Course Specifications

Faculty: Veterinary Medicine
Department: Pathology and Parasitology

General Considerations

- Program: Bachelor of Vet Medicine (BVS).
- Major or minor element of program: Major.
- Department offering the Program: Faculty of Veterinary Medicine.
- Department offering the course: Pathology (specific).

A. Basic Information

- Lecture Tutorial: 2 hours/week.
- Practical Session: 2 hours/week.
- Total: 60 hours/semester (٥١ weeks).

B. Professional Information

1. Overall Aims of The Course:
   ١. To familiarize students with the basic patterns of specific diseases and their underlying mechanisms within the specific organ systems as for preparing the students for their clinical courses and future as a practitioners
   ٢. To promote life long competencies necessary for continuous professional development

2. Intended Learning Outcomes (ILOs):

   a) Knowledge and Understanding:
   By the end of the course, students should be able to:

   • 1- Define and discuss the disease categories as well as the basic mechanisms underlying these disorders ( etiology and pathogenesis )
   • 2- Describe the morphology (gross & microscopic) of such diseases or disease conditions in various organ systems.
   • ٧- Perform PM examination in different animals species and reach a preliminary diagnosis of the cause of death..
   • ٤- Determine the fate & complications of each particular disease and outline the general management procedures

   b) Intellectual Skills:
   By the end of the course, students should be able to:

   • Predict the signs and symptoms of a disease based on the underlying gross & microscopic tissue changes responsible for symptomatology and physical changes in the
patient, thereby enabling the student recognize patients with life/organ threatening conditions.

- Choosing the most appropriate cost effective pathologic diagnostic procedures
- Manage the information gained from different examination (Gross, microscopic, molecular, ..) to reach accurate diagnosis.
- Interpret in a professional manner a pathology report.

c) **Professional and Practical Skills:**
By the end of the course, students should be / able to

- 8- prepared for their upcoming clinical training by:
- Diagnose and accurately report or describe the pathologic picture of a disorder based on gross or microscopic morphology.
- Distinguish between the normal and abnormal cellular or tissue structure.
- Distinguish between the pathologic pictures of various diseases and diseases categories.
- Take a rapid, accurate decision in dealing with dangerous diseases.

**d) General and Transferable Skills:**
By the end of the course, students should be able to:

- Appreciate the importance of life long learning and show a strong commitment to it
- Professional use of biomedical information resources to remain current with the advances in knowledge & practice .
- Frame a question, search the literature, collect , analyze, critically appraise and utilize the obtained information to solve a particular clinical problem according to the principles of evidenced based medicine .
- Respond appropriately according to the seriousness of the pathologic diagnosis in an acceptable humane manner.
- Maintain and improve professional image in manner, dress, speech and interpersonal relationships that is consistent with the veterinary medical profession's accepted contemporary standards in the community
- Identify difficult ethical situations and how to properly deal with them
- Express themselves freely and adequately by improving their descriptive capabilities and enhancing their communication skills

3. **Contents:**

3.1. **Lecture Contents:**

<table>
<thead>
<tr>
<th>Lecture Topics</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>1. Introduction To Infectious Diseases, Tissue Reaction To Viral Infection, Host Defensive Responses To The Virus</td>
<td>hrs</td>
</tr>
<tr>
<td>2. Foot And Mouth Disease, Vesicular Stomatitis, Cattle Plague (Rinderpest), Peste Des Petits Ruminants (PPR)</td>
<td>hrs</td>
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<tr>
<td>3. Bovine Viral Diarrhea (BVD), Border Disease, Malignant Catarrhal Fever</td>
<td>hrs</td>
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<tr>
<td>Course Specifications</td>
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<tr>
<td>Damanhour University</td>
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<tr>
<td>Faculty of Veterinary Medicine</td>
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<td>Pathology and Parasitology Department</td>
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<thead>
<tr>
<th>Lecture Topics</th>
<th>Hours</th>
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<tbody>
<tr>
<td>4. Infectious Bovine Rhinotracheitis (IBR), Bovine Ulcerative Mamillitis,</td>
<td>2hrs</td>
</tr>
<tr>
<td>Pseudorabies (Aujeszky’s Disease),</td>
<td></td>
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<tr>
<td>5. Bovine Ephemeral Fever, Neonatal Calf Viral Diarrhea (Scours), Pseudocowpox,</td>
<td>2hrs</td>
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<tr>
<td>Bovine Papular Stomatitis, Lumpy-Skin Disease, Sheep-Pox, Contagious Ovine Ecthyma (Orf)</td>
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<tr>
<td>6. Pox Diseases, Pseudocowpox, Bovine Papular Stomatitis, Lumpy-Skin Disease, Sheep-Pox, Contagious Ovine Ecthyma (Orf)</td>
<td>2hrs</td>
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<tr>
<td>7. Rift Valley Fever, Bluetongue, Visna / Maedi Ovine Pulmonary Adenomatosis</td>
<td>2hrs</td>
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<tr>
<td>8. Equine Viral Abortion, Equine Viral Arteritis African Horse Sickness, Borna Disease</td>
<td>2hrs</td>
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<tr>
<td>9. Rabies, Canine Distemper, Infectious Canine Hepatitis)</td>
<td>2hrs</td>
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<tr>
<td>10. Tuberculosis, Paratuberculosis (John's Disease)</td>
<td>2hrs</td>
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<tr>
<td>11. Actinomycosis, Actinobacillosis, Ulcerative Lymphangitis, Oedematous Skin Disease, Epizootic Lymphangitis</td>
<td>2hrs</td>
</tr>
<tr>
<td>12. Colibacillosis, Paratyphoid, Joint Ill, Calf Diphtheria, Contagious Bovine Pleuropneumonia, Hemorrhagic Septicemia, Anthrax</td>
<td>2hrs</td>
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<tr>
<td>13. Brucellosis, Vibriosis, Campylobacteriosis</td>
<td>2hrs</td>
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<tr>
<td>14. Tetanus, Lamb Dysentery, Struck, Pulpy Kidney, Blackleg, Malignant Oedema, Black Disease, Bacillaryhaemoglobinurea</td>
<td>2hrs</td>
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<tr>
<td>15. Leptospirosis, Listeriosis, Strangles, Glanders</td>
<td>2hrs</td>
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**Total** 3.0 hrs

### 3.2. Laboratory Contents:

<table>
<thead>
<tr>
<th>Lecture Topics</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>1. Post mortem examination technique</td>
<td>2hrs</td>
</tr>
<tr>
<td>2. Glass slides and virtual slides on Foot And Mouth Disease, Vesicular Stomatitis, Cattle Plague (Rinderpest), Peste Des Petits Ruminants (PPR)</td>
<td>2hrs</td>
</tr>
<tr>
<td>3. Glass slides and virtual slides on Bovine Ephemeral Fever, Neonatal Calf Viral Diarrhea (Scours), Papillomatosis In Animals, Enzootic Bovine Leucosis (Ebl)</td>
<td>2hrs</td>
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<tr>
<td>4. Glass slides and virtual slides on Pox Diseases, Pseudocowpox, Bovine Papular Stomatitis, Lumpy-Skin Disease, Sheep-Pox, Contagious Ovine Ecthyma (Orf)</td>
<td>2hrs</td>
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<tr>
<td>5. Post mortem examination case study</td>
<td>2hrs</td>
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<tr>
<td>6. Glass slides and virtual slides on Rift Valley Fever, Bluetongue, Visna / Maedi Ovine Pulmonary Adenomatosis Equine Viral Abortion, Equine Viral Arteritis African Horse Sickness, Borna Disease</td>
<td>2hrs</td>
</tr>
<tr>
<td>7. Glass slides and virtual slides on Rabies, Canine Distemper, Infectious Canine Hepatitis)</td>
<td>2hrs</td>
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</tbody>
</table>
Glass slides and virtual slides on Tuberculosis, Paratuberculosis (John’s Disease) Pseudotuberculosis In Sheep

Glass slides and virtual slides on Colibacillosis, Paratyphoid, Joint Ill, Calf Diphtheria Contagious Bovine Pleuropneumonia, Hemorrhagic Septicemia

Post mortem examination case study

Glass slides and virtual slides on Anthrax, Brucellosis, Vibriosis, Campylobacteriosis

Glass slides and virtual slides on Tetanus, Lamb Dysentery, Struck, Pulpy Kidney, Blackleg, Malignant Oedema, Black Disease, Bacillaryhaemoglobinurea

Glass slides and virtual slides on Leptospirosis, Listeriosis, Strangles, Glanders

Glass slides and virtual slides on Prion Diseases, BSE.

Post mortem examination case study

**Total** 3 hrs

4. **Teaching and Learning Methods:**
   4.1. Lectures
   4.2. Practical (tutor presentation followed by students' small group sessions).
   4.3. Independent (Laboratory and home assignments supervised by tutor):
       a) Writing reports/assignments.
       b) Preparation of colored posters and slide presentations.
       c) Preparation of slides.
       d) Group discussion.
   4.4. Computer Courseware: For independent student can be accessed at the education centre: CLIVE standalone programs and any other recently developed web-based courseware.

Methods for disabled students:
No special arrangements are available now; however those students can consult our staff for help.

5. **Students Assignment:**
   5.1. Assignment Methods:
       a) Mid and final term written examinations to assess knowledge and understanding.
       b) Periodical semester activities to assess general and transferable skills.
       c) Periodical examinations to assess professional and practical skills.
       d) Oral examination to assess intellectual skills, understanding of topics and ways of thinking in resolving problems.
5.2. Assessment Schedule:

- Assessment ١: Midterm examination.........................................................٠١ th week.
- Assessment ٢: Final examination (practical)..........................................٠٥ th week.
- Assessment ٣: Final examination (oral)...........................................Together with written exam.
- Assessment ٤: Final examination (written)... According to faculty schedule.

5.3. Writing of Assessments:

a) Semester formative work:
   1. Midterm examination.................................................................٠١٪
   2. Home and laboratory periodical assignments...........................٠١٪

b) Final term examinations:
   1. Written examination..................................................................٥٠٪
   2. Oral examination.........................................................................٥٠٪
   3. Practical examination.........................................................٥٠٪

c) Other types of assessment.................................................................٠٪

Total........................................................................................................٠٠٪

6. List of References:
   a. Lectures Notes in Pathology of specific diseases
   b. Color atlases of animal diseases

7. Essential Text Books:
   a. Principles of Veterinary Pathology by Runnels RA, Monlux WS and Monlux AW.
   b. General Pathology, JB Walter, MS Israel:

8. Recommended Books:
   c. Basic Pathology by Kumar, Cotran & Robbins,

9. Important web sites
   b. http://vet.cornell.edu/nst/
   d. http://www.path.uiowa.edu/virtualslidebox/
   e. http://www.pathmax.com/
   g. http://www-medlib.med.utah.edu/WebPath/LABS/LABMENU.html#*
   j. http://www.gwumc.edu/dept/path/F.HTM
   k. http://www.path.uiowa.edu/virtualslidebox/
   l. http://web.med.unsw.edu.au/pathology/Pathmus/pathmus.htm#InteractiveImag

10. Facilities Required for Teaching and Learning:
10.1. **For Lecture:** A large hall equipped with white board, data show and computer.

10.2. **For Laboratory sessions:** Laboratory room with mono and binuclear microscopes, slide boxes, staining sets, colored posters, charts, atlases, handouts, and pamphlets.

10.3. **For small group discussions (5-8 students):** Convenient hall equipped with white board, computer and video projector.

10.4. **Digital library,** Internet and networking connections for easy access of online course materials and the recommended websites by our staff.

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**Course Director:**

Prof. Dr. Abou-Rawash A. A

**Head of the Department:**

Prof. Dr. Abou-Rawash A. A
<table>
<thead>
<tr>
<th>Weeks</th>
<th>Topics</th>
<th>المحتويات المقرر</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to Infection, Host Defensive Responses To The Virus/bacterial infection</td>
<td>1</td>
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<tr>
<td>2-9</td>
<td>Lectures on Viral diseases</td>
<td>2</td>
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<tr>
<td>2-7</td>
<td>Practical sessions on Viral diseases (slides)</td>
<td>3</td>
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<tr>
<td>7-14</td>
<td>Post mortem examination case study</td>
<td>4</td>
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<tr>
<td>14-10</td>
<td>Lectures on bacterial diseases</td>
<td>5</td>
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<tr>
<td>14-8</td>
<td>Practical sessions on bacterial diseases (slides)</td>
<td>6</td>
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<tr>
<td>15</td>
<td>Post mortem examination case study</td>
<td>7</td>
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Course Matrix

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<thead>
<tr>
<th>الموارد العامة والمنقول</th>
<th>المهارات العملية والمهنية</th>
<th>المهارات الذ鲟نية</th>
<th>المعرفة والفهم</th>
<th>أسابيع الدراسة</th>
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Professor of the Course: Prof. Dr. Abdalrahman Abdulsatar Amrosh
<table>
<thead>
<tr>
<th>Head of Department</th>
<th>Course Coordinator</th>
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<tbody>
<tr>
<td>Dr. Abdel-Rahman Abou-Rawash</td>
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