

| 2022 | Cou | rse Specifica | ation |
|------|-----|---------------|-------|
|      |     |               |       |

Course Code: **FSNU313** 

Program: Food Science and Human Nutrition

Department: Food Science and Human Nutrition

College: Agriculture and Veterinary Medicine

Institution: Qassim University

Version: Course Specification Version Number

Last Revision Date: *Pick Revision Date.* 





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#### A. General information about the course: **Course Identification** 1. Credit hours: 2 (1+1) 2. Course type a. University 🗆 Department Track Others 🗌 College ⊠ b. Required □ Elective⊠ 3. Level/year at which this course is College elective offered: 4. Course general Description Introduction of different food safety hazards e.g. chemical, physical, and biological including food pathogenic diseases in food production - pre requisite programs for implementation of food safety systems in food establishment - HACCP and FSMS ISO 22000. 5. Pre-requirements for this course (if any): BCH301 6. Co- requirements for this course (if any):Non

7. Course Main Objective(s)

• Identify the different hazards affected food safety in the different stages of food production.

• Illustrate the basic knowledge of the elements of food safety systems and evaluation of prerequisite programs necessary to implement food safety systems in food establishments.

• Gain proficiency in dealing with problems related to food safety and how to solve them.

• Get on the sources and compile information relating to food safety systems.

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 15x3 (45)     | 100%       |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |

### 1. Teaching mode (mark all that apply)





### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 45            |
| 2. | Laboratory/Studio |               |
| 3. | Field             |               |
| 4. | Tutorial          |               |
| 5. | Others (specify)  |               |
|    | Total             | 45            |

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

| Code | Course Learning<br>Outcomes   | Code of CLOs aligned<br>with program | Teaching<br>Strategies  | Assessment<br>Methods              |
|------|---|--------------------------------------|---|------------------------------------|
| 1.0  | Knowledge and unde  | rstanding                            |   |                                    |
| 1.1  |   |                                      |   |                                    |
| 1.2  | Student memorizes<br>the principles of food<br>safety systems such<br>as HACCP and ISO<br>22000-2005, with<br>understand their<br>prerequisite programs<br>e. g. GMP and GHP. | K2                                   | Lecture, Research<br>activities, Whole<br>group and small<br>group discussion,<br>presentation  | Pe, L, F, Hw,<br>Pr, It, Rr, Wt, O |
| 2.0  | Skills  |                                      |   |                                    |
| 2.1  |   |                                      |   |                                    |
| 2.2  |   |                                      |   |                                    |
|      |   |                                      |   |                                    |
| 3.0  | Values, autonomy, ar  | nd responsibility                    |   |                                    |
| 3.1  | Student illustrates<br>and audits the<br>prerequisite programs<br>and food safety<br>systems e. g.<br>HACCP.  | V1                                   | Lecture, Research<br>activities, Whole<br>group and small<br>group discussion,<br>presentation. | Pe, L, F, Hw,<br>Pr, It, Rr, Wt, O |
| 3.2  |   |                                      |   |                                    |
|      |   |                                      |   |                                    |





# C. Course Content

| No | List of Topics  | Contact Hours |  |  |
|----|---|---------------|--|--|
| 1. | Lecture Topic   |               |  |  |
| 2. | Introduction of food safety and its definitions   | 1             |  |  |
| 3. | Local, regional and international bodies concerned with food safety systems and their application in food establishments. | 1             |  |  |
| 4  | Different hazards and their sources of contamination affected the safety of food products.                                | 1             |  |  |
| 5  | Different hazards and their sources of contamination affected the safety of food products.                                | 1             |  |  |
| 6  | Risk assessment of different hazards contaminated foods.  | 1             |  |  |
| 7  | Prerequisite programs of food safety system such as GMP/GHP; SSOP.  | 1             |  |  |
| 8  | Prerequisite programs of food safety system such as GMP/GHP; SSOP.  | 1             |  |  |
| 9  | Sanitary Inspection in food establishments.   | 1             |  |  |
| 10 | Hazard Analysis Critical Control Point (HACCP) system.  | 1             |  |  |
| 11 | Hazard Analysis Critical Control Point (HACCP) system.  | 1             |  |  |
| 12 | Hazard Analysis Critical Control Point (HACCP) system.  |               |  |  |
| 13 | Food safety management system (FSMS).   |               |  |  |
| 14 | Food safety management system (FSMS).   |               |  |  |
| 15 | Other food safety systems.  | 1             |  |  |
| 16 | Auditing food safety system applied in food establishments.   | 1             |  |  |
| 1  | Practical topic   |               |  |  |
| 2  | Introduction to the practical section of the course.  | 2             |  |  |
| 3  | Risk assessment of different hazards.   |               |  |  |
| 4  | Risk assessment of different hazards. 2   |               |  |  |
| 5  | Assessment the prerequisite programs of food safety system. 2   |               |  |  |
| 6  | Assessment the prerequisite programs of food safety system. 2   |               |  |  |
| 7  | Assessment the prerequisite programs of food safety system.   | 2             |  |  |
| 8  | Design and Application of food safety systems in food establishments.   | 2             |  |  |
| 9  | Design and Application of food safety systems in food establishments.   | 2             |  |  |
| 10 | Design of HACCP plans for different food products.  | 2             |  |  |
| 11 | Design of HACCP plans for different food products.  | 2             |  |  |
| 12 | Design of HACCP plans for different food products.  | 2             |  |  |
| 13 | Design food safety management system in food establishment.   | 2             |  |  |
| 14 | Design food safety management system in food establishment.   | 2             |  |  |
| 15 | Auditing of food safety systems.  | 2             |  |  |
| 16 | Auditing of food safety systems.  | 2             |  |  |
|    | Total   | 45            |  |  |





| D. Students Assessment Activities |  |                                      |   |  |
|-----------------------------------|--|--------------------------------------|---|--|
| No                                | Assessment Activities *                | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |  |
| 1.                                | Periodical exam                        | 5                                    | 20%                                     |  |
| 2.                                | Practical exam                         | 15                                   | 20%                                     |  |
| 3.                                | Final exam                             | End of semester                      | 50%                                     |  |
| 4.                                | Periodical activities and home working | 5, 7, 8, 10                          | 5%                                      |  |
| 5                                 | Oral exam                              | 15                                   | 5%                                      |  |

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

# E. Learning Resources and Facilities

### 1. References and Learning Resources

| Essential References     | دين، أو كلايفر ) 2002 ( الأمراض المنقولة بواسطة الغذاء ترجمة مسفر بن محمد<br>الدقل و إسماعيل عيسى الشايب – مطابع<br>جامعة الملك سعود – الرياض<br>هندي، مبد الحميد زيدان و إبراهيم، عبد المجيد محمد ) 1999 ( الملوثات البيئية و •<br>الكيميائية – الدار العربية للنشر - القاهرة<br>المواصفات الدولية لنظام إدارة سلامة الغذاء بالمنشأة الغذائية ايزو 2000 – عام •<br>2005 |  |
|--------------------------|--|--|
| Supportive References    | CODEA)   |  |
| Electronic Materials     | www.momra.gov.sa<br>www.sfda.gov.sa<br>http://www.fsis.usda.gov/<br>http://www.food.gov.uk/safereating/<br>http://WWW.Codex.com  |  |
| Other Learning Materials | <ul> <li>Guide line and standards of codex</li> <li>Standards of International Organization of standardization</li> </ul>  |  |

# 2. Required Facilities and equipment

| Items  | Resources                                  |
|--|--|
| facilities                                   | Lecture room equipped with blackboard,     |
| (Classrooms, laboratories, exhibition rooms, | overhead projector, computer, and internet |
| simulation rooms, etc.)                      | connection.                                |





| Items   | Resources   |
|---|---|
| Technology equipment<br>(projector, smart board, software)    | Data show, Smart Board, software, Internet connection |
| Other equipment<br>(depending on the nature of the specialty) | Non   |

# F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor        | Assessment Methods                        |
|---|-----------------|---|
| Effectiveness of teaching                   | Students        | Indirect methods course evaluation survey |
| Effectiveness of students assessment        | Faculty         | Indirect                                  |
| Quality of learning resources               | Students        | Indirect methods course evaluation survey |
| The extent to which CLOs have been achieved | Program Leaders | Direct through the tests                  |
| Other                                       |                 |   |

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

# G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |





T-104 2022

# **Course Specification**

**Course Title:** Surgical anatomy

Course Code: VMD 326

**Program: Bachelor of Veterinary Medicine** 

**Department: Veterinary Medicine** 

**College: Agriculture and Veterinary Medicine** 

Institution: Qassim University

Version: **T-104** (2022)

Last Revision Date: 1/2/2023







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Others □

Track

# A. General information about the course: Course Identification 1. Credit hours: 2 (1 + 1) 2. Course type

| ۷. | course type       |           |
|----|-------------------|-----------|
| a. | University $\Box$ | College 🗆 |

b. Required ⊠ Elective□

3. Level/year at which this course is

| offered | : Level | 4 / Second | year |
|---------|---------|------------|------|
|---------|---------|------------|------|

4. Course general Description

The course includes studying the surgical anatomy of the various parts of the body in the animal, including knowledge and identification of nerve, block nerves in the head region, what is related to the eyes, ear, maxilla and mandible fractures, suturing wounds in the upper and lower lips area, and knowledge of the places that undergo most surgeries in the neck region, block nerves in the abdominal region, block nerves in the forelimb, block nerves sites in the hindlimb.

Department⊠

5. Pre-requirements for this course (if any): 224 VMD

6. Co- requirements for this course (if any): None

7. Course Main Objective(s)

- Provide the student with basic knowledge in locating nerves in various parts of the body to perform various surgical operations
- The course prepares students for other medical sciences at other levels and other courses such as obstetric surgery

### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 60            | 100%       |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |





| No | Mode of Instruction | Contact Hours | Percentage |
|----|---------------------|---------------|------------|
| 4. | Distance learning   |               |            |

### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 15            |
| 2. | Laboratory/Studio | 30            |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |
| 5. | Others (specify)  | -             |
|    | Total             | 45            |





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

| Code | Course Learning<br>Outcomes  | Code of<br>CLOs<br>aligned with<br>program | Teaching Strategies  | Assessment Methods   |
|------|--|--|--|--|
| 1.0  | Knowledge and unde   | rstanding                                  |  |  |
| 1.1  | Students will be able<br>to plan for strategic<br>methods used for<br>disease prevention<br>and control. | <b>S</b> 3                                 | - Lectures.<br>-Practical sessions.                                | -One midterm exams.<br>-Final practical exams<br>- Final written exam. |
| 1.2  | Students will be able<br>to interpret the<br>available data in the<br>field of disease<br>prevention.    | S5   | <ul><li>Using internet.</li><li>Individual presentation.</li></ul> | - Class activity discussion.   |
|      |  |  |  |  |
| 2.0  | Skills   |  |  |  |
| 2.1  |  |  |  |  |
| 2.2  |  |  |  |  |
|      |  |  |  |  |
| 3.0  | Values, autonomy, ar   | nd responsibili                            | ty   |  |
| 3.1  | Students will be able<br>to make independent<br>and critical<br>assessments                              | V3   |  | - Class participation discussion.                                      |
| 3.2  |  |  |  |  |
|      |  |  |  |  |

# C. Course Content

| No | List of Topics                          | Contact Hours |
|----|---|---------------|
| 1. | Introduction to the course              | 1             |
| 2. | Surgical anatomy of the head region     | 4             |
| 3. | Surgical anatomy of the neck region     | 2             |
| 4. | Surgical anatomy of the thoracic region | 2             |
| 5. | Surgical anatomy of the abdomen region  | 2             |
| 6. | Surgical anatomy of the forelimb region | 2             |
| 7. | Surgical anatomy of the hindlimb region | 2             |





# **D. Students Assessment Activities**

| No | Assessment Activities *                     | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|---|--------------------------------------|---|
| 1. | First and second midterm (written test).    | 7 & 12                               | 20                                      |
| 2. | Class Participation discussion (Oral test). | Through semester                     | 5                                       |
| 3. | Practical exam (written test).              |                                      | 25                                      |
| 4. | Final theoretical exams                     | 15                                   | 50                                      |

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





# E. Learning Resources and Facilities

# 1. References and Learning Resources

| Essential References     | Regional and Surgical Anatomy of Bovines, 2016   |  |  |
|--------------------------|--|--|--|
| Supportive References    | <ul> <li>Journal of veterinary anatomy</li> <li>Anatomia, Histologia, Emberyologia</li> <li>International Journal of Veterinary and Animal</li> <li>Veterinary Sciences</li> </ul> |  |  |
| Electronic Materials     | <ul> <li>https://www.imaios.com/en/vet-anatomy</li> </ul>  |  |  |
| Other Learning Materials |  |  |  |

### 2. Required Facilities and equipment

| Items   | Resources  |  |
|---|--|--|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | • Classroom of 20 students capacity.<br>Laboratory of 15students capacity. |  |
| Technology equipment<br>(projector, smart board, software)                            | Data show.   |  |
| Other equipment<br>(depending on the nature of the specialty)                         | Chemicals. Glasses and kits for experimental sessions.                     |  |

# F. Assessment of Course Quality

| Assessment Areas/Issues              | Assessor                      | Assessment Methods  |
|--------------------------------------|-------------------------------|---|
| Effectiveness of teaching            | Students                      | Course Evaluation Survey<br>(Indirect)  |
| Effectiveness of students assessment | • Students<br>Program Leaders | <ul> <li>Course Evaluation<br/>Survey<br/>(Indirect).</li> <li>Result of the course<br/>(Direct)</li> </ul> |
| Quality of learning resources        | Students                      | Course Evaluation Survey<br>(Indirect)  |





| Assessment Areas/Issues                     | Assessor                 | Assessment Methods   |
|---|--------------------------|--|
| The extent to which CLOs have been achieved | • Students<br>Instructor | <ul> <li>Course Evaluation<br/>Survey<br/>(Indirect).</li> <li>Checking students'<br/>performance in the test<br/>(Direct).</li> </ul> |
| Other                                       |                          |  |

Other

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

# G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |







Program: Food Science & Human Nutrition program

Department: Food Science & Human Nutrition

College: College of Agric. & Veterinary Medicine

Institution: Qassim University

Version: T104 Course Specifications

Last Revision Date: V2022





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| A. General information about the course:   |   |                           |           |                 |              |            |
|--|---|---------------------------|-----------|-----------------|--------------|------------|
| Course   | Identification  |                           |           |                 |              |            |
| 1. Cred  | it hours:   | 2h (2+0)                  |           |                 |              |            |
| 2. Cour  | se type   |                           |           |                 |              |            |
| a. Uni   | versity 🗆   | College 🛛                 | Depa      | rtment□         | Track□       | Others □   |
| b. Rec   | quired 🗆  | Elective⊠                 |           |                 |              |            |
| 3. Leve<br>offered   | l/year at whic<br>:   | ch this course is         |           | Optional colle  | ege-2022     |            |
| 4. Cour<br>This<br>nutri<br>respo<br>to re   | 4. Course general Description<br>This course is intended to Qualify the student with Understand the relationship between<br>nutrition and immune response, Know the effect of different nutrients on immune<br>response, Know the effect of amino and fatty acids on immune response, understand how<br>to reduce risks of disease through dietary modifications. |                           |           |                 |              |            |
| 5. Pre-  | requirements  | for this course (if       | f any): I | 3CH 301, Princi | pal of Bioch | emistry    |
| 6. Co- requirements for this course (if any): None   |   |                           |           |                 |              |            |
| <ul> <li>7. Course Main Objective(s)</li> <li>Qualify the students to Understand the relationship between nutrition and immune response.</li> <li>Know the effect of different nutrients on immune response.</li> <li>Summarize nutritional care and restricted diet for patients with Food sensitivities and auto immune diseases.</li> </ul> |   |                           |           |                 |              |            |
| 1. Teaching mode (mark all that apply)   |   |                           |           |                 |              |            |
| No   | Mode  | of Instruction            |           | Contact Ho      | ours         | Percentage |
| 1.   | Traditional cl  | assroom                   |           | 30 hr.          |              | 100%       |
| ۷.   | E-learning  |                           |           |                 |              |            |
| 3.   | • Tradi<br>• E-lea  | tional classroom<br>rning |           |                 |              |            |

4. Distance learning

### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30 hr.        |
| 2. | Laboratory/Studio |               |
| 3. | Field             |               |





| 4. | Tutorial         |        |
|----|------------------|--------|
| 5. | Others (specify) |        |
|    | Total            | 30 hr. |

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

| Code | Course Learning<br>Outcomes  | Code of CLOs aligned<br>with program | Teaching Strategies  | Assess<br>ment<br>Method<br>s |
|------|--|--------------------------------------|--|-------------------------------|
| 1.0  | Knowledge and under  | standing                             |  |                               |
| 1.1  |  |                                      |  |                               |
| 1.2  | Introduces students to<br>the most important<br>principles governing<br>the functions of the<br>human immune<br>system and to<br>Understand the<br>relationship between<br>nutrition and immune<br>response. | К2                                   | Theoretical lectures<br>Using pictures and power<br>point<br>Interactive learning<br>process through questions<br>and answers in class.    | Pe, F,                        |
|      |  |                                      |  |                               |
| 2.0  | Skills   |                                      |  |                               |
| 2.1  |  |                                      |  |                               |
| 2.2  | Summarize nutritional<br>care and restricted<br>diet for patients with<br>Food sensitivities and<br>auto immune<br>diseases.   | S2                                   | Lectures are followed by<br>numerous examples,<br>some of which are<br>practical in nature, to<br>illustrate the application<br>and use.   | Pe, F,<br>Hw,                 |
|      |  |                                      |  |                               |
| 3.0  | Values, autonomy, an   | d responsibility                     |  |                               |
| 3.1  | Qualify the students to<br>Understand the<br>relationship between<br>nutrition and immune<br>response  | V1                                   | Theoretical lectures<br>Using pictures and<br>power point<br>Interactive learning<br>process through<br>questions and answers<br>in class. | Pe, F,                        |
| 3.2  |  |                                      |  |                               |
|      |  |                                      |  |                               |





# C. Course Content

| No  | List of Topics   | Contact Hours |
|-----|--|---------------|
| 1.  | Introduction to human immune system  | 2hr           |
| 2.  | Nutritional status and immune response   | 2hr           |
| 3.  | Deficiency of immune response among elderly and its relation with nutrition        | 2hr           |
| 4.  | Nutritional factors that modify immune response                                    | 2hr           |
| 5.  | Food allergy and intolerance   | 2hr           |
| 6.  | Immunomodulatory Effect of macronutrients  | 2hr           |
| 7.  | Immunomodulatory Effect of micronutrients  | 4hr           |
| 8.  | Reduction of disease risks through dietary modifications                           | 2hr           |
| 9.  | The Immunomodulator roll of functional and nutraceuticals food                     | 4hr           |
| 10. | Meal Planning for some different food allergy, intolerance and auto immune disease | 8hr           |
|     | Total  | 30hr.         |

# **D. Students Assessment Activities**

| No | Assessment Activities *        | Assessment timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|--------------------------------|-----------------------------------|---|
| 1. | Homework, activity and sharing | Along the semester                | 10%                                     |
| 2. | Periodical Exam                | 7-11 <sup>th</sup> week           | 30%                                     |
| 3. | Final Exam                     | 16 -17 <sup>th</sup> week         | 60%                                     |
|    |                                |                                   |   |

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





# E. Learning Resources and Facilities

### 1. References and Learning Resources

| Essential References     | <ul><li>Lillian, L. (1999): Nutrition and Immunity in Man. ILSI Europe,<br/>Belgium.</li><li>Prakash Shetty (2010): Nutrition, Immunity and Infection.</li><li>Cambridge University Press, Cambridge, UK.</li></ul> |  |  |
|--------------------------|---|--|--|
| Supportive References    | Course materials  |  |  |
| Electronic Materials     | <ul><li>www.ift.org</li><li>WHO web site</li><li>AOAC on line</li></ul>   |  |  |
| Other Learning Materials | None  |  |  |
|                          |   |  |  |

### 2. Required Facilities and equipment

| Items   | Resources  |
|---|--|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Lecture room contain at list 45 seats and equipped with a White board. |
| Technology equipment<br>(projector, smart board, software)                            | Data show device, computer, or lab top and internet connection         |
| Other equipment<br>(depending on the nature of the specialty)                         | None   |

## F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor        | Assessment Methods |
|---|-----------------|--------------------|
| Effectiveness of teaching                   | Students        | Indirect method    |
| Effectiveness of students assessment        | Faculty         | Indirect method    |
| Quality of learning resources               | Students        | Indirect method    |
| The extent to which CLOs have been achieved | Program Leaders | Direct method      |
| Other                                       |                 |                    |

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

## G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |





Course Title: Molecular biology

Course Code: VMD 348

Program: Bachelor of Veterinary Medicine.

Department: Veterinary Medicine.

College: Agriculture and Veterinary Medicine.

Institution: Qassim University .

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021.





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| <ol> <li>Teaching mode (mark all that apply)</li> <li>Contact Hours (based on the academic semester)</li> </ol> | 3    |  |
| B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods                                  | 4    |  |
| C. Course Content   | 4    |  |
| D. Student Assessment Activities  | 5    |  |
| E. Learning Resources and Facilities  | 5    |  |
| 1. References and Learning Resources  | 5    |  |
| 2. Required Facilities and Equipment  | 5    |  |
| F. Assessment of Course Qualit  | 5    |  |
| G. Specification Approval Data  | 6    |  |





| A. General information about the course:  |                   |           |             |        |          |
|---|-------------------|-----------|-------------|--------|----------|
| Course Identification   |                   |           |             |        |          |
| 1. (  | Credit hours:     | 2 (1+ 1)  |             |        |          |
| 2. Course type  |                   |           |             |        |          |
| a.  | University $\Box$ | College 🖂 | Department□ | Track□ | Others □ |
| b.  | Required 🗆        | Elective⊠ |             |        |          |
| 3. Level/year at which this course is offered:  |                   |           |             |        |          |
| 4. Course general Description:<br>This course is concerned with the study of components of the cell with more emphasis on the processes of DNA replication, transcription, translation, DNA damage and repairs, cell division as well as laboratory techniques utilized in molecular biology. |                   |           |             |        |          |
| 5. Pre-requirements for this course (if any): Biochemistry (BCH 301).   |                   |           |             |        |          |

6. Co- requirements for this course (if any): NA

#### 7. Course Main Objective(s):

1. To provide students with an adequate knowledge on the basics of molecular biology & molecular tools used in diseases diagnosis.

### 1. Teaching mode (mark all that apply)

| 1.Traditional classroom45100%2.E-learningHybrid               | No | o Mode of Instruction   | Contact Hours | Percentage |
|---|----|---|---------------|------------|
| 2. E-learning<br>Hybrid                                       | 1. | 1. Traditional classroom  | 45            | 100%       |
| Hybrid  | 2. | 2. E-learning   |               |            |
| <ul><li>3. Traditional classroom</li><li>E-learning</li></ul> | 3. | <ul><li>Hybrid</li><li>Traditional classroom</li><li>E-learning</li></ul> |               |            |
| 4. Distance learning  | 4. | 4. Distance learning  |               |            |

### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio | 15            |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |
| 5. | Others (specify)  | -             |
|    | Total             | 45            |





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

| Co<br>de | Course Learning Outcomes   | Code of CLOs<br>aligned with<br>program | Teaching Strategies  | Assessment<br>Methods  |
|----------|--|---|--|--|
| 1.0      | Knowledge and understanding  |   |  |  |
| 1.1      | Students will be able to list and<br>recognize basic knowledge related<br>to cell and molecular biology. | K1                                      | Lectures contain tools<br>currently used in<br>molecular biology and<br>their applications,<br>pictures of Cell<br>division and DNA<br>replication,<br>transcription and<br>translation.<br>Laboratory sessions<br>about some molecular<br>diagnostic methods.<br>- Giving handouts. | <ol> <li>Quarterly exam</li> <li>Practical exam</li> <li>Final exam</li> </ol> |
| 2.0      | Skills   |   |  |  |
| 2.1      | Students will be familiar with<br>widely used molecular diagnostic<br>methods.                           | S1                                      | Lectures contain tools<br>currently used in<br>molecular biology and<br>their applications,<br>pictures of Cell<br>division and DNA<br>replication,<br>transcription and<br>translation.<br>Laboratory sessions<br>about some molecular<br>diagnostic methods.<br>- Giving handouts. | <ol> <li>Quarterly exam</li> <li>Practical exam</li> <li>Final exam</li> </ol> |
| 3.0      | Values, autonomy, and responsibility   |   |  |  |
| 31       |  |   |  |  |

# C. Course Content

| No | List of Topics   | Contact Hours |
|----|--|---------------|
| 1. | General introduction to the cell                                 | 10            |
| 2. | Nucleic acids  | 5             |
| 3. | DNA replication  | 5             |
| 4. | Transcription and translation                                    | 5             |
| 5. | DNA damage and repair  | 5             |
| 6. | Cell division  | 5             |
| 7. | DNA isolation  | 5             |
| 8. | Tools currently used in molecular biology and their applications | 5             |
|    | Total  | 45            |





# **D. Students Assessment Activities**

| No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|--------------------------------------|---|
| 1. | First quarterly exam    | 6                                    | 15                                      |
| 2. | Second quarterly exam   | 12                                   | 15                                      |
| 3. | Assignments             | Anytime                              | 5                                       |
| 4. | Practical exam          | 15                                   | 15                                      |
| 5. | Final exam              | 16                                   | 50                                      |

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

#### E. Learning Resources and Facilities

### **1. References and Learning Resources**

| Essential References     | Molecular Biology of the Cell<br>by Bruce Alberts |
|--------------------------|---|
| Supportive References    | Journal of Veterinary Surgery                     |
| Electronic Materials     |   |
| Other Learning Materials | Suitable videos and animations from the internet. |

### 2. Required Facilities and equipment

| Items   | Resources  |
|---|--|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Air conditioned classroom of a minimum of 35 seats<br>and powered by multimedia equipment. |
| Technology equipment<br>(projector, smart board, software)                            | Data show connected to a computer (desktop or laptop), access to the world wide web.       |
| Other equipment<br>(depending on the nature of the specialty)                         | None   |

# F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor  | Assessment Methods  |
|---|---|---|
| Effectiveness of teaching                   | Students – graduates- faculty –<br>program administration –<br>committee for quality assurance<br>and accreditation | Students survey and<br>questionnaire<br>annual reports prepared by<br>the program administrative<br>committee |
| Effectiveness of students assessment        | Students- Graduates- employers<br>- committee for quality<br>assurance and accreditation                            | Survey for students –<br>graduates – employers – bi-<br>annual reports of the quality<br>assurance unit       |
| Quality of learning resources               | Students – graduates – peer<br>reviewer   | Surveys and periodical visits<br>of internal and external per<br>reviewers                                    |
| The extent to which CLOs have been achieved | Students<br>Instructor  | Course Evaluation Survey<br>(Indirect).<br>Checking students'   |





| Assessment Areas/Issues | Assessor | Assessment Methods                |
|-------------------------|----------|-----------------------------------|
|                         |          | performance in the test (Direct). |
| Other                   |          |                                   |

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

# G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | VETERINARY DEPARTMENT |
|-----------------------|-----------------------|
| REFERENCE NO.         | 1444-10-95            |
| DATE                  | 19.02.2023            |





| T-104<br>2022 | Course Specification |
|---------------|----------------------|
|               |                      |
| Course        | Itle: IISSUE Culture |

Program: Bachelor of Veterinary Medicine

Department: **Department of Veterinary Medicine** 

College: College of Agriculture and Veterinary Medicine

Institution: Qassim University

Version: : T-104 (2022)

Last Revision Date: 1/2/2021





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| G. Specification Approval Data  |      |  |





#### A. General information about the course: **Course Identification** 1. Credit hours: 2(1+1)2. Course type a. University 🗆 College $\Box$ Department □ Track Others 🗌 b. Required $\Box$ Elective⊠ 3. Level/year at which this course is Level 3 and after offered: 4. Course general Description Systemic histology is a discipline which provides students/beneficial with the structure and correlating functions of animal body systems using microscopy. The course involves the study of animal systems appearance and explores histologically and ultra-structurally the various organ systems including cardiovascular, lymphatic, integumentary (skin), digestive, respiratory, urinary, endocrine, male and female reproductive systems as well as special senses (eye and ear). Functional correlations will also be made. 5. Pre-requirements for this course (if any):

#### General histology (VMD222)

6. Co- requirements for this course (if any): N/A

### 7. Course Main Objective(s)

- To provide students with the basic knowledge about systemic histology: Different animal systems structures and functions as well as how they can be characterized.
- The course will prepare the students for histopathology in the coming levels.

### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 60            | 100%       |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |

#### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio | 30            |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |





| 5. | Others (specify) | -  |
|----|------------------|----|
|    | Total            | 60 |

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

| Code | Course Learning Outcomes  | Code of CLOs<br>aligned with<br>program | Teaching<br>Strategies                                 | Assessment Methods   |
|------|---|---|--|--|
| 1.0  | Knowledge and understand  | ling                                    |  |  |
| 1.1  | Students will be able to list<br>and recognize knowledge<br>related to tissue culture | K1                                      | <ul><li>Lectures.</li><li>Practical sessions</li></ul> | -Two midterm exams.<br>- Final written exam.<br>- Practical exam.<br>- Quizzes and classwork |
| 1.2  |   |   |  |  |
|      |   |   |  |  |
| 2.0  | Skills  |   |  |  |
| 2.1  |   |   |  |  |
| 2.2  |   |   |  |  |
|      |   |   |  |  |
| 3.0  | Values, autonomy, and resp  | oonsibility                             |  |  |
| 3.1  |   |   |  |  |
| 3.2  |   |   |  |  |

# C. Course Content

| No | List of Topics   |    |
|----|--|----|
| 1. | Introduction   | 2  |
| 2. | Histology and cytology revision  | 2  |
| 3. | Sterilization techniques & types of animal tissue cultures   | 4  |
| 4. | Methods of preparation of tissue culture and requirements  | 7  |
| 5  | Preparation of media and sera/ Culturing and sub-culturing of animal cells/<br>Cell counting and viability | 3  |
| 6  | Staining of animal cells/ Preservation of cells  | 6  |
| 7  | Propagation and isolation of virus in tissue cells   | 3  |
| 8  | Characterization of pathological lesions (cytopathic effects)  | 3  |
| 9  | Propagation of viruses for vaccine production  | 9  |
| 10 | Animal cell culture applications   | 6  |
|    | Total  | 60 |





# **D. Students Assessment Activities**

| No | Assessment Activities *                  | Assessment timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|--|-----------------------------------|---|
| 1. | First and second midterm (written test). | 7 & 12                            | 20                                      |
| 2. | Class work                               | Throughout semester               | 5                                       |
| 3. | Quiz                                     | 3                                 | 5                                       |
| 4  | Practical exam (written test).           | 15                                | 20                                      |
| 5  | Final exam (written test)                | 16                                | 50                                      |

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





### E. Learning Resources and Facilities

### 1. References and Learning Resources

| Essential References     | - Culture of Animal Cells: A Manual of Basic<br>Technique and Specialized Applications, 6th Edition.<br>By: R. Ian Freshney, Wiley-Blackwell, 2010. |
|--------------------------|---|
| Supportive References    | Print Journals and other books related to tissue cultures   |
| Electronic Materials     | Electronic Journals and books related to tissue cultures  |
| Other Learning Materials |   |

# 2. Required Facilities and equipment

| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | -Classroom of 20 student's capacity.<br>-Laboratory of 15students capacity. |
| Technology equipment<br>(projector, smart board, software)                            | -Projectors<br>-Software provision on blackboard                            |
| Other equipment<br>(depending on the nature of the specialty)                         | Chemicals. Glasses and kits for experimental sessions.                      |

### F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor                    | Assessment Methods  |
|---|-----------------------------|---|
| Effectiveness of teaching                   | Students                    | Course Evaluation Survey (Indirect)                                   |
| Effectiveness of students assessment        | Students<br>Program Leaders | Course Evaluation Survey (Indirect).<br>Result of the course (Direct) |
| Quality of learning resources               | Students                    | Course Evaluation Survey (Indirect)                                   |
| The extent to which CLOs have been achieved | Students<br>Instructor      | Course Evaluation Survey (Indirect).<br>Exams (Direct).               |

#### Other

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

### G. Specification Approval Data

| COUNCIL /COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|--------------------|---|
| REFERENCE NO.      | 1444-10-95                                |
| DATE               | 19/2/2023                                 |





T-104 2022 Course Specification

Course Title: Functional Foods

Course Code: FSNU352

Program: Food Science and Human Nutrition

Department: Food Science and Human Nutrition

College: College of Agriculture and Veterinary Medicine

Institution: Qassim University

Version: Ver. 4

Last Revision Date: Pick Revision Date.





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| F. Assessment of Course Qualit  |   |  |  |  |
| G. Specification Approval Data  |   |  |  |  |





| A. General information about the course:   |                     |           |      |   |       |          |  |  |
|--|---------------------|-----------|------|---|-------|----------|--|--|
| Со   | urse Identificatior | n         |      |   |       |          |  |  |
| 1.   | Credit hours:       | 2 h (1+1) |      |   |       |          |  |  |
| 2.   | 2. Course type      |           |      |   |       |          |  |  |
| а.   | University $\Box$   | College 🛛 | Depa | rtment  | Track | Others □ |  |  |
| b.   | Required $\Box$     | Elective⊠ |      |   |       |          |  |  |
| 3. Level/year at which this course is offered:   |                     |           |      | 4 <sup>th</sup> , 5 <sup>th</sup> , and 6 <sup>th</sup> level |       |          |  |  |
| <ul> <li>concept development) and its positive impact on human health. Besides, the scientific basis, technologies of producing different types of functional foods. More focus will be on important examples of functional foods from dairy, cereals products. Uses of functional foods to reduce risk of chronic diseases (coronary heart diseases – diabetes – cancer – osteoporosis).</li> <li>5. Pre-requirements for this course (if any):</li> <li>FSNU344</li> <li>6. Co- requirements for this course (if any):</li> </ul>                                |                     |           |      |   |       |          |  |  |
| 7. Course Main Objective(s)<br>The main objective of this course is to provide a comprehensive understanding of<br>functional foods and their positive health effects. Students will learn about the different<br>topics, such as phytochemicals, zoochemical (CLA, Omega3), probiotics, prebiotics,<br>symbiotic, and their health benefits. In addition, the course will focus on the<br>relationship between the bioactivity of key components in functional foods and their<br>health benefits against some chronic diseases (CHD, Diabetes, osteoporosis, and |                     |           |      |   |       |          |  |  |

cancers).

# 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 3             | 100        |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |




| 2. Contact Hours (based on the academic semester) |                   |               |
|---|-------------------|---------------|
| No  | Activity          | Contact Hours |
| 1.  | Lectures          | 1h (1×15)     |
| 2.  | Laboratory/Studio | 2 h (2×15)    |
| 3.  | Field             |               |
| 4.  | Tutorial          |               |
| 5.  | Others (specify)  |               |
|   | Total             | 45            |

#### 2. Contact Hours (based on the academic semester)

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

| Code | Course Learning<br>Outcomes  | Code of CLOs aligned<br>with program | Teaching<br>Strategies | Assessment<br>Methods |
|------|--|--------------------------------------|------------------------|-----------------------|
| 1.0  | Knowledge and unde   | rstanding                            |                        |                       |
| 1.1  | Explain functional food concepts, history and regulations.   | К1                                   | Lectures               | F, Pe, Q              |
| 1.2  | Describe the health<br>benefits of different<br>phytochemicals and<br>their use against<br>some chronic<br>diseases. | K2                                   | Lectures               | F, Pe, Q              |
|      |  |                                      |                        |                       |
| 2.0  | Skills   |                                      |                        |                       |
| 2.1  | Determine different<br>functional ingredients<br>using qualitative and<br>quantitative<br>techniques.                | S1                                   | Laboratory             | L, R                  |
| 2.2  |  |                                      |                        |                       |
|      |  |                                      |                        |                       |
| 3.0  | Values, autonomy, ar   | nd responsibility                    |                        |                       |
| 3.1  |  |                                      |                        |                       |
| 3.2  |  |                                      |                        |                       |
|      |  |                                      |                        |                       |

Pe: Periodical exams, F: final exam, R: Reports, Q: quiz, L: Practical Exam.

#### C. Course Content

| No | List of Topics     | Contact Hours |
|----|--------------------|---------------|
|    | <u>A: Lectures</u> |               |
|    |                    |               |





| 1.  | Introduction to functional foods, its categories and market.   | 1  |
|-----|--|----|
| 2.  | History and development of functional food concept.  | 2  |
| 3.  | Regulation and health claims of functional foods.  | 2  |
| 4.  | Phytochemicals in fruit and vegetables.  | 2  |
| 5.  | Functional food products:<br>Milk-based functional foods.<br>Cereals-based functional foods.                           | 3  |
| 6.  | Functional foods for risk reduction of chronic diseases (coronary heart diseases – diabetes – cancers - osteoporosis). | 5  |
|     | B: Practical   |    |
| 7.  | Extraction of phytochemicals from plant sources  | 6  |
| 8.  | Sprouting and germination of seeds and its health potentials   | 2  |
| 9.  | Detection of phytochemicals – Qualitative analysis   | 4  |
| 10. | Detection of phytochemicals – Quantitative analysis  | 4  |
| 11. | Determination of total phenolic acids.   | 2  |
| 12. | Determination of total flavonoids.   | 2  |
| 13. | Detailed studies on probiotic, prebiotic and symbiotic.  | 2  |
| 14. | Determination of antioxidant activity – DPPH method  | 2  |
| 15. | Determination of antioxidant activity – ABTS method  | 2  |
| 16. | Determination of Chlorophyl and beta carotene .  | 2  |
| 17. | Determination of vitamin C.  | 2  |
|     | Total  | 45 |

### **D. Students Assessment Activities**

| No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|--------------------------------------|---|
| 1. | Periodical exams        | 6-7                                  | 20                                      |
| 2. | Practical Exam          | 15                                   | 20                                      |
| 3. | Quiz                    | In some<br>weeks                     | 5                                       |
| 4. | Reports                 | In some<br>weeks                     | 5                                       |
| 4. | Final exam              | 16-17                                | 50                                      |

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





### E. Learning Resources and Facilities

#### 1. References and Learning Resources

| Essential References     | <ul> <li>Smith, J. Q and Charter, E. (2010). "Functional food product development". Blackwell publishing Ltd., United Kingdom (Available in the central library of QU).</li> <li>Schmidl, M. K. and Labuza, T. P. (2000). Essentials of functional foods. Aspen Publication, Inc., Gaithersburg, Maryland (Available in the central library of QU).</li> </ul>   |
|--------------------------|--|
| Supportive References    | <ul> <li>Margaret Ashwell, (2002): Concepts of Functional Foods. ILSI<br/>Europe, Brussels, Belgium</li> <li>Gibson, G. R., and Williams, C. R. (2000): Functional foods:<br/>concept to product. CRC Press LLC, Boca Raton. USA.</li> <li>Chadwick, R., Henson, S., Moseley, B., Koenen, G.,<br/>Liakopoulos, M., Midden, C., Palou, A., Rechkemmer, G.,<br/>Schröder, D., Wright, A. von. (2003). "Functional Foods".<br/>Springer-Verlag, Berlin, Germany.</li> </ul> |
| Electronic Materials     | http://www.journals.elsevier.com/journal-of-functional-foods/  |
| Other Learning Materials | Course materials provided to students at the beginning of the semester, which containing all PowerPoint slides of all topics.  |

#### 2. Required Facilities and equipment

| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Classrooms, laboratory  |
| Technology equipment<br>(projector, smart board, software)                            | Projector and computer  |
| Other equipment<br>(depending on the nature of the specialty)                         | Rotary evaporators, chemicals and reagents required for practical work. |

### F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor           | Assessment Methods                           |
|---|--------------------|--|
| Effectiveness of teaching                   | Students           | Indirect method:<br>Course Evaluation Survey |
| Effectiveness of students assessment        | Students           | Indirect method:<br>Course Evaluation Survey |
| Quality of learning resources               | Students           | Indirect method:<br>Course Evaluation Survey |
| The extent to which CLOs have been achieved | Course instructors | Direct method:<br>Students achievements in   |





| Assessment Areas/Issues | Assessor | Assessment Methods    |
|-------------------------|----------|-----------------------|
|                         |          | assessment activities |
| Other                   |          |                       |

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

### G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |





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|-----|---|----------|---|----|
| - L | - | <u>т</u> | U | 4  |
|     |   |          |   |    |

### **Course Specification**

| Course Title: Production of ornamental animals and birds |
|--|
| Course Code: APP 380                                     |
| Program: Animal production                               |
| Department: Animal production and breeding               |
| College: Agriculture and veterinary medicine             |
| Institution: Qassim university                           |
| Version: Course Specification Version Number             |
| Last Revision Date: Feb 2023                             |





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### A. General information about the course:

| Course Identification  |  |  |
|--|--|--|
| 1. Credit hours:   |  |  |
| 2. Course type   |  |  |
| a. University □ College ⊠ Department □ Track □ Others □                                      |  |  |
| b. Required □ Elective⊠  |  |  |
| 3. Level/year at which this course is offered: 3   |  |  |
| 4. Course general Description  |  |  |
| This course deals with the care, feeding, reproduction and inheritance of ornamental animals |  |  |
| and birds  |  |  |
| 5. Pre-requirements for this course (if any): APP 211  |  |  |
| 6. Co- requirements for this course (if any):  |  |  |
| 7. Course Main Objective(s)  |  |  |
| Teaching the students the Breeds, housing, nutrition, reproduction, management and rearing   |  |  |
| of ornamental animals  |  |  |

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction   | Contact Hours | Percentage |
|----|-----------------------|---------------|------------|
| 1. | Traditional classroom | 45            | 100        |
| 2. | E-learning            |               |            |
|    | Hybrid                |               |            |
| 3. | Traditional classroom |               |            |
|    | • E-learning          |               |            |
| 4. | Distance learning     |               |            |





| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio |               |
| 3. | Field             |               |
| 4. | Tutorial          |               |
| 5. | Others (specify)  | 15            |
|    | Total             | 45            |

#### 2. Contact Hours (based on the academic semester)





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

#### Assessment Methods

| Code | Course Learning Outcomes   | Code of<br>CLOs aligned<br>with program | Teaching Strategies            | Assessment<br>Methods    |
|------|--|---|--------------------------------|--------------------------|
| 1.0  | Knowledge and understanding  |   |                                |                          |
| 1.1  | Identify the breeds of ornamental animals and birds                            |   | Lectures and practical lessons | periodical<br>exam       |
| 1.2  | Learn about the feeding and<br>reproduction of ornamental<br>animals and birds |   | Lectures and practical lessons | periodical<br>exam       |
| •••  |  |   |                                |                          |
| 2.0  | Skills   |   |                                |                          |
| 2.1  | Learn in animal care and nutrition   |   | Practical lessons              | Periodic and final exam  |
| 2.2  |  |   |                                |                          |
| •••  |  |   |                                |                          |
| 3.0  | Values, autonomy, and responsibili   | ity                                     |                                |                          |
| 3.1  | Graduate familiar with animal ethics and welfare                               |   | Lectures                       | Periodic and final exams |
| 3.2  | A graduate interested in preserving endangered animals                         |   | Lectures                       | Periodic and final exams |
|      |  |   |                                |                          |

#### C. Course Content

| No | List of Topics  | Contact Hours |
|----|---|---------------|
| 1. | Breeds of ornamental animals (cats, dogs, rabbits, fish, hamsters, turtles) - Breeds of ornamental birds (canaries, parrots, pigeons, pigeons, ducks) | 8             |
| 2. | Shelter systems for ornamental animals and birds  | 4             |
| 3. | Feeding ornamental animals and birds  | 8             |
| 4. | Breeding of ornamental animals and birds  | 4             |
| 5. | Breeding and management of ornamental animals and birds   | 4             |





| 6. | Environmental conditions, ornamental animals and birds           | 5  |
|----|--|----|
| 7. | Marketing of ornamental animals and birds                        | 4  |
| 8. | Knowledge of the structural and administrative structure of zoos | 8  |
|    | Total  | 45 |

### D. Students Assessment Activities

| No | Assessment Activities *            | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|------------------------------------|--------------------------------------|---|
| 1. | Periodical and practical tests     | 5, 10, 15                            | 35%                                     |
| 2. | Participation in the lecture halls | 8,10,12, 14                          | 5%                                      |
| 3. | Quizzes                            | 4                                    | 5%                                      |
| 4. | Field reports                      | 15                                   | 5%                                      |
| 5. | Final Exams                        | 16                                   | 50%                                     |
| 6. | Periodical and practical tests     | 5, 10, 15                            | 35%                                     |

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





#### E. Learning Resources and Facilities

#### 1. References and Learning Resources

| Essential References     | Encyclopedia of Aquarium & Pond Fish , Alderton 2008.  |
|--------------------------|--|
| Supportive References    | كتاب "من عجائب الخلق في عالم الطيور" ، محمد اسماعيل جاويش (الدار الذهبية<br>كتاب "كلب بلدي قط شيرازي" عن الحيوانات الأليفة في مصر ، أحمد النبراوي (دار<br>المصري للنشر والتوزيع).<br>Books:<br>1-Caring for Your Canary. Paul Ruddock, Paradise Press.<br>2- The Alpaca Breeding Book. K. D. Galbraith, Walnut Creek<br>Publishing 2013. |
| Electronic Materials     | Waterfowls Management Guidelines (wildpro.twycrosszoo.org) <ul> <li>Poultry web site</li> </ul>  |
| Other Learning Materials | N/A  |

#### 2. Required Facilities and equipment

| ltems  | Resources |
|--|-----------|
| facilities                                   |           |
| (Classrooms, laboratories, exhibition rooms, | N/A       |
| simulation rooms, etc.)                      |           |
| Technology equipment                         |           |
| (projector, smart board, software)           |           |
| Other equipment                              |           |
| (depending on the nature of the specialty)   |           |

#### F. Assessment of Course Quality

| Assessment Areas/Issues              | Assessor | Assessment Methods |
|--------------------------------------|----------|--------------------|
| Effectiveness of teaching            |          |                    |
| Effectiveness of students assessment |          |                    |
| Quality of learning resources        |          |                    |
| The extent to which CLOs have been   |          |                    |
| achieved                             |          |                    |





| Assessment Areas/Issues                  | Assessor                           | Assessment Methods |
|--|------------------------------------|--------------------|
| Other                                    |                                    |                    |
| Assessor (Students Faculty Program Leade | ers Peer Reviewer Others (specify) |                    |

Assessment Methods (Direct, Indirect)

### G. Specification Approval Data

| COUNCIL /COMMITTEE | The report has been revised and approved by the departmental council. |  |  |
|--------------------|---|--|--|
| REFERENCE NO.      | ) rings   |  |  |
| DATE               | 20/3/2023   |  |  |





### T-104 2022

## **Course Specification**

Course Title: Technical Management of Animal Production Farms

Course Code: APP 381

Program: Animal Production And Breeding Program/ Animal production TracTechk

Department: Animal Production And Breeding

College: Agriculture and Veterinary Medicine

Institution: Qassim University

Version: 3<sup>rd</sup> Version

Last Revision Date: Feb 3, 2023



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| G. Specification Approval Data  |      |  |

#### A. General information about the course:

| Со  | Course Identification  |            |      |         |       |        |
|---|--|------------|------|---------|-------|--------|
| 1.  | Credit hours:  |            |      |         |       |        |
| 2. (  | Course type  |            |      |         |       |        |
| a.  | University   | College X  | Depa | rtment□ | Track | Others |
| b.  | Required   | Elective X |      |         |       |        |
| 3.<br>off<br>De                               | 3. Level/year at which this course is<br>offered: All Levels for all<br>Departments. |            |      |         |       |        |
| 4. (  | 4. Course general Description  |            |      |         |       |        |
| 5. Pre-requirements for this course (if any): |  |            |      |         |       |        |
| 6.  | 6. Co- requirements for this course (if any): None                                   |            |      |         |       |        |

#### 7. Course Main Objective(s)

The ability to provide students with an appropriate understanding of the technical management of animal production farms.

At the end of the course, the student will be able to technically manage animal production farms.

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction   | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom   | 45            | 100%       |
| 2. | E-learning  |               |            |
| 3. | <ul><li>Hybrid</li><li>Traditional classroom</li><li>E-learning</li></ul> |               |            |
| 4. | Distance learning   |               |            |

#### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 15            |
| 2. | Laboratory/Studio | 30            |
| 3. | Field             |               |
| 4. | Tutorial          |               |
| 5. | Others (specify)  |               |
|    | Total             | 45            |

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

| Code | Course Learning<br>Outcomes  | Code of CLOs aligned<br>with program | Teaching<br>Strategies        | Assessment<br>Methods |
|------|--|--------------------------------------|-------------------------------|-----------------------|
| 1.0  | Knowledge and unde   |                                      |                               |                       |
| 1.1  | The ability to provide<br>students with an appropriate<br>understanding of the | К1                                   | 1. Lecture<br>2. Role Playing | 1,2,3, and 4          |

| Code         | Course Learning<br>Outcomes  | Code of CLOs aligned<br>with program | Teaching<br>Strategies                      | Assessment<br>Methods |
|--------------|--|--------------------------------------|---|-----------------------|
|              | technical management of animal production farms.   |                                      |   |                       |
| 1.2          |  |                                      |   |                       |
| ····<br>2 () | Skille   |                                      |   |                       |
| 2.1          | At the end of the<br>course the student<br>should be able to:<br>At the end of the course, the<br>student will be able to<br>technically manage animal<br>production farms.  | S5                                   | 1. Lecture<br>2. Debate<br>3. Brainstorming | 1,2,3, and4           |
| 2.2          | At the end of the<br>course the student<br>should be able to:<br>select the type of activity and<br>the decision regarding the<br>size and the quality of<br>activity in terms of the<br>number and required<br>investments, as well as the<br>breeding and management<br>system for the project that is<br>chosen and the importance<br>of biosecurity in such<br>projects. | S6                                   | 1. Lecture<br>2. Debate<br>3. Brainstorming | 1,2,3, and 4          |
|              |  |                                      |   |                       |
| 3.0          | Values, autonomy, ar   | nd responsibility                    |   |                       |
| 3.1          |  |                                      |   |                       |
| 3.2          |  |                                      |   |                       |
|              |  |                                      |   |                       |

#### Program Learning Outcomes

|    | <b>Program Learning Outcomes</b><br>At the end of the program, the student should be able to:                                |
|----|--|
| K1 | Knowing the elements of production on the farm, types and functions of management.   |
| K2 | Understanding the fundamentals of management in animal production, recipes and characteristics of a successful farm manager. |
| K3 | Recognize the types and classifications of decisions facing the farm manager.  |
| K4 | Describe the farm production costs.  |

| K5 | Describes Some of the main productive activities in animal production projects.   |
|----|---|
| K6 |   |
| S1 | Evaluate the role of animal health and biosecurity procedures.  |
| S2 | Represent the importance of farm records.   |
| S3 | Explain the role of motivation and incentives in farm management.   |
| S4 | The ability to provide students with an appropriate understanding of the technical management of animal production farms. |
| S5 | At the end of the course, the student will be able to technically manage animal production farms.                         |
| S6 |   |
| S7 |   |
| V1 | Illustrate the ability to work in teams, communicate with others, and take responsibility.                                |
| V2 | Write reports that cover different aspects of technical management of animal production farms. In a                       |
|    | correct way linguistically and scientifically   |

#### List of assessment methods

| Assessment Methods |                                |     |                                    |  |
|--------------------|--------------------------------|-----|------------------------------------|--|
| No.                | Tool                           | No. | Tool                               |  |
| 1                  | Mid-term exam                  | 6   | Homework                           |  |
| 2                  | Practical Exam                 | 7   | Presentations                      |  |
| 3                  | Final exam                     | 8   | Reports                            |  |
| 4                  | Participation in lecture rooms | 9   | Practical experiments and training |  |
| 5                  | Computer skills                |     |                                    |  |

#### C. Course Content

| No | List of Topics | Contact Hours |
|----|----------------|---------------|
| 1. |                |               |
| 2. |                |               |
|    |                |               |
|    | Total          |               |

### **D. Students Assessment Activities**

| No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|--------------------------------------|---|
| 1. | First Mid-term exam     | 7 <sup>th</sup> week                 | 10%                                     |
| 2. | Second Mid-term exam    | 10 <sup>th</sup> week                | 10%                                     |

| No | Assessment Activities *        | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score      |
|----|--------------------------------|--------------------------------------|--|
| 3. | Participation in lecture rooms | Every<br>week                        | Bonus with a<br>maximum value of 5<br>degree |
| 4. | Practical Exam                 | 8 <sup>th</sup> week                 | 12.5%  |
| 5. | Report                         | 13 <sup>th</sup> week                | 12.5%  |
| 6. | Final Exam                     | 15 <sup>th</sup> week                | 50%  |

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

#### E. Learning Resources and Facilities

#### 1. References and Learning Resources

| Essential References     | .م2016د. إيهاب الضمان، إدارة مزارع الإنتاج الحيواني، جامعة حماة ، سوريا ،                  |
|--------------------------|--|
| Supportive References    | وزارة البيئة والمياه والزراعة، دليل الأمن الحيوي في المنشآت الزراعية، مركز<br>وقاء، الرياض |
| Electronic Materials     |  |
| Other Learning Materials |  |

#### 2. Required Facilities and equipmen (

| Items   | Resources                        |
|---|----------------------------------|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Classrooms for about 40 students |
| Technology equipment<br>(projector, smart board, software)                            |                                  |
| Other equipment<br>(depending on the nature of the specialty)                         |                                  |

#### F. Assessment of Course Quality

| Assessment Areas/Issues                        | Assessor | Assessment Methods                  |
|--|----------|-------------------------------------|
| Effectiveness of teaching                      | Students | Indirect Assessment (Questionnaire) |
| Effectiveness of students assessment           | Students | Indirect Assessment (Questionnaire) |
| Quality of learning resources                  | Students | Indirect Assessment (Questionnaire) |
| The extent to which CLOs have<br>been achieved | Students | Indirect Assessment (Questionnaire) |
| Other  |          |                                     |

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

### G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | The report has been revised and approved by the departmental council. |  |  |
|-----------------------|---|--|--|
| REFERENCE NO.         | () rivis  |  |  |
| DATE                  | 20/3/2023   |  |  |





| T-10<br>202 | 04<br>22<br><b>Co</b> | urse Specification            |  |
|-------------|-----------------------|-------------------------------|--|
| [           |                       |                               |  |
|             | Course Title:         | Veterinary Scientific Terms . |  |
|             | Course Code:          | BVM 413.                      |  |

Program: Bachelor of Veterinary Medicine.

Department: Veterinary Medicine.

College: Agriculture and Veterinary Medicine.

Institution: Qassim University .

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021 .





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| 2. Required Facilities and Equipment  | 4    |  |
| F. Assessment of Course Qualit  | 5    |  |
| G. Specification Approval Data  |      |  |





| A. General information about the course: |                           |                      |                         |              |               |  |  |
|--|---------------------------|----------------------|-------------------------|--------------|---------------|--|--|
| Course                                   | Identification            | ١                    |                         |              |               |  |  |
| 1. Crec                                  | lit hours:                | (1)                  |                         |              |               |  |  |
| 2. Cour                                  | rse type                  |                      |                         |              |               |  |  |
| a. Un                                    | iversity 🗆                | College 🗆            | Department⊠             | Track        | Others □      |  |  |
| b. Re                                    | quired 🛛                  | Elective             |                         |              |               |  |  |
| 3. Leve                                  | el/year at whi            | ch this course is    | offered: Level 9/ Fifth | year         |               |  |  |
| 4. Cour                                  | rse general De            | escription:          |                         |              |               |  |  |
| This cou                                 | rse is concerned v        | with the study of Ve | terinary Medical Terms. |              |               |  |  |
| 5. Pre-                                  | requirements              | for this course      | (if any): NA            |              |               |  |  |
| 6 60-                                    | requirements              | s for this course    | (if any): NA            |              |               |  |  |
| 0. 00                                    | requirements              |                      |                         |              |               |  |  |
| 7. Cour                                  | rse Main Obie             | ective(s):           |                         |              |               |  |  |
| Teaching                                 | the students vete         | erinary medical term | s.                      |              |               |  |  |
| 1. Tea                                   | ching mod                 | e (mark all tha      | it apply)               |              |               |  |  |
| No                                       | Mode                      | of Instruction       | Contact Ho              | ours         | Percentage    |  |  |
| 1.                                       | Traditional c             | lassroom             | 12                      |              | 100%          |  |  |
| 2.                                       | E-learning                |                      |                         |              |               |  |  |
| З  | Hybria<br>Tradi           | itional classroom    |                         |              |               |  |  |
| J.                                       | <ul> <li>Fleat</li> </ul> | irnina               |                         |              |               |  |  |
| 4.                                       | Distance lear             | rning                |                         |              |               |  |  |
| 2. Cor                                   | ntact Hours               | (based on the        | e academic semeste      | r)           |               |  |  |
| No                                       |                           | A                    | Activity                |              | Contact Hours |  |  |
| 1.                                       | Lectures                  |                      |                         |              | 12            |  |  |
| 2.                                       | Laboratory/St             | tudio                |                         |              | -             |  |  |
| 3.                                       | Field                     |                      |                         |              | -             |  |  |
| 4.                                       | Tutorial                  | £ .)                 |                         |              | -             |  |  |
| 5.                                       | Others (speci             | ту)                  |                         |              | -             |  |  |
|  | Total                     |                      |                         |              | 12            |  |  |
|  |                           |                      |                         |              |               |  |  |
|  |                           |                      |                         | alatina e Ct |               |  |  |
| B. Co                                    | ourse Lear                | ning Outco           | mes (CLOs), Tea         | ching St     | rategies and  |  |  |

| Co<br>de | Course Learning Outcomes | Code of CLOs<br>aligned with<br>program | Teaching Strategies | Assessment<br>Methods |
|----------|--------------------------|---|---------------------|-----------------------|
|----------|--------------------------|---|---------------------|-----------------------|





| Co<br>de | Course Learning Outcomes  | Code of CLOs<br>aligned with<br>program | Teaching Strategies  | Assessment<br>Methods                                  |
|----------|---|---|--|--|
| 1.0      | Knowledge and understanding   |   |  |  |
| 1.1      | Student will be able to list and<br>recognize knowledge related to<br>veterinary scientific terms   | К1                                      | Lectures contain<br>medical terms, pictures<br>of clinical cases, and<br>examples of diseases. | <ol> <li>quarterly exam</li> <li>final exam</li> </ol> |
| 2.0      | Skills  |   |  |  |
| 2.5      | Students will be able to<br>demonstrate critical analysis of new<br>information and research findings<br>relevant to veterinary medicine. | S5                                      | Lectures contain<br>medical terms, pictures<br>of clinical cases, and<br>examples of diseases. | <ol> <li>quarterly exam</li> <li>final exam</li> </ol> |
| 3.0      | Values, autonomy, and responsibility  |   |  |  |
| 31       |   |   |  |  |

#### C. Course Content

| No | List of Topics  | Contact Hours |
|----|---|---------------|
| 1. | General scientific terms.   | 2             |
| 2. | Scientific terms of the digestive system                            | 2             |
| 3. | Scientific terms of the respiratory system                          | 2             |
| 4. | Scientific terms of the cardiovascular system                       | 2             |
| 5. | 5. Scientific terms of the urogenital system                        |               |
| 6. | Scientific terms of the nervous system/ Ophthalmic scientific terms | 2             |
|    | Total   | 12            |

### **D. Students Assessment Activities**

| No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|--------------------------------------|---|
| 1. | First quarterly exam    | 5                                    | 25                                      |
| 2. | Second quarterly exam   | 10                                   | 25                                      |
| 4  | Final exam              | 16                                   | 50                                      |

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

#### E. Learning Resources and Facilities

#### 1. References and Learning Resources

| Essential References     |                      |
|--------------------------|----------------------|
| Supportive References    |                      |
| Electronic Materials     | Power point lectures |
| Other Learning Materials | prepared note        |
| 2. Required Facilities a | and equipment        |







| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Air conditioned classroom of a minimum of 35 seats and powered by multimedia equipment. |
| Technology equipment<br>(projector, smart board, software)                            | Data show connected to a computer (desktop or laptop), access to the world wide web.    |
| Other equipment<br>(depending on the nature of the specialty)                         |   |

#### F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor  | Assessment Methods  |
|---|---|---|
| Effectiveness of teaching                   | Students – graduates- faculty –<br>program administration –<br>committee for quality assurance<br>and accreditation | Students survey and<br>questionnaire<br>annual reports prepared by<br>the program administrative<br>committee |
| Effectiveness of students assessment        | Students- Graduates- employers<br>- committee for quality<br>assurance and accreditation                            | Survey for students –<br>graduates – employers – bi-<br>annual reports of the quality<br>assurance unit       |
| Quality of learning resources               | Students – graduates – peer<br>reviewer   | Surveys and periodical visits<br>of internal and external per<br>reviewers                                    |
| The extent to which CLOs have been achieved | Students<br>Instructor  | Course Evaluation Survey<br>(Indirect).<br>Checking students'<br>performance in the test<br>(Direct).         |
| Other                                       |   |   |

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

#### G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | VETERINARY DEPARTMENT |
|-----------------------|-----------------------|
| REFERENCE NO.         |                       |
| DATE                  |                       |





| Г-104<br>2022 | Course Specification |  |
|---------------|----------------------|--|
|               |                      |  |

Course Title: Clinical Microbiology

Course Code: VMD 456

Program: Bachelor of Veterinary Medicine

Department: Veterinary Medicine

College: Agriculture and Veterinary Medicine

Institution: Qassim University

Version: T-104 (2022)

Last Revision Date: 10/6/2022





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| C. Course Content  | 5      |
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| 1. References and Learning Resources   | 6      |
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| G. Specification Approval Data   | 7      |





#### A. General information about the course:

| Course Identification |
|-----------------------|
|-----------------------|

| 1. Credit hours: 2 | 2 (1+1) |
|--------------------|---------|
|--------------------|---------|

- 2. Course type
- a. University  $\Box$  College  $\Box$  Department  $\boxtimes$  Track  $\Box$  Others  $\Box$
- b. Required □ Elective⊠
- 3. Level/year at which this course is offered: Levels 7-10/4<sup>th</sup> & 5<sup>th</sup> year
- 4. Course general Description:

Diagnostic microbiology laboratory requirements, collection and submission of appropriate diagnostic samples for various pathological conditions and diseases. Microbial pathogens: microscopy, culture, serology and molecular characteristics.

5. Pre-requirements for this course (if any):

VMD 342 and VMD 344 (Introductory Microbiology Course and Virology Course)

6. Co- requirements for this course (if any): None

7. Course Main Objective(s)

- Students will have enough knowledge about collection and submission of diagnostic specimens for identification of microbes.
- Students will acquire the ability to identify microbes in clinical samples according to their microscopic, cultural, biochemical, serological and molecular characteristics.

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 45            | 100        |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |





| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 15            |
| 2. | Laboratory/Studio | 30            |
| 3. | Field             |               |
| 4. | Tutorial          |               |
| 5. | Others (specify)  |               |
|    | Total             | 45            |

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

| Code | Course Learning Outcomes  | Code of<br>CLOs<br>aligned with<br>program | Teaching<br>Strategies   | Assessment<br>Methods  |
|------|---|--|--|--|
| 1.0  | Knowledge and understanding   |  |  |  |
| 1.1  | Students will be able to cope<br>with recent knowledge of<br>collection and submission of<br>diagnostic specimens.                  |  | - Lectures.<br>- Assignments   | - Quizzes.<br>- 1st & 2nd<br>mid-term tests.   |
| 1.2  | Students will be able to<br>understand advances in<br>diagnostic methods of<br>microbial infections.                                | K2   |  | - Assignments.<br>- Final theory<br>exam.  |
| 2.0  | Skills  |  |  |  |
| 2.1  | Students will be able to apply<br>knowledge and biosafety<br>measures pertaining handling<br>and processing of clinical<br>samples. | S1   | Practical<br>sessions:<br>students will<br>have clinical                                       | <ul> <li>Practical quizzes.</li> <li>Final practical exam.</li> <li>1st &amp; 2nd</li> </ul>               |
| 2.2  | Students will be able to<br>determine and perform<br>appropriate methods for<br>identification of microbes in<br>clinical samples.  |  | know how to<br>properly<br>handle and<br>process them<br>for<br>identification<br>of microbes. | mid-term tests<br>and final<br>theory exam<br>will contain<br>some<br>questions to<br>assess this<br>part. |
| 3.0  | Values, autonomy, and responsit   | oility                                     |  |  |





| Code | Course Learning Outcomes | Code of<br>CLOs<br>aligned with<br>program | Teaching<br>Strategies | Assessment<br>Methods |
|------|--------------------------|--|------------------------|-----------------------|
| 3.1  |                          |  |                        |                       |
| 3.2  |                          |  |                        |                       |

### C. Course Content

| No | List of Topics  | Contact Hours |
|----|---|---------------|
| 1  | Collection of various types of diagnostic samples.                | 4             |
| 2  | Sample submission and submission forms.                           | 4             |
| 3  | Microscopic identification of microbes.                           | 4             |
| 4  | Cultural characteristics of microbes.                             | 8             |
| 5  | Biochemical identification of bacteria and fungi.                 | 8             |
| 6  | Serological identification of microbes.                           | 5             |
| 7  | Molecular characterization of microbes.                           | 8             |
| 8  | Interpretation of laboratory results of microbial identification. | 4             |
|    | Total   | 45            |

#### **D. Students Assessment Activities**

| No | Assessment Activities *     | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-----------------------------|--------------------------------------|---|
| 1. | Quiz 1                      | 3                                    | 2                                       |
| 2. | First mid-term test         | 6                                    | 10                                      |
| 3. | Quiz 2                      | 8                                    | 2                                       |
| 4. | Practical test              | 9                                    | 3                                       |
| 5. | Second mid-term test        | 12                                   | 10                                      |
| 6. | Assignment and presentation | Any time                             | 3                                       |
| 7. | Practical exam              | 14                                   | 20                                      |
| 8. | Final exam                  | 16                                   | 50                                      |

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

#### E. Learning Resources and Facilities

#### 1. References and Learning Resources

**Essential References** 

• Patricia M. Tille (2021). Bailey & Scott's Diagnostic Microbiology, 15th Edition. Elsevier publisher.





|                          | Connie R. Mahon and Donald C. Lehman (2018).     Textbook of Diagnostic Microbiology, Saunders |
|--------------------------|--|
|                          | Publisher.   |
|                          | • Bryan Markey, Finola Leonard, Marie Archambault, Ann   |
|                          | Cullinane, and Dores Maguire (2013). Clinical Veterinary                                       |
|                          | Microbiology, 2nd ed, Mosby, Elsevier.   |
| Supportive References    | Journals of Microbiology.  |
| Electropic Materials     | • Veterinary and public health web sites: FAO, OIE, CDC,                                       |
|                          | WHO,etc.   |
| Other Learning Materials |  |

#### 2. Required Facilities and equipment

| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | <ul> <li>A well-furnished lecture room with a capacity of 30 students.</li> <li>A laboratory with a capacity of 30 students.</li> </ul>           |
| Technology equipment<br>(projector, smart board, software)                            | • Data show (projector and screen).   |
| Other equipment<br>(depending on the nature of the specialty)                         | <ul> <li>The laboratory should contain basic<br/>equipment (glass- and plastic-ware,<br/>autoclave, oven, incubator,<br/>microscopes).</li> </ul> |

### F. Assessment of Course Quality

| Assessment<br>Areas/Issues           | Assessor   | Assessment Methods  |
|--------------------------------------|--|---|
| Effectiveness of teaching            | <ul><li>Students</li><li>Program chairman</li></ul>                      | <ul> <li>Course Evaluation Survey.</li> <li>Field Experience Survey.</li> <li>Program Evaluation Survey.</li> <li>Faculty Evaluation Form (Self-assessment and assessment by the head of department)</li> <li>Frequency of grades distribution form.</li> </ul> |
| Effectiveness of students assessment | <ul> <li>Program Committee<br/>of Development and<br/>Quality</li> </ul> | <ul> <li>Internal moderation (form of frequency of grades distribution, unusual results</li> </ul>  |





| Assessment<br>Areas/Issues                  | Assessor  | Assessment Methods   |
|---|---|--|
|   | <ul><li>Students</li><li>Program chairman</li></ul> | <ul> <li>report, criteria used to revise<br/>question papers and random<br/>samples of student answered<br/>sheets).</li> <li>Course Evaluation Survey.</li> <li>Benchmarking with similar other<br/>course(s).</li> </ul> |
| Quality of learning<br>resources            | • Students  | • Course Evaluation Survey.  |
| The extent to which CLOs have been achieved | <ul><li>Students</li><li>Instructor</li></ul>       | <ul> <li>Course Evaluation Survey.</li> <li>Students' performance in the tests and tasks.</li> <li>Field Experience Survey.</li> </ul>   |

Other

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

### G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |





| T-104<br>2022 | C         | ourse Specificatio  | on |
|---------------|-----------|---------------------|----|
|               |           |                     |    |
| Cour          | se Title: | Veterinary Vaccines |    |

Course Code: VMD 457.

Program: Bachelor of Veterinary Medicine.

Department: Veterinary Medicine.

College: Agriculture and Veterinary Medicine.

Institution: Qassim University .

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021.





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| Α  | A. General information about the course:         |                    |             |        |          |
|--|--|--------------------|-------------|--------|----------|
| Со   | Course Identification                            |                    |             |        |          |
| 1.   | Credit hours:                                    | 2 (1+ 1)           |             |        |          |
| 2. (   | Course type                                      |                    |             |        |          |
| a.   | University $\Box$                                | College 🗆          | Department⊠ | Track□ | Others □ |
| b.   | Required 🗆                                       | Elective⊠          |             |        |          |
| 3.   | Level/year at whic                               | h this course is c | offered:    |        |          |
| 4. Course general Description:<br>This course is concerned with the study of history and evolution of vaccinology, Vaccine types and characteristics, and Vaccination programs & evaluation. |  |                    |             |        |          |
| 5. Pre-requirements for this course (if any): 343 VMD, 344 VMD.  |  |                    |             |        |          |
| 6.   | 6. Co- requirements for this course (if any): NA |                    |             |        |          |

7. Course Main Objective(s):

Providing students with the basic knowledge of vaccines and immune sera (their evolution, types, production methods, preservation and their role in stimulating the immune system and preventing diseases).
 Enabling students to acquire the knowledge and practice of evaluation of vaccines and vaccination programs.

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 45            | 100%       |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |

#### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio | 15            |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |
| 5. | Others (specify)  | -             |
|    | Total             | 45            |




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

| Co<br>de | Course Learning Outcomes  | Code of CLOs<br>aligned with<br>program | Teaching Strategies  | Assessment<br>Methods  |
|----------|---|---|--|--|
| 1.0      | Knowledge and understanding   |   |  |  |
| 1.1      | Students will be able to list and<br>recognize basic knowledge related<br>to veterinary vaccines.                             | K1                                      | Lectures, accompanied<br>with illustrating aids<br>such as videos and<br>animations.<br>Giving handouts.<br>Continuous revisions   | <ol> <li>Quarterly exam</li> <li>Practical exam</li> <li>Final exam</li> </ol> |
| 2.0      | Skills  |   |  |  |
| 2.1      | Students will be able to recognize<br>and perform laboratory methods to<br>produce experimental vaccines and<br>evaluate them | S1                                      | <ul> <li>Laboratory<br/>preparation of</li> <li>experimental vaccines.</li> <li>Giving the students<br/>some vaccines to<br/>evaluate.</li> <li>Assignment<br/>discussions.</li> </ul> | <ol> <li>Quarterly exam</li> <li>Practical exam</li> <li>Final exam</li> </ol> |
| 3.0      | Values, autonomy, and responsibility  |   |  |  |

## C. Course Content

| No | List of Topics   | Contact Hours |
|----|--|---------------|
| 1. | History and evolution of vaccinology.                                  | 10            |
| 2. | Vaccine types and characteristics                                      | 5             |
| 3. | Adjuvants (types & mechanism of action)                                | 5             |
| 4. | Vaccines manufacture and modern techniques                             | 5             |
| 5. | Vaccine preservation, preparation for injection & routes of injection. | 5             |
| 6. | Vaccination programs & evaluation                                      | 5             |
| 7. | Evaluation of experimental and commercial vaccines                     | 5             |
| 8. | Immunogenicity of vaccines   | 5             |
| 9. | Evaluation of immune response  | 5             |
|    | Total  | 45            |

### **D. Students Assessment Activities**

| No | Assessment Activities *   | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|---------------------------|--------------------------------------|---|
| 1. | First quarterly exam      | 6                                    | 15                                      |
| 2. | Second quarterly exam     | 12                                   | 15                                      |
| 3. | Assignment & presentation | Any time                             | 5                                       |
| 4. | Practical exam            | 15                                   | 15                                      |





| No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|--------------------------------------|---|
| 4  | Final exam              | 16                                   | 50                                      |

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

### E. Learning Resources and Facilities

### **1. References and Learning Resources**

| Essential References     | <ul> <li>Vaccinology – an Essential Guide. By: Gregg N. Milligan and Alan D.T.</li> <li>Barrett. John Wiley &amp; Sons Ltd 2014.</li> <li>Do Vaccines Cause That?! A Guide for Evaluating Vaccine Safety</li> <li>Concerns. Martin G. Myers MD (Author), Diego Pineda. Paperback – 2008.</li> <li>Handouts are prepared especially for this course, translated from the appropriate textbooks in the field. These handouts are available at the Faculty photocopying center.</li> </ul> |  |
|--------------------------|---|--|
| Supportive References    |   |  |
| Electronic Materials     | Suitable videos and animations from the websites.   |  |
| Other Learning Materials | computer-based programs/CD, professional standards or regulations and software. NA  |  |

### 2. Required Facilities and equipment

| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Air conditioned classroom of a minimum of 35 seats<br>and powered by multimedia equipment. Equipped<br>Veterinary clinic or Veterinary Teaching Hospital.   |
| Technology equipment<br>(projector, smart board, software)                            | Data show connected to a computer (desktop or laptop), access to the world wide web.  |
| Other equipment<br>(depending on the nature of the specialty)                         | Equipment for sterilization, incubation and<br>refrigeration (autoclave, incubators, hot-air oven,<br>refrigerator/freezer), ELISA reader, laminar flow<br>hood, sensitive balance, hot plate/stirrer, glassware. |

# F. Assessment of Course Quality

| Assessment Areas/Issues              | Assessor  | Assessment Methods  |
|--------------------------------------|---|---|
| Effectiveness of teaching            | Students – graduates- faculty –<br>program administration –<br>committee for quality assurance<br>and accreditation | Students survey and<br>questionnaire<br>annual reports prepared by<br>the program administrative<br>committee |
| Effectiveness of students assessment | Students- Graduates- employers<br>- committee for quality<br>assurance and accreditation                            | Survey for students –<br>graduates – employers – bi-<br>annual reports of the quality<br>assurance unit       |
| Quality of learning resources        | Students – graduates – peer<br>reviewer   | Surveys and periodical visits<br>of internal and external per<br>reviewers                                    |
| The extent to which CLOs have        | Students  | Course Evaluation Survey  |





| Assessment Areas/Issues | Assessor   | Assessment Methods  |
|-------------------------|------------|---|
| been achieved           | Instructor | (Indirect).<br>Checking students'<br>performance in the test<br>(Direct). |
| Other                   |            |   |

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

# G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | VETERINARY DEPARTMENT |
|-----------------------|-----------------------|
| REFERENCE NO.         | 1444-10-95            |
| DATE                  | 19.02.2023            |





| -104<br>2022 | Course Specification |
|--------------|----------------------|
|              |                      |

Course Code: VMD 459.

Program: Bachelor of Veterinary Medicine.

Department: Veterinary Medicine.

College: Agriculture and Veterinary Medicine.

Institution: Qassim University .

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021.





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| 1. References and Learning Resources  | 5    |
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| G. Specification Approval Data  | 6    |





| A. General information about the course:   |  |                  |             |        |          |
|--|--|------------------|-------------|--------|----------|
| Course Identification  |  |                  |             |        |          |
| 1. (   | Credit hours:  | 2 (1+ 1)         |             |        |          |
| 2. (   | Course type  |                  |             |        |          |
| a.   | University $\Box$  | College $\Box$   | Department⊠ | Track□ | Others □ |
| b.   | Required 🗆   | Elective⊠        |             |        |          |
| 3.   | Level/year at whic   | h this course is | offered:    |        |          |
| 4. Course general Description:<br>This course is concerned with the study with the common diseases of rabbit. The clinical signs, pathological<br>findings and diagnostic tools for rabbit diseases are also included. The course will explain the common diseases<br>affecting rabbits in production as well as in experimental laboratory. Furthermore, the course will intend also with<br>the diagnostic tools of the common diseases and differential diagnosis |  |                  |             |        |          |
| 5. Pre-requirements for this course (if any): Anatomy of Domestic Animals, Veterinary pharmacology, General veterinary Pathology and Physics.  |  |                  |             |        |          |
| 6.   | 6. Co- requirements for this course (if any): VMD 471, VMD 342 |                  |             |        |          |

#### 7. Course Main Objective(s):

1. The students will acquire the necessary skills of the principles of pathology, diagnosis, prevention and control of rabbit diseases.

2. Students will be able to analyze data from different resources related the clinical, pathological and diagnostic criteria of the viral diseases affecting rabbits.

3. The students will study the clinical, pathological and diagnostic criteria of the bacterial, parasitic, nutritional and miscellaneous and fungal diseases affecting rabbits

### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 45            | 100%       |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |

### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio | 15            |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |
| 5. | Others (specify)  | -             |





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

| Co<br>de | Course Learning Outcomes  | Code of CLOs<br>aligned with<br>program | Teaching Strategies   | Assessment<br>Methods   |
|----------|---|---|---|---|
| 1.0      | Knowledge and understanding   |   |   |   |
| 1.1      | Students will be able to list and<br>recognize knowledge related to<br>diseases of rabbit                               | K1                                      | <ul> <li>Lectures with<br/>PowerPoint and movie<br/>content on diseases of<br/>rabbits</li> <li>Practical lessons on<br/>necropsy and gross<br/>lesions of rabbit<br/>diseases</li> <li>Practical lesions on<br/>histopathological<br/>picture of various<br/>diseases of rabbit</li> <li>External visits for<br/>farms and slaughter<br/>plants</li> </ul> | <ol> <li>Quarterly exam</li> <li>Practical exam</li> <li>Final exam</li> </ol>  |
| 2.0      | Skills  |   |   |   |
| 2.2      |   |   |   |   |
| 3.0      | Values, autonomy, and responsibility  |   |   |   |
| 3.1      | The students be able to take a decision by working as a team to solve problems related to diagnosis of rabbit diseases. | V1                                      | <ul> <li>Students are asked to<br/>work in small groups<br/>within the course, so<br/>they can cooperate and<br/>share their skills.</li> <li>Students will be<br/>trained on necropsy of<br/>rabbits and writing<br/>report and suggestive<br/>diagnosis.</li> </ul>   | <ul> <li>Final written<br/>exam with</li> <li>different manners<br/>of questions</li> <li>Practical exam</li> <li>Evaluation of a<br/>written report<br/>(Assignments)</li> </ul> |
| 3.3      | Students should be able to make<br>independent assessment and correct<br>diagnosis of rabbit diseases.                  | V3                                      | •Writing reports about<br>field rabbit farm and<br>exterminate lab visits<br>and methods for<br>diagnosis of rabbit<br>diseases.<br>•Individual<br>presentation.  | •Evaluation of a<br>written report<br>(Assignments)   |

# C. Course Content

| No | List of Topics  | Contact Hours |
|----|---|---------------|
| 1. | Introduction on rabbit morphology, biology and clinical chemistry   | 10            |
| 2. | Viral diseases of rabbit (clinical, pathological and diagnostic criteria):<br>Myxomatosis, shope fibroma, viral papillomatosis, rabbit poxvirus, rabbit | 10            |





|    | herpesvirus infection, rabbit coronavirus, rabbit rotavirus, rabbit viral<br>hemorrhagic disease, and rabies virus infection.   |    |
|----|---|----|
| 3. | Bacterial diseases of rabbit (clinical, pathological and diagnostic criteria):<br>Pasteurellosis (snuffle), Bordatella bronchiseptica, Stapylococcus aureus<br>(ulcerative pododermatitis), Treponematosis, Pseudomonas aeruginosa (moist<br>dermatitis), Clostridiosis, colibacillosis, Lawsonia intracellularis (proliferative<br>enteropathy), salmonellosis, tularemia, Yersiniosis, listeriosis and pyogenic<br>pathogens infection. | 15 |
| 4. | Mycotic diseases of rabbit (clinical, pathological and diagnostic criteria):<br>Superficial mycosis (Ringworm) and deep and systemic mycosis (Aspergillosis)  | 15 |
| 5. | Nutritional and metabolic diseases of rabbit (clinical, pathological and diagnostic criteria):<br>Vitamin E deficiency, hypervitaminosis Vitamin D, Hypo and hypervitaminosis<br>A, Carbohydrate overload, Pregnancy toxemia, chronic fluorosis   | 10 |
| 6. | Neoplastic/proliferative diseases of rabbit (clinical, pathological and diagnostic criteria)  | 15 |
| 7. | Congenital and miscellaneous diseases of rabbit (clinical, pathological and<br>diagnostic criteria):<br>Malocclusion, Buphthalmia (Congenital Glaucoma), Splay Leg, Endometrial<br>venous aneurysms, Hydrocephalus<br>Vertebral fracture, Trichobezar, Barbering, Ulcerative Pododermatitis<br>Hydrometra, Liver Lobe Torsion, Urolithiasis, Lumbar Hernia  | 15 |
|    | Total   | 90 |

### **D. Students Assessment Activities**

| No | Assessment Activities *            | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|------------------------------------|--------------------------------------|---|
| 1. | First quarterly exam               | 6                                    | 10                                      |
| 2. | Second quarterly exam              | 12                                   | 10                                      |
| 3. | Practical exam                     | 15                                   | 5                                       |
| 4  | Final exam                         | 16                                   | 50                                      |
| 5  | Participation in the lecture halls | 15                                   | 5                                       |
| 6  | Field reports                      | 13                                   | 5                                       |
| 7  | Team work                          | 13                                   | 5                                       |
| 8  | Case study                         | 9                                    | 5                                       |

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

#### **E. Learning Resources and Facilities**

### 1. References and Learning Resources







|                          | 12-409527-4.00010-9.   |
|--------------------------|--|
| Supportive References    |  |
| Electronic Materials     | -www. Google.com<br>-www.youtube.com<br>-www.freemedicalvideos.com                 |
| Other Learning Materials | computer-based programs/CD, professional standards or regulations and software. NA |

### 2. Required Facilities and equipment

| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Air conditioned classroom of a minimum of 35 seats<br>and powered by multimedia equipment. Equipped<br>Veterinary clinic or Veterinary Teaching Hospital.               |
| Technology equipment<br>(projector, smart board, software)                            | Data show connected to a computer (desktop or laptop), access to the world wide web.  |
| Other equipment<br>(depending on the nature of the specialty)                         | <ul> <li>Slide photographing unit (triheaded microscope – digital camera – monitor).</li> <li>Color printer for glossy paper A3/A4 for the pathology Studio.</li> </ul> |

# F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor  | Assessment Methods  |
|---|---|---|
| Effectiveness of teaching                   | Students – graduates- faculty –<br>program administration –<br>committee for quality assurance<br>and accreditation | Students survey and<br>questionnaire<br>annual reports prepared by<br>the program administrative<br>committee |
| Effectiveness of students assessment        | Students- Graduates- employers<br>- committee for quality<br>assurance and accreditation                            | Survey for students –<br>graduates – employers – bi-<br>annual reports of the quality<br>assurance unit       |
| Quality of learning resources               | Students – graduates – peer<br>reviewer   | Surveys and periodical visits<br>of internal and external per<br>reviewers                                    |
| The extent to which CLOs have been achieved | Students<br>Instructor  | Course Evaluation Survey<br>(Indirect).<br>Checking students'<br>performance in the test<br>(Direct).         |
| 0.1   |   |   |

#### Other

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

# **G. Specification Approval Data**

| COUNCIL<br>/COMMITTEE | VETERINARY DEPARTMENT |
|-----------------------|-----------------------|
| REFERENCE NO.         | 1444-10-95            |





| DATE | 19.02.2023 |
|------|------------|
|      |            |







Course Title: Clinical Pharmacology

Course Code: VMD 464

**Program: Bachelor of Veterinary Medicine** 

Department: Veterinary Medicine

**College: Agricultural and Veterinary Medicine** 

Institution: Qassim University

Version: T-104 (2022)

Last Revision Date: 1-2-2022

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| C. Course Content                    | 5 |
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| E. Learning Resources and Facilities | 5 |
| 1. References and Learning Resources | 5 |
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### A. General information about the course:

| Сс  | ourse Identification  | 1   |         |               |              |                   |
|---|---|---|---------|---------------|--------------|-------------------|
| 1.  | Credit hours:   | 2 (1+1)   |         |               |              |                   |
| 2.  | Course type   |   |         |               |              |                   |
| a.  | University $\Box$   | College $\Box$  | Dep     | artment□      | Track□       | Others □          |
| b.  | Required □  | Elective⊠   |         |               |              |                   |
| 3.<br>off   | Level/year at whic<br>fered:  | ch this course is   |         | Level 8 / Fou | irth year    |                   |
| <ul> <li>Course general Description</li> <li>Preparation of the student to develop an understanding of the principles of<br/>individualization of drug therapy, apply the principles of clinical pharmacology and<br/>rational pharmacotherapy in clinical practice and develop skills and attitudes needed<br/>to recognize and avoid irrational prescribing.</li> </ul> |   |   |         |               |              |                   |
| 5. Pre-requirements for this course (if any): VMD 461- VMD 481  |   |   |         |               |              |                   |
| 6.  | Co- requirements  | for this course (i  | if any) | : None        |              |                   |
| 7.<br>- F<br>   | Course Main Obje<br>Preparation of the<br>Understand the m<br>s to know the effec | ctive(s)<br>student to<br>nain theories rela<br>t of the particular | ted to  | drug action a | and pharmaco | okinetics as well |

as to know the effect of the particular drug on main body organs as well as therapeutic uses. Understand the basis of drug use in treatment of diseases. Memorize the most recent drugs and evaluate their therapeutic potential. Describe the main side effects and overdose toxicity of drugs. Show the hazards of drug residues on the health and choose the drugs with no withdrawal time.





100%

#### 1. Teaching mode (mark all that apply) Mode of Instruction **Contact Hours** Percentage No 1. Traditional classroom 60 2. E-learning Hybrid 3. • Traditional classroom • E-learning 4. Distance learning

### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio | 30            |
| 3. | Field             |               |
| 4. | Tutorial          |               |
| 5. | Others (specify)  |               |
|    | Total             | 60            |

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

| Code | Course Learning  | Code of CLOs aligned | Teaching<br>Strategies  | Assessment<br>Methods  |
|------|--|----------------------|---|--|
| 1.0  | Knowledge and unde   | rstanding            | Ollalogios  | Methodo  |
| 1.1  | The student should<br>be able to<br>understand<br>principles of<br>individualization of<br>drug therapy.                     | К1                   | -Lectures.<br>-Practical and<br>clinical<br>sessions.<br>-Take home<br>assignments.                 | -<br>Examinatio<br>ns, quizzes,<br>clinical<br>procedure<br>evaluated.                         |
| 1.2  |  |                      |   |  |
|      |  |                      |   |  |
| 2.0  | Skills   |                      |   |  |
| 2.3  | The student<br>should be able<br>to apply the<br>principles of<br>clinical<br>pharmacology<br>and rational<br>pharmacotherap | \$3                  | -Take home:<br>the student<br>,given<br>problems that<br>need to be<br>solved.<br>-<br>Comprehensiv | -Take<br>home:<br>Seminars<br>need to be<br>prepared,<br>presented<br>and will be<br>evaluated |





| Code         Course Learning         Code of CLOs aligned         Teaching           Outcomes         with program         Strategies  | Assessment<br>Methods  |
|--|--|
| y in clinical e clinical cae ,<br>practice and presented to<br>develop skills and attitudes needed to<br>recognize and avoid irrational<br>prescribing e clinical cae ,<br>presented to<br>the student<br>and will be<br>asked to<br>formulate a | accordingly<br>-Clinical<br>reports<br>related<br>question<br>discussed<br>in the<br>format of<br>group  |
| <ul> <li>The student should S4</li> <li>be able to construct therapeutic plan to a given health problem based on proper evaluation of drug action, kinetics and side effects.</li> </ul>   | discussio<br>n.<br>-Students<br>evaluated for<br>their<br>professional<br>attitude by<br>monitoring<br>students<br>throughout<br>their study<br>period.      |
| 2.5 <b>S5</b> - Demonstration in computer.<br>-Group assignment.<br>-Using the internet<br>-Clinical simulation of the animal owner.<br>- Communication n with animal owners of different levels of educations                                   | -Students<br>assignment<br>s evaluated<br>by direct<br>assessment<br>and<br>continuous<br>assessment<br>s.<br>-Direct<br>evaluation of<br>take home<br>work. |
| Values, autonomy, and responsibility   |  |
|  |  |





### C. Course Content

| No   | List of Topics   | Contact Hours |
|------|--|---------------|
| 1.   | Orientation to the course                                | 4             |
| 2.   | Principles of pharmacokinetics and rational drug therapy | 4             |
| 3.   | Drugs of food and nonfood animals.                       | 4             |
| 4.   | Drug-drug interactions                                   | 4             |
| 5.   | Potential toxicity of major drug groups in animals.      | 4             |
| 6.   | Drugs prohibited for use in food animals                 | 4             |
| 7.   | Drugs acting on skin, eye and inflammations              | 4             |
| 8.   | Growth promoting agents                                  | 4             |
| 9.   | Prudent usage of antimicrobials                          | 4             |
| 10.  | Fluid therapy  | 4             |
| 11.  | Bioavailability  | 4             |
| 12.  | Bioequivalence   | 4             |
| 13.  | Immunotherapy  | 4             |
| 14.  | Gene therapy   | 4             |
| 15.  | Veterinary herbal medicine                               | 4             |
| Tota | d l  | 60            |

## **D. Students Assessment Activities**

| No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|--------------------------------------|---|
| 1. | 1st midterm             | 6                                    | 10                                      |
| 2. | Assignments and quizzes | 4, 8                                 | 10                                      |
| 3. | 2nd midterm             | 11                                   | 10                                      |
| 4  | Practical exam          | 15                                   | 20                                      |
| 5  | Final Exam              | 16                                   | 50                                      |

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

## **E.** Learning Resources and Facilities

### 1. References and Learning Resources

| Essential References  | - Goodman L.S. & Gilman A. (2009): The Pharmacological Basis<br>of Therapeutics. 8th Ed. Bailliere Tindal, London Harvey, R.A.<br>and Champ P. C. (2009): Lippincott's Illustrated Reviews<br>Pharmacology. 4th Ed. Lippincott Williams and Wilkins. |
|-----------------------|--|
| Supportive References | -Handouts prepared especially for this course, translated from<br>the appropriate textbooks in the field. These handouts are<br>available at the Faculty photocopying center.  |





|                          | - Basic & Clinical Pharmacology & ToxicologyJournal or             |  |  |
|--------------------------|--|--|--|
|                          | Veterinary Pharmacology and TherapeuticsJournal of                 |  |  |
|                          | Environmental Toxicology and PharmacologyJournal of                |  |  |
|                          | Pharmacology and Experimental Therapeutics Research in             |  |  |
|                          | Vet. Sci Toxicology. Appl. Pharmacology.                           |  |  |
|                          | www.vmd.gov.uk www.usp.org www.fda.gov/search.html                 |  |  |
|                          | www.osha.gov. http://dx.doi.org/10.1007/978-0-387-72573-4          |  |  |
| Electropic Meteriale     | http://dx.doi.org/10.1007/b138634                                  |  |  |
|                          | http://dx.doi.org/10.1007/b138972 http://dx.doi.org/10.1007/978-3- |  |  |
|                          | 540-38918-7 http://dx.doi.org/10.1007/978-3-540-74805-2            |  |  |
|                          | http://dx.doi.org/10.1007/3-7643-7440-3                            |  |  |
| Other Learning Materials | Suitable videos and animations from the websites.                  |  |  |

### 2. Required Facilities and equipment

| Items   | Resources  |
|---|--|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Classroom of 20 students capacity.<br>Laboratory of 15students capacity. |
| Technology equipment<br>(projector, smart board, software)                            | Data show.   |
| Other equipment<br>(depending on the nature of the specialty)                         | Chemicals. Glasses and kits for experimental sessions.                   |

# F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor  | Assessment Methods   |
|---|---|--|
| Effectiveness of teaching                   | Students  | Course Evaluation Survey<br>(Indirect)   |
| Effectiveness of students assessment        | <ul> <li>Students</li> <li>Program Leaders</li> </ul> | <ul> <li>Course Evaluation<br/>Survey<br/>(Indirect).</li> <li>Result of the<br/>course (Direct)</li> </ul>                            |
| Quality of learning resources               | Students  | Course Evaluation Survey<br>(Indirect)   |
| The extent to which CLOs have been achieved | <ul> <li>Students</li> <li>Instructor</li> </ul>      | <ul> <li>Course Evaluation<br/>Survey<br/>(Indirect).</li> <li>Checking students'<br/>performance in the<br/>test (Direct).</li> </ul> |
| Other                                       |   |  |





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

# G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |





T-104 2022

# **Course Specification**

| Course Title: | safety Poultry | <b>Meat</b> |
|---------------|----------------|-------------|
|---------------|----------------|-------------|

Course Code: 478 VMD

Program: Veterinary Medicine

Department: Veterinary Medicine

College: Agriculture and Veterinary Medicine

Institution: Qassim University

Version: T-104

Last Revision Date: 1/2/2021 (modified on 10/8/2022 to fit the three semesters system).





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| A. General information about the course:  |  |         |                 |                |        |
|---|--|---------|-----------------|----------------|--------|
| Course Identificat  | ion  |         |                 |                |        |
| 1. Credit hours:  | 2 (1 + 1)  |         |                 |                |        |
| 2. Course type  |  |         |                 |                |        |
| a. University 🗆   | College 🗆  | Dep     | partment□       | Track□         | Others |
| b. Required   | Elective⊠  |         |                 |                |        |
| 3. Level/year at w offered:   | hich this course is  | S       | Level 8/4th ye  | ear            |        |
| <b>4. Course general Description</b><br>This course discusses the safety aspects of poultry meat production from farm to table. The major chapters of this course include poultry-slaughtering process; sanitation and safety; foodborne pathogens in poultry meat production; HACCP; pre- and post- harvest interventions. |  |         |                 |                |        |
| 5. Pre-requirements for this course (if any): 344 VMD/ 352 VMD  |  |         |                 |                |        |
| 6. Co- requirement  | nts for this course  | e (if a | any): None      |                |        |
| 7. Course Main Ol<br>A. To gain a basic   | <b>jective(s)</b><br>understanding of the<br>understanding | he p    | oultry-slaughte | ering process. |        |

- B. Enabling students to control and prevent the risk of poultry contamination with different hazards.
- C. Enabling students to identify the major sources of poultry contamination.
- D. Enabling students to evaluate the safety of poultry products.
- E. Students will be able to understand and adhere to HACCP regulations throughout the harvest process.

### **1. Teaching mode (mark all that apply)**

| No | Mode of Instruction   | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom   | $\checkmark$  | 100%       |
| 2. | E-learning  |               |            |
| 3. | <ul><li>Hybrid</li><li>Traditional classroom</li><li>E-learning</li></ul> |               |            |
| 4. | Distance learning   |               |            |

### 2. Contact Hours (based on the academic semester)

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





| 1. | Lectures          | 12 |
|----|-------------------|----|
| 2. | Laboratory/Studio | 20 |
| 3. | Field             | 3  |
| 4. | Tutorial          |    |
| 5. | Others (specify)  |    |
|    | Total             | 35 |





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

| Code | Course Learning Outcomes   | Code of<br>CLOs<br>aligned with<br>program | Teaching<br>Strategies   | Assessment<br>Methods     |
|------|--|--|--|---------------------------|
| 1.0  | Knowledge and understanding  |  |  |                           |
|      |  |  |  | 1. Midterm<br>exam        |
| 1.1  | Students will gain a basic<br>understanding of poultry-  | K1   | -Lectures<br>-Practical sessions   | 2. Final exam             |
|      | slaughtering process.  |  | -Field visits  | 3. Quizzes                |
|      |  |  |  | 4. Class<br>Participation |
| 2.0  |  | Skills                                     |  |                           |
|      |  |  |  | 1. Midterm<br>exam        |
| 0.1  | Students will be able to monitor<br>the production of poultry meat<br>to prevent public health<br>hazards. | S3   | -Lectures<br>-Practical sessions<br>-Field visits  | 2. Practical exam         |
| 2.1  |  |  |  | 3. Final exam             |
|      |  |  |  | 4. Quizzes                |
|      |  |  |  | 5. Class<br>Participation |
|      | Students will be able to demonstrate analyses of   | 85   | <ul> <li>Using scholarly<br/>sources.</li> </ul>   | 1. Midterm<br>exam        |
| 2.2  |  |  | <ul> <li>Writing reports.</li> <li>Searching per-<br/>reviewed journals<br/>for information;</li> <li>Presentation of a<br/>study's findings.</li> </ul> | 2. Practical exam         |
|      | poultry hygiene.   |  |  | 3. Final exam             |
|      |  |  |  | 4. Quizzes                |
|      |  |  |  | 5. Reports                |
| 3.0  | Values, a  | utonomy, and                               | responsibility   |                           |
|      | Students should be able to make  |  | - Writing reports<br>- Group discussion  | 1. Midterm<br>exam        |
| 3.1  | a decision as a team to solve<br>problems related to diagnosis of  | V1   |  | 2. Practical exam         |
|      | tood poisoning associated with the consumption of poultry  |  |  | 3. Final exam             |
|      | the consumption of poultry   |  |  | 4. Quizzes                |





| Code | Course Learning Outcomes   | Code of<br>CLOs<br>aligned with<br>program | Teaching<br>Strategies  | Assessment<br>Methods  |
|------|--|--|---|--|
|      |  |  |   | 5. Reports   |
| 3.2  | Students will be able to make an independent assessment of the safety of poultry products. | V3   | - Writing reports<br>-Field visits<br>- Practical<br>sessions | <ol> <li>Midterm<br/>exam</li> <li>Practical<br/>exam</li> <li>Final exam</li> <li>Quizzes</li> <li>Reports</li> </ol> |

### C. Course Content

| No | List of Topics  | Contact Hours |
|----|---|---------------|
| 1  | Introduction  | 1             |
| 2  | Poultry-slaughtering process: Premortem handling          | 1             |
| 3  | Poultry-slaughtering process: Postmortem handling         | 1             |
| 4  | Sanitation and safety: Chemical contaminations            | 1             |
| 5  | Sanitation and safety: Microbial contaminations           | 1             |
| 6  | Salmonella in Poultry Meat Production 1                   |               |
| 7  | Antibiotic-Resistant Salmonella 1                         |               |
| 8  | Campylobacter in Poultry Meat Production 1                |               |
| 9  | НАССР   | 1             |
| 10 | Pre-harvest Interventions to Improve Poultry Meat Safety  | 1             |
| 11 | Post-harvest Interventions to Improve Poultry Meat Safety | 1             |
| 12 | Inspection  | 1             |
|    | Total   | 12            |

## **D. Students Assessment Activities**

| No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|--------------------------------------|---|
| 1  | Midterm exam.           | 6                                    | 20%                                     |
| 2  | Practical exam.         | 12                                   | 15%                                     |
| 3  | Quizzes                 | Throughout the semester              | 5%                                      |
| 4  | Individual report       | 12                                   | 5%                                      |





| ٢ | No | Assessment Activities * | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|---|----|-------------------------|--------------------------------------|---|
| 5 |    | Class participation     | Throughout the semester              | 5%                                      |
| 6 |    | Final exam.             | 13                                   | 50%                                     |

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





### E. Learning Resources and Facilities **1. References and Learning Resources**

| Essential References     | Owens, Casey M. Poultry meat processing. CRC Press, 2010.<br>Mead, G., ed. Poultry meat processing and quality. Woodhead<br>Publishing, 2004.<br>Venkitanarayanan, Kumar, Siddhartha Thakur, and Steven C. Ricke,<br>eds. Food safety in poultry meat production. Cham, Switzerland:<br>Springer International Publishing, 2019. |
|--------------------------|--|
| Supportive References    | Hui, Y. H. Handbook of Poultry Science and Technology, Primary Processing. Vol. 1. John Wiley & Sons, 2010.  |
| Electronic Materials     | Saudi FDA, WHO websites  |
| Other Learning Materials |  |

### 2. Required Facilities and equipment

| Items   | Resources                                |
|---|--|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Separate laboratory of at least 25 seats |
| Technology equipment<br>(projector, smart board, software)                            | Data show<br>Laptop                      |
| Other equipment<br>(depending on the nature of the specialty)                         |  |

### F. Assessment of Course Quality

| Assessment Areas/Issues                     | Assessor                  | Assessment Methods   |  |
|---|---------------------------|--|--|
| Effectiveness of teaching                   | Students                  | Course Evaluation Survey<br>(Indirect)   |  |
| Effectiveness of students assessment        | Students; Program Leaders | Course Evaluation Survey<br>(Indirect); Result of the<br>course (Direct)                           |  |
| Quality of learning resources               | Students                  | Course Evaluation Survey<br>(Indirect)   |  |
| The extent to which CLOs have been achieved | Students; Instructor      | Course Evaluation Survey<br>(Indirect). Checking<br>students' performance in<br>the test (Direct). |  |

#### Other

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





| G. Specification Approval Data |                       |  |  |  |
|--------------------------------|-----------------------|--|--|--|
| COUNCIL<br>/COMMITTEE          | Veterinary Department |  |  |  |
| REFERENCE NO.                  |                       |  |  |  |
| DATE                           |                       |  |  |  |





| ٦ | - | 1  | <b>n</b> | 1. |
|---|---|----|----------|----|
|   |   | ь. | U        | 4  |
|   |   |    |          |    |

# **Course Specification**

| Course Title: Organic animal production      |
|--|
| Course Code: APP 480                         |
| Program: Animal production                   |
| Department: Animal production and breeding   |
| College: Agriculture and veterinary medicine |
| Institution: Qassim university               |
| Version: Course Specification Version Number |
| Last Revision Date: Feb 2023                 |





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| Course Identification   |  |  |  |  |
|---|--|--|--|--|
| 1. Credit hours: 2(1+1)   |  |  |  |  |
| 2. Course type  |  |  |  |  |
| a. University 🗌 College 🛛 Department 🗌 Track 🗌 Others 🗌                                       |  |  |  |  |
| b. Required □ Elective⊠   |  |  |  |  |
| 3. Level/year at which this course is   |  |  |  |  |
| offered:6-8 level   |  |  |  |  |
| 4. Course general Description   |  |  |  |  |
| 1- Principles and practices of organic farming  |  |  |  |  |
| 2- The differences between raising traditional and organic farm animals                       |  |  |  |  |
| 3- learning marketing of organic products   |  |  |  |  |
| 5. Pre-requirements for this course (if any):   |  |  |  |  |
| 101 Zool  |  |  |  |  |
| 6. Co- requirements for this course (if any):   |  |  |  |  |
| N/A   |  |  |  |  |
| 7. Course Main Objective(s)   |  |  |  |  |
| Raising the knowledge and practices of the students in the field of livestock organic farming |  |  |  |  |

### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction   | Contact Hours | Percentage |
|----|-----------------------|---------------|------------|
| 1. | Traditional classroom | 45            | 100        |
| 2. | E-learning            |               |            |
|    | Hybrid                |               |            |
| 3. | Traditional classroom |               |            |
|    | • E-learning          |               |            |
| 4. | Distance learning     |               |            |





### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio |               |
| 3. | Field             |               |
| 4. | Tutorial          |               |
| 5. | Others (specify)  | 15            |
|    | Total             | 45            |





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

### **Assessment Methods**

| Code | Course Learning Outcomes  | Code of<br>CLOs<br>aligned<br>with<br>program | Teaching Strategies   | Assessment<br>Methods                                       |
|------|---|---|---|---|
| 1.0  | Knowledge and understanding   |   |   |   |
| 1.1  | The student will be able to<br>implement the principles of<br>organic animal farming<br>knowledge and practices |   | Lectures, Practical<br>sessions, visits to<br>organic animal farms. | Periodical and<br>practical tests.<br>Final exam<br>Quizzes |
| 1.2  |   |   |   |   |
| •••  |   |   |   |   |
| 2.0  | Skills  |   |   |   |
| 2.1  | To be able to choose suitable<br>solutions for the problems related<br>to Organic animal breeding.              |   | Lectures  | Quizzes   |
| 2.2  |   |   |   |   |
| •••  |   |   |   |   |
| 3.0  | Values, autonomy, and responsibi  | ility   |   |   |
| 3.1  | Introducing the student to the<br>ethics of dealing and caring for the<br>product from organic animals          |   | lectures  | periodic and final exams                                    |
| 3.2  |   |   |   |   |
| •••  |   |   |   |   |

### C. Course Content

| No | List of Topics                              | Contact Hours |
|----|---|---------------|
| 1. | Principles and practices of organic farming | 6             |
| 2. | Farms as ecosystems                         | 3             |





| 3.  | Certification process and agencies                               | 3  |
|-----|--|----|
| 4.  | Managing organic matter to support soil nutrients                | 3  |
| 5.  | Biodiversity management  | 3  |
| 6.  | Forage crop cycles   | 3  |
| 7.  | Plant competition and ground cover                               | 3  |
| 8.  | Differences between conventional and organic farm animal farming | 6  |
| 9.  | Integration of crops and animals                                 | 3  |
| 10. | Organic animal husbandry practices                               | 6  |
| 11. | Shelter for birds and animals                                    | 3  |
| 12. | Marketing of organic animal products                             | 3  |
|     | Total  | 45 |

## D. Students Assessment Activities

| No      | Assessment Activities *  | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|---------|--|--------------------------------------|---|
| 1.      | Principles and practices of organic farming                      | 1-3                                  | 12%                                     |
| 2.      | Farms as ecosystems  | 4-5                                  | 8%                                      |
| 3.      | Certification process and agencies                               | 5-6                                  | 8%                                      |
| 4.      | Managing organic matter to support soil nutrients                | 6-7                                  | 8%                                      |
| 5.      | Biodiversity management  | 7-8                                  | 8%                                      |
| 6.      | Forage crop cycles   | 8-9                                  | 8%                                      |
| 7.      | Plant competition and ground cover                               | 9-10                                 | 8%                                      |
| 8.      | Differences between conventional and organic farm animal farming | 10-11                                | 8%                                      |
| 9.      | Integration of crops and animals                                 | 11-12                                | 8%                                      |
| 10.     | Organic animal husbandry practices                               | 12-13                                | 8%                                      |
| 11.     | Shelter for birds and animals                                    | 13-14                                | 8%                                      |
| 1<br>2. | Marketing of organic animal products                             | 14-15                                | 8%                                      |

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











### E. Learning Resources and Facilities

### 1. References and Learning Resources

| Essential References     | The complete guide to organic livestock farming. Terri Paajanen.<br>(Atlantic Publishing Group 2011).<br>(.صالح شعبان عبد الرحمن: الدواجن العضوية )وزارة الزراعة السعودية3311<br>دليل الزراعة العضوية (وزراة الزراعة السعودية 3313 |
|--------------------------|--|
| Supportive References    | <ul><li>1-J. Organic Agriculture</li><li>2- Korean J. Org. Agric.</li><li>3-International J. Organic farming</li></ul>   |
| Electronic Materials     | https://www.infonet-biovision.org/AnimalHealth/Organic-animal-<br>husbandry-Breeding-housing-and-feeding-animals   |
| Other Learning Materials | N/A  |

### 2. Required Facilities and equipment

| ltems  | Resources |
|--|-----------|
| facilities                                   |           |
| (Classrooms, laboratories, exhibition rooms, |           |
| simulation rooms, etc.)                      |           |
| Technology equipment                         |           |
| (projector, smart board, software)           |           |
| Other equipment                              |           |
| (depending on the nature of the specialty)   |           |

### F. Assessment of Course Quality

| Assessment Areas/Issues              | Assessor | Assessment Methods |
|--------------------------------------|----------|--------------------|
| Effectiveness of teaching            |          |                    |
| Effectiveness of students assessment |          |                    |
| Quality of learning resources        |          |                    |
| The extent to which CLOs have been   |          |                    |
| achieved                             |          |                    |
| Other                                |          |                    |





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

# G. Specification Approval Data

| COUNCIL /COMMITTEE | The report has been revised and approved by the departmental council. |  |
|--------------------|---|--|
| REFERENCE NO.      |   |  |
| DATE               | 20/3/2023   |  |




| T-104<br>2022 | C | ourse Sp | ecificatior |  |  |
|---------------|---|----------|-------------|--|--|
|               |   |          |             |  |  |

Course Code: VMD 493

Program: Bachelor of Veterinary Medicine

Department: Veterinary Medicine

College: Agriculture and Veterinary Medicine

Institution: Qassim University

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021.





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#### A. General information about the course:

| Co   | urse Identification |                    |                     |               |                    |
|------|---------------------|--------------------|---------------------|---------------|--------------------|
| 1. ( | Credit hours:       | 2 (1+ 1)           |                     |               |                    |
| 2. ( | Course type         |                    |                     |               |                    |
| a.   | University $\Box$   | College 🗆          | Department⊠         | Track□        | Others □           |
| b.   | Required 🗆          | Elective⊠          |                     |               |                    |
| 3.   | Level/year at whic  | h this course is o | ffered: Elective    |               |                    |
| 4.   | Course general [    | Description: This  | course is concerned | with the stud | y of diagnosis and |

treatment of different diseases of pet animals such as diseases of digestive, respiratory, urogenital system. Veterinary ophthalmology and liver and skin disorders.

5. Pre-requirements for this course (if any): Virology (VMD 344), Systemic Pathology (VMD 352).

6. Co- requirements for this course (if any): NA

#### 7. Course Main Objective(s):

After completion of this course, students are expected to know; normal gait of dogs and cats and diagnosis of lameness. Students are expected to know diseases of digestive system, respiratory system, urogenital system. Veterinary ophthalmology and liver and skin disorders.

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 70            | 70%        |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |

#### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 70            |
| 2. | Laboratory/Studio | -             |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |
| 5. | Others (specify)  | 30            |
|    | Total             | 100           |





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

| Co<br>de | Course Learning Outcomes  | Code of CLOs<br>aligned with<br>program | Teaching Strategies   | Assessment<br>Methods   |
|----------|---|---|---|---|
| 1.0      | Knowledge and understanding   |   |   |   |
| 1.1      |   |   |   |   |
| 2.0      | Skills  |   |   |   |
| 2.2      | Students will be able to apply<br>critical thinking and analytical<br>skills for intervention in pet animal<br>medicine.      | S2                                      | Lectures contain case<br>studies, pictures of<br>clinical cases, and<br>examples of diseases.<br>Case studies are major<br>parts of the practical<br>part of this course.<br>These case studies are<br>upon clinical cases,<br>how to diagnose and<br>methods of treatment. | <ol> <li>Quarterly exam</li> <li>Practical exam</li> <li>Final exam</li> </ol>    |
| 3.0      | Values, autonomy, and responsibility  |   |   |   |
| 3.1      | Students will be able to work<br>effectively in teams for solving<br>medical disorders  | V1                                      | Students are trained to<br>work in team. This<br>team is responsible for  |   |
| 3.2      | Students will be able to show full<br>awareness of ethical and<br>professional issues relevant to<br>medical diseases in pets | V2                                      | a clinical case. Each<br>student has a specific<br>task at this team and<br>should perform his task<br>efficiently.   | 7. Team work  |
| 3.3      | Students will be able to manipulate veterinary field works using sense and locomotor organs.                                  | V3                                      | Training in dealing<br>with pets diseases at<br>the practical part of the<br>course   | <ol> <li>Practical exam</li> <li>11. case study</li> <li>12. team work</li> </ol> |

### C. Course Content

| No | List of Topics                                       | Contact Hours |
|----|--|---------------|
| 1. | Manipulation of pet animals                          | 12            |
| 2. | Diseases of the cardiovascular system of pet animals | 12            |
| 3. | Diseases of the respiratory system of pet animals    | 12            |
| 4. | Diseases of the digestive system of pet animals      | 6             |
| 5. | Diseases of the urinary system of pet animals        | 12            |
| 6. | 6. Diseases of the skin of pet animals               |               |
| 7. | 7. Ocular affections of pet animals                  |               |
| 8. | Liver disorders of pet animals                       | 6             |
| 9. | Malnutrition diseases of pet animals                 | 12            |
|    | Total  | 84            |





| No | Assessment Activities *            | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|------------------------------------|--------------------------------------|---|
| 1. | First quarterly exam               | 6                                    | 10                                      |
| 2. | Second quarterly exam              | 12                                   | 10                                      |
| 3. | Practical exam                     | 15                                   | 5                                       |
| 4  | Final exam                         | 16                                   | 50                                      |
| 5  | Participation in the lecture halls | 15                                   | 5                                       |
| 6  | Field reports                      | 13                                   | 5                                       |
| 7  | Team work                          | 13                                   | 5                                       |
| 8  | Case study                         | 9                                    | 5                                       |

#### **D. Students Assessment Activities**

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

#### E. Learning Resources and Facilities

#### **1. References and Learning Resources**

| Essential References     | <ul> <li>Small Animal Internal Medicine 6th Edition by Richard W. Nelson<br/>DVM, C. Guillermo Couto DVM. 2019.</li> <li>Practical small animal ultrasonography. Abdomen – April 6, 2016</li> <li>by Panagiotis Mantis. 2016.</li> <li>Quick guidebook to canine and feline ophthalmology - 2nd</li> <li>edition by Javier Esteban Martín, Lori Newman. 2019</li> <li>Differential Diagnosis in Small Animal Medicine 2nd Edition by Alex<br/>Gough, Kathryn F. Murph. 2015.</li> <li>Cardiovascular Disease in Small Animal Medicine 1st Edition, by Wendy<br/>Ware. 2011</li> </ul> |
|--------------------------|---|
| Supportive References    | Journal of Veterinary Internal Medicine   |
| Electronic Materials     | NA  |
| Other Learning Materials | computer-based programs/CD, professional standards or regulations and software  |

#### 2. Required Facilities and equipment

| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Air-conditioned classroom of a minimum of 35 seats<br>and powered by multimedia equipment. Equipped<br>Veterinary clinic or Veterinary Teaching Hospital.               |
| Technology equipment<br>(projector, smart board, software)                            | Data show connected to a computer (desktop or laptop), access to the world wide web.  |
| Other equipment<br>(depending on the nature of the specialty)                         | Sterilization equipment; boiler, hot air oven.<br>Autoclave, anesthetic machines, X-ray machine and<br>accessories, Sonography and other diagnostic imaging<br>devices. |

### F. Assessment of Course Quality

| Assessment Areas/Issues   | Assessor                        | Assessment Methods  |
|---------------------------|---------------------------------|---------------------|
| Effectiveness of teaching | Students - graduates- faculty - | Students survey and |





| Assessment Areas/Issues                     | Assessor   | Assessment Methods  |
|---|--|---|
|   | program administration –<br>committee for quality assurance<br>and accreditation         | questionnaire<br>annual reports prepared by<br>the program administrative<br>committee                  |
| Effectiveness of students assessment        | Students- Graduates- employers<br>- committee for quality<br>assurance and accreditation | Survey for students –<br>graduates – employers – bi-<br>annual reports of the quality<br>assurance unit |
| Quality of learning resources               | Students – graduates – peer<br>reviewer  | Surveys and periodical visits<br>of internal and external per<br>reviewers                              |
| The extent to which CLOs have been achieved | Students<br>Instructor   | Course Evaluation Survey<br>(Indirect).<br>Checking students'<br>performance in the test<br>(Direct).   |

Other

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

# G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |



| T-1<br>202 | 04<br>22<br><b>C</b> a | ourse Specification |  |
|------------|------------------------|---------------------|--|
|            | Course Title:          | Pot Animale Surgery |  |
|            | Course Code:           | VMD 494             |  |

Program: Bachelor of Veterinary Medicine.

Department: Veterinary Medicine.

College: Agriculture and Veterinary Medicine.

Institution: Qassim University .

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021.





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| 1. References and Learning Resources  | 5    |
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| F. Assessment of Course Qualit  | 5    |
| G. Specification Approval Data  | 6    |





#### A. General information about the course: **Course Identification** 1. Credit hours: 2 (1+ 1) 2. Course type Track Others 🗆 a. University College $\Box$ Department⊠ b. Required □ Elective⊠ 3. Level/year at which this course is offered: Elective 4. Course general Description: This course is concerned with the study of diagnosis and treatment of different surgical affections in pet animals such as Gait construction, abnormalities and lameness diagnosis, Affections of the forelimbs, Affections of the hind limbs, Affections of the digestive system, Affections of the respirator system, Affections of the urogenital system, and Veterinary ophthalmology and Veterinary anesthesia.

5. Pre-requirements for this course (if any): Surgery 1 (VMD 485).

#### 6. Co- requirements for this course (if any): NA

#### 7. Course Main Objective(s):

After completion of this course, students are expected to know; normal gait of dogs and cats and diagnosis of lameness. Students are expected to know surgical affections of the digestive system, respiratory system, urogenital system. Veterinary ophthalmology and veterinary anesthesia.

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction                               | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom                             | 70            | 70%        |
| 2. | E-learning  |               |            |
| 3. | Hybrid<br>• Traditional classroom<br>• E-learning |               |            |
| 4. | Distance learning                                 |               |            |

#### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 70            |
| 2. | Laboratory/Studio | -             |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |
| 5. | Others (specify)  | 30            |
|    | Total             | 100           |



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

| Co<br>de | Course Learning Outcomes   | Code of CLOs<br>aligned with<br>program | Teaching Strategies   | Assessment<br>Methods  |
|----------|--|---|---|--|
| 1.0      | Knowledge and understanding  |   |   |  |
| 1.1      |  |   |   |  |
| 2.0      | Skills   |   |   |  |
| 2.2      | Students will be able to apply<br>critical thinking and analytical<br>skills for intervention in surgery.                | S2                                      | Lectures contain case<br>studies, pictures of<br>clinical cases, and<br>examples of diseases.<br>Case studies are major<br>parts of the practical<br>part of this course.<br>These case studies are<br>upon clinical cases,<br>how to diagnose and<br>methods of treatment. | <ol> <li>Quarterly exam</li> <li>Practical exam</li> <li>Final exam</li> </ol> |
| 3.0      | Values, autonomy, and responsibility   |   |   |  |
| 3.1      | Students will be able to work<br>effectively in teams for solving<br>veterinary surgical problems.                       | V1                                      | Students are trained to<br>work in team. This<br>team is responsible for  |  |
| 3.2      | Students will be able to show full<br>awareness of ethical and<br>professional issues relevant to<br>veterinary surgery. | V2                                      | a clinical case. Each<br>student has a specific<br>task at this team and<br>should perform his task<br>efficiently.   | 7. Team work   |
| 3.3      | Students will be able to manipulate veterinary field works using sense and locomotor organs.                             | V3                                      | Training and surgery at<br>the practical part of the<br>course  | <ol> <li>Practical exam</li> <li>case study</li> <li>team work</li> </ol>      |

#### C. Course Content

| No | List of Topics  | Contact Hours |
|----|---|---------------|
| 1. | Gait construction, abnormalities and lameness diagnosis | 12            |
| 2. | Affections of the forelimbs                             | 12            |
| 3. | Affections of the hind limbs                            | 12            |
| 4. | Fractures Managements                                   | 6             |
| 5. | Affections of the digestive system                      | 12            |
| 6. | Affections of the respirator system                     | 6             |
| 7. | Affections of the urogenital system                     | 6             |
| 8. | Common anaesthetic techniques use in pets               | 6             |
| 9. | Veterinary ophthalmology                                | 12            |
|    | Total   | 84            |





| No | Assessment Activities *            | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|------------------------------------|--------------------------------------|---|
| 1. | First quarterly exam               | 6                                    | 10                                      |
| 2. | Second quarterly exam              | 12                                   | 10                                      |
| 3. | Practical exam                     | 15                                   | 5                                       |
| 4  | Final exam                         | 16                                   | 50                                      |
| 5  | Participation in the lecture halls | 15                                   | 5                                       |
| 6  | Field reports                      | 13                                   | 5                                       |
| 7  | Team work                          | 13                                   | 5                                       |
| 8  | Case study                         | 9                                    | 5                                       |

#### **D. Students Assessment Activities**

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

#### E. Learning Resources and Facilities

#### **1. References and Learning Resources**

| Essential References     | <ul> <li>Stephen D. Gilson. (2006): Small Animal Soft Tissue Surgery.</li> <li>Clarke KW, Trim, CM, and Hall LW (2014): Veterinary Anaesthesia.</li> <li>Donald Piermattei (2006): Small Animals Orthopedics and Fracture Repair.</li> <li>Douglas Slatter (2003): Small Animal Surgery.</li> <li>Thrall DE (2002): Veterinary diagnostic radiology</li> </ul> |
|--------------------------|--|
| Supportive References    | Veterinary Surgery Journal   |
| Electronic Materials     | WWW contains some video clips on suturing, wounds and fractures, animal anaesthesia.   |
| Other Learning Materials | computer-based programs/CD, professional standards or regulations and software. NA   |

#### 2. Required Facilities and equipment

| Items   | Resources  |
|---|--|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Air conditioned classroom of a minimum of 35 seats<br>and powered by multimedia equipment. Equipped<br>Veterinary clinic or Veterinary Teaching Hospital.  |
| Technology equipment<br>(projector, smart board, software)                            | Data show connected to a computer (desktop or laptop), access to the world wide web.   |
| Other equipment<br>(depending on the nature of the specialty)                         | Sterilization equipment; boiler, hot air oven.<br>Autoclave, anesthetic machines, X-ray machine and<br>accessories, Sonography and other diagnostic imaging<br>devices. Surgical instruments, sutures and carcasses<br>for training are necessary. |

## F. Assessment of Course Quality

| Assessment Areas/Issues   | Assessor  | Assessment Methods   |
|---------------------------|---|--|
| Effectiveness of teaching | Students – graduates- faculty –<br>program administration –<br>committee for quality assurance<br>and accreditation | Students survey and<br>questionnaire<br>annual reports prepared by<br>the program administrative |





| Assessment Areas/Issues                     | Assessor   | Assessment Methods  |
|---|--|---|
|   |  | committee   |
| Effectiveness of students assessment        | Students- Graduates- employers<br>- committee for quality<br>assurance and accreditation | Survey for students –<br>graduates – employers – bi-<br>annual reports of the quality<br>assurance unit |
| Quality of learning resources               | Students – graduates – peer<br>reviewer  | Surveys and periodical visits<br>of internal and external per<br>reviewers                              |
| The extent to which CLOs have been achieved | Students<br>Instructor   | Course Evaluation Survey<br>(Indirect).<br>Checking students'<br>performance in the test<br>(Direct).   |

Other

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

# G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |







**Course Title: Theriogenology of Pet Animals** 

Course Code: VMD 495

**Program: Bachelor of Veterinary Medicine** 

**Department: Veterinary Medicine** 

**College: Agriculture and Veterinary Medicine** 

Institution: Qassim University

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021





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| G. Specification Approval Data  | 7    |





| Α.                                    | General info  | rmation ab  | out the   | course   | •   |  |
|---------------------------------------|---|---|---|--|---|--|
| Со                                    | urse Identification   |   |   |  |   |  |
| 1.                                    | Credit hours:   | 2 (1 + 1)   |   |  |   |  |
| 2.                                    | Course type   |   |   |  |   |  |
| a.                                    | University $\Box$   | College 🗆   | Departr   | ment⊠  | Track   | Others □   |
| b.                                    | Required 🗆  | Elective⊠   |   |  |   |  |
| 3.                                    | Level/year at whic  | h this course is  | offered:  | Level Op   | otional   |  |
| 4.<br>The<br>rep<br>sys<br>stu<br>pet | course general De<br>e course deals with<br>productive processes,<br>tem, reproductive te<br>dents with the skills<br>canimals. | the functional<br>endocrine contr<br>chnologies, and<br>to diagnose and t | anatomy of<br>ol of reproc<br>infertility in<br>treat differe | f the male<br>duction, and<br>both sexen<br>nt infertility | and female po<br>d examination o<br>s. The course a<br>problems in bo | ets' genital organs,<br>off the reproductive<br>aims to provide the<br>oth male and female |
| 5.                                    | Pre-requirements  | for this course   | (if any): 33  | 33 VMD –   | 342 VMD- 46   | 32 VMD   |
| 6.                                    | Co- requirements  | for this course   | (if any): No  | one  |   |  |
|                                       | <ul><li>7. Course Main (</li><li>The student will</li></ul>   | Objective(s)<br>be able to diagnc   | ose, treat an   | d control re   | production dise   | ases of pet animals  |

- The student will be able to diagnose, treat and control of nutritional causes of reproductive diseases in pet animals
- The student will be able to diagnose infectious causes of reproductive diseases in pet animals.
- The student will be able to use modern reproductive techniques to improve fertility of pet animals.

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction  | Contact Hours | Percentage |
|----|--|---------------|------------|
| 1. | Traditional classroom                                      | 30            | 100%       |
| 2. | E-learning   |               |            |
|    | Hybrid   |               |            |
| 3. | <ul><li>Traditional classroom</li><li>E-learning</li></ul> |               |            |
| 4. | Distance learning  |               |            |





| 2. Contact Hours (based on the academic semester) |                   |               |  |
|---|-------------------|---------------|--|
| No  | Activity          | Contact Hours |  |
| 1.  | Lectures          | 15            |  |
| 2.  | Laboratory/Studio | 15            |  |
| 3.  | Field             | -             |  |
| 4.  | Tutorial          | -             |  |
| 5.  | Others (specify)  | -             |  |
|   | Total             | 30            |  |

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

| Code | Course Learning<br>Outcomes   | Code of CLOs<br>aligned with<br>program | Teaching Strategies   | Assessment Methods   |
|------|---|---|---|--|
| 1.0  | Knowledge and understan   | ding                                    |   |  |
| 2.0  | Skills  |   |   |  |
| 2.2  | Students will be able to<br>determine comprehensive<br>methods for diagnosis,<br>differential diagnosis,<br>treatment and control of<br>different reproductive<br>disorders of pet animals. | <b>S</b> 2                              | Lectures<br>practical room and<br>clinical cases<br>diagnosis and<br>treatment  | <ol> <li>Practical tests.</li> <li>4-participation in the<br/>lecture hall</li> <li>13- Oral exam</li> </ol>                   |
| 2.6  | Students will be able to<br>manipulate<br>Theriogenology field<br>works using sense and<br>locomotor organs   | S6                                      | practical room and<br>clinical cases<br>diagnosis and<br>treatment  | <ol> <li>Quarterly tests.</li> <li>Practical tests.</li> <li>Final tests.</li> <li>Field report</li> <li>Case study</li> </ol> |
| 3.0  | Values, autonomy, and res   | sponsibility                            |   |  |
| 3.1  | Students will be able to<br>work effectively in teams<br>for solving infertility<br>problems.   | <b>V</b> 1                              | <ul> <li>Lectures</li> <li>Showing of pictures<br/>and Videos of signs<br/>and lesions</li> <li>Case studies</li> </ul> | 11- Case study<br>12-group working   |
| 3.2  | Students will be able to<br>show full awareness of<br>ethical and professional  | V2                                      | practical room and<br>clinical cases<br>diagnosis and   | <ul><li>2-practical exam</li><li>4-participation in the</li></ul>  |





| Code | Course Learning<br>Outcomes  | Code of CLOs<br>aligned with<br>program | Teaching Strategies | Assessment Methods                                 |
|------|--|---|---------------------|--|
|      | issues relevant to<br>Veterinary Theriogenology<br>Students will be able to<br>show full awareness of<br>ethical and professional<br>issues relevant to<br>Veterinary Theriogenology |   | treatment           | lecture hall<br>7-field report<br>12-group working |

#### **C.** Course Content

| No  | List of Topics  | Contact<br>Hours |
|-----|---|------------------|
| 1.  | Functional Anatomy of the female pets genital organs  | 2                |
| 2.  | Functional Anatomy of the female pets genital organs  | 2                |
| 3.  | Estrous cycle, ovulation, and fertilization           | 2                |
| 4.  | Estrous cycle, ovulation, and fertilization           | 2                |
| 5.  | Examination of non-pregnant and pregnant pets animals | 2                |
| 6.  | Examination of non-pregnant and pregnant pets animals | 2                |
| 7.  | Diagnostic Ultrasonography In pets Reproduction       | 2                |
| 8.  | Diagnostic Ultrasonography In pets Reproduction       | 2                |
| 9.  | Diseases of the female pets genital organs            | 2                |
| 10. | Diseases of the female pets genital organs            | 2                |
| 11. | Physiology of pregnancy                               | 2                |
| 12. | Dystocia in pets                                      | 2                |
| 13  | Function anatomy of the male pets genital organs      | 2                |
| 14. | Male reproductive diseases                            | 2                |
| 15  | Reproductive techniques in pets                       | 2                |
|     | Total   | 30               |

# **D. Students Assessment Activities**

| No | Assessment Activities *                  | Assessment timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|--|-----------------------------------|---|
| 1  | First and second midterm (written test). | 7 & 12                            | 20                                      |
| 2  | Practical exam                           | 15                                | 5                                       |
| 3  | Final exam                               | 16                                | 50                                      |
| 4  | Participation in the lecture halls       | 15                                | 5                                       |





| No | Assessment Activities * | Assessment timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|-------------------------|-----------------------------------|---|
| 5  | Field reports           | 13                                | 5                                       |
| 6  | Team work               | 13                                | 5                                       |
| 7  | Case study              | 9                                 | 5                                       |
| 8  | Oral exam               | 15                                | 5                                       |

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

#### **E.** Learning Resources and Facilities

#### 1. References and Learning Resources

|                          | 1. Pathways to Pregnancy and Parturition 3rd Edition by P. L.                              |  |  |  |
|--------------------------|--|--|--|--|
|                          | Senger, Current Conceptions Inc., 2012.  |  |  |  |
|                          | 2. Holst PA. 1999. Canine Reproduction: The Breeder's                                      |  |  |  |
|                          | Guide 2nd Edition, Alpine Pubns Inc; 2 edition.  |  |  |  |
|                          | 3. Margaret V. Root Kustritz: Small Animal   |  |  |  |
|                          | Theriogenology: Butterworth-Heinemann, 2003  |  |  |  |
| Essential References     | 4. Shirley Dianne Johnston, Margaret V. Root Kustritz, Patricia                            |  |  |  |
|                          | Schultz Olso. 2001. Canine and Feline Theriogenology,                                      |  |  |  |
|                          | Saunders.  |  |  |  |
|                          | 5. Senger PL. 2003. Pathways to Pregnancy and Parturition" 2nd                             |  |  |  |
|                          | Edition.   |  |  |  |
|                          | 6. Morrow DA. 2004. Current Therapy in Theriogenology" W.B.                                |  |  |  |
|                          | Saunders Company.  |  |  |  |
| Supportive References    | Journal of Theriogenology, Animal Reproduction science                                     |  |  |  |
|                          | https://www.arssales.com/  |  |  |  |
| Electronic Materials     | <u>https://visgar.vetmed.ufl.edu/</u><br>https://www.pifa.usda.gov/grants/programs/animal- |  |  |  |
|                          | programs/animal-reproduction   |  |  |  |
|                          | Publications related to pet animals reproduction uploaded by the                           |  |  |  |
| Other Learning Materials | instructors in the research engines as researchgate, Google scholar                        |  |  |  |
|                          | and science direct.  |  |  |  |

### 2. Required Facilities and equipment

| Items   | Resources  |
|---|--|
| Facilities (Classrooms, laboratories, exhibition rooms, | <ul><li>Classroom of 20 students' capacity.</li><li>Laboratory of 15students capacity.</li></ul> |





| Items   | Resources  |
|---|--|
| simulation rooms, etc.)                                       | • Veterinary hospital with all necessary diagnostic tools and clinical examination |
| Technology equipment<br>(projector, smart board, software)    | • Data show.   |
| Other equipment<br>(depending on the nature of the specialty) | Ultrasonography, Doppler, diagnostic kits.   |

### F. Assessment of Course Quality

| Assessment Areas/Issues   | Assessor   | Assessment Methods   |
|---|--|--|
| Effectiveness of teaching   | <ul> <li>Students</li> <li>Committee of<br/>Development and<br/>Quality</li> <li>Program chairman</li> </ul>     | • Course Evaluation Survey.<br>Frequency of grades distribution form.  |
| Effectiveness of students assessment  | <ul> <li>Committee of<br/>Development and<br/>Quality</li> <li>Students</li> <li>Program<br/>chairman</li> </ul> | <ul> <li>Internal moderation.</li> <li>Internal benchmarking with similar other course(s).</li> <li>Course Evaluation Survey.</li> </ul> |
| Quality of learning resources   | Students   | Course Evaluation Survey.  |
| The extent to which CLOs have been achieved   | <ul><li>Students</li><li>Instructor</li></ul>  | <ul> <li>Course Evaluation Survey.</li> <li>Students' performance in the tests<br/>and tasks.</li> </ul>                                 |
| The extent to which students are<br>prepared to carry lab. diagnosis and<br>interpret results | Instructor   | • Practical sessions and exams.<br>Assignments.  |

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

#### **G.** Specification Approval Data

| COUNCIL<br>/COMMITTEE | COUNCIL OF VETERINARY MEDICINE DEPARTMENT |
|-----------------------|---|
| REFERENCE NO.         | 1444-10-95                                |
| DATE                  | 19/2/2023                                 |





T-104 2022

# **Course Specification**

Course Title: Wildlife health and management

Course Code: VMD 496.

Program: Bachelor of Veterinary Medicine.

Department: Veterinary Medicine.

College: Agriculture and Veterinary Medicine.

Institution: Qassim University.

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021.



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| Course  | e Identificatior   | )  |  |   |   |   |            |
|---|--|--|--|---|---|---|------------|
| 1. Crea   | dit hours:   | 2 (1+ 1)   |  |   |   |   |            |
| 2. Cou  | rse type   |  |  |   |   |   |            |
| a. Ur   | niversity $\Box$   | College 🖂  | Departn  | nent 🗆  | Track 🗆   | Others 🗆  |            |
| b. Re   | equired 🗆  | Elective 🛛   |  |   |   |   |            |
| 3. Lev  | el/year at whic  | ch this course is  | s offered: ar  | ny level: fro   | m 3rd to 10th   | levels  |            |
| 4. Couprotectiand the coupand pro   | urse general<br>on including the<br>causes of extinc<br>rse is covering i<br>fessional issues  | Description: The<br>prine of wild animed<br>antify the nation<br>relevant to wild a  | his course is<br>ne diseases tha<br>nals, especially<br>nal regulations<br>nimals.                                   | concerned<br>at they can be<br>to the endange<br>and legislat   | with wild anine<br>infected with.<br>ered species.<br>ion to preserve | nal husbandry<br>Also, the extin<br>wildlife and e          | and action |
| 5. Pre  | -requirements  | for this course  | e (if any): NA   | L.  |   |   |            |
| 6. Co-  | requirements   | s for this course  | e (if any): NA   |   |   |   |            |
| After co<br>1   | mpletion of the co   | ourse, students shou   | ild be able to:  | al husbandry o  | nd protection   |   |            |
| After co<br>1.<br>2.<br>3.<br>4.<br><b>1. Tea</b>   | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br>ching mod   | burse, students shou<br>the knowledge relate<br>onal regulations and<br>mess of ethical and p<br>ong writing and oral<br>e (mark all the   | Ild be able to:<br>ed to wild anima<br>I legislation to p<br>professional issu<br>I communicatio<br><b>at apply)</b> | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills                                       | nd protection<br>fe<br>wild animals                                   |   |            |
| After co  | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br>ching mod<br>Mode   | burse, students shou<br>the knowledge related<br>and regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction   | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communicatio<br><b>at apply)</b>   | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He                         | nd protection<br>fe<br>wild animals                                   | Percentag   | е          |
| After co<br>2.<br>3.<br>4.<br><b>I. Tea</b><br><b>No</b><br>1.  | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br>ching mod<br>Mode<br>Traditional c  | burse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom   | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communicatio<br><b>at apply)</b>   | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45                   | nd protection<br>fe<br>wild animals                                   | Percentag<br>90%  | е          |
| After co<br>2.<br>3.<br>4.<br><b>No</b><br>1.<br>2.   | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br>ching mod<br>Mode<br>Traditional c<br>E-learning  | burse, students shou<br>the knowledge relate<br>onal regulations and<br>hess of ethical and p<br>ong writing and oral<br><b>e (mark all the</b><br><b>of Instruction</b><br>lassroom   | Id be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communicatio<br><b>at apply)</b>    | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact Ho<br>45                   | nd protection<br>fe<br>wild animals                                   | Percentag<br>90%  | e          |
| After co<br>2.<br>3.<br>4.<br><b>I. Tea</b><br><b>1.</b><br>2.<br>3.<br>3.  | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br><b>ching mod</b><br>Traditional c<br>E-learning<br>Hybrid<br>Tradi<br>E-lea   | burse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom   | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communicatio<br><b>at apply)</b>   | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45                   | nd protection<br>fe<br>wild animals                                   | Percentag<br>90%  | e          |
| After co.   | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stron<br><b>Ching mod</b><br>Traditional c<br>E-learning<br>Hybrid<br>• Tradi<br>• E-lear   | ourse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom   | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communicatio<br><b>at apply)</b>   | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45                   | nd protection<br>fe<br>wild animals                                   | Percentag<br>90%<br>10%                                     | e          |
| After co.   | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stron<br><b>ching mod</b><br><b>Mode</b><br>Traditional c<br>E-learning<br>Hybrid<br>• Tradi<br>• E-lea<br>Distance lear  | ourse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom<br>itional classroom<br>itional classroom<br>iting<br>crining<br>(based on th   | ald be able to:<br>ed to wild animal<br>legislation to p<br>professional issu<br>communication<br>at apply)          | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45<br>5<br>c semeste | nd protection<br>fe<br>wild animals                                   | Percentag<br>90%<br>10%                                     | e          |
| After co  | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br><b>ching mod</b><br>Traditional c<br>E-learning<br>Hybrid<br>• Tradi<br>• E-lear<br>Distance lear   | burse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom<br>itional classroom<br>ining<br>ching<br>(based on th  | ald be able to:<br>ed to wild animal<br>legislation to p<br>professional issu<br>communication<br>at apply)          | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45<br>5<br>c semeste | nd protection<br>fe<br>wild animals<br>OURS                           | Percentag<br>90%<br>10%<br>Contact Ho                       | e          |
| After co<br>After co<br>Tea<br>No<br>1.<br>2.<br>3.<br>4.<br>2.<br>Cor<br>No<br>1.  | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br><b>ching mod</b><br>Traditional c<br>E-learning<br>Hybrid<br>E-lea<br>Distance lear<br><b>ntact Hours</b><br>Lectures   | ourse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom<br>itional classroom<br>arning<br>(based on th  | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communicatio<br><b>at apply)</b>   | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45<br>5<br>c semeste | nd protection<br>fe<br>o wild animals<br>OURS                         | Percentag<br>90%<br>10%<br>Contact Ho<br>15                 | e          |
| After co.   | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stron<br>Ching mod<br>Mode<br>Traditional c<br>E-learning<br>Hybrid<br>E-lea<br>Distance lear<br>Ntact Hours<br>Lectures<br>Laboratory/St   | ourse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom<br>itional classroom<br>itional classroom<br>itional states of the<br>runing<br>for the state of the<br>studio          | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communication<br><b>at apply)</b>  | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45<br>5<br>c semeste | nd protection<br>fe<br>wild animals<br>OURS                           | Percentag<br>90%<br>10%<br>Contact Ho<br>15<br>30           | e          |
| After co.   | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br><b>ching mod</b><br>Traditional c<br>E-learning<br>Hybrid<br>• Tradi<br>• E-lear<br>Distance lear<br><b>ntact Hours</b><br>Lectures<br>Laboratory/St<br>Field                               | ourse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br>e (mark all the<br>of Instruction<br>lassroom<br>itional classroom<br>itional classroom<br>inning<br>(based on the<br>tudio   | ald be able to:<br>ed to wild animal<br>legislation to p<br>professional issu<br>communication<br>at apply)          | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45<br>5<br>c semeste | nd protection<br>fe<br>o wild animals<br>OURS                         | Percentag<br>90%<br>10%<br>Contact Ho<br>15<br>30           | e          |
| After co.<br>After | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stro<br><b>ching mod</b><br>Traditional c<br>E-learning<br>Hybrid<br>• Tradi<br>• E-lea<br>Distance lear<br><b>tact Hours</b><br>Lectures<br>Laboratory/St<br>Field<br>Tutorial                     | ourse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br><b>e (mark all the</b><br><b>of Instruction</b><br>lassroom<br>itional classroom<br>inning<br><b>(based on th</b><br>tudio  | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communicatio<br><b>at apply)</b>   | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45<br>5<br>c semeste | nd protection<br>fe<br>o wild animals<br>OURS                         | Percentag<br>90%<br>10%<br>Contact Ho<br>15<br>30<br>-      | e          |
| After co<br>1.<br>2.<br>3.<br>4.<br><b>1. Tea</b><br><b>1. Tea</b><br><b>1.</b><br>2.<br>3.<br>4.<br><b>2. Co</b><br><b>No</b><br>1.<br>2.<br><b>3.</b><br>4.<br><b>2. Co</b><br><b>1.</b><br>2.<br>3.<br>4.<br><b>2.</b><br><b>3.</b><br>4.<br><b>2.</b><br><b>3.</b><br><b>4.</b><br><b>5.</b><br><b>5.</b>   | mpletion of the co<br>List and recogniz<br>Identify the natio<br>Show full awarer<br>Demonstrate stron<br><b>Ching mod</b><br>Traditional c<br>E-learning<br>Hybrid<br>• Tradi<br>• E-lea<br>Distance lear<br><b>Ntact Hours</b><br>Lectures<br>Laboratory/St<br>Field<br>Tutorial<br>Others (specir | averse, students shou<br>the knowledge relate<br>onal regulations and<br>ness of ethical and p<br>ong writing and oral<br><b>e (mark all the</b><br><b>of Instruction</b><br>lassroom<br>itional classroom<br>itional classroom<br>itional statement<br>for the statement<br>itional classroom | ald be able to:<br>ed to wild anima<br>l legislation to p<br>professional issu<br>communication<br>at apply)         | al husbandry a<br>preserve wildli<br>ues relevant to<br>ns skills<br>Contact He<br>45<br>5<br>c semeste | nd protection<br>fe<br>wild animals<br>DURS                           | Percentag<br>90%<br>10%<br>Contact Ho<br>15<br>30<br>-<br>- | e          |

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

| Co<br>de | Course Learning Outcomes   | Code of CLOs<br>aligned with<br>program | Teaching Strategies   | Assessment<br>Methods  |
|----------|--|---|---|--|
| 1.0      | Knowledge and understanding  |   |   |  |
| 1.1      | Students will be able to list and recognize knowledge related to wild animal husbandry and protection.             |   | <ol> <li>Lecture</li> <li>Class discussion</li> <li>Homework</li> </ol>   | <ol> <li>Participation</li> <li>in classroom</li> <li>Quizzes</li> <li>Midterm-</li> <li>Exam</li> </ol>                     |
| 2.0      | Skills   |   |   |  |
| 2.1      | Students will be able to<br>determine the national<br>regulations and legislation to<br>preserve wildlife          |   | <ol> <li>Lecture</li> <li>Class discussion</li> <li>Homework</li> </ol>   | <ol> <li>Participation</li> <li>in classroom</li> <li>Quizzes</li> <li>Midterm-</li> <li>Exam</li> <li>Final Exam</li> </ol> |
| 2.2      | Students will be able to show<br>full awareness of ethical and<br>professional issues relevant to<br>wild animals. |   | <ol> <li>Class discussion</li> <li>Homework</li> <li>Showing electronic<br/>materials</li> <li>Visiting nature reserves<br/>and showing used<br/>strategies and systems.</li> </ol> | <ol> <li>Quizzes</li> <li>Midterm-Exam</li> <li>Practical exam</li> <li>Final Exam</li> </ol>                                |
| 3.0      | Values, autonomy, and responsibility   |   |   |  |
| 3.1      | Students will be able to demonstrate strong writing and oral communications skills.                                |   | 1. Class discussion<br>2. Homework  | <ol> <li>Participation in<br/>classroom</li> <li>Homework</li> </ol>   |
|          |  |   |   | 5. Practical exam  |

# C. Course Content

| No | List of Topics   | Contact Hours |
|----|--|---------------|
| 1. | Introduction of health and the types diseases, source of infection, diagnosis, treatment, and disease control. | 7             |
| 2. | Some viral diseases that infect wild animals.  | 7             |
| 3. | Some bacterial, parasitic, and fungal diseases that infect wild animals.                                       | 8             |
| 4. | Wildlife and its values and environmental factors that affect the wildlife.                                    | 7             |
| 5. | The extinction and the causes of extinction.   | 8             |
| 6. | Husbandry and protection of some wild animals.   | 8             |
|    | Total  | 45            |





### **D. Students Assessment Activities**

| No | Assessment Activities *                         | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|---|--------------------------------------|---|
| 1. | Class discussion and participation in classroom | Weekly                               | 10                                      |
| 2. | Quiz  | 4 and 8                              | 6                                       |
| 3. | Midterm-Exam                                    | 5 and 11                             | 10                                      |
| 4  | Homework assignments                            | 9                                    | 4                                       |
| 5  | Practical exam                                  | 14                                   | 20                                      |
| 6  | Final Exam                                      | 18                                   | 50                                      |

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

#### E. Learning Resources and Facilities

#### 1. References and Learning Resources

|                          | Miller, G.T. and Spoolman, S.E. (2011). Living in the                           |
|--------------------------|---|
|                          | Environment: Principles, Connections, and Solutions                             |
| Essential References     | Animal Behavior and Wildlife Conservation. Editors: Marco Festa-                |
|                          | Bianchet&Marco Apollonio 2003   |
|                          | Saudi Wildlife Authority publications 'in Arabic'                               |
|                          | أنظمة المحافظة علي الحياة الفطرية والمواطن الطبيعية في المملكة العربية السعودية |
| Supportive References    | المها من الأسر إلى التوطين  |
|                          | المحميات الطبيعية في المملكة العربية السعودية                                   |
|                          | http://www.swa.gov.sa/  |
|                          | http://www.nwi.org/wildnie.aspx   |
|                          | http://www.uccs.org/  |
| Electronic Materials     | http://uae.panda.org/ar/  |
|                          | www.endangeredspecie.com  |
|                          | www.youtube.com   |
|                          | www.alwelaie.com  |
| Other Learning Materials | NA  |

## 2. Required Facilities and equipment

| Items   | Resources   |
|---|---|
| facilities<br>(Classrooms, laboratories, exhibition rooms,<br>simulation rooms, etc.) | Class room for 30 students<br>Well-equipped lab     |
| Technology equipment  | Data show connected to computer (desktop or laptop) |
| (projector, smart board, software)  | Smart board   |
| Other equipment   | Digital camera                                      |
| (depending on the nature of the specialty)  | Video camera  |





# F. Assessment of Course Quality

| Assessment Areas/Issues   | Assessor   | Assessment Methods  |
|---|--|---|
| Strategies for Obtaining Student<br>Feedback on Effectiveness of Teaching   | Students, graduates, faculty,<br>program administration,<br>committee for quality assurance<br>and accreditation   | Students survey and<br>questionnaire<br>- annual reports prepared by<br>the program administrative<br>committee   |
| Other Strategies for Evaluation of<br>Teaching by the Program/Department<br>Instructor  | Students, graduates, employers, committee for quality assurance and accreditation  | Survey for students -<br>graduates - employers –<br>bi-annual reports of the<br>quality assurance unit  |
| Processes for Improvement of Teaching   | Students, graduates, and peer reviewer   | Surveys and periodical visits<br>of internal and external per<br>reviewers  |
| Verifying Standards of Student<br>Achievement (e.g., check marking by an<br>independent member teaching staff of a<br>sample of student work, periodic<br>exchange and remarking of tests or a<br>sample of assignments with staff at<br>another institution) | The head of the department<br>revise course grades; maximum,<br>minimum and average.<br>An independent committee<br>appointed by the Head<br>Department. | The program quality<br>assurance and accreditation<br>unit have a committee<br>responsible for revising a<br>sample of courses exams to<br>check marks and submit a<br>report to department head. |
| Describe the planning arrangements for<br>periodically reviewing course<br>effectiveness and planning for<br>improvement  | Students, faculty, and quality unit.   | <ul> <li>Students' evaluation form.</li> <li>Faculty evaluation form.</li> <li>Periodic checking of<br/>students' works</li> <li>Benchmarking with similar<br/>other course(s)</li> </ul>         |

Other

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

### G. Specification Approval Data

| COUNCIL<br>/COMMITTEE | VETERINARY DEPARTMENT |
|-----------------------|-----------------------|
| REFERENCE NO.         |                       |
| DATE                  |                       |





| T-104<br>2022 | Course Sp        | pecification   |  |
|---------------|------------------|----------------|--|
|               |                  |                |  |
| Course        | Title: Wild Anim | al Anesthesia. |  |
| Course        | Code: VMD 497    |                |  |

Program: Bachelor of Veterinary Medicine.

Department: Veterinary Medicine.

College: Agriculture and Veterinary Medicine.

Institution: Qassim University .

Version: **T-104 (2022)** 

Last Revision Date: 1/2/2021.





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| 1. References and Learning Resources  | 5    |  |  |
| 2. Required Facilities and Equipment  | 5    |  |  |
| F. Assessment of Course Qualit  | 5    |  |  |
| G. Specification Approval Data  |      |  |  |





| A. General information about the course:  |                         |                     |        |          |
|---|-------------------------|---------------------|--------|----------|
| Course Identifi   | cation                  |                     |        |          |
| 1. Credit hours   | 5: 2 (1+ 1)             |                     |        |          |
| 2. Course type  |                         |                     |        |          |
| a. University   | □ College □             | Department⊠         | Track□ | Others □ |
| b. Required [   | □ Elective ⊠            |                     |        |          |
| 3. Level/year a   | at which this course is | s offered: Elective |        |          |
| 4. Course general Description:<br>This course is concerned with the study of anesthesia and analgesia of wild animals . |                         |                     |        |          |
| 5. Pre-requirements for this course (if any): (VMD 461).  |                         |                     |        |          |
| 6. Co- requirements for this course (if any): NA  |                         |                     |        |          |

7. Course Main Objective(s):

1. The students will acquire the necessary skills related to sedation, tranquillization, and anesthesia of wild animals.

2. Students will be able to analyze data from different resources related principles of anesthesia and preparation of wild animals for surgery.

3. Students will be able to deal with general and special anesthetics instruments, how to handle them practically.

#### 1. Teaching mode (mark all that apply)

| No | Mode of Instruction   | Contact Hours | Percentage |
|----|---|---------------|------------|
| 1. | Traditional classroom   | 90            | 100%       |
| 2. | E-learning  |               |            |
| 3. | <ul><li>Hybrid</li><li>Traditional classroom</li><li>E-learning</li></ul> |               |            |
| 4. | Distance learning   |               |            |

#### 2. Contact Hours (based on the academic semester)

| No | Activity          | Contact Hours |
|----|-------------------|---------------|
| 1. | Lectures          | 30            |
| 2. | Laboratory/Studio | 60            |
| 3. | Field             | -             |
| 4. | Tutorial          | -             |
| 5. | Others (specify)  | -             |
|    | Total             | 90            |





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

| Co<br>de | Course Learning Outcomes   | Code of CLOs<br>aligned with<br>program | Teaching Strategies  | Assessment<br>Methods  |
|----------|--|---|--|--|
| 1.0      | Knowledge and understanding  |   |  |  |
| 1.1      |  |   |  |  |
| 2.0      | Skills   |   |  |  |
| 2.2      | Students will be able to apply<br>critical thinking and analytical<br>skills for intervention in<br>Anaesthesia.             | S2                                      | Lectures contain case<br>studies, pictures of<br>clinical cases, and<br>examples of diseases.<br>Case studies are major<br>parts of the practical part<br>of this course. These case<br>studies are upon clinical<br>cases, how to deal with<br>anaesthesia. | <ol> <li>Quarterly<br/>exam</li> <li>Practical<br/>exam</li> <li>Final exam</li> </ol> |
| 2.4      | Students will be able to manipulate veterinary field works using sense and locomotor organs.                                 | S6                                      | Training and Anaesthesia<br>at the practical part of the<br>course   | <ol> <li>Practical<br/>exam</li> <li>Team work</li> <li>Case study</li> </ol>          |
| 3.0      | Values, autonomy, and responsibility   |   |  |  |
| 3.1      | Students will be able to work<br>effectively in teams for solving<br>veterinary Anaesthetic problems.                        | V1                                      | Students are trained to<br>work in team. This team<br>is responsible for a   |  |
| 3.2      | Students will be able to show full<br>awareness of ethical and<br>professional issues relevant to<br>veterinary anaesthesia. | V2                                      | clinical case. Each<br>student has a specific<br>task at this team and<br>should perform his task<br>efficiently.  | 7. Team work   |

### C. Course Content

| No | List of Topics                       | Contact Hours |
|----|--------------------------------------|---------------|
| 1. | Techniques of local Anaesthesia.     | 10            |
| 2. | Anaesthetic agents                   | 10            |
| 3. | Techniques of regional anaesthesia   | 18            |
| 4. | Tranquillization                     | 6             |
| 5. | Induction of anaesthesia             | 6             |
| 6. | General anaesthesia                  | 6             |
| 7. | Anaesthetic machines and accessories | 12            |
| 8. | Monitoring of anaesthesia            | 12            |
| 9. | Recovery of anaesthesia              | 10            |
|    | Total                                | 90            |





| No | Assessment Activities *            | Assessment<br>timing<br>(in week no) | Percentage of Total<br>Assessment Score |
|----|------------------------------------|--------------------------------------|---|
| 1. | First quarterly exam               | 6                                    | 10                                      |
| 2. | Second quarterly exam              | 12                                   | 10                                      |
| 3. | Practical exam                     | 15                                   | 5                                       |
| 4  | Final exam                         | 16                                   | 50                                      |
| 5  | Participation in the lecture halls | 15                                   | 5                                       |
| 6  | Field reports                      | 13                                   | 5                                       |
| 7  | Team work                          | 13                                   | 5                                       |
| 8  | Case study                         | 9                                    | 5                                       |

#### **D. Students Assessment Activities**

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

#### E. Learning Resources and Facilities

#### **1. References and Learning Resources**

| Essential References     | Lumb and Jones' Veterinary Anesthesia and Analgesia, 4th Edition.<br>William J. Tranquilli, John C. Thurmon, Kurt A. Grimm. Wiley-<br>Blackwell. 2007 Dollar's veterinary surgery general, operative and<br>regional. John A. W. Dollar, James Joseph O'Conner. Baillière, Tindall<br>and Cox, 1930. |  |
|--------------------------|--|--|
| Supportive References    | Veterinary anaesthesia and analgesia Journal   |  |
| Electronic Materials     | WWW contains some video clips on suturing, wounds and fractures, animal anaesthesia.   |  |
| Other Learning Materials | computer-based programs/CD, professional standards or regulations and software. NA   |  |

#### 2. Required Facilities and equipment

| Items  | Resources  |
|--|--|
| facilities   | Air conditioned classroom of a minimum of 35 seats                                   |
| (Classrooms, laboratories, exhibition rooms,               | and powered by multimedia equipment. Equipped  |
| simulation rooms, etc.)                                    | Veterinary clinic or Veterinary Teaching Hospital.                                   |
| Technology equipment<br>(projector, smart board, software) | Data show connected to a computer (desktop or laptop), access to the world wide web. |
| Other equipment  | Sterilization equipment; boiler, hot air oven.                                       |
| (depending on the nature of the specialty)                 | Autoclavesetc, and anesthetic machines.  |

## F. Assessment of Course Quality

| Assessment Areas/Issues   |    | Assessor  | Assessment Methods  |   |
|---------------------------|----|---|---|---|
| Effectiveness of teaching |    | Students – graduates- faculty –<br>program administration –<br>committee for quality assurance<br>and accreditation | Students survey and<br>questionnaire<br>annual reports prepared by<br>the program administrative<br>committee |   |
| Effectiveness assessment  | of | students  | Students- Graduates- employers<br>- committee for quality   | Survey for students – graduates – employers – bi- |





| Assessment Areas/Issues                     | Assessor                                | Assessment Methods  |
|---|---|---|
|   | assurance and accreditation             | annual reports of the quality assurance unit  |
| Quality of learning resources               | Students – graduates – peer<br>reviewer | Surveys and periodical visits<br>of internal and external per<br>reviewers                            |
| The extent to which CLOs have been achieved | Students<br>Instructor                  | Course Evaluation Survey<br>(Indirect).<br>Checking students'<br>performance in the test<br>(Direct). |

Other

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

# **G. Specification Approval Data**

| COUNCIL<br>/COMMITTEE | VETERINARY DEPARTMENT |
|-----------------------|-----------------------|
| REFERENCE NO.         |                       |
| DATE                  |                       |
|                       |                       |

