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 2022-2023

Universitiy: University of Baghdad College :College of Veterinary Medicine Departments In The College :Anatomy

to Au Dean's Name

Date: 16 / 10/ 2022

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Dean's Assistant For Scientific Affairs

Am taken The College Quality Assurance And University Performance Manager Date: 16/10/2022 Signature

Signature

Date : [6 /10 / 2022 Signature

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: Anatomy, Histology & Embryology

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.

| 1. Teaching Institution | Ministry of Higher Education and Scientific research |
|--|--|
| 2. University Department/Centre | University of Baghdad/ College of Veterinary Medicine/ Department of Anatomy, Histology & Embryology |
| 3. Programmed Title | Bachelor in Veterinary Medicine & Surgery |
| 4. Title of Final Award | Bachelor in Veterinary Medicine & Surgery |
| 5. Modes of Attendance offered | Two terms / year |
| 6. Accreditation | |
| 7. Other external influences | None |
| 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

A. 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 tow 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 |
| written examinations oral examination Quiz examination Report assignment preparation 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 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

| 11. Program | nme Structure | | | |
|-------------|--|--|------------------|------------------------|
| Level/Year | Course or Module Code | Course or Module Title | Credit rating | 12. Awards and Credits |
| First | Anatomy Animal management Chemistry Computer Biology English language | ANAT. I ANM CHM1401 COM BIO ENG | | . Bachelor Degree |
| Second | Anatomy Histology Animal nutrition Biochemistry Physiology Genetics | ANAT. II HIST EMB ANN BCH2402 PHY2502 | | Requires (x) credits |
| Third | Microbiology Pathology Parasitology Pharmacology immunology | MIC PAT PAR PHR3402 IMN | | |

| Fourth | Surgary | SUR | |
|--------|----------------------|-----|--|
| FOULUI | -Surgery | | |
| | -Poultry diseases- | POU | |
| | -Clinical pathology | CLP | |
| | -Theriogenology | THE | |
| | -Medicine | MED | |
| | -Infectious diseases | INF | |
| | & epidemiology | | |
| | | | |
| | | | |
| Fifth | -Clinic | CLN | |
| | -Veterinary public | VPH | |
| | health | | |
| | -Fish diseases | FDS | |
| | -Obstetric | OBS | |
| | -Surgery | SUR | |
| | -Research project | RES | |
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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 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | Р | rogra | mme | Learı | ning O | utcon | nes | | | | |
| Year / Level | Course Code | Course Title | Core (C) Title or Option (O) | K U | Knowledge and understanding Subject-specific skills Thinking Skills | | | Subject-specific skills | | S | General and Transferable Skills (or) Other skills relevant to employability and personal development | | ills oility | | | | | | |
| | | | | A1 | A2 | A3 | A4 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | D1 | D2 | D3 | D4 |
| | | | | | | | | | | | | | | | | | | | |
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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 | |
|---|--|
| 2. University Department/Centre | Baghdad University/College of Veterinary Medicine/ Anatomy department |
| 3. Course title/code | Anatomy/First class (ANAT. I) Anatomy/Second class (ANAT. II) Histology/second class (HIST) Embryology (EMB) |
| 4. Programme(s) to which it contributes | Bachelor in General Veterinary Medicine & Surgery |
| 5. Modes of Attendance offered | Compulsory |
| 6. Semester/Year | Two semesters/year |
| 7. Number of hours tuition (total) | Anatomy/First class (ANAT. I): 2.5 hours theoretical/week, 2 hours practical/week Anatomy/Second class (ANAT. II) 2 hours theoretical/week, 3 hours practical/week Histology/second class (HIST) 2 hours theoretical/week, 3 hours practical/week |

| | 4. Embryology (EMB):1 hours theoretical/week | | | | | | |
|--|---|--|--|--|--|--|--|
| 8. Date of production/revision of this specification | 1/4/2014 | | | | | | |
| 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 an Animals | d systems of the body of different domestic | | | | | | |
| B. Normal microscopic anatomy (histology) of a different domestic animals | lifferent organs and systems of the body of | | | | | | |
| C. Normal developmental anatomy (embryology of different domestic animals | <i>i</i>) of different organs and systems of the body | | | | | | |
| 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 | | | | | | | |
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| 10. Learning Outcomes, Teaching ,Learning and Assessment Method | | | | | | | |

A- 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

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A5.

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- 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.

| First semeste | er | Second sem | ester | Final examination | | |
|---------------|------------|-------------|------------|-------------------|------------|--|
| Theoretical | Laboratory | Theoretical | Laboratory | Theoretical | Laboratory | |
| 15% | 10% | 15% | 10% | 20% | 30% | |

Course assessment weight for annual system (100%) for EMB

| Second semester | Final examination |
|-----------------|-------------------|
| 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 S ANAT. | | | | | |
|-----------------------|-------|------|---|---------------------|---------------------|
| Week | Hours | ILOs | Unit/Module or Topic Title | Teaching Method | Assessment Method |
| | 2.5 | | Introduction, | Theoretical lecture | Written examination |
| | 5 | | General Osteology, | Theoretical lecture | Written examination |
| | 5 | | Myology: | Theoretical lecture | Written examination |
| | 6 | | General Syndesmology (arthrology): | Theoretical lecture | Written examination |
| | 6 | | Common integument | Theoretical lecture | Written examination |
| | 8 | | Cardiovascular system (heart & arteries): | Theoretical lecture | Written examination |
| | 3 | | Mammary gland: | Theoretical lecture | Written examination |
| | 5 | | Urinary system | Theoretical lecture | Written examination |
| | 8 | | Male genital system | Theoretical lecture | Written examination |
| | 7 | | Female genital system | Theoretical lecture | Written examination |
| | 5 | | Endocrine gland | Theoretical lecture | Written examination |
| | 2 | | Bones of thoracic limb &joints, scapula of horse & comparative anatomy | Practical lecture | Spot examination |
| | 2 | | Humerus & comparative anatomy | Practical lecture | Spot examination |
| | 2 | | Radius & ulna with comparison | Practical lecture | Spot examination |
| | 2 | | Carpal, metacarpal & phalanges in horse | Practical lecture | Spot examination |
| | 2 | | Circulatory system: pericardium, heart, chambers of heart, major vessels of the heart | Practical lecture | Spot examination |
| | 2 | | Muscles of the shoulder girdle of the sheep | Practical lecture | Spot examination |
| | 2 | | Lateral surface of shoulder & arm muscles in sheep | Practical lecture | Spot examination |
| | 2 | | Dissection of intrinsic muscles of shoulder & arm | Practical lecture | Spot examination |
| | 2 | | Muscles of the forearm & manus (extensor & flexor) | Practical lecture | Spot examination |

| | 2 | Arteries & nerves of the thoracic limb in sheep | Practical lecture | Spot examination |
|---|---|--|-------------------|------------------|
| 2 | 2 | Thoracic & lumbar vertebrae, sacrum in horse | Practical lecture | Spot examination |
| 2 | 2 | Ribs & sternum in horse | Practical lecture | Spot examination |
| | 2 | Arteries & nerves of the thoracic limb in sheep | Practical lecture | Spot examination |
| | 2 | Arteries & nerves of the thoracic limb in sheep | Practical lecture | Spot examination |
| | 2 | Thoracic & lumbar vertebrae, sacrum in horse | Practical lecture | Spot examination |
| | 2 | Arteries & nerves of the thoracic limb in sheep | Practical lecture | Spot examination |
| 2 | 2 | Thoracic & lumbar vertebrae, sacrum in horse | Practical lecture | Spot examination |
| 2 | 2 | Comparative anatomy of the pelvic bone | Practical lecture | Spot examination |
| | 2 | Comparative anatomy of the femur | Practical lecture | Spot examination |
| 2 | 2 | Comparative anatomy of the tibia & fibula | Practical lecture | Spot examination |
| | 2 | Tarsal & metatarsal bones in horse | Practical lecture | Spot examination |
| | 2 | Muscles of the lion, hip & thigh in sheep | Practical lecture | Spot examination |
| | 2 | Flexor & extensor muscles of the pelvic limb in sheep | Practical lecture | Spot examination |
| | 2 | Arteries & sacrolumbar plexus & nerves of the pelvic limb | Practical lecture | Spot examination |
| | 2 | Inguinal region & mammary gland in sheep | Practical lecture | Spot examination |
| | 2 | Urinary system (kidneys, ureter & urinary bladder) | Practical lecture | Spot examination |

| 2 | Female reproductive system in sheep (ovaries, uterine tube & uterus) | Practical lecture | Spot examination |
|---|--|-------------------|------------------|
| 2 | Male reproductive system in sheep (testis & scrotum) | Practical lecture | Spot examination |
| 2 | Penis & accessory sex glands | Practical lecture | Spot examination |
| 2 | Muscles of the lions, hip & thigh in sheep | Practical lecture | Spot examination |

| 11. Course S ANAT. | | | | | |
|-----------------------|-------|------|--|---------------------|---------------------|
| Week | Hours | ILOs | Unit/Module or Topic Title | Teaching Method | Assessment Method |
| | 20 | | Digestive system | Theoretical lecture | Written examination |
| | 10 | | Respiratory system: | Theoretical lecture | Written examination |
| | 12 | | Lymphatic system | Theoretical lecture | Written examination |
| | 12 | | Nervous system | Theoretical lecture | Written examination |
| | 6 | | Sense organs | Theoretical lecture | Written examination |
| | 3 | | General description of the skull | Practical lecture | Spot examination |
| | 3 | | Cranial cavity, nasal cavity, hyoid bone, mandible | Practical lecture | Spot examination |
| | 3 | | Skull comparative, paranasal sinuses | Practical lecture | Spot examination |
| | 3 | | Cervical vertebrae, comparative | Practical lecture | Spot examination |
| | 3 | | Superficial dissection of face region (muscles, nerves, arteries, veins) | Practical lecture | Spot examination |
| | 3 | | Deep dissection of face region (muscles, nerves, arteries, veins, parotid- auricular region, buccal region, mental region) | Practical lecture | Spot examination |
| | 3 | | Dissection of oral cavity with its contents (comparison), muscles of hyoid bone, muscles & papillae of the tongue | Practical lecture | Spot examination |
| | 3 | | Dissection of pharynx (divisions, muscles, openings, muscles of soft palate, muscles of mastication) | Practical lecture | Spot examination |
| | 3 | | Dissection of nasal cavity with its contents | Practical lecture | Spot examination |

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| | (comparison), larynx (laryngeal cartilages, muscles & cavities), blood & nerve supply of the larynx | | |
| 3 | The eye (tunics, muscles, nerves, chambers) | Practical lecture | Spot examination |
| 3 | The brain, cranial & spinal meninges, parts of brain, cranial nerves | Practical lecture | Spot examination |
| 3 | Dissection of neck region (lateral & ventral surfaces) including chief veins, nerves, arteries, muscles, thyroid gland, lymph nodes, trachea, esophagus | Practical lecture | Spot examination |
| 3 | Dissection of neck region (dorsal & lateral surfaces) including chief muscles & nerves | Practical lecture | Spot examination |
| 3 | Dissection of thorax, thoracic fascia, muscles of thoracic wall, respiratory muscles, internal thoracic fascia, pleura, pulmonary ligament, thymus, lung comparative, trachea, bronchial tree | Practical lecture | Spot examination |
| 3 | Nerves in thoracic cavity (phrenic, vagus, sympathetic chain), pericardium, cranial & caudal vena cava, vena azygos, longus coli muscle, transverses thoracic muscles | Practical lecture | Spot examination |
| 3 | Aortic arch, common Brachiocephalic trunk with its branches, thoracic aorta with its branches | Practical lecture | Spot examination |

| 3 | Diaphragm (parts, hiatuses) | Practical lecture | Spot examination |
|---|---|-------------------|------------------|
| 3 | Viscera: stomach (comparative) | Practical lecture | Spot examination |
| 3 | Viscera: small intestine (comparative) | Practical lecture | Spot examination |
| 3 | Viscera: large intestine (comparative) | Practical lecture | Spot examination |
| 3 | Viscera: liver & its ligaments (comparative) | Practical lecture | Spot examination |
| 3 | Lymph centers in abdominal cavity, spleen | Practical lecture | Spot examination |
| 3 | Abdominal aorta with its branches, distribution of autonomic nervous system in region behind diaphragm | Practical lecture | Spot examination |
| 3 | Terminal branches of abdominal aorta in pelvic cavity with autonomic nerves in it | Practical lecture | Spot examination |
| 3 | Dissection of abdominal wall (muscles & nerves) | Practical lecture | Spot examination |
| | Avian anatomy | Practical lecture | Spot examination |

| 11. Course S HIST: | Structure | | | | |
|-----------------------|-----------|------|---|---------------------|---------------------|
| Week | Hours | ILOs | Unit/Module or Topic Title | Teaching Method | Assessment Method |
| | 5 | | Cytology | Theoretical lecture | Written examination |
| | 4 | | The blood and myeloid tissue | Theoretical lecture | Written examination |
| | 5 | | Nervous Tissue | Theoretical lecture | Written examination |
| | 3 | | Cartilage and bone | Theoretical lecture | Written examination |
| | 3 | | Cardiovascular system | Theoretical lecture | Written examination |
| | 3 | | Lymphatic system | Theoretical lecture | Spot examination |
| | 3 | | Respiratory system | Theoretical lecture | Spot examination |
| | 4 | | Skin | Theoretical lecture | Spot examination |
| | 8 | | Digestive system | Theoretical lecture | Spot examination |
| | 3 | | Urinary system | Theoretical lecture | Spot examination |
| | 4 | | Endocrine system | Theoretical lecture | Spot examination |
| | 4 | | Male reproductive system | Theoretical lecture | Spot examination |
| | 6 | | Female reproductive system | Theoretical lecture | Spot examination |
| | 4 | | Sensory organs | Theoretical lecture | Spot examination |
| | 3 | | 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. | Practical lecture | Spot examination |
| | 3 | | Glycogen granules, mitochondria, Golgi complex, Nissl bodies. | Practical lecture | Spot examination |
| | 3 | | Different types of epithelial tissue (simple & stratified). | Practical lecture | Spot examination |
| | 3 | | Connective tissue proper: reticular C.T., adipose C.T., elastic C.T., white fibrous C.T., cells of the C.T. | Practical lecture | Spot examination |
| | 3 | | Muscular tissue (striated muscle, smooth muscle, cardiac muscle), supportive C.T. (elastic cartilage, hyaline cartilage, fibrocartilage). | Practical lecture | Spot examination |
| | 3 | | Compact bone, decalcified, cancellous bone, bone developing. | Practical lecture | Spot examination |

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|---|---|---|-------------------|------------------|
| 3 | | Nervous tissue: myelinated nerve fibers, nerve trunk, spinal ganglion, sympathetic ganglion, Pacinian corpuscle, motor end plate. | Practical lecture | Spot examination |
| 3 | 3 | Blood cells: WBC, RBC, blood platelets. | Practical lecture | Spot examination |
| 3 | | Blood smear: preparation, staining & differential count of WBCs | Practical lecture | Spot examination |
| 3 | | Bone marrow. | Practical lecture | Spot examination |
| 3 | | Lymphatic system: lymph node, thymus, spleen, palatine tonsil, pharyngeal tonsil. | Practical lecture | Spot examination |
| 3 | | 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. | Practical lecture | Spot examination |
| 3 | | Tongue structure, lingual papillae. | Practical lecture | Spot examination |
| 3 | | Salivary glands: parotid, sublingual, submaxillary, esophagus. | Practical lecture | Spot examination |
| 3 | | Fundic gland region of stomach, pyloric gland region of stomach, rumen, reticulum, Omasum. | Practical lecture | Spot examination |
| 3 | | Small intestine: duodenum, jejunum, ileum, large intestine, recto-anal canal | Practical lecture | Spot examination |
| 3 | 3 | Liver, gall bladder, pancreas | Practical lecture | Spot examination |
| 3 | | Respiratory system: larynx, trachea, lung | Practical lecture | Spot examination |
| 3 | | Endocrine glands: hypophysis (pituitary gland), adrenal gland, thyroid gland, parathyroid gland | Practical lecture | Spot examination |
| 3 | | Urinary system: kidney, ureter, urinary bladder | Practical lecture | Spot examination |
| 3 | | Male genital system: testis, epididymis, vas deferens | Practical lecture | Spot examination |

| 3 | Female genital system: ovary, corpus luteum, uterine tubes, uterus (secretory & proliferative phases) | Practical lecture | Spot examination |
|---|---|-------------------|------------------|
| 3 | Hairy skin, including hair follicles & sebaceous glands | Practical lecture | Spot examination |
| 3 | Eye: cornea, retina | Practical lecture | Spot examination |
| 3 | Ear: cochlea, Corti organ | Practical lecture | Spot examination |
| 3 | Mammary gland (active & inactive) | Practical lecture | Spot examination |

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

| 12. Infrastructure | |
|--|---|
| Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER | Course Notes (by staff members) Dellmann, H. D. 1998. Textbook of Veterinary Histology. 5th Ed. Lippincott, Williams and Wilkins, USA. (HIST) Bacha, W.J. and L. M. Bacha. 2000. Color Atlas of Veterinary Histology, Lippincott William and Wilkins, USA.(HIST) Lee and Febiger, Banks, W.J., 1992. Applied Veterinary Histology. (3rd Ed). Williams and Willkins, Baltimore.(HIST) Veterinary Developmental Anatomy-Veterinary Embryology, 2011. (EMB) langman's medical embryology 9th ed. (EMB) A Text Book of Veterinary Anatomy By Robert Getty. (ANAT . I, ANAT. II) |
| Special requirements (include for example workshops, periodicals, IT software, websites) | 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 |
| Community-based facilities (include for example, guest Lectures , internship , field studies) | |

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

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

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

Table (1)

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:
 - a) Self-Evaluation Report for the programme together with supporting information
 - b) Improvement plan prepared and implemented since the Programme Review report
 - c) Programme Review Report
 - d) Higher Education Quality Review Report and institutional strategic plan (if any)
 - e) Additional evidence presented during the follow-up visit.
- 4. The overall conclusions reached as the outcome of the follow-up review are as follows:
 - a) The programme (give title) at (give name of institution) has/has not successfully implemented an improvement plan.
 - b) Good practice in the indicators demonstrated since the Programme Review site visit includes: (insert)
 - c) 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 |

| Pa | Part 1: The Internal Quality Assurance System in operation | | | | | | | |
|----|---|-------------|---------|--------------------------|--|--|--|--|
| | Questions | Yes? (√) | Comment | Further action required? | | | | |
| 1 | Is the programme Self- Evaluation Report complete? | | | | | | | |
| 2 | 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? | | | | | | | |
| 3 | Is there an improvement plan in place, informed by external and internal review? | | | | | | | |
| 4 | Are there any major gaps that appear not to be addressed? | | | | | | | |
| 5 | Is progress with the improvement plan monitored? | | | | | | | |
| 6 | Are there any major obstacles to the expected achievement of the improvement plan? | | | | | | | |
| 7 | What is the institution's estimate of the time needed to complete improvements to the programme? | | | | | | | |
| 8 | What is the reviewers' assessment of the time needed to complete improvements to the programme that would demonstrate the indicators? | | | | | | | |

| Part 2: Progress demonstrated | with the indicators | | |
|--|--|---|--------------------|
| Indicators (refer to Framework of Evaluation) | Improvement plan points (comment on match with the Programme Review report's recommendations) | New information from follow-up site visit | Overall conclusion |
| <u>Curriculum</u> 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 | | | |
| <u>Academic Standards</u> 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:
 - i. 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.
 - ii. The timing of the external review is appropriate.
 - iii. The profile of the visiting peer review panel matches in broad terms the profile of the academic activities in the institution.
 - iv. There is due attention to detail in planning and preparation, by
 - a. 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
 - b. 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
 - c. The institution: provides a self-evaluation report for the programme to be externally reviewed
 - d. 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
 - v. 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.
 - vi. Reviewers and representatives of the institution conduct an open dialogue throughout the review that shows mutual respect.
 - vii. The judgements reached by the reviewers are clear, based on the evidence available and systematically recorded.
 - viii. The review report is produced on time in line with the standard report structure and is confirmed by the institution to be factually accurate.
 - ix. The set of conclusions arising from the review are constructive, offering a fair and balanced view of the programme.
 - x. 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.

VIEW

GLOSSARY OF TERMS IN PROGRAMME RE-

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, selfassessment 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.