

T-104 2022

Course Specification

Course Title: Parasitology

Course Code: ZOOL 352

Program: Biology B.Sc.

Department: Biology

College: Science

Institution: Jazan University

Version: **20232**

Last Revision Date: Pick Revision Date.





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A. General information about the course:

| Со | Course Identification | | | | |
|------|--|-----------|-------------|--------|---------|
| 1. | Credit hours: | 2h | | | |
| 2. (| Course type | | | | |
| a. | University □ | College □ | Department⊠ | Track□ | Others□ |
| b. | Required ⊠ | Elective□ | | | |
| 3. | 3. Level/year at which this course is | | | | |
| off | offered: Level 9- 3 rd year | | | | |
| 4. (| 4. Course general Description | | | | |

General concepts of parasitology, knowledge of some parasitic diseases, different parasitic from different phyla, life cycles and host parasite relationships.

- 5. Pre-requirements for this course (if any): ZOOL 252
- 6. Co- requirements for this course (if any):

None.

- 7. Course Main Objective(s)
 - 1. General concept of parasitology.
 - 2. Knowledge of some parasitic diseases that could be transmitted between animals and man (Zoonotic diseases).
 - 3. Knowledge how to protect man and domestic animals from parasites and their treatment.
 - 4. Basic knowledge of parasitism, the different biological inter-relationships and the host parasite relationships.
 - 5. Knowledge of different parasitic examples from all phyla (Protozoa & Platyhelminthes, Nematoda), their morphology, biology, life cycles, diagnosis, treatment & control.
 - 6. Dissemination of health awareness of these parasitic diseases.

1. Teaching mode (mark all that apply)

| No | Mode of Instruction | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom | 10 | %77 |
| 2. | E-learning | 1 | %7.7 |
| 3. | HybridTraditional classroomE-learning | 1 | %7.7 |
| 4. | Distance learning | 1 | %7 |

2. Contact Hours (based on the academic semester)

| No | Activity | Contact Hours |
|----|----------|---------------|
|----|----------|---------------|





| 1. | Lectures | 11 |
|----|----------------------------------|----|
| 2. | Laboratory/Studio | 22 |
| 3. | Field | - |
| 4. | Tutorial | - |
| 5. | Others (specify) (Self-Learning) | 2 |
| | Total | 35 |





B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

| Code | Course Learning Outcomes | Code of CLOs aligned with program | Teaching Strategies | Assessment Methods |
|------|--|-----------------------------------|--|--|
| 1.0 | Knowledge and understanding | | | |
| 1.1 | Define the parasitism and their types & examples. | K1.1 | LecturesLab work | Quizzes Short Answer Question assignments Lab work assessment |
| 1.2 | Compare between different parasites and explaining and aspects related to parasites. | K2.1 | LecturesGroup DiscussionLab work | Written examQuizzesLab work assessment |
| 1.3 | Understand host- parasite relationship | K3.1 | Lectures,Web-based work | Written examplesShort AnswerQuestion |
| 2.0 | Skills | | | |
| 2.1 | Argue parasitic diseases and the life cycles, diagnosis, treatment & control. | S1.1 | LecturesLab work | Short Answer QuestionAssignmentsWritten exam |
| 2.2 | Propose solutions for different parasites infections. | S3.2 | LecturesLab work | Quizzes Written exam |
| 3.0 | Values, autonomy, ar | nd responsibility | | |
| 3.1 | Illustrate awareness of risk assessment and safety observation when dealing with various parasites | V2.1 | Lab WorkGroupDiscussion | Lab work assessmentGroup Assignment |

C. Course Content

| No | List of Topics | Contact Hours |
|----|---|---------------|
| | Introduction: Parasitology, terms, definitions. Parasitism picture for the | |
| 1 | host - division of parasites according to the number of families - ways of | |
| 1. | transmission of parasites - the effect of parasites on their hosts - division | |
| | of parasitology - general characteristics of parasitic protozoa, types of | 1 |



| | parasitism. | |
|-----|---|------------|
| 2. | Phylum Amoebozoa, Class: Archamoebae (Entamoeba histolytica), (Entamoeba coli), Class: Kinetoplastida (Trypanosoma sp.) three types: Trypanosoma gambiense, T. rhodsiense, T. cruzi | 1 |
| 3. | Phylum Euglenozoa, Class: Kinetoplastea (<i>Leishmania</i>), Phylum Metamonada, Order: Diplomonadida (<i>Giardia lamblia</i>), Order: Trichomonadida (Trichomonas tenax), (Trichomonas vaginalis) | 1 |
| 4. | Phylum Ciliophora, Class: Litostomatea (Balantidium coli), Phylum Apicomplexa, Class: Aconoidasida (Plasmodium sp.), (Plasmodium falciparum), (Plasmodium vivax) (Eimeria) (Cystoisospora belli) | 2 |
| 5. | Phylum Apicomplexa, Class: Conoidasida.(Toxoplasma gondii) (Sarcocystis) (Cryptosporidium sp.) | 1 |
| 6. | Phylum: Platyhelminthes —Helminths- General characteristics, Class: Trematoda, (Fasciola hepatica), (Heterophyes heterophyes), (Schistosoma Spp.), (Clonorchis sinensis), (Paragonimus westermani) | 1 |
| 7. | Phylum Platyheminthes, Class: Cestoda (Taenia saginta), (Taenia solium), (Dipylidium caninum), (Dipylidium latum), (Hymenolepis nana), (Hymenolepis diminuta), (Echinococcus granulosus) | 1 |
| 8. | Phylum Nematoda, General characteristics, Class: Chromadorea (Ascaris lumbricoides), (Necator americanus) | 1 |
| 9. | Phylum Nematoda, Class: Secernentea, (Enterobius vermicularis), (Ancylostoma duodenale) | 1 |
| 10. | Phylum Nematoda, Class: Enoplea (disputed). (Trichinella spiralis), (Trichuris trichura), (Strongyloides stercoralis), (Wuchereria bancrofti), (Loa loa) | 1 |
| 11. | Medical arthropods: Anopheles, Musca domestica, Tse Tse fly, Sand fly, Cimex lecturalis, Siphonaptera, Lice, Tick, Flea, Mites, Cockroaches. | Self-Study |
| | Total | 11 |



D. Students Assessment Activities

| No | Assessment Activities * | Assessment timing (in week no) | Percentage of Total Assessment Score |
|----|--------------------------------|--------------------------------------|---|
| 1. | Homework assignment | 2 | %10 |
| 2. | Lecture Quizzes (written test) | 3 | %10 |
| 3. | Mid-term exam (written test) | 6 | %20 |
| 4. | Final practical exam | 11 | %20 |
| 5. | Final Exam | 12 | %40 |

^{*}Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

| Essential References | مذكرة الطفيليات النظري | |
|--------------------------|--|--|
| Esserillal Nelelelices | الطفيليات والانسان ، 2007، ناديه محمد الالفي، القاهرة : دار الفكر العربي، | |
| Supportive References | Loker, E.S. and Hofkin, B.V. (2015) parasitology. A conceptual approach. Garland science. Taylor and Franis group. New York and London. 577 pages. | |
| Electronic Materials | https://ar.wikipedia.org, www.ncbi.nlm.nih.gov/books/NBK8262/ | |
| Other Learning Materials | <pre>www.youtube.com : https://www.cambridge.org/core/journals/parasitology</pre> | |

2. Required Facilities and equipment

| Items | Resources |
|---|--|
| facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.) | Lecture room(s) for groups of 50 students. Laboratory for group of 25 students |
| Technology equipment (projector, smart board, software) | Computer laboratories for groups of 25 students. |
| Other equipment (depending on the nature of the specialty) | Light microscopes, glassware, etc. |

F. Assessment of Course Quality

| Assessment Areas/Issues | | | Assessor | Assessment Methods |
|--------------------------|----------|----------|---------------------|--------------------|
| Effectiveness of | teaching | | by Program QA Unit. | questionnaires |
| Effectiveness assessment | of | students | by Program QA Unit. | questionnaires |





| Assessment Areas/Issues | Assessor | Assessment Methods |
|---|---------------------|---------------------------|
| Quality of learning resources | by Program QA Unit. | questionnaires |
| The extent to which CLOs have been achieved | Coordinator | Course content assessment |
| Other | | |

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

| COUNCIL /COMMITTEE | Biology Department Board |
|-----------------------|--------------------------|
| REFERENCE NO. | B102214 |
| DATE | 20/9/2022AD |

