

I. Preface

For the development of any modern society, Science plays a key role. Progress in various fields of Science and Technology has become the tools to understand life processes. Since knowledge in all branches and fields is growing globally at a fast pace with new disciplines emerging. The present curriculum will expose students to various fields in Zoology.

Zoology is the branch of Biology dedicated to all aspects of animal life – from anatomy and physiology to evolution and husbandry. It is a subject for those who **love animals** and those who want to understand how the natural world works. We should protect and conserve the environment and wildlife, so will Zoology be an increasingly worthwhile subject to study.

Zoology is a branch of Biology and is focused on animal life. In **Zoology Department**, you will learn about animal life from every point of view – including (but not limited to) **genetics, evolution, biodiversity, behavior, physiology, ecosystems, and microbiology** (single-celled organisms) but is more focused on **multi-cellular life** (such as **Copepods** and **Plankton**), invertebrates (**insects, molluscs, etc.**), and fauna (**birds, reptiles, mammals, etc.**).

As with most science courses, in a **Zoology Bachelor**, you will start broad and narrow down your specialty as you go. In the first year, you can expect to study general biology and chemistry, as well as some broad topics such as ecology and environmental science.

A Zoology BSc program will typically last **3 to 4 years**. Expect a mix of **classroom learning, laboratory work, and fieldwork**. Entry requirements will differ depending on the university, but you can expect to need passing grades in biology and a second science such as chemistry.

As well as working as a zoologist, your in-depth knowledge of animal sciences and lab and field work equips you for a career in the environmental, agricultural, and scientific industries

Job options

❖ **Jobs directly related to your degree include:**(تشمل الوظائف المرتبطة مباشرة بشهادتك ما يلي)

• Academic researcher	• باحث أكاديمي
• Animal nutritionist	• أخصائي تغذية الحيوان
• Ecologist	• عالم البيئة
• Environmental consultant	• مستشار بيئي
• Environmental education officer	• مسؤول التثقيف البيئي
• Higher education lecturer	• محاضر بالتعليم العالي
• Marine scientist	• عالم بحري
• Nature conservation officer	• مسؤول الحفاظ على الطبيعة
• Science writer	• كاتب العلوم
• Zookeeper	• حارس حديقة الحيوان
• Zoologist	• عالم الحيوان

❖ Jobs where your degree would be useful:(الوظائف التي ستكون شهادتك فيها مفيدة)

<ul style="list-style-type: none"> • Animal physiotherapist • Environmental manager • Field trials officer • Fisheries officer • Marine biologist • Palaeontologist • Research scientist (life sciences) • Toxicologist 	<ul style="list-style-type: none"> • أخصائي العلاج الطبيعي للحيوان • مدير البيئة • ضابط التجارب الميدانية • موظف مصايد الأسماك • عالم الأحياء البحرية • عالم الحفريات • عالم أبحاث (علوم الحياة) • عالم السموم
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Department credit-hour programs:

Zoology Department also offers 6 credit-hour Master degree and 6 credit-hour Ph.D. degree programs in:

- 1- M.Sc. Degree in Entomology.
- 2- M. Sc. Degree in Cell Biology, Histology and Genetics.
- 3- M. Sc. Degree in Comparative Anatomy and Embryology.
- 4- M.Sc. Degree in Physiology.
- 5- M.Sc. Degree in Invertebrates & Parasitology.
- 6- M.Sc. Degree in Biological Oceanography.
- 7- M.Sc. Degree in Molecular Biology
- 8- M.Sc. Degree in Animal Ecology and fauna
- 9- Ph.D. Degree in Entomology.
- 10- Ph. D. Degree in Cell Biology, Histology and Genetics.
- 11- Ph. D. Degree in Comparative Anatomy & Embryology.
- 12- Ph.D. Degree in Physiology.
- 13- Ph.D. Degree in Invertebrates & Parasitology.
- 14- Ph.D. Degree in Biological Oceanography.
- 15- Ph.D. Degree in Molecular Biology
- 16- Ph.D.. Degree in Animal Ecology and fauna
- 17- In addition to 2 Diploma in:
 - 1- Biological Laboratory Analyses.
 - 2- Tissue Culture and Pathology.

Fields of Research and Research Groups:

Our programs are designed to fulfill the requirements of quality standards and the national academic reference standards (NARS).

In addition, the research plan of the Department of Zoology 2030 is compatible with the state Plan 2030.

Research activities in the department cover a lot of fields including; biological studies, histopathology, anatomy, histology, stem cells research, nanoparticles, molecular biology, environmental pollutants, histochemistry and immunohistochemistry, fish farming, physiology, ecology, biodiversity and parasites that infect different animal species.

The department staff is well qualified and well trained with a tremendous experience in teaching and research activities; they mostly graduated from Europe, Japan, and the States and mostly

have good credit regarding scientific publications in international and local journals. The department has about 22 faculty members performing research in most areas of the major fields of Zoology.

II. Mission

Program's Mission

Preparing a generation of innovators who have the ability to improve and advance society, protect it from environmental problems, and provide adequate solutions to avoid risks, in order to excel as a leader in our region in various fields.

رسالة البرنامج

إعداد جيل من المبتكرين لديهم القدرة على الارتقاء والنهوض بالمجتمع وحمايته من المشكلات البيئية وتقديم الحلول الكافية لتجنب المخاطر وذلك من أجل التميز لريادة اقليمنا في شتى المجالات.

III. Vision

The Program's Vision

Providing an accredited academic environment that aims to achieve excellence and leadership through scientific research, academic studies, and technological applications in the fields of animal science.

رؤية البرنامج

توفير بيئة أكاديمية معتمدة تهدف لتحقيق التميز والريادة من خلال الأبحاث العلمية والدراسات الأكاديمية وتطبيقات تكنولوجية في مجالات علم الحيوان.

IV. Aims of Zoology/ Chemistry program

- 1- To introduce a multidisciplinary Zoology and Chemistry program to benefit the community of our graduates in the fields of zoology and chemistry.
- 2- To develop students' professional skills that enable a successful career (Outcomes).
- 3- To acquire students the essential required knowledge and skills to apply the zoological, chemistries, mathematical, physical, and zoological principles for solving zoological and chemistries problems.
- 4- To provide students with the broad education necessary to practice zoology, and chemistry, in a global and societal context.
- 5- To Prepare students and graduates to be good scientific researchers in the fields of Physiology, Molecular biology, genetics, Microbiology, Biodiversity, Ecology, Embryology, Histochemistry, Immunology, and Chemistry.