



Zagazig University

Faculty of Veterinary Medicine

The Quality Assurance Unit

وحدة ضمان الجودة بكلية الطب البيطري - جامعة الزقازيق

Programme Specification

Bachelor of Veterinary Medical Sciences
(BVMSc)

(2020-2021)

Faculty Council 11 / 1 / 2021



Programme Specification (2020-2021)

Zagazig University

Faculty of Veterinary Medicine

Programme specification

Basic information

- 1- **Programme Title:** Bachelor of Veterinary Medical Sciences (BVMSc)
- 2- **Programme type:** Single
- 3- **Departments:**

A- Faculty Departments

1. Anatomy and Embryology
2. Histology
3. Biochemistry
4. Physiology
5. Animal Wealth Development
6. Veterinary Public Health
7. Pathology
8. Bacteriology, Mycology and Immunology
9. Nutrition and Clinical Nutrition
10. Pharmacology
11. Parasitology
12. Virology
13. Theriogenology
14. Surgery, Anesthesia and Radiology
15. Animal Medicine
16. Fish Diseases and Management
17. Clinical Pathology
18. Food Control
19. Forensic Medicine and Toxicology
20. Avian and Rabbit Medicine
21. Zoonoses



B- External Institutions

- i. ELP Centre of Zagazig University "English Language and Terminology" (ENLA 108)
- ii. Faculty of Science:
Department of Physics "Biophysics" (BPHY 109)
- iii. Human rights (HURT 110): Faculty of law

C- Coordinator: Prof. Dr. Nasr Abd El-Wahab Mohamed (Faculty Dean).

D- External evaluator: The external evaluator Committee nominated by the quality assurance center and department councils according to each specialty.

6- Last date of programme specification approval:

6.1- The current bylaw is issued by the ministerial decree no. 103 on 23/2/1986 and updated by decrees No. 80 on 27/1/1994, 1274 on 22/5/2005 and 1249 on 11/6/2009.

6.2- According to the approved reviewing study (12/4/2010) for adoption and application of NARS Feb. 2009 and justification matching of program specification to fulfill the NARS, the Bachelor of Veterinary Medical Sciences (BVMSc) programme was reviewed and approved (Faculty council 20-29 October 2014). The academic departments confirmed their continued adoption of NARS Feb. 2009 through their departmental councils, whose executive decisions were approved by the Education and Student Affairs Committee on 3/4/2019 and the College Board on 8/4/2019.

B- Professional Information

1 - Programme aims



The main objective of the Faculty of Veterinary Medicine – Zagazig University is to supply the local, national, and regional societies with highly qualified veterinarians able to:

1. Recognize the scientific basis of veterinary medicine and apply that understanding to veterinary practice ethically with legal frame.
2. Comprehend disease at a molecular, cellular, systemic, individual, and population level.
3. Combine their knowledge into the effective diagnosis, medical management and treatment of sick animals and other health-related issues.
4. Utilize the scientific veterinary research concepts (uncovering curiosity and criticism..... etc) as well as cooperation and working in groups.
5. Find out and use medical information. They should engage in lifelong learning to remain current in their understanding of the scientific basis of veterinary medicine.
6. Promote the health of animals and the public through client and public education, service, and action.
7. Distinguish the important and diverse roles that animals play in the health, economics, food-supply, recreation, and well-being of mankind.
8. Be aware that the BVMSc degree is an entry-level degree and that, in order to function effectively as a seasoned veterinarian or as a specialist, they will need to invest considerable additional educational time and efforts.

2 - Intended learning Outcomes (ILOs)

a - Knowledge and Understanding

The Zagazig Veterinary Medicine graduates should be able to:

- a.1- Distinguish English language and terminology.
 - a.2- Recognize molecular, ultra-structural, clinical, biochemical and cellular mechanisms important in maintaining the body's homeostasis.
 - a.3- Describe macroscopic and microscopic structure of normal tissue and organs.
 - a.4- Identify function of the body and each of its major organ systems.
 - a.5- Recognize the embryological development, causes of teratogenesis, and types of malformation.
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- a.6- Attain basics of biostatistics, biophysics and biochemistry and their applications in veterinary fields.
 - a.7- Identify genetic principles, theories and their filed applications.
 - a.8- Acquire complementary sciences for computer skills related to animal farm management and animal rights.
 - a.9- Recognize normal animal behavior of different animal species.
 - a.10- Acquire principles of adequate nutrition, normal feeding patterns and metabolic disorders.
 - a.11- Identify common animal breeds within their localities.
 - a.12- Recognize normal and abnormal reproductive behavior.
 - a.13- Be familiar with influence of stress and other issues on animal production and health.
 - a.14- Estimate the economic impact and factors on the delivery of veterinary health care as well as improvement of animal production (genetic lines and artificial insemination).
 - a.15- Be acquainted with the value of the scientific methods in establishing the causation of disease and efficacy of traditional and nontraditional therapies
 - a.16- Identify the scientific principals underlying laboratory diagnosis and the ability to critically evaluate the limitations of diagnostic methodologies.
 - a.17- Recognize various causes (genetic developmental, metabolic, toxic, microbiologic, parasitic, autoimmune, neoplastic, degenerative and traumatic) of disorders and the ways in which they operate on the body (Pathogenesis).
 - a.18- Describe the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.
 - a.19- Identify principals of pharmacology, therapeutics and therapeutic decision making.
 - a.20- Spot ideal and permissible parameters (physical, chemicals, and drug residues as well as microbial) of milk, dairy products, eggs, oils meat and meat products.
 - a.21- Recognize how to detect the adulteration of milk, meat and their products.
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- a.22- Depict the etiology, source, reservoir, mode of transmission and control of animal and zoonotic diseases.
- a.23- Identify the basics of judgment of meat, fish and poultry carcasses and their products and knowledge of statutory requirements for animal transport, slaughter houses and storage of meat and its products.
- a.24- Recognize avian, rabbit and fish diseases and their prophylactic and control measures.
- a.25- Be aware of management and prevention strategy decisions against diseases.
- a.26- Be familiar with animal health maintenance application.
- a.27- Recognize the epidemiological triangle of diseases and accurate measurements of Veterinary quarantine.
- a.28- Identify permissible limits of pollutants in water, feed and air & soil contents.
- a.29- Portray the application of disinfectants in different situations (self, labs, farms..... etc.).
- a.30- Identify basics of forensic medicine and toxicology in addition to different sources, types of toxic agents, how to detect them and treat their effects.
- a.31- Recognize principles of anesthesia, surgical and theriogenological operations beside diagnostic imaging of different animal species.
- a.32- Be aware of laws and ethical codes relevant to animal and food hygiene (meat and milk products).
- a.33- Be acquainted with appropriate euthanasia of animals, ensuring personal and environmental safety as well as carcass disposal.
- a.34- Identify principles of control of emerging and exotic animal, poultry and fish diseases.
- a.35- Be familiar with the basics of communication skills and human rights.

b - Intellectual skills

The Zagazig Veterinary Medicine graduates must be able to:

- b.1- Highlight important clinical questions stemming from a case interaction.



- b.2- Assess and critique based on an understanding of available data as macro and microscopical picture of different body organs, animal nutritional problems and medication for different problems.
- b.3- Evaluate scientific as well as clinical information and critically analyze conflicting data and hypotheses.
- b.4- Select from different choices in handling, preventing and treatment of different veterinary problems.
- b.5- Conclude and discuss the scientific approach to find solutions for the veterinary problems and interpret the laboratory test results.
- b.6- Have a commitment to ongoing learning and self-evaluation.
- b.7- Specify problems and find solution in different veterinary sciences.
- b.8- Select the appropriate procedures for treatment and control of animal diseases.
- b.9- Utilize the knowledge of evidence based veterinary medicine in making decisions.

c - Professional and practical skills

The Zagazig Veterinary Medicine graduates must be able to:

- c.1- Secure and handle animals in a safe and human manner with maintenance the animal welfare.
 - c.2- Isolate and identify the etiological agents of diseases (bacteria, viruses, parasites, nutritional, toxic, metabolic etc.).
 - c.3- Carryout clinical and pathobiological (pathological, clinical pathological and clinical biochemistry) examination of diseased animals.
 - c.4- Diagnose different diseases among various animal species.
 - c.5- Write a ration formula according to the health status and genetic line of animals.
 - c.6- Apply anesthesia for common surgical and theriogenological procedures efficiently and implement appropriate after care.
 - c.7- Perform a post-mortem examination appropriate to the species involved.
 - c.8- Apply surgical and theriogenological procedures.
 - c.9 – Obtain the history of different animal cases.
 - c.10- Implement procedures related to public health issues, notifiable diseases and disposal of animal wastes.
 - c.11- Apply specific treatment for the diagnosed cases and write a prescription
 - c.12- Recognize and outline initial treatment as well as emergency care for sick animals with life threatening condition and pain management.
 - c.13- Utilize appropriate safety procedures to protect clients, co-workers and self.
 - c.14- Carryout feasibility studies as well as bioinformatics for animal production projects.
 - c.15- Inspect meat, milk and their products to decide their fitness to human consumption with issuing a report.
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- c.16- Apply preventive measures in veterinary premises and fields.
- c.17- Perform diagnostic imaging techniques safely.
- c.18- Apply proper animal euthanasia in humane and safe manner.
- c.19- Deal professionally with animal, poultry and fish farm management.
- c.20- Examine different animal tissues macro and microscopically.
- c.21- Carryout suitable procedure of vaccination in different animal species.
- c.22- Carryout a scientific experiment and test professionally.

d - General and transferable skills

The Zagazig Veterinary Medicine graduates must be able to:

- d.1- Impress team work to achieve a specific task.
- d.2- Communicate successfully among students and animal owners by various means.
- d.3- Perform a specified task in research on common disease problems in the surrounding domestic and wild animals in Sharkia province.
- d.4- Demonstrate knowledge of the organization and management of veterinary practices and record keeping.
- d.5- Utilize the acquired knowledge and skills to work under pressure for control of emerging diseases.
- d.6- Interpret, transcribe and communicate data and observation (e.g. medical legal report).
- d.7- Use media to help in veterinary extension.

▪ Teaching and learning under pandemic of Covid-19 district

In commitment of the prophylactic and strict control WHO and Egyptian ministry of health to ovoid the spread of Covid-19, the Zagazig University and the Faculty of Veterinary Medicine applied the following strategies during the teaching and learning:

- Emphasis was placed on following precautionary measures such as social distancing, wearing a face mask and gloves, and using disinfectants. Also, if there is a case of infection among students, faculty members, or their contacts with infected people, they are prevented from attending until the end of the isolation period to ensure that the epidemic does not spread among students.
- The students will be subdivided into four groups (each / educational runway); two hours / week. The onsite lectures will be given for each group beside online lectures. The public links will be distributed by department coordinator and online committee. Teaching tools includes Data show, overhead projector and blackboard and online videos. Onsite will be on Saturday (12-4 PM while the online will be on Tuesday at 3-4(3-4 afternoon every week), interactive learning through questions must be included.



▪ **Assessment in case of Covid-19 and/ or any disaster**

In the event that there is a need to stop the study or that the study is completely through E-learning, the plan will be to replace some or all of the assessments by alternative electronic methods to meet the student's achievement of the targeted learning outcomes of the courses and the academic program.

3-Academic standards

3.1- External references for standard:

The national academic reference standards (NARS) of veterinary medicine issued by national authority of quality assurance and accreditation for education (NAQAAE) were adopted by the faculty council 12/4/2010. The academic departments confirmed their continued adoption of NARS Feb. 2009 through their departmental councils, whose executive decisions were approved by the Education and Student Affairs Committee on 3/4/2019 and the College Board on 8/4/2019.

3.2- Comparison of provision to external references:

3.2.1- Comparing the NARS with Bachelor of Veterinary Medical Sciences (BVMSc) programme ILOS (in a separate file)

3.2.2- Comparing the NARS with Bachelor of Veterinary Medical Sciences (BVMSc) programme structure (in a separate file).

4- Curriculum structure and content.

4.a) Programme duration: 5 years.

4.b) Programme structure:

A- No. of contact hours

| Academic year | Lectures | Practical | Total |
|----------------------|-----------------|------------------|--------------|
| 1 st year | 450 | 330 | 780 |
| 2 nd year | 360 | 300 | 660 |
| 3 rd year | 465 | 390 | 855 |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

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|----------------------|-----|-----|-----|
| 4 th year | 510 | 480 | 990 |
| 5 th year | 540 | 450 | 990 |

B- Summer Training

| Academic year | Total hours |
|----------------------|-------------|
| 3 rd year | 240 |
| 4 th year | 240 |
| 5 th year | 240 |
| Total | 720 |

Contact hours/ week

| Academic year | 1 st semester | 2 nd semester | Summer Training |
|-----------------|--------------------------|--------------------------|-----------------|
| 1 st | 26 | 26 | - |
| 2 nd | 22 | 22 | - |
| 3 rd | 30 | 27 | 42 |
| 4 th | 33 | 33 | 42 |
| 5 th | 33 | 33 | 42 |

4.bi- Total contact hours:

Lectures: 2325 Practical: 1950 Summer Training: 720 Total: 4995

4.bii- No of contact hours compulsory (4275)

| | | |
|--|----------|---------|
| 4.biii- No of contact hours of basic sciences: | No:1080 | %: 21.6 |
| 4.biv- No of contact hours of social science and humanities: | No: 120 | %: 2.4 |
| 4.bv- No of contact hours of specialized: | No: 2925 | %:58.56 |
| 4.bvi- discretionary subjects: | No: 150 | %: 3 |
| 4.bvii- No of field training (summer training): | No:720 | %:14.4 |

4.bviii- Single programme



Table (1) curriculum structure and course percentage

| Academic year | Code No | Course title | Total Contact hours | Percentage |
|-------------------|----------|--|---------------------|------------|
| First Year | ANEM101 | Anatomy and Embryology A | 120 | 2.80 |
| | HIST 102 | Histology A | 150 | 3.50 |
| | BCHE 103 | Biochemistry | 120 | 2.80 |
| | PHYS 104 | General Physiology | 120 | 2.80 |
| | ANWD 105 | Biostatistics | 60 | 1.40 |
| | ANWD 106 | Veterinary Genetic and Genetic engineering | 90 | 2.11 |
| | ENLA 108 | English language | 30 | 0.70 |
| | BPHY109 | Biophysics | 60 | 1.40 |
| | HURT 110 | Human rights | 30 | 0.70 |
| Total | | | 780 | |

| Academic year | Code No | Course title | Total Contact hours | Percentage |
|--------------------|----------|--|---------------------|------------|
| Second Year | ANEM 211 | Applied and Comparative anatomy | 180 | 4.21 |
| | PHYS 212 | Special Physiology | 120 | 2.80 |
| | BCHE 213 | Clinical Biochemistry | 60 | 1.40 |
| | VTPH 214 | Animal & poultry behavior and management | 120 | 2.80 |
| | ANWD 215 | Animal breeding and production | 150 | 3.50 |
| | ANWD 216 | Veterinary economics and farm management | 60 | 1.40 |
| Total | | | 660 | |
| Academic year | Code No | Course title | Total Contact hours | Percentage |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

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|-------------------|-----------|----------------------------------|------------|------|
| Third Year | PATH 317 | General pathology | 120 | 2.80 |
| | BAMI 318 | Bacteriology and mycology | 120 | 2.80 |
| | NCNT 319 | Nutrition and clinical nutrition | 150 | 3.50 |
| | PHAR 320 | Pharmacology | 150 | 3.50 |
| | PARA 321 | Parasitology | 150 | 3.50 |
| | VIROL 322 | Virology | 120 | 2.80 |
| | BAMI 323 | Immunology | 45 | 1.05 |
| TOTAL | | | 855 | |

| Academic year | Code No | Course title | Total Contact hours | Percentage |
|----------------------|----------------|---|----------------------------|-------------------|
| Fourth Year | THER 424 | Gynecology and obstetrics | 120 | 2.80 |
| | SANR 425 | General surgery and anesthesia | 120 | 2.80 |
| | ANME 426 | General internal medicine | 120 | 2.80 |
| | FDMN 427 | Fish diseases and management | 120 | 2.80 |
| | CLPA 428 | Clinical pathology | 120 | 2.80 |
| | FCNT 429 | Milk and Milk products hygiene and technology | 150 | 3.50 |
| | FMDT 430 | Forensic medicine, toxicology and veterinary procedures | 120 | 2.80 |
| | PATH 431 | Pathology (Morbid anatomy) | 120 | 2.80 |
| TOTAL | | | 990 | |

| Academic year | Code No | Course title | Total Contact hours | Percentage |
|----------------------|----------------|---|----------------------------|-------------------|
| Fifth Year | THER 532 | Obstetrics and artificial insemination | 120 | 2.80 |
| | SANR 533 | Special surgery radiology | 120 | 2.80 |
| | ANME 534 | Special internal medicine | 120 | 2.80 |
| | VTPH 535 | Animal, poultry and environmental hygiene | 150 | 3.50 |
| | ANME 536 | Infectious diseases | 120 | 2.80 |
| | AVRM 537 | Avian and rabbit diseases | 120 | 2.80 |
| | FCNT 538 | Meat and meat products hygiene and technology | 150 | 3.50 |
| | ZOON 539 | Zoonoses | 90 | 2.11 |
| Total | | | 990 | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5- Programme courses

5-1- First year- Semester I

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|--|---------------------|---------------------|------|-------|---------------------------------|---------------------|---------|------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| ANEM101 | Anatomy and Embryology -A | 60 | 2 | 2 | 4 | 1, 3, 5 | 2, 3, 4 | 18, 20 | 1, 2, 7 |
| HIST102 | Histology-A | 75 | 3 | 2 | 5 | 2, 3 | 2, 3, 4, 5 | 20 | 1, 2, 3, 7 |
| BCHE103 | Biochemistry (Basics)-A | 60 | 2 | 2 | 4 | 2, 6, 7, 16 | 2, 3, 4, 5, 6, 7 | 22 | 1, 2, 6 |
| PHYS104 | General Physiology -A | 60 | 2 | 2 | 4 | 2, 4, 33 | 2, 3, 4, 5, 6, 7, 9 | 18, 22 | 1, 2, 6 |
| ANWD105 | Biostatistics | 60 | 2 | 2 | 4 | 6, 8 | 2, 3, 4, 5, 6, 9 | 14 | 1, 2, 4, 6 |
| ANWD106 | Vet. Genetics and Genetic Engineering -A | 45 | 2 | 1 | 3 | 2, 5, 7, 14, 17 | 2, 3, 4, 5, 6, 7, 9 | 2 | 1, 2, 6 |
| ENLA108 | English Language | 30 | 2 | - | 2 | 1 | 2, 5, 6 | - | 2, 6 |
| | Total | 390 | 15 | 11 | 26 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-2- First year- Semester II

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|--|---------------------|---------------------|------|-------|---------------------------------|---------------------|---------|------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| ANEM101 | Anatomy and Embryology –B | 60 | 2 | 2 | 4 | 1, 3, 5 | 2, 3, 4 | 18, 20 | 1, 2, 7 |
| HIST102 | Histology-B | 75 | 3 | 2 | 5 | 2, 3 | 2, 3, 4, 5 | 20 | 1, 2, 3, 7 |
| BCHE103 | Biochemistry (Molecular biology) -B | 60 | 2 | 2 | 4 | 2, 6, 7, 16 | 2, 3, 4, 5, 6, 7 | 22 | 1, 2, 6 |
| PHYS104 | General Physiology -B | 60 | 2 | 2 | 4 | 2, 4, 33 | 2, 3, 4, 5, 6, 7, 9 | 18, 22 | 1, 2, 6 |
| ANWD106 | Vet. Genetics and Genetic Engineering -B | 45 | 2 | 1 | 3 | 2, 5, 7, 14, 17 | 2, 3, 4, 5, 6, 7, 9 | 2 | 1, 2, 6 |
| BPHY109 | Biophysics | 60 | 2 | 2- | 4 | 6 | 2, 3, 4, 5 | 22 | 1, 2, 6 |
| HURT110 | Human rights and combating corruption | 30 | 2 | - | 2 | 35 | 2, 6 | - | 2 |
| | Total | 390 | 15 | 11 | 26 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-3- Second year- Semester I

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|--|---------------------|---------------------|------|-------|---------------------------------|---------------------|---------|------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| ANEM211 | Applied and Comparative anatomy-A | 75 | 3 | 2 | 5 | 1, 3, 5 | 2, 3, 4 | 18, 20 | 1, 2, 7 |
| PHYS212 | Special Physiology-A | 60 | 2 | 2 | 4 | 2, 4, 12, 33 | 2, 3, 5, 6, 7, 9 | 18, 22 | 1, 2, 6 |
| BCHE213 | Clinical Biochemistry | 60 | 2 | 2 | 4 | 2, 6, 16 | 2, 3, 4, 5, 6, 7 | 3, 22 | 1, 2, 6 |
| VTPH214 | Animal & Poultry Behavior and Management-A | 60 | 2 | 2 | 4 | 1, 9, 12, 33 | 2, 3, 4, 5, 6, 7 | 1 | 1, 2, 7 |
| ANWD215 | Animal Breeding and Production - A | 75 | 3 | 2 | 5 | 9, 11, 13, 14 | 2, 3, 4, 5, 6, 7, 9 | 19 | 1, 2, 4, 6 |
| | Total | 330 | 12 | 10 | 22 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-4- Second year- Semester II

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|--|---------------------|---------------------|------|-------|---------------------------------|---------------------|---------|---------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| ANEM211 | Applied and Comparative anatomy-B | 75 | 3 | 2 | 5 | 1, 3, 5 | 2, 3, 4 | 18, 20 | 1, 2, 7 |
| PHYS212 | Special Physiology-B | 60 | 2 | 2 | 4 | 2, 4, 12, 33 | 2, 3, 5, 6, 7, 9 | 18, 22 | 1, 2, 6 |
| VTPH214 | Animal & Poultry Behavior and Management-B | 60 | 2 | 2 | 4 | 1, 9, 12, 33 | 2, 3, 4, 5, 6, 7 | 1 | 1, 2, 7 |
| ANWD215 | Animal Breeding and production -B | 75 | 3 | 2 | 5 | 9, 11, 13, 14 | 2, 3, 4, 5, 6, 7, 9 | 19 | 1, 2, 4, 6 |
| ANWD216 | Vet. Economics and farm management | 60 | 2 | 2 | 4 | 8, 14 | 2, 3, 4, 5, 6, 7, 9 | 14 | 1, 2, 3, 6, 7 |
| | Total | 330 | 12 | 10 | 22 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-5 Third year - Semester I

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|----------------------------------|---------------------|---------------------|------|-------|---------------------------------|---------------------|-----------|-----------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| PATH317 | General Pathology-A | 60 | 2 | 2 | 4 | 10, 16, 18 | 2, 3, 4, 5, 6, 7, 9 | 3 | 1, 2, 3 |
| BAMI318 | Bacteriology & Mycology - A | 60 | 2 | 2 | 4 | 16, 17 | 2, 3, 4, 5, 6, 7 | 2, 13, 22 | 1, 2, 6 |
| NCNT319 | Nutrition & Clinical Nutrition-A | 75 | 3 | 2 | 5 | 10, 17, 28 | 2, 3, 4, 5, 6, 7, 9 | 2, 5 | 1, 2, 6 |
| PHAR320 | Pharmacology -A | 75 | 3 | 2 | 5 | 15, 19, 20, 29, 30 | 2, 3, 4, 5, 6, 7, 9 | 1, 11, 22 | 1, 2, 6 |
| PARA321 | Parasitology -A | 75 | 3 | 2 | 5 | 16, 17 | 2, 4, 5 | 2 | 1, 2 |
| VIRL322 | Virology -A | 60 | 2 | 2 | 4 | 2, 16, 17, 22 | 2, 3, 4, 5, 6, 7 | 2, 13, 22 | 1, 2 |
| BAMI323 | Immunology | 45 | 1 | 2 | 3 | 16, 17 | 2, 3, 4, 5, 6 | 2, 22 | 1, 2, 6 |
| | Total | 450 | 16 | 14 | 30 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-6 Third year- Semester II

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|----------------------------------|---------------------|---------------------|------|-------|---------------------------------|---------------------|-----------|-----------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| PATH317 | General Pathology-B | 60 | 2 | 2 | 4 | 10, 16, 18 | 2, 3, 4, 5, 6, 7, 9 | 3 | 1, 2, 3 |
| BAMI318 | Bacteriology & Mycology -B | 60 | 2 | 2 | 4 | 16, 17 | 2, 3, 4, 5, 6, 7 | 2, 13, 22 | 1, 2, 6 |
| NCNT319 | Nutrition & Clinical Nutrition-B | 75 | 3 | 2 | 5 | 10, 17, 28 | 2, 3, 4, 5, 6, 7, 9 | 2, 5 | 1, 2, 6 |
| PHAR320 | Pharmacology -B | 75 | 3 | 2 | 5 | 15, 19, 20, 29, 30 | 2, 3, 4, 5, 6, 7, 9 | 1, 11, 22 | 1, 2, 6 |
| PARA321 | Parasitology -B | 75 | 3 | 2 | 5 | 16, 17 | 2, 4, 5 | 2 | 1, 2 |
| VIRL322 | Virology -B | 60 | 2 | 2 | 4 | 2, 16, 17, 22 | 2, 3, 4, 5, 6, 7 | 2, 13, 22 | 1, 2 |
| | Total | 405 | 15 | 12 | 27 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-7 Fourth year- Semester I

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|---|---------------------|---------------------|------|-------|---------------------------------|---------------------------|-----------------------------|---------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| THER424 | Gynecology and obstetrics - A | 60 | 2 | 2 | 4 | 5, 12, 13, 14, 15, 19, 25, 31 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 3, 4, 6, 8, 9, 11, 13, 17 | 1, 2, 4, 6 |
| SANR425 | General Surgery and Anesthesia - A | 60 | 2 | 2 | 4 | 15, 19, 31, 33 | 1, 2, 3, 4, 6, 7, 8, 9 | 1, 2, 3, 4, 6, 8, 9, 11, 12 | 1, 2, 4, 6, 7 |
| ANME426 | General Internal Medicine- A | 60 | 2 | 2 | 4 | 13, 15, 19, 31 | 1, 3, 4, 5, 6, 7, 8, 9 | 1, 3, 4, 12, 16 | 1, 2, 6 |
| FDMN427 | Fish Diseases and Management -A | 60 | 2 | 2 | 4 | 1, 10, 13, 15, 16, 19, 24, 25 | 1, 2, 3, 4, 5, 6, 7, 8 | 2, 3, 4, 7, 9, 10, 11, 13 | 1, 2, 4, 5, 7 |
| CLPA428 | Clinical Pathology -A | 60 | 2 | 2 | 4 | 2, 16, 18 | 2, 3, 4, 5, 6, 7 | 2, 3, 22 | 1, 2, 6 |
| FCNT429 | Milk & M. Products Hygiene and Technology -A | 75 | 3 | 2 | 5 | 20, 21, 32 | 2, 3, 4, 5, 6, 7 | 15, 22 | 1, 2, 6, 7 |
| FMDT430 | Forensic Medicine, Toxicology and Vet Procedures -A | 60 | 2 | 2 | 4 | 17, 30 | 2, 3, 4, 5, 6, 9 | 2 | 1, 2, 6 |
| PATH431 | Pathology (Morbid Anatomy)- A | 60 | 2 | 2 | 4 | 16, 18, 33 | 2, 3, 4, 5, 6, 7, 9 | 3, 7, 18 | 1, 2, 6 |
| | Total | 495 | 17 | 16 | 33 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-8 Fourth year - Semester II

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|---|---------------------|---------------------|------|-------|---------------------------------|---------------------------|-----------------------------|---------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| THER424 | Gynecology and obstetrics - B | 60 | 2 | 2 | 4 | 5, 12, 13, 14, 15, 19, 25, 31 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 3, 4, 6, 8, 9, 11, 13, 17 | 1, 2, 4, 6 |
| SANR425 | General Surgery and Anesthesia-B | 60 | 2 | 2 | 4 | 15, 19, 31, 33 | 1, 2, 3, 4, 6, 7, 8, 9 | 1, 2, 3, 4, 6, 8, 9, 11, 12 | 1, 2, 4, 6, 7 |
| ANME426 | General Internal Medicine- B | 60 | 2 | 2 | 4 | 13, 15, 19, 31 | 1, 3, 4, 5, 6, 7, 8, 9 | 1, 3, 4, 12, 16 | 1, 2, 6 |
| FDMN427 | Fish Diseases and Management -B | 60 | 2 | 2 | 4 | 1, 10, 13, 15, 16, 19, 24, 25 | 1, 2, 3, 4, 5, 6, 7, 8 | 2, 3, 4, 7, 9, 10, 11, 13 | 1, 2, 4, 5, 7 |
| CLPA428 | Clinical Pathology -B | 60 | 2 | 2 | 4 | 2, 16, 18 | 2, 3, 4, 5, 6, 7 | 2, 3, 22 | 1, 2, 6 |
| FCNT429 | Milk & M. Products Hygiene and Technology -B | 75 | 3 | 2 | 5 | 20, 21, 32 | 2, 3, 4, 5, 6, 7 | 15, 22 | 1, 2, 6, 7 |
| FMDT430 | Forensic Medicine, Toxicology and Vet Procedures -B | 60 | 2 | 2 | 4 | 17, 30 | 2, 3, 4, 5, 6, 9 | 2 | 1, 2, 6 |
| PATH431 | Pathology (Morbidity Anatomy)- B | 60 | 2 | 2 | 4 | 16, 18, 33 | 2, 3, 4, 5, 6, 7, 9 | 3, 7, 18 | 1, 2, 6 |
| | Total | 495 | 17 | 16 | 33 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-9 Fifth year- Semester I

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|--|---------------------|---------------------|------|-------|------------------------------------|---------------------------|-------------------------------------|------------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| THER532 | Obstetric and AI-A | 60 | 2 | 2 | 4 | 5, 12, 13, 14, 15, 25, 31 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 3, 4, 6, 8, 9, 11, 13, 17 | 1, 2, 4, 6 |
| SANR533 | Special Surgery and Radiology-A | 60 | 2 | 2 | 4 | 15, 19, 31 | 1, 2, 3, 4, 6, 7, 8, 9 | 1, 2, 3, 4, 6, 8, 9, 11, 12, 13, 17 | 1, 2, 4, 6, 7 |
| ANME534 | Special Internal Medicine -A | 60 | 2 | 2 | 4 | 10, 13, 15, 19, 31 | 1, 3, 4, 5, 6, 7, 8, 9 | 2, 3, 4, 9, 11, 16, 17 | 1, 2, 3, 6 |
| VTPH535 | Animal, Poultry & Environmental Hygiene -A | 75 | 3 | 2 | 5 | 22, 26, 27, 28, 29, 32, 33, 34 | 2, 3, 4, 5, 6, 7, 8, 9 | 10, 18, 22 | 1, 2, 4, 5, 6, 7 |
| ANME536 | Infectious Diseases -A | 60 | 2 | 2 | 4 | 15, 19, 25 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 2, 3, 4, 7, 9, 11, 12, 13, 16, 21 | 1, 2, 4, 5, 6, 7 |
| AVRM537 | Avian & rabbit Diseases-A | 60 | 2 | 2 | 4 | 10, 13, 15, 16, 19, 24, 25, 26, 33 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 2, 3, 4, 7, 9, 11, 13, 16, 18, 21 | 1, 2, 4, 5, 6, 7 |
| FCNT538 | Meat & M. Products Hygiene and Technology -A | 75 | 3 | 2 | 5 | 20, 21, 23, 32 | 2, 3, 4, 5, 6, 7, 9 | 7, 15, 22 | 1, 2, 5, 6, 7 |
| ZOON539 | Zoonoses -A | 45 | 2 | 1 | 3 | 1, 15, 16, 22, 25, 27, 34 | 2, 3, 4, 5, 6, 7, 8, 9 | 2, 10, 13 | 1, 2, 3, 5, 6, 7 |
| | Total | 495 | 18 | 15 | 33 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-10 Fifth year -Semester II

| Code No | Course title | Total Contact hours | No. of hours / week | | | Programme ILOs covered (by No.) | | | |
|---------|--|---------------------------|------------------------|------|-------|------------------------------------|---------------------------|-------------------------------------|------------------|
| | | | Lect. | Lab. | Total | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| THER532 | Obstetric and AI-B | 60 | 2 | 2 | 4 | 5, 12, 13, 14, 15, 25, 31 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 3, 4, 6, 8, 9, 11, 13, 17 | 1, 2, 4, 6 |
| SANR533 | Special Surgery and Radiology-B | 60 | 2 | 2 | 4 | 15, 19, 31 | 1, 2, 3, 4, 6, 7, 8, 9 | 1, 2, 3, 4, 6, 8, 9, 11, 12, 13, 17 | 1, 2, 4, 6, 7 |
| ANME534 | Special Internal Medicine -B | 60 | 2 | 2 | 4 | 10, 13, 15, 19, 31 | 1, 3, 4, 5, 6, 7, 8, 9 | 2, 3, 4, 9, 11, 16, 17 | 1, 2, 3, 6 |
| VTPH535 | Animal, Poultry and Environmental Hygiene -B | 75 | 3 | 2 | 5 | 22, 26, 27, 28, 29, 32, 33, 34 | 2, 3, 4, 5, 6, 7, 8, 9 | 10, 18, 22 | 1, 2, 4, 5, 6, 7 |
| ANME536 | Infectious Diseases -B | 60 | 2 | 2 | 4 | 15, 19, 25 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 2, 3, 4, 7, 9, 11, 12, 13, 16, 21 | 1, 2, 4, 5, 6, 7 |
| AVRM537 | Avian & rabbit Diseases-B | 60 | 2 | 2 | 4 | 10, 13, 15, 16, 19, 24, 25, 26, 33 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 2, 3, 4, 7, 9, 11, 13, 16, 18, 21 | 1, 2, 4, 5, 6, 7 |
| FCNT538 | Meat & M. Products Hygiene and Technology -B | 75 | 3 | 2 | 5 | 20, 21, 23, 32 | 2, 3, 4, 5, 6, 7, 9 | 7, 15, 22 | 1, 2, 5, 6, 7 |
| ZOON539 | Zoonoses -B | 45 | 2 | 1 | 3 | 1, 15, 16, 22, 25, 27, 34 | 2, 3, 4, 5, 6, 7, 8, 9 | 2, 10, 13 | 1, 2, 3, 5, 6, 7 |
| | Total | 495 | 18 | 15 | 33 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-11 Third year- Summer Training

| Code No | Course title | Total Contact hours | Programme ILOs covered (by No.) | | | |
|---------|---|---------------------|---------------------------------|---------------------|-----------|-----------|
| | | | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| PATH340 | General Pathology-T | 40 | 10, 16, 18 | 2, 3, 4, 5, 6, 7, 9 | 3 | 1, 2, 3 |
| BAMI341 | Bacteriology, Mycology and Immunology-T | 40 | 16, 17 | 2, 3, 4, 5, 6, 7 | 2, 13, 22 | 1, 2, 6 |
| NCNT342 | Nutrition & Clinical Nutrition-T | 40 | 10 | 3, 4, 5, 9 | 2 | 1, 2 |
| PHAR343 | Pharmacology-T | 40 | 15, 19, 20 | 3, 4, 5, 9 | 11, 22 | 1, 2, 6 |
| PARA344 | Parasitology-T | 40 | 16, 17 | 4 | 2 | 1, 2 |
| VIRL345 | Virology-T | 40 | 16 | 4, 5 | 2, 13, 22 | 1, 2 |
| | Total | 240 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-12 Fourth year- Summer Training

| Code No | Course title | Total Contact hours | Programme ILOs covered (by No.) | | | |
|---------|--|---------------------|---------------------------------|------------------------|-----------------------------|---------------|
| | | | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| THER446 | Gynecology and obstetrics-T | 30 | 5, 12, 13, 14, 15, 19, 25, 31 | 1, 2, 3, 4, 5, 6, 7, 8 | 3, 4, 6, 8, 9, 11, 13, 17 | 1, 2, 4, 6 |
| SANR447 | General Surgery and Anesthesia-T | 30 | 15, 19, 31, 33 | 1, 2, 3, 4, 6, 7, 8, 9 | 1, 2, 3, 4, 6, 8, 9, 11, 12 | 1, 2, 4, 6 |
| ANME448 | General Internal Medicine-T | 30 | 13, 15, 19, 31 | 1, 3, 4, 5, 6, 7, 8, 9 | 1, 3, 4, 12, 16 | 1, 2, 6 |
| FDMN449 | Fish Diseases and Management-T | 30 | 1, 10, 13, 15, 16, 19, 24, 25 | 1, 2, 3, 4, 5, 6, 7, 8 | 2, 3, 4, 7, 9, 10, 11, 13 | 1, 2, 4, 5, 7 |
| CLPA450 | Clinical Pathology-T | 30 | 16, 18 | 2, 3, 6, 7 | 2, 3, 22 | 1, 2, 6 |
| FCNT451 | Milk & M. Products Hygiene and Technology-T | 30 | 20, 32 | 2, 3, 4, 5, 6, 7 | 15, 22 | 1, 2, 6 |
| FMDT452 | Forensic Medicine, Toxicology and Vet Procedures-T | 30 | 17, 30 | 2, 3, 4, 5, 6, 9 | 2 | 1, 2, 6 |
| PATH453 | Morbid Anatomy-T | 30 | 16, 18, 33 | 2, 3, 4, 5, 6, 7, 9 | 3, 7, 18 | 1, 2, 6 |
| | Total | 240 | | | | |



Bachelor of Veterinary Medical Sciences (BVMSc) Programme Specification
Faculty of Veterinary Medicine – Zagazig University

5-13 Fifth year – Summer Training

| Code No | Course title | Total Contact hours | Programme ILOs covered (by No.) | | | |
|---------|---|---------------------|---------------------------------|------------------------|-----------------------------|------------|
| | | | K,U (a) | I.S (b) | P.S (c) | G.T.S (d) |
| THER554 | Obstetric and AI-T | 30 | 5, 12, 13, 14, 15, 25, 31 | 1, 2, 3, 4, 5, 6, 7, 8 | 3, 4, 6, 8, 9, 11, 13, 17 | 1, 2, 4, 6 |
| SANR555 | Special Surgery and Radiology-T | 30 | 15, 19, 31, 33 | 1, 2, 3, 4, 6, 7, 8, 9 | 1, 2, 3, 4, 6, 8, 9, 11, 12 | 1, 2, 4, 6 |
| ANME556 | Special Internal Medicine-T | 30 | 10, 13, 15, 19, 31 | 3, 4, 5, 7, 8, 9 | 2, 3, 4, 9, 11, 16, 17 | 1, 2, 3, 6 |
| VTPH557 | Animal, Poultry and Environmental Hygiene-T | 30 | 29, 34 | 3, 4, 7, 8 | 10 | 1, 2, 6 |
| ANME558 | Infectious Diseases-T | 30 | 15, 25 | 2, 3, 8, 9 | 2, 3, 4, 11, 12, 16 | 2, 4, 6 |
| AVRM559 | Avian & rabbit Diseases-T | 30 | 19, 24, 25 | 2, 3, 4, 7, 8, 9 | 11, 16, 21 | 1, 2 |
| FCNT560 | Meat & M. Products Hygiene and Technology-T | 30 | 23, 32 | 4, 6, 7, 9 | 15, 22 | 1, 6 |
| ZOON561 | Zoonoses-T | 30 | 16, 22, 34 | 2, 3, 4, 8 | 2, 10, 13 | 1, 2 |
| | Total | 240 | | | | |



6 - Programme admission requirement:

The student could admit to join the Bachelor of Veterinary Medical Sciences programme if he/she has one of the following:

- 1) The general Secondary school certificate, science branch with the grades stated by the Central Admission Office.
- 2) A percentage of students enrolled are holders of the equivalent certificates such as the American Diploma and IGCSE.
- 3) A percentage of students from Arab countries with the equivalent grades determined by the Ministry of Higher Education, Central Admission office in the same academic year.
- 4) Students can be transferred from equivalent governmental universities with a condition of minimum good grades and if health and social status necessitate this transfer.

7 - Regulations for progression and programme completion.

The policy of student retention and progression are determined according to the University regulations. Promotion to the next year requires that student passes either without failed courses or with not more than two failed courses. Students transferred with failed courses must enter make up exam in these courses in proper semester. However, the final year students who have failed in one/two courses will get their make-up exam in the same year. After four successive opportunities for recite in failed course, the student will become external then when succeed return to regular automatically.



8 - Evaluation of programme intended learning outcomes:

| Evaluator | Tool | Samples |
|-----------------------------|------------------------------------|-----------|
| 1- Senior students | Questionnaires and open discussion | 50/ Grade |
| 2- Alumni | Questionnaires and open discussion | 25 |
| 3- Stakeholders (Employers) | Questionnaires and open discussion | Random |
| 4- External Evaluators | Report | - |
| Other (External examiners) | Report | - |

Program coordinator

Prof. Dr. Nasr Abd El-Wahab Mohamed

Faculty Dean

Date: / /2021