Republic of Iraq

Ministry of Higher Education & Scientific Research

Supervision and Scientific Evaluation Directorate

Quality Assurance and Academic Accreditation

International Accreditation Dept.

Academic Program Specification Form For The Academic Year 2015-2016

Universitiy:University of Baghdad

College :College of Veterinary Medicine

Departments In The College :Anatomy

Date Of Form Completion :

# 

Dean ’s Name

Date : / / 2016

Signature

Dean ’s Assistant For Scientific Affairs

Date : / / 2016

Signature

The College Quality Assurance And University Performance Manager

Date : / / 2016

Signature

Quality Assurance And University Performance Manager

Date : / / 2016

Signature

**TEMPLATE FOR PROGRAMME SPECIFICATION**

|  |
| --- |
| HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW |

**PROGRAMME SPECIFICATION**

|  |
| --- |
| This Programme Specification provides a concise summary of the main features of the programme 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 is supported by a specification for each course that contributes to the programme. |

|  |  |
| --- | --- |
| Ministry of Higher Education and Scientific research | 1. Teaching Institution |
| University of Baghdad/ College of Veterinary Medicine/ Department of Anatomy, Histology & Embryology | 2. University Department/Centre |
| Bachelor in Veterinary Medicine & Surgery | 3. Programmed Title |
| Bachelor in Veterinary Medicine & Surgery | 4. Title of Final Award |
| Two terms / year | 5. Modes of Attendance offered |
|  | 6. Accreditation |
| None | 7. Other external influences |
|  | 8. Date of production/revision of this specification |
| 9. Aims of the Programme | |
| A. The program established a set of academic standards that veterinary students should fulfill before their graduation. The aim of these standards is to ensure the acquirement of the minimum required professional skills by the students before their graduation | |
| B. The programme provides, in early years, a broad – based knowledge and understanding of the range of biomedical subjects | |
|  | |
|  | |
|  | |
|  | |

|  |
| --- |
| 10. Learning Outcomes, Teaching, Learning and Assessment Methods |
| 1. Knowledge and Understanding   A1. Knowledge of basic concepts in animal anatomy of different organs &  systems  A2. Knowledge of basic concepts in animal histology of different organs &  systems  A3. Knowledge of basic concepts in animal development (Embryology) of  different organs & systems  A4.  A5.  A6. |
| B. Subject-specific skills  B1.Provide skill in identifying grossly different organs and systems of different  domestic animals  B2. Provide skill in identifying the histological sections of different organs and  systems of different domestic animals  B3. Provide skill in identifying the developmental events of different organs and  systems of different domestic animals |
| Teaching and Learning Methods |
| 1. Establishment grossly of a clear mission for each of the organs and systems of  each domestic animal.  2. Establishment histologically of a clear mission for each of the organs and  systems of each domestic animal.  3. Establishment Embryologically of a clear mission for each of the organs and  systems of each domestic animal.  4. Using of recent methods in teaching of the students  5. Methods of student’s assessments |
| Assessment methods |
| 1. Written Examination (theoretical & practical)  2. Oral examination  3. Assignments (reports preparation) |
| C. Thinking Skills  C1.The ability to achieve commitment and responsibility and leadership toward  excellence and creativity in the  C2.  C3.  C4. |
| Teaching and Learning Methods |
| 1. lectures  2. Practical sections  3. Discussion  4. Quizzes  5. Report assignments  6. oral practice  7. data show and power point show |
| Assessment methods |
| 1. written examinations  2. oral examination  3. Quiz examination  4. Report assignment preparation  5. Attendances |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| D. General and Transferable Skills (other skills relevant to employability and personal development)  D1.Acquire the skills to laboratory tools such as microscopes and examination of  histological section slides  D2. Acquire the skills to dissect and diagnose grossly the different organs and  systems of the domestic animals  D3.  D4. | | | | |
| Teaching and Learning Methods | | | | |
| 2. Practical sections  3. Discussion  4. Quizzes  5. Report assignments  6. oral practice  7. data show and power point show | | | | |
| Assessment Methods | | | | |
| 1. written examinations  2. oral examination  3. Quiz examination  4. Report assignment preparation  5. Attendances | | | | |
| 12. Awards and Credits | 11. Programme Structure | | | |
| Credit  rating | Course or Module Title | Course or  Module  Code | Level/Year |
| Bachelor Degree  Requires ( x ) credits |  | **ANAT. I**  ANM  CHM1401  COM  BIO ENG | Anatomy  Animal management  Chemistry  Computer  Biology  English language | First |
|  | **ANAT. II HIST**  **EMB** ANN BCH2402  PHY2502 | Anatomy  Histology  Animal nutrition  Biochemistry  Physiology  Genetics | Second |
|  |  | MIC PAT PAR PHR3402  IMN | Microbiology  Pathology  Parasitology  Pharmacology  immunology | Third |
|  | SUR POU CLP THE MED INF | -Surgery  -Poultry diseases-  -Clinical pathology  -Theriogenology  -Medicine  -Infectious diseases & epidemiology | Fourth |
|  | CLN VPH  FDS OBS SUR RES | -Clinic  -Veterinary public --health  -Fish diseases  -Obstetric  -Surgery  -Research project | Fifth |
|  |  |  |  |

|  |
| --- |
| 13. Personal Development Planning |
| Prepare a generation able to follow up to date and new knowledge in the veterinary fields. Conduct themselves in a professional manner with regard to the veterinarian’s professional and legal responsibilities and understand and apply the ethical codes. Promote and maintain a good professional relationship with clients and colleagues, developing common trust and respecting their professional views and confidentially |
| 14. Admission criteria . |
| According to central acceptance programme of ministry of higher education and scientific research |
| 15. Key sources of information about the programme |
| 1. Establishment of a clear mission and vision for the faculty to ensure the main  objectives of the intended development programme  2.Reference to the instructions regarding Baghdad University vocabulary curriculum and instruction exams |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Curriculum Skills Map** | | | | | | | | | | | | | | | | | | | | |
| **please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed** | | | | | | | | | | | | | | | | | | | | |
| **Programme Learning Outcomes** | | | | | | | | | | | | | | | |  | | | | |
| General and Transferable Skills (or) Other skills relevant to employability and personal development | | | | Thinking Skills | | | | Subject-specific skills | | | | Knowledge and  understanding | | | | Core (C)  Title or Option  (O**)** | | Course Title | Course  Code | Year / Level |
| **D4** | **D3** | **D2** | **D1** | **C4** | **C3** | **C2** | **C1** | **B4** | **B3** | **B2** | **B1** | **A4** | **A3** | **A2** | **A1** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |

**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 |
| Baghdad University/College of Veterinary Medicine/ Anatomy department | 2. University Department/Centre |
| 1. Anatomy/First class (ANAT. I)  2. Anatomy/Second class (ANAT. II)  3.Histology/second class (HIST)  4. Embryology (EMB) | 3. Course title/code |
| Bachelor in General Veterinary Medicine & Surgery | 4. Programme(s) to which it contributes |
| Compulsory | 5. Modes of Attendance offered |
| Two semesters/year | 6. Semester/Year |
| 1. Anatomy/First class (ANAT. I):  2.5 hours theoretical/week, 2 hours  practical/week  2. Anatomy/Second class (ANAT. II)  2 hours theoretical/week, 3 hours  practical/week  3.Histology/second class (HIST)  2 hours theoretical/week, 3 hours  practical/week  4. Embryology (EMB):  1 hours theoretical/week | 7. Number of hours tuition (total) |
| 1/4/2014 | 8. Date of production/revision of this specification |
| 9. Aims of the Course  These courses were designated to achieve a general understanding for the first and second class students about: | |
| A. Normal gross anatomy of different organs and systems of the body of different domestic  Animals | |
| B. Normal microscopic anatomy (histology) of different organs and systems of the body of  different domestic animals | |
| C. Normal developmental anatomy (embryology) of different organs and systems of the body of different domestic animals | |
| D. The practical lab portion of these courses will emphasize introductory exercises and skill in  identifying normal morphology of the different body organs at both macro and microscopic  levels | |
|  | |
|  | |
|  | |
|  | |

|  |
| --- |
| 10· Learning Outcomes, Teaching ,Learning and Assessment Method |
| 1. Knowledge and Understanding   A1. The student will have a comprehensive knowledge and understanding on  normal structure of the organs and body systems  A2. The student will have a comprehensive knowledge and understanding on  normal microscopic structure of the organs and body systems  A3. The student will have a comprehensive knowledge and understanding on  normal developmental events occurred in the organs and body systems  A4.  A5.  A6 . |
| B. Subject-specific skills  B1.create a skill and provide knowledge to the student on which improve the  ability to diagnose the normal body organs grossly  B2. create a skill and provide knowledge to the student on which improve the  ability to diagnose the normal body organs microscopically  B3.improve student ability to use diagnostic tools such as the microscope |
| Teaching and Learning Methods |
| 1. Theoretical lectures and practical approach for teaching ANAT. , ANAT. II  and HIST and only theoretical lectures for EMB.  2. Collection of some information from textbooks or online internet and  providing report on them  3. Quizzes  4. Oral discussion during lectures or practical lab |
| Assessment methods |
| 1. Written theoretical examinations (mid-term, final of term).  2. Written practical examinations (mid-term, final of term).  3. Quizzes  4. Reports  Course assessment weight for annual system (100%) for ANAT. I, ANAT. II and HIST.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Final examination | | Second semester | | First semester | | | Laboratory | Theoretical | Laboratory | Theoretical | Laboratory | Theoretical | | 30% | 20% | 10% | 15% | 10% | 15% |   Course assessment weight for annual system (100%) for EMB   |  |  | | --- | --- | | Final examination | Second semester | | 50% | 50% | |
| C. Thinking Skills  C1.Performing practical examination and diagnosis as well as drawing of the  histological slides of different tissues and organs  C2.How to use the microscope perfectly  C3.photography of the organs grossly and microscopically  C4. Using power point to show slides of tissues and organs |
| Teaching and Learning Methods |
| Involvement of students in the scientific discussion during the practical and theoretical lectures |
| Assessment methods |
| 1.Regular practical quizzes  2. preparing assignment (report) |

|  |
| --- |
| D. General and Transferable Skills (other skills relevant to employability and personal development)  D1.good communication  D2.use new technology  D3.how to write report on specific scientific related subject to the course  D4. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 11. Course Structure  **ANAT. I:** | | | | | |
| Assessment Method | Teaching  Method | Unit/Module or Topic Title | ILOs | Hours | Week |
| Written examination | Theoretical lecture | **Introduction**, |  | 2.5 |  |
| Written examination | Theoretical lecture | **General Osteology**, |  | **5** |  |
| Written examination | Theoretical lecture | **Myology**: |  | **5** |  |
| Written examination | Theoretical lecture | **General Syndesmology (arthrology):** |  | 6 |  |
| Written examination | Theoretical lecture | **Common integument** |  | 6 |  |
| Written examination | Theoretical lecture | **Cardiovascular system (heart & arteries):** |  | 8 |  |
| Written examination | Theoretical lecture | **Mammary gland:** |  | 3 |  |
| Written examination | Theoretical lecture | **Urinary system** |  | 5 |  |
| Written examination | Theoretical lecture | **Male genital system** |  | 8 |  |
| Written examination | Theoretical lecture | **Female genital system** |  | 7 |  |
| Written examination | Theoretical lecture | **Endocrine gland** |  | 5 |  |
| Spot examination | Practical lecture | Bones of thoracic limb &joints, scapula of horse & comparative anatomy |  | 2 |  |
| Spot examination | Practical lecture | Humerus & comparative anatomy |  | 2 |  |
| Spot examination | Practical lecture | Radius & ulna with comparison |  | 2 |  |
| Spot examination | Practical lecture | Carpal, metacarpal & phalanges in horse |  | 2 |  |
| Spot examination | Practical lecture | Circulatory system: pericardium, heart, chambers of heart, major vessels of the heart |  | 2 |  |
| Spot examination | Practical lecture | Muscles of the shoulder girdle of the sheep |  | 2 |  |
| Spot examination | Practical lecture | Lateral surface of shoulder & arm muscles in sheep |  | 2 |  |
| Spot examination | Practical lecture | Dissection of intrinsic muscles of shoulder & arm |  | 2 |  |
| Spot examination | Practical lecture | Muscles of the forearm & manus (extensor & flexor) |  | 2 |  |
| Spot examination | Practical lecture | **Arteries & nerves of the thoracic limb in sheep** |  | 2 |  |
| Spot examination | Practical lecture | **Thoracic & lumbar vertebrae, sacrum in horse** |  | 2 |  |
| Spot examination | Practical lecture | **Ribs & sternum in horse** |  | 2 |  |
| Spot examination | Practical lecture | **Arteries & nerves of the thoracic limb in sheep** |  | 2 |  |
| Spot examination | Practical lecture | **Arteries & nerves of the thoracic limb in sheep** |  | 2 |  |
| Spot examination | Practical lecture | **Thoracic & lumbar vertebrae, sacrum in horse** |  | 2 |  |
| Spot examination | Practical lecture | **Arteries & nerves of the thoracic limb in sheep** |  | 2 |  |
| Spot examination | Practical lecture | **Thoracic & lumbar vertebrae, sacrum in horse** |  | 2 |  |
| Spot examination | Practical lecture | **Comparative anatomy of the pelvic bone** |  | 2 |  |
| Spot examination | Practical lecture | **Comparative anatomy of the femur** |  | 2 |  |
| Spot examination | Practical lecture | **Comparative anatomy of the tibia & fibula** |  | 2 |  |
| Spot examination | Practical lecture | **Tarsal & metatarsal bones in horse** |  | 2 |  |
| Spot examination | Practical lecture | **Muscles of the lion, hip & thigh in sheep** |  | 2 |  |
| Spot examination | Practical lecture | **Flexor & extensor muscles of the pelvic limb in sheep** |  | 2 |  |
| Spot examination | Practical lecture | **Arteries & sacrolumbar plexus & nerves of the pelvic limb** |  | 2 |  |
| Spot examination | Practical lecture | **Inguinal region & mammary gland in sheep** |  | 2 |  |
| Spot examination | Practical lecture | **Urinary system (kidneys, ureter & urinary bladder)** |  | 2 |  |
| Spot examination | Practical lecture | **Female reproductive system in sheep (ovaries, uterine tube & uterus)** |  | 2 |  |
| Spot examination | Practical lecture | **Male reproductive system in sheep (testis & scrotum)** |  | 2 |  |
| Spot examination | Practical lecture | **Penis & accessory sex glands** |  | 2 |  |
| Spot examination | Practical lecture | **Muscles of the lions, hip & thigh in sheep** |  | 2 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 11. Course Structure  **ANAT. II:** | | | | | |
| Assessment Method | Teaching  Method | Unit/Module or Topic Title | ILOs | Hours | Week |
| Written examination | Theoretical lecture | Digestive system |  | 20 |  |
| Written examination | Theoretical lecture | Respiratory system: |  | 10 |  |
| Written examination | Theoretical lecture | Lymphatic system |  | 12 |  |
| Written examination | Theoretical lecture | Nervous system |  | 12 |  |
| Written examination | Theoretical lecture | Sense organs |  | 6 |  |
| Spot examination | Practical lecture | General description of the skull |  | 3 |  |
| Spot examination | Practical lecture | Cranial cavity, nasal cavity, hyoid bone, mandible |  | 3 |  |
| Spot examination | Practical lecture | Skull comparative, paranasal sinuses |  | 3 |  |
| Spot examination | Practical lecture | Cervical vertebrae, comparative |  | 3 |  |
| Spot examination | Practical lecture | Superficial dissection of face region (muscles, nerves, arteries, veins) |  | 3 |  |
| Spot examination | Practical lecture | Deep dissection of face region (muscles, nerves, arteries, veins, parotid-auricular region, buccal region, mental region) |  | 3 |  |
| Spot examination | Practical lecture | Dissection of oral cavity with its contents (comparison), muscles of hyoid bone, muscles & papillae of the tongue |  | 3 |  |
| Spot examination | Practical lecture | Dissection of pharynx (divisions, muscles, openings, muscles of soft palate, muscles of mastication) |  | 3 |  |
| Spot examination | Practical lecture | Dissection of nasal cavity with its contents (comparison), larynx (laryngeal cartilages, muscles & cavities), blood & nerve supply of the larynx |  | 3 |  |
| Spot examination | Practical lecture | The eye (tunics, muscles, nerves, chambers) |  | 3 |  |
| Spot examination | Practical lecture | The brain, cranial & spinal meninges, parts of brain, cranial nerves |  | 3 |  |
| Spot examination | Practical lecture | Dissection of neck region (lateral & ventral surfaces) including chief veins, nerves, arteries, muscles, thyroid gland, lymph nodes, trachea, esophagus |  | 3 |  |
| Spot examination | Practical lecture | Dissection of neck region (dorsal & lateral surfaces) including chief muscles & nerves |  | 3 |  |
| Spot examination | Practical lecture | Dissection of thorax, thoracic fascia, muscles of thoracic wall, respiratory muscles, internal thoracic fascia, pleura, pulmonary ligament, thymus, lung comparative, trachea, bronchial tree |  | 3 |  |
| Spot examination | Practical lecture | Nerves in thoracic cavity (phrenic , vagus, sympathetic chain), pericardium, cranial & caudal vena cava, vena azygos, longus coli muscle, transverses thoracic muscles |  | 3 |  |
| Spot examination | Practical lecture | Aortic arch, common Brachiocephalic trunk with its branches, thoracic aorta with its branches |  | 3 |  |
| Spot examination | Practical lecture | Diaphragm (parts, hiatuses) |  | 3 |  |
| Spot examination | Practical lecture | Viscera: stomach (comparative) |  | 3 |  |
| Spot examination | Practical lecture | Viscera: small intestine (comparative) |  | 3 |  |
| Spot examination | Practical lecture | Viscera: large intestine (comparative) |  | 3 |  |
| Spot examination | Practical lecture | Viscera: liver & its ligaments (comparative) |  | 3 |  |
| Spot examination | Practical lecture | Lymph centers in abdominal cavity, spleen |  | 3 |  |
| Spot examination | Practical lecture | Abdominal aorta with its branches, distribution of autonomic nervous system in region behind diaphragm |  | 3 |  |
| Spot examination | Practical lecture | Terminal branches of abdominal aorta in pelvic cavity with autonomic nerves in it |  | 3 |  |
| Spot examination | Practical lecture | Dissection of abdominal wall (muscles & nerves) |  | 3 |  |
| Spot examination | Practical lecture | Avian anatomy |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 11. Course Structure  HIST: | | | | | |
| Assessment Method | Teaching  Method | Unit/Module or Topic Title | ILOs | Hours | Week |
| Written examination | Theoretical lecture | Cytology |  | 5 |  |
| Written examination | Theoretical lecture | The blood and myeloid tissue |  | 4 |  |
| Written examination | Theoretical lecture | Nervous Tissue |  | 5 |  |
| Written examination | Theoretical lecture | Cartilage and bone |  | 3 |  |
| Written examination | Theoretical lecture | Cardiovascular system |  | 3 |  |
| Spot examination | Theoretical lecture | Lymphatic system |  | 3 |  |
| Spot examination | Theoretical lecture | Respiratory system |  | 3 |  |
| Spot examination | Theoretical lecture | Skin |  | 4 |  |
| Spot examination | Theoretical lecture | Digestive system |  | 8 |  |
| Spot examination | Theoretical lecture | Urinary system |  | 3 |  |
| Spot examination | Theoretical lecture | Endocrine system |  | **4** |  |
| Spot examination | Theoretical lecture | Male reproductive system |  | **4** |  |
| Spot examination | Theoretical lecture | Female reproductive system |  | 6 |  |
| Spot examination | Theoretical lecture | Sensory organs |  | 4 |  |
| Spot examination | Practical lecture | General information to the students, their positions in the laboratory, how to use & take care of microscopes, general structure of the cell, nerve cell, different type of cells. |  | 3 |  |
| Spot examination | Practical lecture | Glycogen granules, mitochondria, Golgi complex, Nissl bodies. |  | 3 |  |
| Spot examination | Practical lecture | Different types of epithelial tissue (simple & stratified). |  | 3 |  |
| Spot examination | Practical lecture | Connective tissue proper: reticular C.T., adipose C.T., elastic C.T., white fibrous C.T., cells of the C.T. |  | 3 |  |
| Spot examination | Practical lecture | Muscular tissue (striated muscle, smooth muscle, cardiac muscle), supportive C.T. (elastic cartilage, hyaline cartilage, fibrocartilage). |  | 3 |  |
| Spot examination | Practical lecture | Compact bone, decalcified, cancellous bone, bone developing. |  | 3 |  |
| Spot examination | Practical lecture | Nervous tissue: myelinated nerve fibers, nerve trunk, spinal ganglion, sympathetic ganglion, Pacinian corpuscle, motor end plate. |  | 3 |  |
| Spot examination | Practical lecture | Blood cells: WBC, RBC, blood platelets. |  | 3 |  |
| Spot examination | Practical lecture | Blood smear: preparation, staining & differential count of WBCs |  | 3 |  |
| Spot examination | Practical lecture | Bone marrow. |  | 3 |  |
| Spot examination | Practical lecture | Lymphatic system: lymph node, thymus, spleen, palatine tonsil, pharyngeal tonsil. |  | 3 |  |
| Spot examination | Practical lecture | Cardiovascular system: aorta (elastic artery), medium-sized muscular artery, small artery, small vein, medium-sized vein, large vein (vena cava), wall of heart (purkinje fibers), semilunar valves. |  | 3 |  |
| Spot examination | Practical lecture | Tongue structure, lingual papillae. |  | 3 |  |
| Spot examination | Practical lecture | Salivary glands: parotid, sublingual, submaxillary, esophagus. |  | 3 |  |
| Spot examination | Practical lecture | Fundic gland region of stomach, pyloric gland region of stomach, rumen, reticulum, Omasum. |  | 3 |  |
| Spot examination | Practical lecture | Small intestine: duodenum, jejunum, ileum, large intestine, recto-anal canal |  | 3 |  |
| Spot examination | Practical lecture | Liver, gall bladder, pancreas |  | 3 |  |
| Spot examination | Practical lecture | Respiratory system: larynx, trachea, lung |  | 3 |  |
| Spot examination | Practical lecture | Endocrine glands: hypophysis (pituitary gland), adrenal gland, thyroid gland, parathyroid gland |  | 3 |  |
| Spot examination | Practical lecture | Urinary system: kidney, ureter, urinary bladder |  | 3 |  |
| Spot examination | Practical lecture | Male genital system: testis, epididymis, vas deferens |  | 3 |  |
| Spot examination | Practical lecture | Female genital system: ovary, corpus luteum, uterine tubes, uterus (secretory & proliferative phases) |  | 3 |  |
| Spot examination | Practical lecture | Hairy skin, including hair follicles & sebaceous glands |  | 3 |  |
| Spot examination | Practical lecture | Eye: cornea, retina |  | 3 |  |
| Spot examination | Practical lecture | Ear: cochlea, Corti organ |  | 3 |  |
| Spot examination | Practical lecture | Mammary gland (active & inactive) |  | 3 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 11. Course Structure  EMB: | | | | | |
| Assessment Method | Teaching  Method | Unit/Module or Topic Title | ILOs | Hours | Week |
| Written examination | Theoretical lecture | Introduction, oogenesis, spermatogenesis |  | 1 |  |
| Written examination | Theoretical lecture | Fertilization, cleavage, implantation |  | 1 |  |
| Written examination | Theoretical lecture | Trilaminar embryonic disc |  | 1 |  |
| Written examination | Theoretical lecture | Placentation with classification |  | 1 |  |
| Written examination | Theoretical lecture | Development of cardiovascular system |  | 1 |  |
| Written examination | Theoretical lecture | Development of Urogenital system |  | 1 |  |
| Written examination | Theoretical lecture | Development of body cavities |  | 1 |  |
| Written examination | Theoretical lecture | Development of digestive system |  | 1 |  |
| Written examination | Theoretical lecture | Development of respiratory system |  | 1 |  |
| Written examination | Theoretical lecture | Development of nervous system |  | 1 |  |

|  |  |
| --- | --- |
| 12. Infrastructure | |
| 1. Course Notes (by staff members)  2. Dellmann, H. D. 1998. Textbook of Veterinary  Histology. 5th Ed. Lippincott, Williams and  Wilkins, USA. **(HIST)**  3. Bacha, W.J. and L. M. Bacha. 2000. Color Atlas of  Veterinary Histology, Lippincott William and  Wilkins, USA.**(HIST)**  4. Lee and Febiger, Banks, W.J., 1992. Applied  Veterinary Histology. (3rd Ed). Williams and  Willkins, Baltimore.**(HIST)**  5. Veterinary Developmental Anatomy-Veterinary  Embryology, 2011**. (EMB)**  6. langman's medical embryology 9th ed. **(EMB)**  7. A Text Book of Veterinary Anatomy By Robert Getty. **(ANAT . I, ANAT. II)** | Required reading:  · CORE TEXTS  · COURSE MATERIALS  · OTHER |
| Laboratory devices and tools  Data show, screen, microscopes.  Dissecting of animals and view the different organs and system of domestic animals.  Using latex injection method for studying g the blood vessels | Special requirements (include for example workshops, periodicals, IT software, websites) |
|  | Community-based facilities  (include for example, guest  Lectures , internship , field studies) |

|  |  |
| --- | --- |
| 13. Admissions | |
|  | Pre-requisites |
| 40 | Minimum number of students |
| 80 | Maximum number of students |

**TEMPLATE FOR TYPICAL SITE VISIT CHEDULE**

1. The typical site visit schedule is designed for two or three days. It includes pre-arranged meetings. The responsibility for arranging these meetings and fitting the template to the circumstances rests with the Universities Quality Assurance and University Performance departments

2. Site visits will normally commence at 09:00 on day 1. Start times of pre-arranged meetings are indicated. Pre-arranged meetings should not normally last more than one hour. The schedule should not completely fill all times with meetings, but leave space for additional activities by peer reviewers including preparing for meetings, updating notes and records and drafting paragraphs for the draft Programme Review report

Table (1)

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Time** | **Session** | |
|  | **Day** **1** | | |
| Welcome and introductions; brief introduction to the review (purposes, intended outcomes, use of evidence and self-evaluation report) – Programme Team | 09:00 | | 1 |
| Curriculum; discussion with faculty members | 09:30 | | 2 |
| Meeting with a group of students | 11:00 | | 3 |
| Efficiency: tour of resources | 12:30 | | 4 |
| Review panel meeting: scrutiny of additional documentation including sample of students’ assessed work | 14:00 | | 5 |
| Efficiency: meeting with faculty members | 15:00 | | 6 |
| Review panel meeting: review of the evidence and any gaps or matters to follow-up | 16:00 | | 7 |
| Meeting with external stakeholders (sample of graduates, employers, other partners) | 17:00 | | 8 |
|  | **Day** **2** | | |
| Review meeting with review chairperson, review coordinator, programme leader: summary of day 1 findings, addressing any gaps, adjust the schedule for day 2 if required | 08:45 | | 9 |
| Academic standards: meeting with faculty members | 09:00 | | 10 |
| Effectiveness of quality management and assurance: meeting with faculty members | 10:30 | | 11 |
| Review panel meeting: review of evidence and any matters still to be addressed | 12:00 | | 12 |
| Flexible time to pursue any matters arising | 14:00 | | 13 |
| Review panel final meeting: decisions on outcomes and drafting oral feedback | 14:30 | | 14 |
| Oral feedback by review chairperson to review coordinator and faculty members | 16:30 | | 15 |
| Close | 17:00 | |  |

**TEMPLATE FOR THE FOLLOW-UP PROCESS**

**AND REPORT, AND OUTLINE OF TYPICAL SITE VISIT SCHED-**

**ULE FOR FOLLOW-UP**

**TEMPLATE FOR FOLLOW-UP REPORT**

Quality Assurance and Academic Accreditation Directorate / International Accreditation Department.

Institution: **BAGHDAD UNIVERSITY**

Faculty: **COLLEGE OF VETERINARY MEDICINE**

Programme: **Bachelor in Veterinary Medicine & Surgery**

Follow-up Report

1. This report presents the findings of the follow-up visit, which took place on / /20\_\_. This is part of the Universities Quality Assurance and University Performance departments arrangements to provide continuing support for the development of internal quality assurance processes and continuing improvement

2. The purposes of the follow-up review are to assess the progress made in the programme since the Programme Review report, and to provide further information and support for the continuing improvement of academic standards and quality of higher education in Iraq.

3. The evidence base used in this follow-up review and report includes:

1. Self-Evaluation Report for the programme together with supporting information
2. Improvement plan prepared and implemented since the Programme Review report
3. Programme Review Report
4. Higher Education Quality Review Report and institutional strategic plan (if any)
5. Additional evidence presented during the follow-up visit.

4. The overall conclusions reached as the outcome of the follow-up review are as follows:

1. The programme (give title) at (give name of institution) has/has not successfully

implemented an improvement plan.

1. Good practice in the indicators demonstrated since the Programme Review site visit includes: (insert)
2. Matters of particular importance that should be addressed by the institution in its

continuing improvement of the programme are: (insert and indicate if they are, or as yet are not, addressed by the improvement plan).

5. The detailed report is provided in Annexure A below.

Annexure A

Name of Institution\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of initial Programme Review site visit\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date visited in follow-up \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of follow-up report \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Names of follow-up reviewers Position/title Signed

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Part 1: The Internal Quality Assurance System in operation** | | | | |
| **Further action required?** | **Comment** | **Yes?**  **(√)** | **Questions** |  |
|  |  |  | Is the programme Self- Evaluation  Report complete? | 1 |
|  |  |  | Do the most recent self-evaluation  reports indicate the extent to which the criteria in the Framework for Evaluation are met and/or are being addressed? | 2 |
|  |  |  | Is there an improvement plan in place, informed by external and internal review? | 3 |
|  |  |  | Are there any major gaps that appear not to be addressed? | 4 |
|  |  |  | Is progress with the improvement plan monitored? | 5 |
|  |  |  | Are there any major obstacles to the expected achievementof the improvement plan? | 6 |
|  |  |  | What is the institution’s estimate of the time needed to complete improvements to the programme? | 7 |
|  |  |  | What is the reviewers’ assessment of the time needed to complete improvements to the programme that would demonstrate the indicators? | 8 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Part 2: Progress demonstrated with the indicators** | | | |
| Overall  conclusion | New information from  follow-up site visit | Improvement plan  points (comment  on match with  the Programme  Review report’s  recommendations) | Indicators (refer to  Framework of Evaluation) |
|  |  |  | Curriculum  Aims and ILOs  Syllabus (content)  Progression year on year  Teaching and Learning  Student assessment |
|  |  |  | Efficiency  Profile of admitted  students  Human resources  Physical resources  Uses made of available  resources  Student support  Ratios of graduation to  admitted students |
|  |  |  | Academic Standards  Clearly articulated  standards  Use of appropriate  benchmarks  Achievement of graduates  Standards of students’  assessed work |
|  |  |  | Programme management  and Assurance  Arrangements for  programme management  Policies and procedures  applied  Structured comments  collected and used  Staff development needs  identified and addressed  Improvement planning  processes working |

**CRITERIA FOR A SUCCESSFUL REVIEW AND EVALUATION OF THE PROCESS**

**CRITERIA FOR A SUCCESSFUL REVIEW**

1. The criteria for a successful review that informs the arrangements for Programme Review and its evaluation are as follows:

1. The programme being reviewed is supported by existing or developing internal systems including specifications and review with a culture of self-evaluation and continuing improvement. These features of internal review provide a sound basis for the external review.
2. The timing of the external review is appropriate.
3. The profile of the visiting peer review panel matches in broad terms the profile of the academic activities in the institution.
4. There is due attention to detail in planning and preparation, by -
   1. The Quality Assurance and Academic Accreditation Directorate applies consistently its procedures for working with the institution and the reviewers and provides appropriate support for the external review as required
   2. The review coordinator: ensures that the evidence base generated by internal review and reporting systems is available on time to the visiting peer reviewers, and any requirements for clarification and supplementary information are satisfied
   3. The institution: provides a self-evaluation report for the programme to be externally reviewed
   4. The peer reviewers: undertake their preparation for the visit including reading the advance documentation and preparing initial commentaries that inform the conduct of the visit
5. There is consistency in the application of the published review method and the protocols by all participants in a way that respects and supports the mission and philosophy of the overall process for continuing review and continuing improvement.
6. Reviewers and representatives of the institution conduct an open dialogue throughout the review that shows mutual respect.
7. The judgements reached by the reviewers are clear, based on the evidence available and systematically recorded.
8. The review report is produced on time in line with the standard report structure and is confirmed by the institution to be factually accurate.
9. The set of conclusions arising from the review are constructive, offering a fair and balanced view of the programme.
10. The institution is able to benefit from the external review by giving due reflection and consideration to the findings and preparing where appropriate a realistic improvement plan

**EVALUATION**

2. The Quality Assurance and Academic Accreditation Directorate wishes to establish and implement procedures for the systematic evaluation of all external Programme Reviews arranged by it. The institution, the review chairperson and the peer reviewers will all routinely be asked to evaluate each external review by completing a short questionnaire. The structured comments will be analysed by the Quality Assurance and Academic Accreditation Directorate and where necessary the Quality Assurance and Academic Accreditation Directorate will take action to follow-up any difficulties highlighted. In addition, the Quality Assurance and Academic Accreditation Directorate will collate the structured comments to compile regular summary reports indicating the main features of the review process in practice, including the overall levels of satisfaction expressed by the participants, together with examples of good practice and opportunities for continuing improvement.

**GLOSSARY OF TERMS IN PROGRAMME RE-**

**VIEW**

**DEFINITIONS OF TERMS USED IN THE PROGRAMME REVIEW HANDBOOK**

Some of the terms used in the Handbook and/or used in internal and external review and reporting may have different meanings according to the context in which they are used. To remove possible ambiguities, the following working definitions of the terms are offered.

**ADEMIC FIELDS/SUBJECT AREAS/DISCIPLINES**

Academic fields categorise recognisable and coherent domains or the scope of study such as Mathematics, Medicine, Engineering and Philosophy. Fields that have a wide scope are often subdivided; for example, Humanities include subjects like History and Literature and Arts may include separate disciplines of Fine Arts and Photography. The curriculum of some programmes may combine academic fields, or may include different subjects and disciplines such as Mathematics in Engineering or Accountancy in Business Administration.

**ACADEMIC STANDARDS**

Specific standards decided by the institution, and informed by external reference points. They include the minimum or threshold level of knowledge and skills to be gained by the graduates from the programme, and can be used in evaluation and review.

**ACCREDITATION**

The recognition accorded by an agency or other organisation to either an education programme or to an institution to confirm that it can demonstrate that the programme(s) meet acceptable standards and that the institution has effective systems to ensure the quality and continuing improvement of its academic activities, according to published criteria.

**ACTION OR IMPROVEMENT PLANS**

Realistic plans for improvement derived from the consideration of available evidence and evaluations; they may be implemented for more than one year, but should be prepared and reviewed annually at each level of courses, programmes and the institution.

**ADMITTED STUDENTS**

Students registered on a programme, including those accepted holding prior credits for admission after year 1.

**BENCHMARK/REFERENCE POINTS**

Benchmark statements represent general expectations about the standards of achievement and general attributes to be expected of a graduate in a given academic field or subject. Reference standards may be external or internal. External reference points allow comparison of the academic standards and quality of a programme with equivalent programmes in Iraq and internationally. Internal reference points may be used to compare one academic field with another, or to identify trends over a given time period.

**COMMUNITY**

A defined segment of wider society served by the institution, as determined in its mission and bylaws. It may be defined geographically or in terms of the range of organizations, groups and individuals engaged in its activities.

**COURSE AIMS**

Overall course aims should be expressed as the outcomes to be achieved by students completing the course as significant and assessable qualities. They should contribute to the achievement of defined aims within one or more education programmes.

**CURRICULUM OR (IN THE PLURAL) CURRICULA**

The complete organised learning as designed and managed by an institution for an admitted student, determined by the intended learning outcomes (ILOs) and comprising the content, the arrangements for teaching and learning and assessments of students’ achievements together with the access to the range of facilities available within the University and, by arrangement, outside it, including libraries, computers studies, social, sports, internships and field studies.

**DIRECTED SELF-LEARNING/INDEPENDENT LEARNING**

The active promotion of personal skills included in the curriculum that support the student and graduate to seek, assimilate and learn from a range of structured and unstructured experiences. Methods of promotion include e-learning, personal and autonomous learning and fieldwork, assignments, internships, and reflexive learning. Devices commonly used that support directed self-learning beyond formal teaching lectures include logbooks, self-assessment reports, interactive learning tools or the equivalent.

**E-LEARNING**

Electronic-based learning using information technology may be the primary or secondary element in material associated with a programme or a course. It may be stand-alone or integrated with other teaching and learning approaches. It may include self-determination

of aims, ILOs and materials using self-selection and will usually include self-assessment. It generally increases the levels of autonomy in, and responsibility for, learning. Converting existing texts or lecture notes to a website or pre-recorded media alone is generally not considered to be e-learning.

**EXTERNAL EVALUATOR/EVALUATION**

An appointment to a specific programme, part of a programme or course(s) by the institution to establish an independent and external professional opinion on the academic standards set and achieved in the examinations for the award of the degree.

**FRAMEWORK FOR EVALUATION**

The framework for evaluation provides a standard structure for evaluation of programmes. It will form the basis for self-evaluation, the site visit by external peer reviewers and the Programme Review report. It is designed to operate in all academic fields and institutions, and to apply to internal and external reviews.

**GENERAL PRECEPTS/BY-LAWS**

Principles, by-laws and regulations, which the educational institution must have as part of the policies covering its operations.

**HIGHER EDUCATION INSTITUTE (HEI)/INSTITUTION**

A Faculty, College or University providing higher education programmes leading to a first university degree (B.Sc. or B.A.) or a higher degree.

**INTENDED LEARNING OUTCOMES (ILOS)**

The ILOs are the outcome-related definition of knowledge, understanding and skills which

the institution intends for its programmes. They should be mission-related, capable of measurement (assessable) and reflect the use of external reference standards at appropriate

level.

**INTERNAL SYSTEM FOR QUALITY MANAGEMENT AND ASSURANCE**

The system adopted by the institution to ensure that its education programmes and contributing elements meet specified needs and are continually reviewed and improved. An outcomes-related system of quality management involves precise specifications for quality from design to delivery; evaluation; the identification of good practice as well as of learning deficiencies and obstacles; performance follow-up; suggestions for development and enhancement; and the systematic review and development of processes for establishing effective policies, strategies and priorities to support continuing improvement.

**JOB/LABOUR MARKET**

The availability of professional, commercial, research-oriented or other fields of employment that a graduate is qualified to join upon graduation.

**MISSION STATEMENT**

A brief statement clearly identifying the educational institution’s duty and its role in the development of the community; a mission statement may also offer brief supporting statements on the vision, values and strategic objectives of the institution.

**PEER REVIEWER**

A person who is professionally equal in calibre and with management and/or subject expertise to those delivering the provision, but not from the same institution and without any conflict of interest, who can contribute to the review of an education programme for internal and external quality assurance or for accreditation purposes.

**PROGRAMME**

For the purpose of Programme Review an education programme is defined as one which admits students who, on successful completion, receive an academic award.

**PROGRAMME AIMS**

The broad purposes for providing the programme which in turn guide the development and

implementation of strategic objectives (to ensure that the aims are met) and ILOs (to ensure that the students work towards attaining the specified outcomes).

**PROGRAMME REVIEW**

Programme Review applies to all education programmes in all higher education institutions.

Where the programme is studied in more than one institution, the whole programme is included in Programme Review. Programme Review in Iraq has three objectives:

1. To provide decision-makers (in the higher education institutions, Quality Assurance and Academic Accreditation Directorate , parents, students, and other stakeholders) with evidence-based judgements on the quality of learning programmes
2. To support the development of internal quality assurance processes with information on emerging good practice and challenges, evaluative comment and continuing improvement
3. To enhance the reputation of Iraq’s higher education internationally.

**QUALITY ASSURANCE**

The institution has the means of assuring that for each education programme, academic standards are defined and achieved in line with equivalent national and international standards, that the quality of the curriculum and related infrastructure are appropriate and fulfil the expectations of the range of stakeholders, that its graduates represent the range of attributes specified and that the organisation is capable of sustained, continuing improvement.

**REVIEW COORDINATOR**

The nominee of an institution to coordinate a Programme Review to assist in the gathering and interpretation of information and to support the application of published methods of review.

**REPORT**

The regular reports prepared on the basis of Programme Reviews and evaluations of its education programme.

**SELF-EVALUATION**

n institution’s process of evaluating a programme as part of Programme Review and within an internal system of quality management and assurance.

**SITE VISIT**

A scheduled visit by external peer reviewers as part of Programme Review. Normally the site visit will be for two or three days. A typical outline timetable is provided in Appendix(1).

**SPECIFICATION**

The detailed description of the aims, construction and intended outcomes of a programme, and any courses, specific facilities or resources that contribute to it. The specification provides information to design, manage, deliver and review the programme.

**STAKEHOLDER**

Those organisations, groups or individuals which have a legitimate interest in the educational activities of the institution both in respect of the quality and standards of the education and also in respect of the effectiveness of the systems and processes for assuring the quality. An effective strategic review process will include the key stakeholder groups. The precise range of stakeholder groups and their differentiated interests depend upon the mission of the institution, its range of educational activities and local circumstances. The range is usually defined by a scoping study. Examples of groups with a legitimate interest include current students, graduates, intending students and their parents or family, staff in the institution, the employing community, the relevant Government ministries, the sponsors and other funding organisations and, where appropriate, professional organisations or syndicates.

**STRATEGIC OBJECTIVES/PLANS**

A collection of institution-specific objectives that are derived from its mission and developed into a realistic plan based on evidence-based evaluations. Objectives concentrate on the means by which an institution seeks to deliver its mission. The plan sets out the matters to be addressed, timeframe, person responsible and estimate of costs, and is accompanied by an implementation plan with arrangements for monitoring the progress and evaluating impact.

**STUDENTS’ASSESSMENT**

A set of processes, including examinations and other activities conducted by the institution to measure the achievement of the intended learning outcomes of a programme and its courses. Assessments also provide the means by which students are ranked according to their achievement. Diagnostic assessment seeks to determine the existing range of knowledge and skills of a student with a view to constructing an appropriate curriculum. Formative assessment provides information on the student’s performance and progress to support further learning, without necessarily counting a grade towards graduation. Summative assessment determines the final level of attainment of the student on the programme or at the end of a course that contributes credits to the programme.

**STUDENTS’ EVALUATIONS**

The systematic gathering of students’opinions on the quality of their programme in a standardized structure together with the analysis and outcomes. Surveys using questionnaires are the most frequently used methods to collect opinions; other mechanisms include websites conferences, panels or focus groups, and representation on councils or other committees.

**TEACHING AND LEARNING METHODS**

The range of methods used by teachers to help students to achieve the ILOs for the course.

Examples include: lectures, small group teaching such as tutorials, seminars and syndicate groups; a case study to teach students how to analyse information and reach a decision; assignments such as writing a review paper for the students to gain the skills of self-learning and presentation; field trips; practical sessions for the students to gain practical skills; and carrying out experiments to train the students to analyse the results, reach specific conclusions and prepare a report, presentation or poster.