Families: Calliphoridae, Anthomyidae, Cimicidae, - Anopheles,Culex, (male,female) pupa and larva, Simulium adult, Larva	3 hours theory 2 hours practice	
15	Phylum: Arthropoda	Families: Haematopinidae, Linognathidae, Superfamilies, Ischnocera, Amblycera - Oesteridae, Oestrus ovis, Hypoderma bovis, Gastrophilus intestinalis	3 hours theory 2 hours practice	
		Final-term exam.		theory and practice exam (40 +60)

11. Infrastructure	
1. Books Required reading:	
2. Main references (sources)	<ul><li>1-Foundation of parasitology: authors</li><li>Larry S. Roberts</li><li>John Janovy, JR.</li><li>2-Veterinary parasitology.</li></ul>

	Third edition M A Taylor; R L Coop; R L Wall. 2007 3-Common Human Parasites In Iraq. Ph.D. Mohammed A.Kadir. 2014			
A- Recommended books and references (scientific journals, reports).				
B-Electronic references, Internet sites	Wikipedia			
12. The development of the curriculum plan				
1. Adding Visual Studio to the curriculum.				