



ARS for PhD in Veterinary Medical Sciences (Parasitology)

1) Graduate attributes

The graduate should have the ability for:

- 1) Mastering the basics and methodologies of scientific research in Parasitology.
- 2) Making continuous effort to add knowledge in microscopical and immunological methods in Parasitology.
- 3) Application of analytical and criticizing method in Parasitology and related areas.
- 4) Interpreting the laboratory investigations in parasitology and serology.
- 5) Showing deep awareness with the ongoing problems and modern molecular theories in Parasitology.
- 6) Understand and interpret different reports in Parasitology.
- 7) Mastering a wide range of professional skills in Parasitology.
- 8) Acquiring trends towards developing modern methods and tools in professional practice.
- 9) Develop new assays to identify the pathogenic parasites of veterinary and zoonotic significance.
- 10) Effective communication and leading work team through professional scale.
- 11) Decision making in different professional situations.
- 12) Employment and development of available resources efficiently and working on finding new ones.
- 13) Awareness with his role in society development and community preservation from different parasitic infestations.
- 14) Acting with integrity, credibility and according to the rules of profession.
- 15) Commitment with continuous self and life-long development and transferring of his knowledge and experience to others.

المقررات التي تحقق المعايير الأكاديمية للبرنامج

| Code | Name |
|------|--|
| 627 | Physiology of blood and immunity system |
| 639 | Microbial biochemistry and biotechnology |
| 660 | Pathology of microbial and parasitic animal diseases |
| 669 | Clinical pathology (advanced) |
| 684 | Veterinary medical entomology |
| 685 | Helminthology |
| 686 | Protozoology |
| 687 | Parasites of birds |
| 688 | Parasites of fish |
| 689 | Snails and their veterinary significance |
| 690 | Parasitic immunology |
| 691 | Clinical parasitology |

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| 692 | Parasites of wild animals |
| 693 | Specific parasitology (advanced) |
| 711 | Hygiene of slaughter animal |
| 730 | Cattle infectious diseases |
| 731 | Sheep and goat infectious diseases |
| 732 | Camel infectious diseases |
| 733 | Equine infectious diseases |
| 734 | Pet animal infectious diseases |
| 737 | Buffalo infectious diseases |
| 763 | Parasitic diseases of poultry |
| 765 | Wild and migratory birds diseases |
| 766 | Rabbits diseases (advanced) |
| 773 | Control of pests and disease vectors |
| 777 | Epidemiology of animal and bird diseases |
| 778 | Zoonoses - advanced |
| 811 | Microbial aquatic diseases (specific courses) |
| 812 | Parasitic aquatic diseases (specific courses) |

مقارنة ما يقدمه البرنامج من نتائج تعليمية مستهدفة مع المعايير المرجعية القياسية

A) Knowledge and understanding

| Adopted ARS | | NARS (Master) |
|-------------|--|--|
| | <i>By the end of this program the graduate should understand and accommodate the following:</i> | <i>By the end of this program the graduate should understand and accommodate the following:</i> |
| 1) | Recent theories, principles and knowledge in mechanisms and pathogenesis of parasitic infestations in addition the immune responses to parasites | Recent theories, principles and knowledge in the field of specialization and related areas |
| 2) | Basics and moral ethics of scientific research in the field of Parasitology and its different tools | Basics, methodologies and ethics of scientific research and its different tools |
| 3) | Legal and ethical principles of control, prevention and eradication of parasitic diseases. | Legal and ethical principles of professional practice in the area of specialization |
| 4) | Outline the principles of laboratory safety and regulations in laboratory of Clinical Parasitology | Principles and the basics of quality assurance in the area of professional practice in the field of specialization |
| 5) | Awareness with the effect of parasites on the animal body and production of milk and meat. | Awareness with the effect of professional practice on the environment and methods of its maintain and development |
| 6) | Recognize the different molecular and serological protocols for parasitic diagnosis | |

B) Intellectual skills

| Adopted ARS | | NARS (Master) |
|--------------------|---|---|
| | <i>By the end of this program the graduate should understand and accommodate the following:</i> | <i>By the end of this program the graduate should understand and accommodate the following:</i> |
| 1) | Analyzing and evaluating microscopical and serological tests and extrapolating from them | Analyzing and evaluating information in the field of specialization and the eliciting from them |
| 2) | Solving professional problems in diagnosis and control of parasitic diseases using available data | Solving professional problems using available data |
| 3) | Performing scientific research studies that add to knowledge in parasitology | Conducting scientific research studies that add to knowledge |
| 4) | Formulating scientific papers and publishing them in international journals | Formulating scientific papers |
| 5) | Design a Risk Assessment Form and performing a Risk Assessment for an item within parasitology laboratory | Risk-assessment in the field of specialization |
| 6) | Planning to enhance the performance in the laboratory diagnosis of parasitic diseases using molecular techniques. | Planning to enhance the performance in field of specialization |
| 7) | Using appropriate intellectual strategy to deal with laboratory diagnostic problems. | Making professional decisions under different professional contexts |
| 8) | Creation of new biotechnological techniques that aid in identification of different stages of parasites | Creation and innovative in the area of specialization |
| 9) | Develop a trial and error method to encourage learning and practice. | Dialogue and discussion based on evidences and proofs |

C) Professional and practical skills

| Adopted ARS | | NARS (Master) |
|--------------------|--|---|
| | <i>By the end of this program the graduate should understand and accommodate the following:</i> | <i>By the end of this program the graduate should understand and accommodate the following:</i> |
| 1) | Mastering basic and modern professional skills in isolation and identification of parasites and their infective stages | Mastering basic and modern professional skills in the area of specialization |
| 2) | Writing and evaluating professional reports in Parasitology and serology | Writing and evaluating professional reports |
| 3) | Evaluating and modernizing methods and tools in parasitology | Evaluating and modernizing methods and tools in the area of specialization |
| 4) | Using modern technological means to serve protect animals against parasitic infestations and diseases transmitted by insects | Using modern technological means to serve professional practice |
| 5) | Planning for the improvement of veterinary medicine by applying molecular techniques and developing performance of others | Planning for the improvement of professional practice and developing performance of others |

D) General and transferable skill

| Adopted ARS | | NARS (Master) |
|--------------------|---|---|
| | <i>By the end of this program the graduate should understand and accommodate the following:</i> | <i>By the end of this program the graduate should understand and accommodate the following:</i> |
| 1) | Effective communication with colleagues, students and veterinarians. | Effective communication |
| 2) | Utilizing information technology to serve development of clinical Parasitology practice | Utilizing information technology to serve development of professional practice |
| 3) | Teaching others and evaluating their performance | Teaching others and evaluating their performance |
| 4) | Self-assessment and continuous learning | Self-assessment and continuous learning |
| 5) | Using different resources to obtain knowledge and information | Using different resources to obtain knowledge and information |
| 6) | Team working and leading a team in familiar professional contexts | Team working and leading a team in familiar professional contexts |
| 7) | Management of scientific meetings with the ability to manage time efficiently | Management of scientific meetings with the ability to manage time efficiently |

