



UMM AL-QURA UNIVERSITY
DEPARTMENT OF BIOLOGY

Biology Department Handbook

Biology Department - College of Science

For the Academic Year 1446-1447 AH (2025-2026)

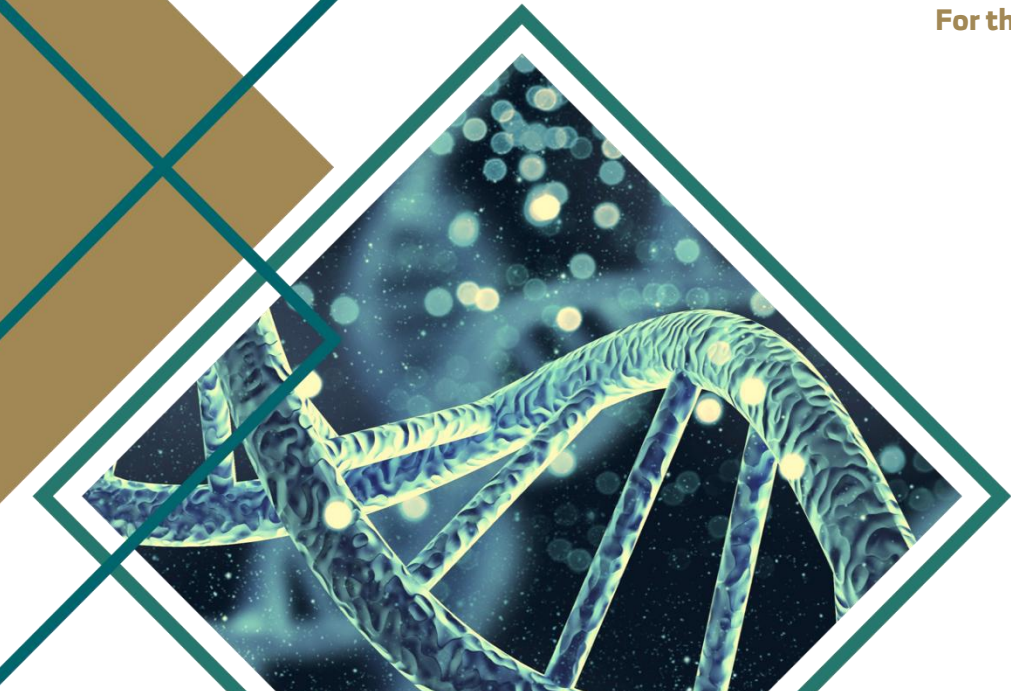
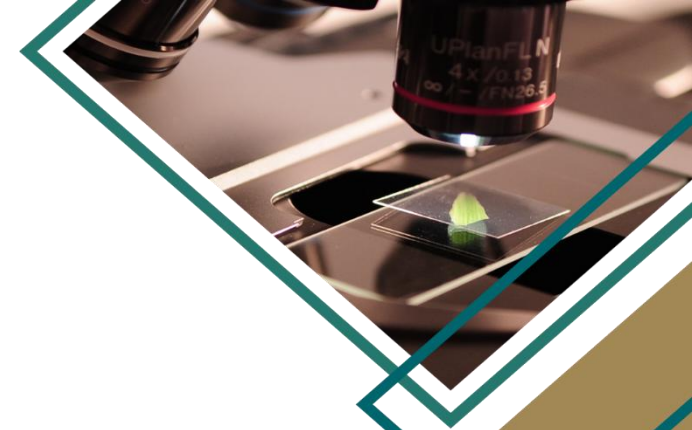




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Message from the Head of Department

Biology constitutes a fundamental axis for understanding living systems, spanning levels from molecular organization to entire ecosystems. From this perspective, the Biology Department is committed to providing an academic environment that supports structured learning, fosters scientific reasoning, and integrates knowledge with practical application.

The Department offers a comprehensive academic program designed to establish a solid foundational knowledge base, while providing specialized tracks that enable students to pursue in-depth study in Botany, Zoology, Microbiology, and Ecology. This diversity allows students to align their academic interests with fields that possess clear applied and research dimensions.

Instruction within the Department is grounded in an integrative approach that combines theoretical knowledge with practical training, with particular emphasis on developing analytical skills, laboratory competencies, and proficiency in modern scientific techniques. The Department also promotes active student engagement in scientific activities and research projects, contributing to the development of scientifically grounded individuals capable of continuous learning and adaptation to evolving scientific demands.

The Department seeks to graduate individuals who possess both scientific competence and practical expertise, enabling them to contribute effectively across diverse sectors, including education, scientific research, and applied fields related to health, environment, and food sciences.

We believe that investment in biological knowledge is essential to sustainable development, and we strive to ensure that our graduates serve as active contributors to this endeavor.

Head of the Biology Department
Nafee Ibraheem Alothyqi

About the Biology Department

The Biology Department in the College of Science was established on 21/12/1401 AH (19/10/1981), as one of the core scientific departments dedicated to the study of life across multiple levels, ranging from molecular and cellular structures to whole organisms and their interactions with surrounding environments.

The Department is founded on the delivery of a comprehensive academic program in Biology that aims to build an integrated body of scientific knowledge and to develop a systematic understanding of biological systems. It offers specialized tracks in Botany, Zoology, Microbiology, and Ecology, enabling students to progress progressively from fundamental concepts to more advanced and specialized domains in alignment with their academic pathways.

The Department is distinguished by a learning environment that integrates theoretical foundations with practical application. Laboratory-based instruction and field activities are systematically incorporated to support the educational process, thereby enhancing students' ability to analyze and interpret biological phenomena with scientific rigor.

The Department is supported by a distinguished faculty with diverse academic and research expertise across various disciplines of the life sciences. Faculty members contribute to scholarly and research outputs that keep pace with contemporary developments at both national and international levels.

Furthermore, the Department places strong emphasis on the development of students' scientific and research skills, and on linking theoretical knowledge with practical applications in fields related to health, environment, and food sciences. This approach contributes to preparing graduates who are well equipped to meet the demands of development and the labor market, and to actively contribute to the advancement of biological knowledge.

**Department Mission and
Goals**

Goals of the Biology Department

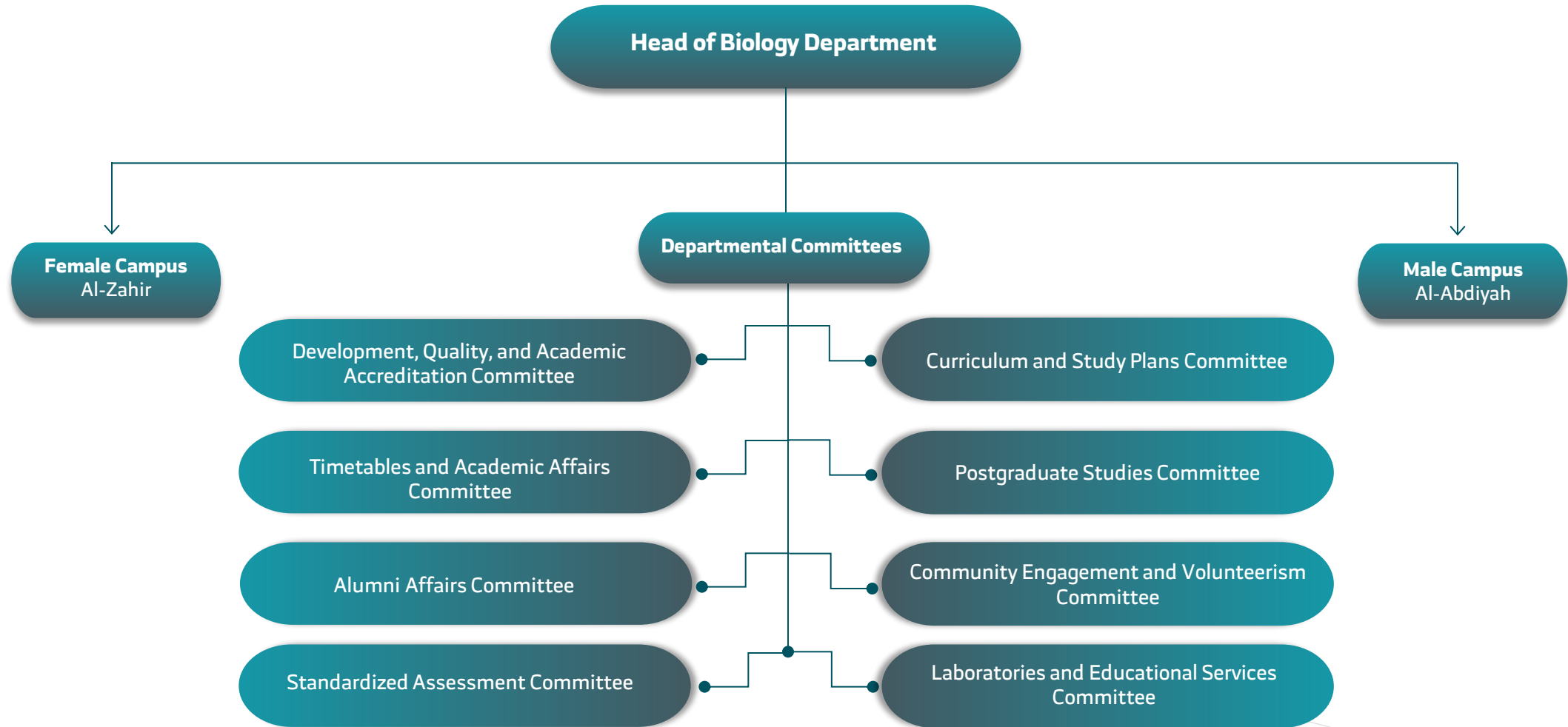
- To prepare undergraduate and postgraduate students for advanced academic levels, enabling them to address professional and technical challenges and to meet the needs of society within the Kingdom of Saudi Arabia and beyond.
- To develop curricula that contribute to the consolidation of fundamental knowledge in life sciences, including general biology, ecology, microbiology, and biotechnology.
- To support the integration of scientific knowledge in a manner that enhances biological understanding through classroom instruction, research laboratories, and fieldwork activities, thereby contributing to the refinement of students' skills.
- To qualify future generations to become distinguished researchers, trainers, and educators through high-quality educational and training programs that bridge theoretical knowledge with research applications in the life sciences.
- To operationalize the university's objectives by linking theoretical learning with practical application, contributing to the resolution of issues related to education, environment, and health, and addressing societal challenges at both local and international levels through systematic analysis and the development of appropriate solutions.

Mission of the Biology Department

The Biology Department seeks, through its programs in Zoology, Botany, Microbiology, and Ecology, to provide integrated scientific knowledge across the life sciences. The Zoology program focuses on developing a comprehensive understanding of animal biology, ecology, and evolution, while the Botany program prepares graduates on a solid scientific foundation in plant sciences and their applications. The Microbiology program is dedicated to the study of microorganisms and their applications in biological, medical, and environmental fields, whereas the Ecology program emphasizes the understanding of ecosystems and the interactions between living organisms and their environments.

The department places strong emphasis on promoting the principles of ethical scientific research, biodiversity conservation, and interdisciplinary learning, alongside integrating theoretical knowledge with practical applications. This approach aims to prepare qualified graduates capable of meeting labor market demands and contributing effectively to scientific research, applied sciences, and community service. In doing so, the department reflects an integrated scientific orientation aligned with its vision and supports the achievement of its strategic objectives.

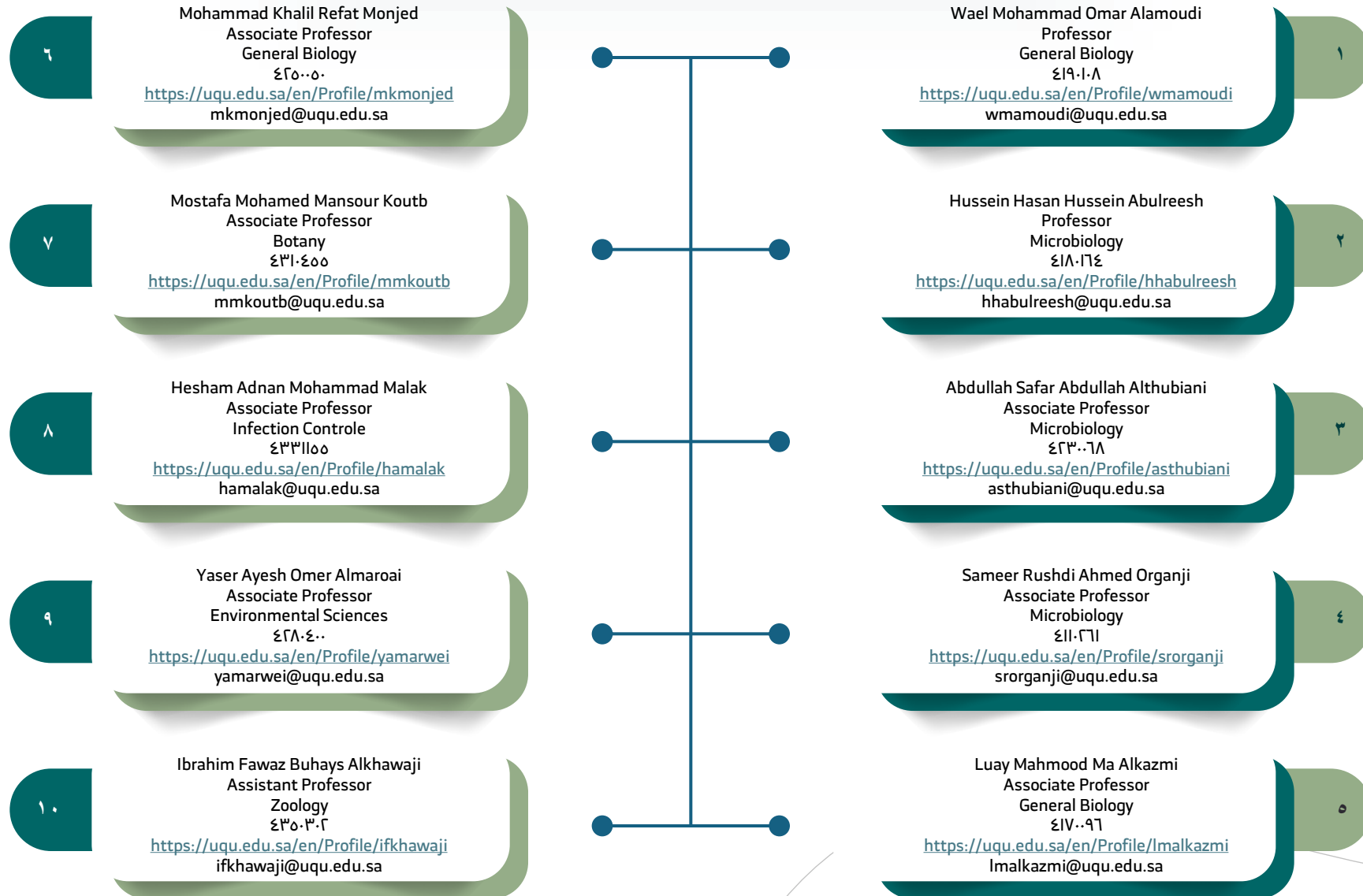
Departmental Organizational Structure





**Faculty Members at
Al-Abdiyah Male Campus**

Faculty Members at Al-Abdiyah Male Campus



Faculty Members at Al-Abdiyah Male Campus

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Faculty Members at Al-Zahir Female Campus

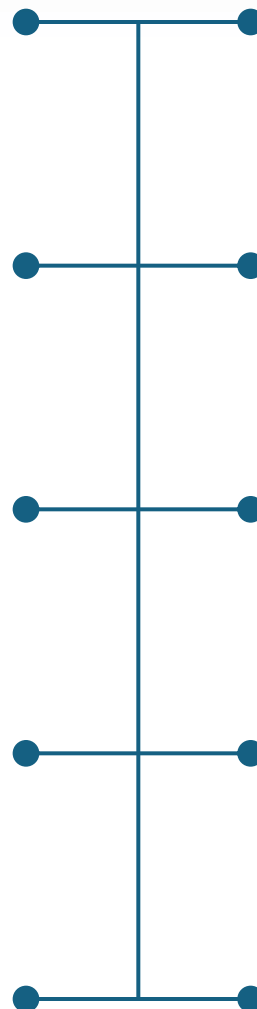
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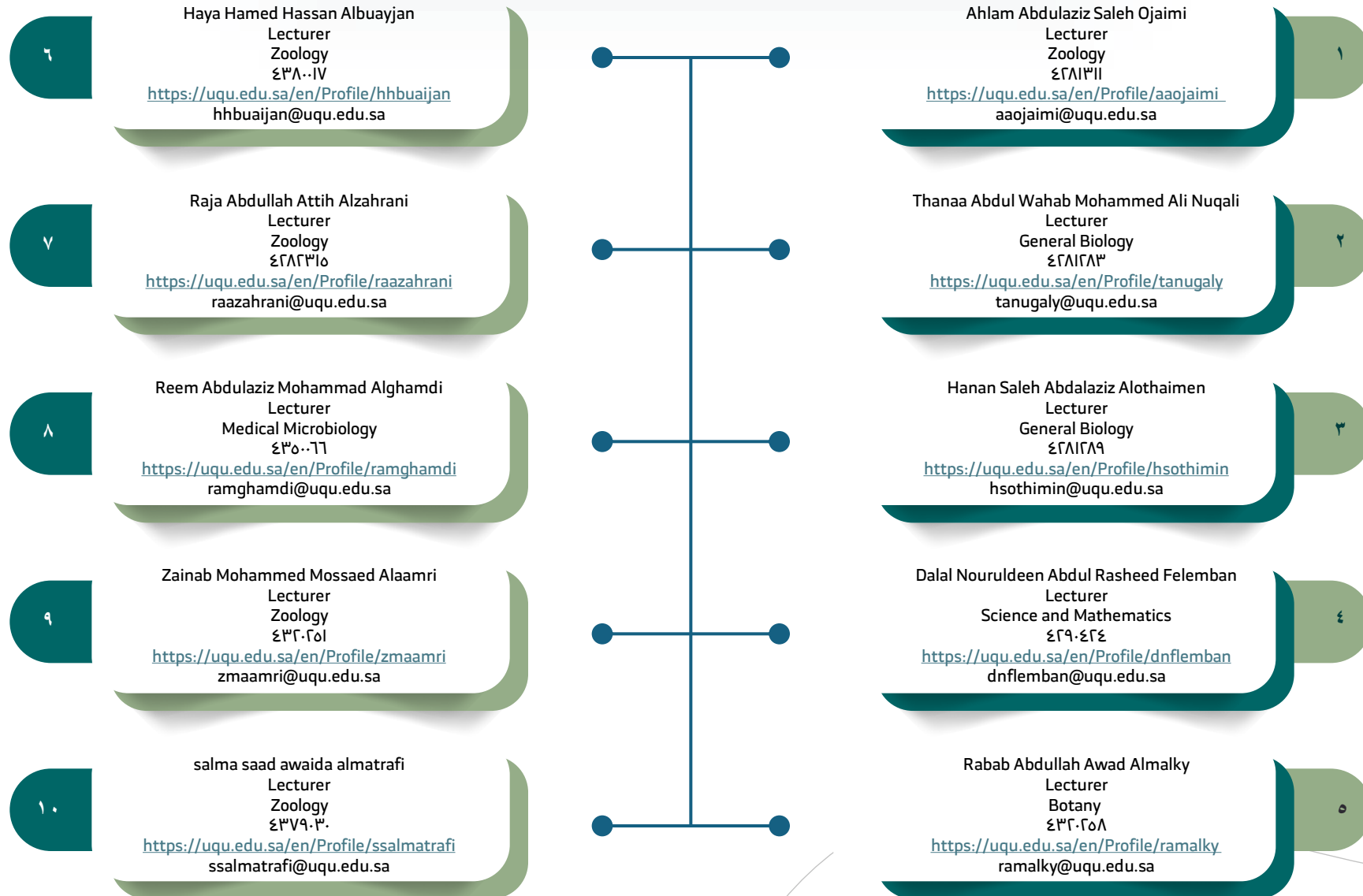
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**Lecturers and Teaching
Assistants**

Lecturers and Teaching Assistants



Lecturers and Teaching Assistants

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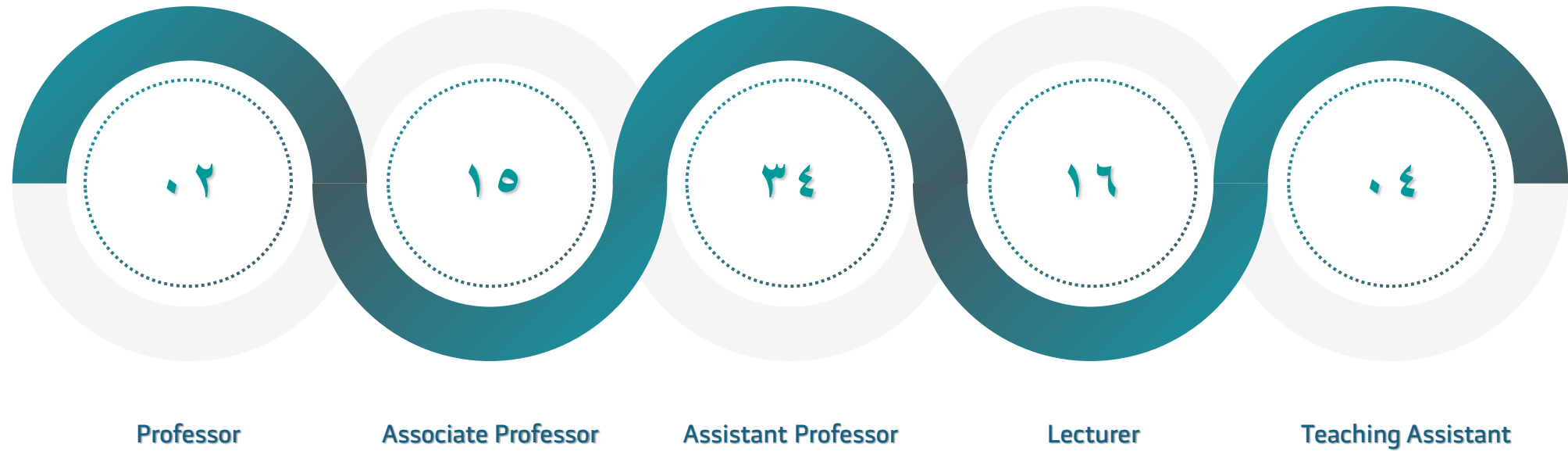
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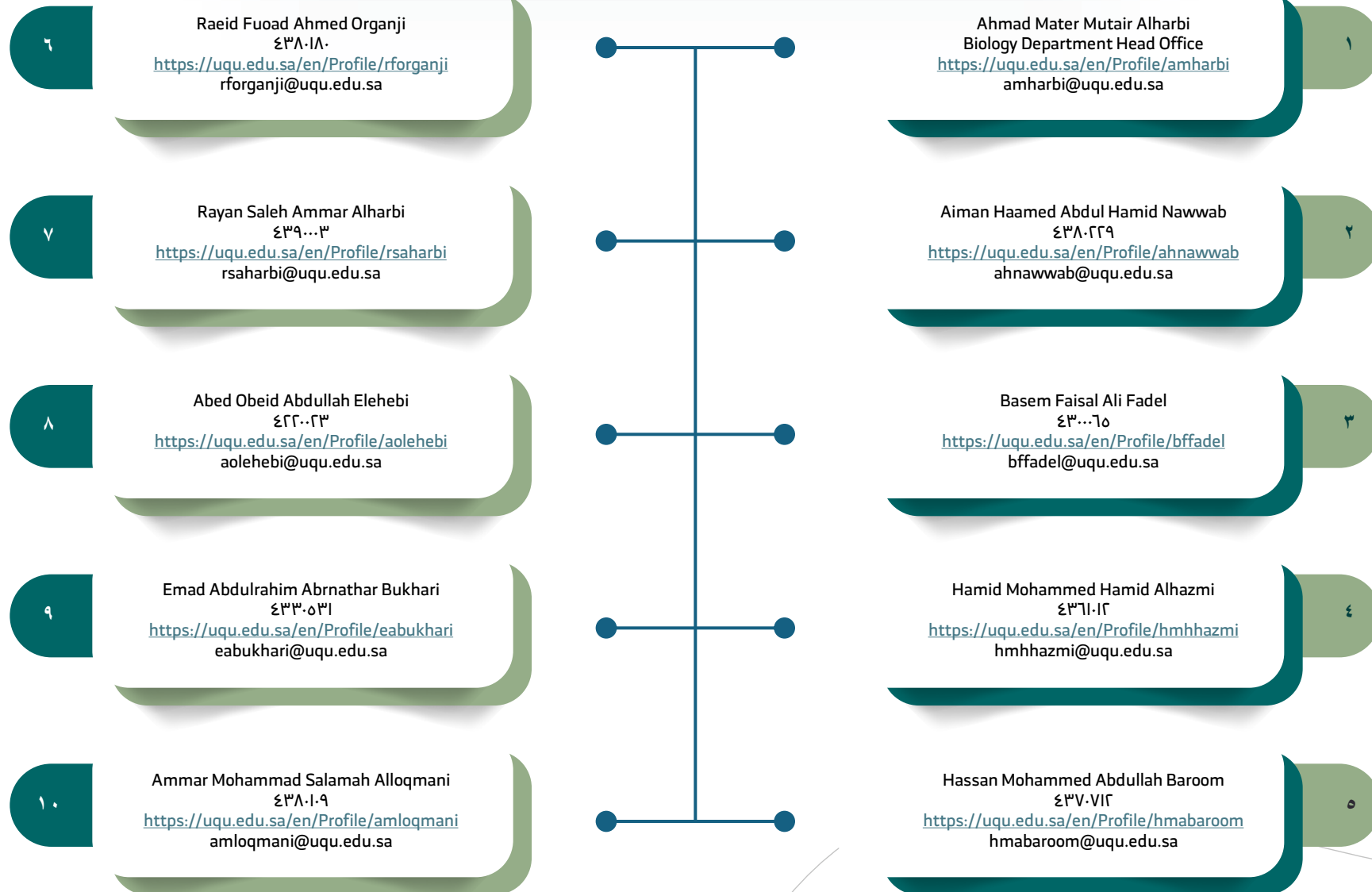
Statistics of Academic Staff in the Biology Department





Administrative Staff

Administrative Staff



Administrative Staff

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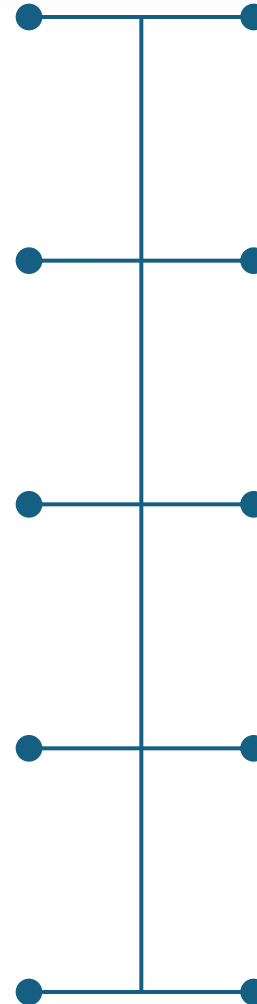
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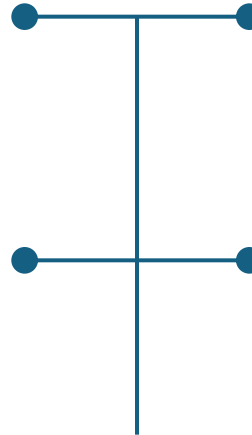
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Department Committee Responsibilities

Curriculum and Study Plans Committee

Responsibilities

- Monitor and review study plans and academic programs to ensure compliance with university requirements and applicable academic standards.
- Ensure alignment of academic programs with scientific developments, labor market needs, and quality assurance and accreditation standards, while reviewing proposals for new and updated academic programs.
- Review study plans, program specifications, and course specifications, and provide recommendations for improvement.
- Evaluate course learning outcomes, ensure their alignment with program learning outcomes, and propose enhancements to teaching and assessment methods.
- Review and endorse proposals after addressing observations, and submit them to the Head of Department for presentation to the Department Council in accordance with formal procedures.
- Follow up on requirements, procedures, and templates related to study plans and academic programs, and coordinate with relevant committees to ensure proper implementation.
- Recommend the establishment of subcommittees when necessary to perform specific tasks.
- Prepare and submit periodic reports to the Head of Department outlining committee activities, achievements, recommendations, and decisions.
- Perform any additional tasks assigned by the Head of Department.

Development, Quality Assurance and Academic Accreditation Committee Responsibilities

- Monitor and periodically review academic programs and study plans to ensure compliance with institutional quality requirements, academic accreditation standards, and disciplinary benchmarks.
- Review course and program specifications to ensure alignment with quality assurance and accreditation requirements, and issue recommendations to ensure full compliance with applicable standards.
- Oversee the implementation of the program quality assurance system, including procedures, requirements, and documentation, and coordinate with relevant departmental committees to ensure effective execution.
- Monitor compliance with national and international academic accreditation requirements and ensure that all required standards are fulfilled in coordination with department members and relevant stakeholders.
- Prepare periodic reports on the implementation and effectiveness of the quality assurance system within academic programs.
- Ensure compliance with institutional quality standards and prepare annual monitoring reports for accredited programs, including reports on accreditation conditions, recommendations, and improvement actions.
- Develop and maintain the program quality manual and update it as required to reflect regulatory and academic developments.
- Recommend the establishment of subcommittees when necessary to support quality assurance and academic accreditation activities, including committees for performance indicators, learning outcomes assessment, and program standards.
- Identify training needs for program staff, prepare structured training plans, and coordinate with relevant entities to ensure effective implementation.
- Submit a periodic report to the Head of Department outlining committee activities, achievements, recommendations, and decisions.
- Perform any additional tasks assigned by the Head of Department.

Postgraduate Studies Committee

Responsibilities

- Monitor postgraduate programs and ensure their continuous quality and compliance with institutional regulations and academic standards.
- Guide postgraduate students and monitor their adherence to approved study plans, ensuring fulfillment of all academic requirements and related procedures.
- Supervise comprehensive examinations, registration of study plans, and follow up procedures related to the appointment of academic supervisors.
- Monitor course scheduling and review supervisory workloads to ensure fair and effective academic distribution.
- Inform postgraduate students of available specializations and the research interests of faculty members.
- Guide students and ensure compliance with academic regulations and approved administrative procedures and forms.
- Monitor students' academic progress throughout their enrollment in the program.
- Provide recommendations for the development of academic programs and courses.
- Review the formation of thesis examination committees in accordance with academic regulations and procedures.
- Organize academic meetings, seminars, and workshops for postgraduate students.
- Recommend the establishment of subcommittees when necessary to perform specific tasks.
- Submit periodic reports to the Head of Department outlining committee activities, achievements, recommendations, and decisions.
- Perform any additional tasks assigned by the Head of Department.

Timetables and Academic Affairs Committee

Responsibilities

- Prepare and coordinate course timetables for theoretical and practical modules in accordance with the regulations and procedures approved by the Deanship of Admissions and Registration.
- Coordinate with other departments regarding interdisciplinary courses outside the department and college, in collaboration with the College Vice Deanship for Academic Affairs.
- Prepare final examination schedules and organize invigilation and examination monitoring arrangements.
- Coordinate examination procedures for general courses and courses requiring standardized examinations.
- Distribute and monitor academic advising and supervision duties among faculty members.
- Monitor student course registration processes based on reports and statistical data from the academic system.
- Assign course coordinators and follow up on their responsibilities in coordination with the Head of Department.
- Supervise the preparation of standardized assessments and related reports.
- Monitor the progress and integrity of the teaching and learning process, with the authority to recommend the formation of periodic monitoring committees when necessary.
- Submit periodic reports to the Head of Department outlining committee activities, achievements, recommendations, and decisions.
- Perform any additional tasks assigned by the Head of Department.

Community Engagement and Volunteerism Committee

Responsibilities

- Promote a culture of volunteerism among students and the wider community and its institutions.
- Regulate relationships among stakeholders in volunteer activities and define their rights and responsibilities.
- Foster values of national belonging, humanitarian engagement, and social responsibility.
- Develop students' volunteer capacities and direct them toward activities that enhance the department's contribution to community engagement initiatives.
- Propose plans, programs, and activities that highlight the department's role in community participation.
- Supervise the coordination of social events and departmental visits in collaboration with the College Deanship.
- Document and disseminate departmental activities and community engagement initiatives through official communication channels, under departmental supervision and in coordination with the College Deanship.
- Coordinate events, activities, and initiatives with relevant stakeholders under departmental supervision and in collaboration with the College Deanship.
- Submit periodic reports to the Head of Department outlining committee activities, achievements, recommendations, and decisions.
- Perform any additional tasks assigned by the Head of Department.

Alumni Affairs Committee

Responsibilities

- Compile data on program graduates, including employment rates and the proportion of employed and unemployed graduates, and analyze the underlying causes of unemployment.
- Collect feedback and reports from supervisors and employers across different sectors regarding program graduates.
- Monitor and analyze employer surveys on graduate performance and incorporate their feedback into program development.
- Review updates issued by relevant government authorities regarding employment opportunities and labor market developments for graduates.
- Establish and maintain a graduate database to facilitate effective communication after graduation, in coordination with the College Alumni Committee.
- Maintain updated graduate records and ensure continuous communication through approved communication channels.
- Organize periodic meetings with graduates from different cohorts to identify challenges faced after graduation and determine developmental programs that enhance their skills and alignment with labor market needs.
- Submit periodic reports to the Head of Department outlining committee activities, achievements, recommendations, and decisions.
- Perform any additional tasks assigned by the Head of Department.

Laboratories and Educational Services Committee

Responsibilities

- Identify and prepare laboratory requirements, including materials, consumables, and equipment.
- Monitor laboratory technicians in preparing inventory reports for laboratory assets and equipment.
- Determine educational resource needs in coordination with the Head of Department and submit them to the Deanship of Educational Services.
- Review laboratory procurement requests with suppliers, form receiving and evaluation committees, and allocate materials according to operational needs in coordination with the Head of Department.
- Follow up departmental requests with relevant entities in coordination with the Head of Department and the College Deanship.
- Ensure compliance with laboratory safety and security procedures in accordance with established standards, identify required safety needs, and coordinate with relevant entities in collaboration with the department and the College Deanship.
- Monitor technicians in submitting maintenance and operational support tickets, and ensure their completion and closure.
- Submit periodic reports to the Head of Department outlining committee activities, achievements, recommendations, and decisions.

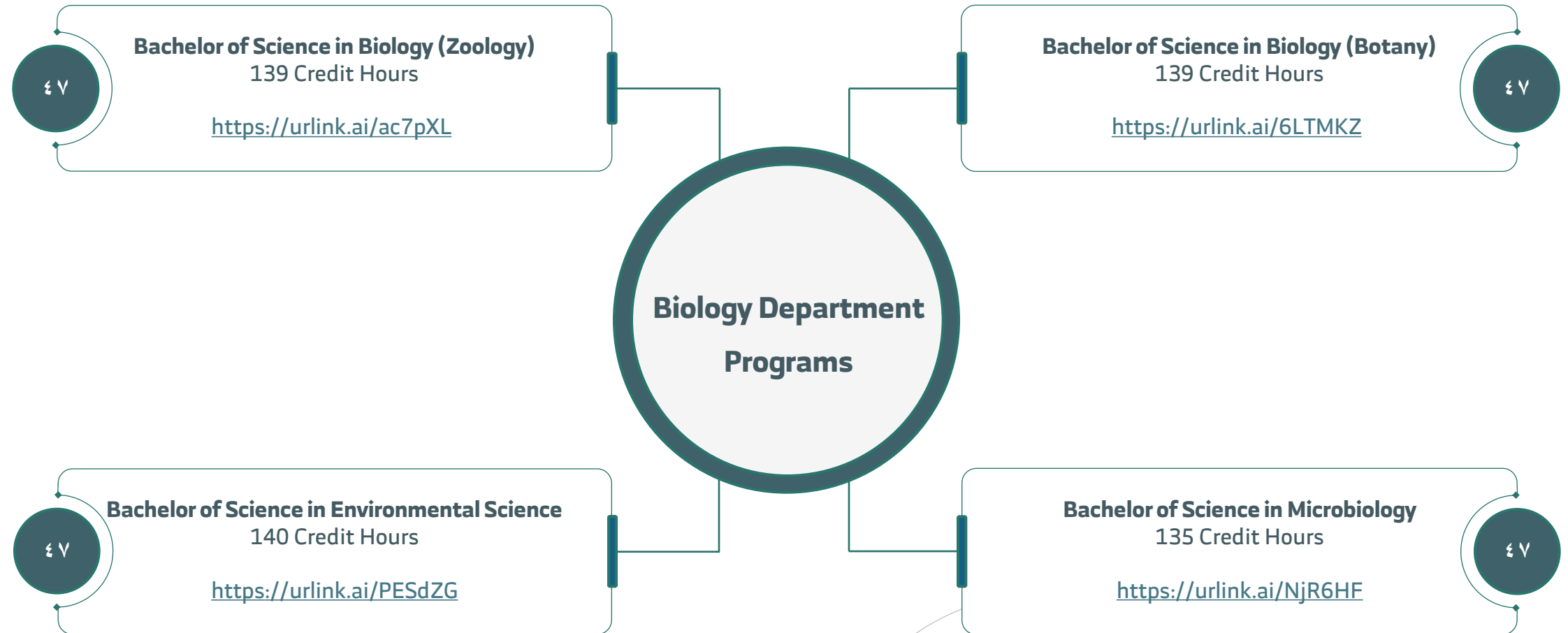
Standardized Assessment Committee

Responsibilities

- Review lists of students expected to graduate from the beginning of the first semester throughout the academic year, and verify the accuracy of their records across the main campus and branch campuses.
- Develop and prepare academic content aligned with program learning outcomes and disciplinary academic standards, where applicable, to orient and prepare students for standardized assessments.
- Develop standardized assessment questions in alignment with learning outcomes and upload them to question banks via the Blackboard system.
- Prepare and support students nominated for standardized assessments, including exit exams, and ensure their readiness to undertake such assessments.
- Monitor the administration and implementation of examinations, both in-person and online, through the Blackboard system.
- Follow up on the implementation of student surveys developed by the Standardized Assessment Follow-up Committee at the Deanship of Development and Quality, and encourage student participation.
- Prepare annual reports on committee activities and achievements and submit them to the relevant authorities.
- Maintain continuous coordination with the representative of the Deanship of Development and Quality at the college and follow up on related updates and directives.



Biology Department Programs





Biology Department Study Plans

Biology Department Program Study Plans

In line with the academic development directions of the College of Science and the University's mission to enhance the quality of education and its outcomes, the Biology Department has developed and updated its Bachelor's program study plans to align with recent advancements in the life sciences and to strengthen graduates' readiness for labor market requirements.

The study plans are based on a progressive academic structure that begins with fundamental courses in biological sciences, then advances to more in-depth specialized courses, culminating in focused tracks in Botany, Zoology, Microbiology, and Ecology. This structure enables students to acquire integrated knowledge while developing analytical and practical skills appropriate to each track.

In designing these plans, international academic standards were taken into consideration, with a strong emphasis on laboratory skills development and safety awareness in laboratory environments. In addition, cooperative training has been integrated as a core component linking theoretical knowledge with practical application, preparing students to engage effectively with diverse professional environments.

The courses have been further developed in alignment with comparable programs in leading universities, while taking into account academic accreditation requirements and relevant national standards. This ensures the achievement of clearly defined, measurable learning outcomes consistent with the National Qualifications Framework in the Kingdom of Saudi Arabia.

The study plan consists of a defined number of credit hours distributed over eight semesters and includes university requirements, college requirements, departmental core courses, specialization and track courses, in addition to the graduation project as an integrated application of the knowledge and skills acquired throughout the program.

These study plans contribute to preparing graduates with a solid scientific foundation, along with practical and research skills that qualify them for diverse career paths in laboratories, healthcare and environmental sectors, food-related industries, and biotechnology fields, as well as enabling them to pursue postgraduate studies in the life sciences.

The department continuously reviews and updates its study plans to ensure responsiveness to rapid scientific advancements and to promote integration between knowledge and practice within a dynamic learning environment.

**Study Plan for Bachelor of
Science in Biology (Botany)**

Study Plan for Bachelor of Science in Biology (Botany)

Level One – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
IND1101T	Design Thinking	2	—	—
QR1101T	Qur'an Recitation	2	—	—
ELIN1301T	English Language 1	3	—	—
CHM1101T	General Chemistry 1	3	—	—
BIO1101T	General Biology	3	—	—
BIO1102T	Basic Biological Lab Skills	3	—	—
BIO1103T	Principles of Ecology	3	—	—

Study Plan for Bachelor of Science in Biology (Botany)

Level Two – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
CUR1101T	University Skills	0	—	—
QR2102T	Qur'an Memorization 1	2	—	—
MTH1101T	Calculus 1	3	—	—
PHYS1101T	General Physics 1	3	—	—
ELIN1302T	English Language 2	3	ELIN1301T	English Language 1
BIO1104T	General Microbiology	3	BIO1101T	General Biology
CHM1416	Organic Chemistry	3	CHM1101T	General Chemistry

Study Plan for Bachelor of Science in Biology (Botany)

Level Three – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
QR2103T	Qur'an Memorization 2	2	—	—
A12001T	Introduction to Artificial Intelligence	2	—	—
BIO2306T	Biochemistry	3	CHM1416T	Organic Chemistry
BIO2307T	Marine Biology	3	BIO1103T	Principles of Ecology
BIO2308T	Plant Biology	3	BIO1101T	General Biology
BIO2305T	Molecular Biology	3	BIO1101T	General Biology
BIO2312T	English for Science	2	ELIN1302T	English Language 2
Level Three – Electives Courses				
BIO2310T	Wildlife Protection	2	BIO1103T	Principles of Ecology
BIO2311T	Protected Agriculture Management	2	BIO1102T	Basic Biological Lab Skills
BIO2309T	Ecosystem	2	BIO1103T	Principles of Ecology

Study Plan for Bachelor of Science in Biology (Botany)

Level Four – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC1201T	Values and Ethics	2	—	—
QR3104T	Qur'an Completion	2	QR1101T	Qur'an Recitation
BIO2313T	Genetics	3	BIO2305T	Molecular Biology
BIO2317T	Biostatistics	3	MTH1101T	Calculus 1
BIO2316T	Plant Anatomy	3	BIO2308T	Plant Biology
BIO2315T	Environmental Pollution	3	BIO1103T	Principles of Ecology
BIO2314T	Phytochemistry	2	BIO2306T	Biochemistry

Study Plan for Bachelor of Science in Biology (Botany)

Level Five – University Electives Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
CS2001T	Digital Technology	2	—	—
PSY3127T	Life Skills	2	—	—
SPED1102T	Diversity, Equity & Inclusion	2	—	—
ECO4312T	E-Commerce	2	—	—
HIS4315T	Cultural Heritage	2	—	—
FIN3703T	Personal Financial Planning	2	—	—
BUS1098T	Innovation & Entrepreneurship	2	—	—
THM3191T	Tourism & Hospitality	2	—	—
ARS1601T	Writing & Public Speaking	2	—	—
HP3009T	Community Health	2	—	—

Study Plan for Bachelor of Science in Biology (Botany)

Level Five – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIO3323T	Mycology & Plant Pathology	3	BIO1104T	General Microbiology
BIO3319T	Phycology	3	BIO1104T	General Microbiology
BIO3322T	Archegoniate	3	BIO2316T	Plant Anatomy
BIO3321T	Plant Physiology	3	BIO2306T	Biochemistry
BIO3320T	Plant Breeding	3	BIO2313T	Genetics
BIO3318T	Plant Ecology	3	BIO2315T	Environmental Pollution

Study Plan for Bachelor of Science in Biology (Botany)

Level Six – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIO3324T	Cooperative Training	6	—	—
Level Seven – Electives Courses				
BIO4330T	Plant Conservation	2	BIO3318T	Plant Ecology
BIO4331T	Forensic Botany	2	BIO3320T	Plant Breeding
BIO4332T	Population Genetics	2	BIO3320T	Plant Breeding

Study Plan for Bachelor of Science in Biology (Botany)

Level Seven – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC4202T	Family in Islam	2	—	—
BIO4329T	Plant Taxonomy	3	BIO3322T	Archegoniate
BIO4328T	Plant Ecophysiology	3	BIO3321T	Plant Physiology
BIO4325T	Plant Biotechnology	3	BIO3320T	Plant Breeding
BIO4327T	Plant Metabolism & Hormones	3	BIO3321T	Plant Physiology
BIO4326T	Plant Embryology	3	BIO3322T	Archegoniate

Study Plan for Bachelor of Science in Biology (Botany)

Level Eight – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BUS1099T	Professional Skills	2	—	—
BIO4335T	Economic Botany	3	BIO4328T	Plant Ecophysiology
BIO4336T	Plant Tissue Culture	3	BIO4325T	Plant Biotechnology
BIO4333T	Graduation Project	3	—	—
BIO4334T	Plant Diversity & Evolution	2	BIO4329T	Plant Taxonomy
BIO4339T	Desert Ecology	2	BIO3318T	Plant Ecology
BIO4338T	Principles of Forestry	2	BIO3318T	Plant Ecology
BIO4337T	Flora	3	BIO4329T	Plant Taxonomy

**Study Plan for Bachelor of
Science in Biology (Zoology)**

Study Plan for Bachelor of Science in Biology (Zoology)

Level One – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
IND1101T	Design Thinking	2	—	—
QR1101T	Qur'an Recitation	2	—	—
ELIN1301T	English Language 1	3	—	—
CHM1101T	General Chemistry 1	3	—	—
BIO1101T	General Biology	3	—	—
BIO1102T	Basic Biological Lab Skills	3	—	—
BIO1103T	Principles of Ecology	3	—	—

Study Plan for Bachelor of Science in Biology (Zoology)

Level Two – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
CUR1101T	University Skills	0	—	—
QR2102T	Qur'an Memorization 1	2	—	—
ELIN1302T	English Language 2	3	ELIN1301T	English Language 1
PHYS1101T	General Physics 1	3	—	—
MTH1101T	Calculus 1	3	—	—
BIO1104T	General Microbiology	3	BIO1101T	General Biology
CHM1416	Organic Chemistry	3	CHM1101T	General Chemistry

Study Plan for Bachelor of Science in Biology (Zoology)

Level Three – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
QR2103T	Qur'an Memorization 2	2	—	—
AI2001T	Introduction to Artificial Intelligence	2	—	—
BIO2208T	Animal Histology	3	BIO1101T	General Biology
BIO2205T	Animal Ecology	3	BIO1103T	Principles of Ecology
BIO2212T	English for Science	2	ELIN1302 T	English Language 2
BIO2206T	Biochemistry	3	CHM1416 T	Organic Chemistry
BIO2207T	Marine Biology	3	BIO1103T	Principles of Ecology
Level Three – Electives Courses				
BIO2209T	Ecosystem	2	BIO1103T	Principles of Ecology
BIO2210T	Wildlife Protection	2	BIO1103T	Principles of Ecology
BIO2211T	Protected Agriculture Management	2	BIO1102T	Basic Biological Lab Skills

Study Plan for Bachelor of Science in Biology (Zoology)

Level Four – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC1201T	Values and Ethics	2	—	—
QR3104T	Qur'an Completion	2	QR1101T	Qur'an Recitation
BIO2217T	Biostatistics	3	MTH1101 T	Calculus 1
BIO2216T	Cell & Molecular Biology	3	BIO2206T	Biochemistry
BIO2214T	Animal Taxonomy	3	BIO2205T	Animal Ecology
BIO2215T	Environmental Pollution	3	BIO2205T	Animal Ecology
BIO2213T	Genetics	2	BIO2206T	Biochemistry

Study Plan for Bachelor of Science in Biology (Zoology)

Level Five – University Electives Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
CS2001T	Digital Technology	2	—	—
PSY3127T	Life Skills	2	—	—
SPED1102T	Diversity, Equity & Inclusion	2	—	—
ECO4312T	E-Commerce	2	—	—
HIS4315T	Cultural Heritage	2	—	—
FIN3703T	Personal Financial Planning	2	—	—
BUS1098T	Innovation & Entrepreneurship	2	—	—
THM3191T	Tourism & Hospitality	2	—	—
ARS1601T	Writing & Public Speaking	2	—	—
HP3009T	Community Health	2	—	—

Study Plan for Bachelor of Science in Biology (Zoology)

Level Five – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIO3223T	Evolutionary Biology	2	BIO1101T	General Biology
BIO3219T	Animal Physiology	3	BIO2206T	Biochemistry
BIO3221T	Invertebrates	3	BIO2214T	Animal Taxonomy
BIO3222T	Entomology	3	BIO2214T	Animal Taxonomy
BIO3220T	Immunology	3	BIO2208T	Animal Histology
BIO3218T	Animal Biotechnology	3	BIO2213T	Genetics

Study Plan for Bachelor of Science in Biology (Zoology)

Level Six – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIO3224T	Cooperative Training	6	—	—
Level Seven – Electives Courses				
BIO4231T	Fish Farming	2	BIO2207T	Marine Biology
BIO4230T	Animal Conservation	2	BIO2214T	Animal Taxonomy
BIO4232T	Toxicology	2	BIO2215T	Environmental Pollution

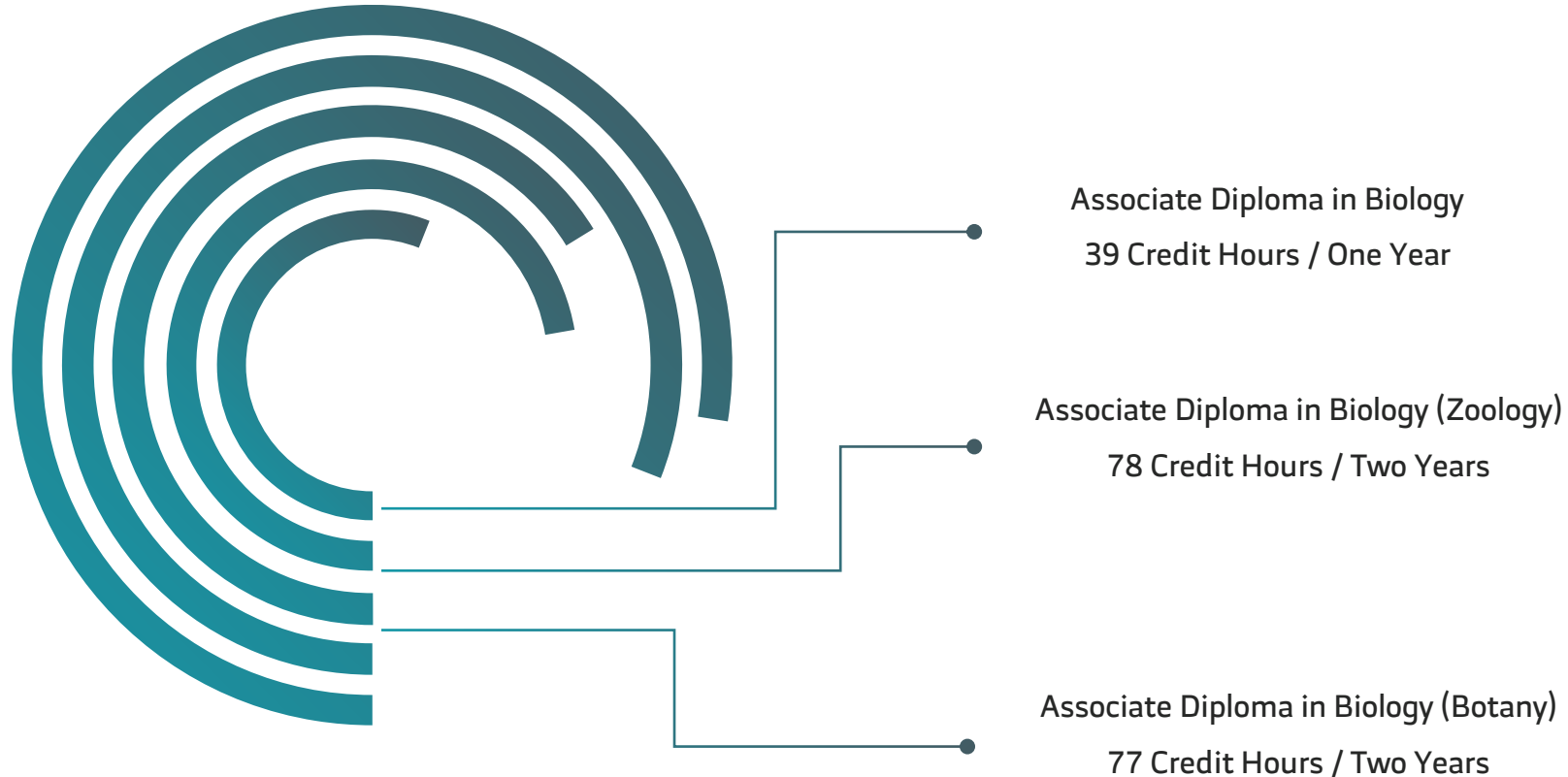
Study Plan for Bachelor of Science in Biology (Zoology)

Level Seven – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC4202T	Family in Islam	2	—	—
BIO4229T	Fauna	3	BIO2214T	Animal Taxonomy
BIO4228T	Parasitology	3	BIO3221T	Invertebrates
BIO4227T	Neurophysiology	3	BIO3219T	Animal Physiology
BIO4226T	Hematology	3	BIO3219T	Animal Physiology
BIO4225T	Vertebrates	3	BIO3221T	Invertebrates

Study Plan for Bachelor of Science in Biology (Zoology)

Level Eight – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BUS1099T	Professional Skills	2	—	—
BIO4237T	Animal Tissue Culture	3	BIO3218T	Animal Biotechnology
BIO4238T	Comparative Animal Anatomy	3	BIO4225T	Vertebrates
BIO4233T	Graduation Project	3	—	—
BIO4234T	Animal Behavior	3	BIO4227T	Neurophysiology
BIO4236T	Animal Embryology	3	BIO4225T	Vertebrates
BIO4235T	Endocrinology	3	BIO3219T	Animal Physiology

Program Exit Points for Bachelor of Science in Biology



**Study Plan for Bachelor of
Science in Microbiology**

Study Plan for Bachelor of Science in Microbiology

Level One – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
IND1101T	Design Thinking	2	—	—
QR1101T	Quran Recitation and Tajweed	2	—	—
ELIN1301T	English Language 1	3	—	—
BIO1101T	General Biology	3	—	—
CHM1101T	General Chemistry 1	3	—	—
BIOM1401 T	Introduction to Microbiology	3	—	—
BIOM1402 T	Occupational Health and Laboratory Safety	2	—	—

Study Plan for Bachelor of Science in Microbiology

Level Two – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
CUR1101T	University Skills	0	—	—
QR2102T	Quran Memorization 1	2	—	—
MTH1101T	Calculus 1	3	—	—
PHYS1101T	General Physics 1	3	—	—
ELIN1302T	English Language 2	3	ELIN1301T	English Language 1
BIOM1103 T	Plant and Animal Biology	3	BIO1101T	General Biology
BIOM1104 T	Biostatistics	2	—	—
CHM1416T	Organic Chemistry	3	CHM1101T	General Chemistry 1

Study Plan for Bachelor of Science in Microbiology

Level Three – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
QR2103T	Quran Memorization 2	2	—	—
AI2001T	Introduction to Artificial Intelligence	2	—	—
BIOM2404 T	Virology	2	BIOM1401 T	Introduction to Microbiology
BIOM2407 T	Phycology	3	BIOM1401 T	Introduction to Microbiology
BIO2212T	English for Science	2	ELIN1302 T	English Language 2
BIOM2108 T	Biochemistry	4	CHM1416 T	Organic Chemistry
BIOM2405 T	Bacteriology	2	BIOM1401 T	Introduction to Microbiology
BIOM2406 T	Mycology	3	BIOM1401 T	Introduction to Microbiology

Study Plan for Bachelor of Science in Microbiology

Level Four – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC1201T	Values and Ethics	2	—	—
QR3104T	Completion of Quran Memorization	2	QR1101T	Quran Recitation and Tajweed
BIOM2413 T	Molecular Microbiology	2	BIOM2405 T BIOM2108 T	Bacteriology Biochemistry
BIOM2312 T	Parasitology	3	BIOM1103 T BIOM1401 T	Plant and Animal Biology Introduction to Microbiology
BIOM2411 T	Hematology	3	BIOM1103 T	Plant and Animal Biology
BIOM2410 T	Microbial Plant Diseases	3	BIOM1103 T BIOM2406 T	Plant and Animal Biology Mycology
BIOM2409T	Microbial Physiology	3	BIOM2405 T BIOM2406 T	Bacteriology Mycology

Study Plan for Bachelor of Science in Microbiology

Level Five – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC4202T	Family in Islam	2	ICC1201T	Values and Ethics
BIOM3417 T	Food Microbiology	3	BIOM2409T	Microbial Physiology
BIOM3416 T	Soil Microbiology	3	BIOM2409T	Microbial Physiology
BIOM3415 T	Water and Wastewater Microbiology	3	BIOM2409T	Microbial Physiology
BIOM3414T	Antimicrobial Agents	3	BIOM2409T	Microbial Physiology
BIOM3418T	Immunology	2	BIOM2411 T	Hematology

Study Plan for Bachelor of Science in Microbiology

Level Five – University Electives Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
THM3191T	Tourism and Hospitality	2	—	—
BUS1098T	Innovation and Entrepreneurship	2	—	—
FIN3703T	Personal Financial Planning Skills	2	—	—
CS2001T	Digital Technology	2	—	—
HP3009T	Community Health	2	—	—
PSY3127T	Life Skills	2	—	—
SPED1102T	Diversity, Equity, and Inclusion	2	—	—
ECO4312T	E-Commerce	2	—	—
ARS1601T	Writing and Public Speaking	2	—	—
HIS4315T	Heritage and Cultural Diversity	2	—	—

Study Plan for Bachelor of Science in Microbiology

Level Five – Program Elective Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIOM3481T	Vaccines and Immunization	2	BIOM3418T	Immunology
BIOM3482T	Microbiome	2	BIOM3422T	Microbial Ecology
BIOM3483T	Cyanobacteria	2	BIOM2405 T	Bacteriology
BIOM3384T	Histochemistry	2	—	—
BIOM3480T	Infection Control	2	BIOM3419T	Medical Microbiology

Study Plan for Bachelor of Science in Microbiology

Level Six – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BUS1099T	Professional Development Skills	2	—	—
BIOM3423T	Biofuels	3	BIOM2409T	Microbial Physiology
BIOM3422 T	Microbial Ecology	2	BIOM3416 T	Soil Microbiology
BIOM3421 T	Food Industrial Microbiology	2	BIOM3417 T	Food Microbiology
BIOM3420 T	Food Quality Assurance	2	BIO3219T	Animal Physiology
BIOM3419 T	Medical Microbiology	3	BIOM2405 T BIOM3418T	Bacteriology Immunology
BIOM3424 T	Microbial Biotechnology	3	BIOM2413 T	Molecular Microbiology

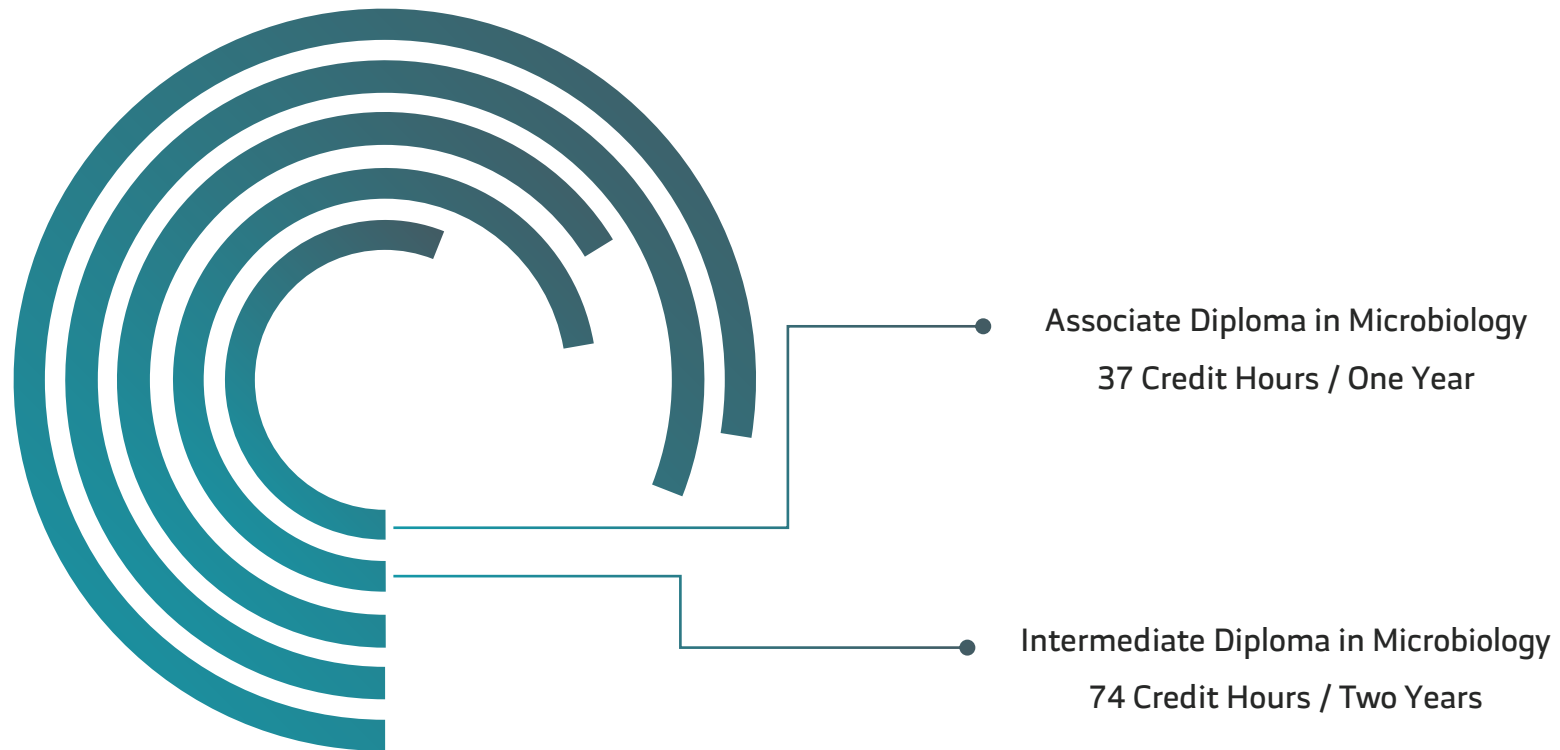
Study Plan for Bachelor of Science in Microbiology

Level Seven – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIOM4495T	Cooperative Training	6	—	—
Level Eight – Elective Courses				
BIOM4487 T	Waterborne and Foodborne Diseases	2	BIOM3415 T	Water and Wastewater Microbiology
			BIOM3417 T	Food Microbiology
BIOM4486 T	Public Health Microbiology During Hajj and Umrah Seasons	2	BIOM3419 T	Medical Microbiology
BIOM4485 T	Epidemiology	2	BIOM3419 T	Medical Microbiology
BIOM3480 T	Infection Control	2	BIOM3419 T	Medical Microbiology

Study Plan for Bachelor of Science in Microbiology

Level Eight – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIOM4490 T	Graduation Project	3	—	—
BIOM4428 T	Petroleum Microbiology and Bioremediation	3	BIOM2409T	Physiology of Microorganisms
BIOM4427 T	Industrial Microbiology	3	BIOM2409T	Physiology of Microorganisms
BIOM4426 T	Bioinformatics	2	BIOM3424 T	Microbial Biotechnology
BIOM4425 T	Microbial Toxicology	2	BIO4227T	Neurophysiology
BIOM4429 T	English Microbiological Terminology	2	—	—

Program Exit Points for Bachelor of Science in Microbiology



**Study Plan for Bachelor of Science
in Environmental Science**

Study Plan for Bachelor of Science in Environmental Science

Level One – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
IND1101T	Design Thinking	2	—	—
QR1101T	Qur'an Recitation and Tajweed	2	—	—
ELIN1301T	English Language I	3	—	—
BIO1101T	General Biology	3	—	—
CHM1101T	General Chemistry I	3	—	—
BIOE1502T	Principles of Ecology	2	—	—
BIOE1501T	Ecosystems of the Kingdom of Saudi Arabia	3	—	—

Study Plan for Bachelor of Science in Environmental Science

Level Two – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
CUR1101T	University Skills	0	—	—
QR2102T	Memorization of the Holy Qur'an I	2	—	—
MTH1101T	Calculus I	3	—	—
PHYS1101T	General Physics I	3	—	—
ELIN1302T	English Language II	3	ELIN1301T	English Language I
BIOE1401T	Environmental Microbiology	3	BIO1101T	General Biology
BIOE1301T	Plant Morphology and Anatomy	2	BIO1101T	General Biology
CHM1415T	Organic Chemistry	3	CHM1101T	General Chemistry I

Study Plan for Bachelor of Science in Environmental Science

Level Three – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
QR2103T	Memorization of the Holy Qur'an II	2	—	—
AI2001T	Introduction to Artificial Intelligence	2	—	—
CHM2227T	Instrumental Chemical Analysis	3	CHM1415T	Organic Chemistry
PHYS2801T	Environmental Physics	3	PHYS1101T	General Physics II
BUS1012T	Business Management	3	—	—
BIOE2302T	Vegetation Cover	3	BIOE1502T	Principles of Ecology
GEO4518T	Applications of Environmental Remote Sensing	2	BIOE1502T	Principles of Ecology
BIOE2503T	Environmental Pollution	2	BIOE1502T	Principles of Ecology
BIOE2201T	Faunal Ecology	2	BIOE1501T	Ecosystems of the Kingdom of Saudi Arabia

Study Plan for Bachelor of Science in Environmental Science

Level Four – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC1201T	Values and Ethics	2	—	—
QR3104T	Qur'an Completion Recitation	2	QR1101T	Qur'an Recitation and Tajweed
PHYS2706T	Heat and Waves	2	PHYS1101T	General Physics I
BIOE2504T	Air and Water Pollution	3	BIOE2503T	Environmental Pollution
CHM2240T	Quantitative Chemical Analysis	3	CHM2227T	Instrumental Chemical Analysis
BIOE2506T	Environmental Regulations and Systems	1	BIOE1501T	Ecosystems of the Kingdom of Saudi Arabia
BIOE2505T	Environmental Biochemistry	3	CHM1415T	Organic Chemistry
BIOE2303T	Flora Ecology	3	BIOE1501T	Ecosystems of the Kingdom of Saudi Arabia

Study Plan for Bachelor of Science in Environmental Science

Level Five – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
ICC4202T	The Family in Islam	2	—	—
BIOE3507T	Environmental Genetics	3	BIO1101T	General Biology
BIOE3202T	Environmental Animal Physiology	3	BIOE2505T	Environmental Biochemistry
BIOE3508T	Population and Community Ecology	2	BIOE1501T	Ecosystems of the Kingdom of Saudi Arabia
BIOE3509T	Soil Science	3	BIOE1502T	Principles of Ecology
BIOE3510T	Marine Ecology	3	BIO1101T BIOE1502T	General Biology Principles of Ecology
PHYS3706T	Renewable Energy Sources	2	PHYS2801T	Environmental Physics

Study Plan for Bachelor of Science in Environmental Science

Level Five – Elective Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
THM3191T	Tourism and Hospitality	2	—	—
BUS1098T	Innovation and Entrepreneurship	2	—	—
FIN3703T	Personal Financial Planning Skills	2	—	—
CS2001T	Digital Technology	2	—	—
HP3009T	Community Health	2	—	—
PSY3127T	Life Skills	2	—	—
SPED1102T	Diversity, Equity, and Inclusion	2	—	—
ECO4312T	E-Commerce	2	—	—
ARS1601T	Writing and Oratory	2	—	—
HIS4315T	Heritage and Cultural Diversity	2	—	—

Study Plan for Bachelor of Science in Environmental Science

Level Six – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	Prerequisite Course
BIOE3203T	Immunology and Epidemiology	3	BIOE1401 T	Environmental Microbiology
BIOE3203T	Environmental Biotechnology	3	BIOE3507	Environmental Genetics
BOIE3511T	Biodiversity Conservation	3	BIOE2303T	Flora Ecology
			BIOE2201T	Faunal Ecology
CHM3233T	Chemical Treatment of Environmental Pollution	2	CHM2227T	Instrumental Chemical Analysis
			BIOE2504T	Air and Water Pollution
MTH1512T	Biostatistics	2	MTH1101T	Calculus I
PHYS3707T	Radiation Physics	3	PHYS1101T	General Physics I
Level Six – Elective Courses				
BIOE3517T	Bioremediation	2	—	—
BIOE3516T	Biological Control	2	—	—
CHM3440T	Green Chemistry	2	—	—

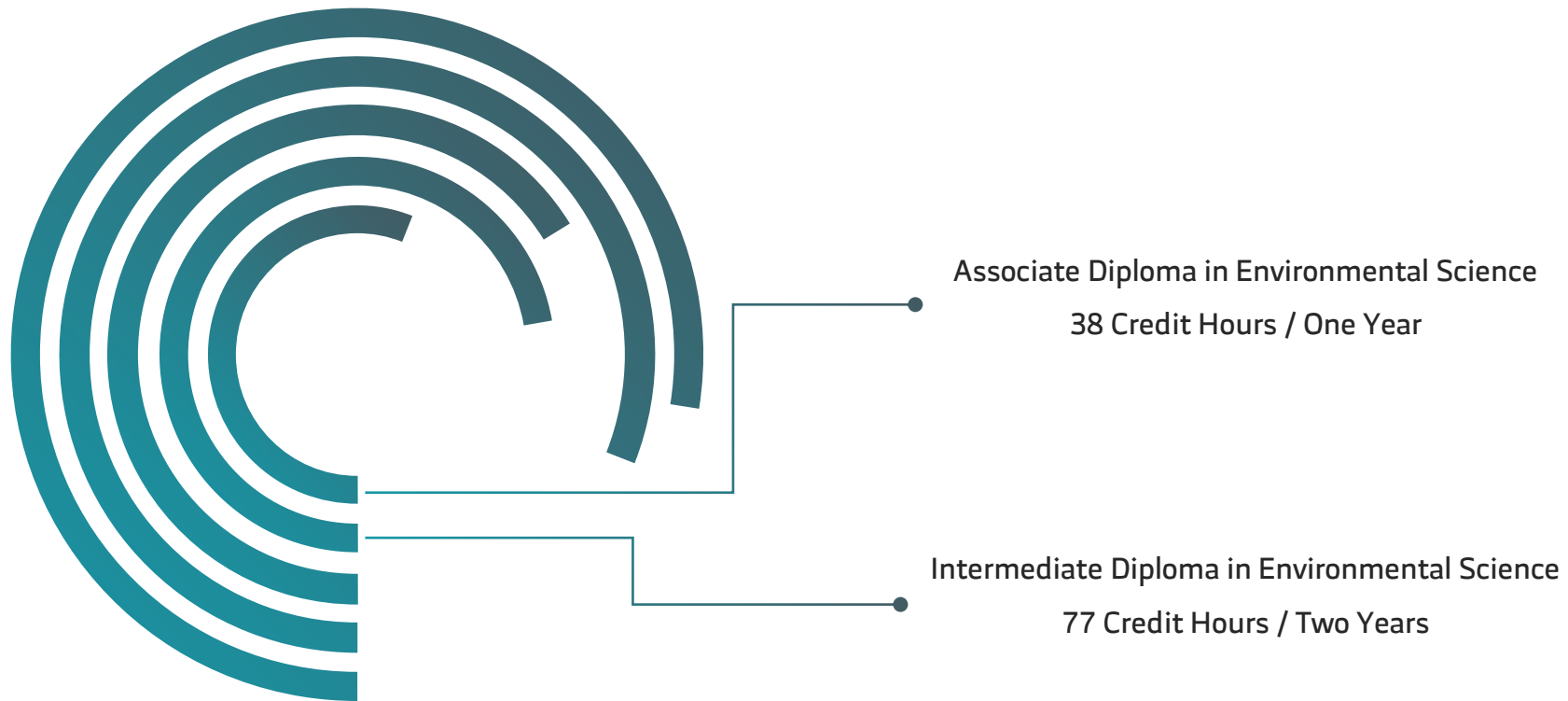
Study Plan for Bachelor of Science in Environmental Science

Level Seven – Required Courses					
Course Code	Course Title	Credit Hours	Prerequisite Code		
BIOE4101T	Cooperative Training	6	—	—	—
Level 8 – Elective Courses					
BIOE4519T	Bioenergy and Renewable Energy	2	—	—	—
ECO4944T	Circular Economy	2	—	—	—
BIOE4518T	Behavioral Ecology	2	—	—	—

Study Plan for Bachelor of Science in Environmental Science

Level Eight – Required Courses				
Course Code	Course Title	Credit Hours	Prerequisite Code	
BUS1099T	Professional Development Skills	2	—	—
BIOE4514T	Natural Resources Management and Restoration	2	BIOE2302T	Vegetation Cover
BIOE4513T	Environmental Toxicology	2	BIOE2503T	Environmental Pollution
BIOE4304T	Physiological Ecology	3	BIOE2505T BIOE2302T	Environmental Biochemistry Vegetation Cover
BIOE4102T	Graduation Project	3	BIO4329T	Plant Taxonomy
CHM4250T	Chemical Safety	2	CHM3233T	Chemical Treatment of Environmental Pollution
BIOE4515T	Environmental Monitoring and Assessment	3	BIOE2503T	Environmental Pollution
			BIOE2504T	Air and Water Pollution

Program Exit Points for Bachelor of Science in Environmental Science





Policies and Procedures for Academic Program and Course Modification

Policies and Procedures for Modifying Academic Programs and Courses

- The Biology Department places continuous emphasis on the development of its academic programs and course offerings to align with scientific advancement in the life sciences and respond to labor market needs. Within this framework, the department adopts structured policies and procedures to ensure the systematic periodic review and updating of programs and courses based on clearly defined academic principles.
- These policies encompass all departmental programs and specialization tracks and include mechanisms for modifying study plans, updating course content, and introducing new tracks or courses when necessary. They also regulate the decision-making process, starting from academic proposals, passing through scientific review within the relevant committees, and culminating in formal approval through the established institutional channels.
- These policies aim to ensure coherence among program components and alignment of learning outcomes with the National Qualifications Framework, while promoting a culture of continuous improvement based on feedback from students, faculty members, and employers. They also contribute to documenting all stages of modification and development, thereby enhancing transparency and strengthening academic quality assurance.
- The implementation of these policies reflects the department's commitment to maintaining a structured academic system that balances scientific stability with flexibility for continuous improvement and development.



<https://urlink.ai/PMj84h>

Policies and Procedures for Modifying
Programs, Study Plans, and Courses



Graduation Projects and Cooperative Training

Graduation Project in Biology

The graduation project is a core academic component of the Bachelor of Science in Biology program and is offered as a course in the eighth level. It aims to enable students to apply the knowledge and skills acquired throughout their studies to investigate a specific scientific topic within one of the specialization tracks, following a structured research methodology.

Under the supervision of a faculty member, the student identifies a scientific problem or research question, designs the study, collects and analyzes data using appropriate methods, and interprets the findings in light of relevant scientific literature. The project is completed with a written scientific report and an oral presentation demonstrating the student's ability to organize, analyze, and communicate scientific information.

The graduation project contributes to the development of research skills, critical thinking, and data analysis, while enhancing student autonomy and problem-solving abilities in scientific contexts. It is assessed according to defined criteria, including content quality, methodological rigor, depth of analysis, and presentation and discussion performance.

The department organizes an annual scientific day for presenting graduation projects in the form of scientific posters, allowing students to showcase their work and strengthening scientific communication and knowledge exchange.

The department has developed a dedicated procedural guide for graduation projects, outlining topic selection, supervision regulations, implementation steps, and assessment criteria, ensuring procedural clarity and quality assurance of outcomes.



<https://urlink.ai/6kkknw>

Graduation Projects Guide

Cooperative Training in the Biology Department

Cooperative training is considered an important practical component of the Biology Program. It is offered as a course in the sixth level after students complete half of the credit hours required in the study plan. The training aims to bridge academic learning with practical application and provide students with the opportunity to gain field experience in real work environments.

The training is implemented in organizations related to the field of biology, such as laboratories, healthcare institutions, environmental agencies, and industries associated with food and biotechnology. During the training period, students participate in practical tasks that contribute to the development of their professional skills and their understanding of workplace requirements.

Cooperative training helps develop communication skills, teamwork, and professional commitment. It also enhances students' ability to apply scientific concepts in practical contexts. Student performance is evaluated through periodic reports, assessments from the training organization, and a final presentation.

The department has also developed a procedural guide for cooperative training that clarifies the training objectives, implementation mechanisms, roles of participating parties, and evaluation criteria, ensuring the effective organization of the training process and the achievement of its educational objectives.



<https://urlink.ai/kFfzdQ>

Cooperative Training Guide



Academic Affairs

Registration, Add, and Drop Policies

- The Deanship of Admission and Registration determines the schedule for registration, add and drop periods, and all related procedures for each academic semester in accordance with the annual academic calendar approved by the University Council.
- The minimum academic load for a student shall not be less than ten credit hours. Exceptions include students expected to graduate in the same semester with fewer than ten remaining credit hours, students not following the study plan, academically struggling students due to the unavailability of offered courses by departments, or visiting students at another university.
- The maximum academic load during the summer semester shall be ten credit hours, excluding equivalent transferred courses.
- When registering courses, students must ensure that there are no timetable conflicts and that all prerequisite requirements for the intended courses are fulfilled. The academic advisor may approve or reject requests to override prerequisites, and the procedure must be approved by the Head of the Department.
- Students are not permitted to register for academic courses simultaneously with cooperative training, or equivalent programs requiring full-time commitment, as specified in the approved study plans and the cooperative training guide approved by the University Council.
- The Department Council approves the academic schedule according to the study plans and the regulations approved by the Deanship of Admission and Registration.
- The academic schedule may not be modified, nor courses deleted by the department after the beginning of the semester except in necessary cases and with the approval of the Dean of the College, based on a request from the Head of the Department and with the approval of the Dean of the Deanship of Admission and Registration.
- Students are not permitted to withdraw from courses in First-Year Programs, Preparatory Year Programs, or courses offered under the full academic year system.
- All courses assigned to the academic level of students enrolled in First-Year Programs and Preparatory Year Programs shall be automatically registered each semester, regardless of whether prerequisite requirements for the courses have been fulfilled.
- If a student has no registered courses in their academic schedule after the end of the registration period, the student shall be considered withdrawn from الدراسة and their enrollment will be terminated at the end of the semester unless a request for deferment or official withdrawal is submitted within the prescribed period.
- The Biology Department is committed, when establishing, modifying, or developing its academic programs and study plans, to complying with the procedural guide for academic programs and study plans approved by the University Council.
- All midterm and final examinations shall be conducted in person for all courses, regardless of the mode of instruction adopted.
- The course instructor shall adhere to the mode of instruction specified in the approved course specification, including its implementation procedures, and must inform students of these arrangements at the beginning of the course.
- Students enrolled in different instructional modes shall be treated equally with regard to study regulations, examinations, grades, academic evaluations, GPA calculation, and academic procedures, in accordance with the Implementing Regulations for Study and Examinations for Undergraduate Programs at Umm Al-Qura University.

Course Withdrawal Regulations

- Students may withdraw from a maximum of two courses during an academic semester in accordance with the procedures determined by the Deanship of Admission and Registration and within the deadlines announced in the academic calendar for each semester.
- Students are not permitted to withdraw from a course that is equivalent to or lower than their academic level according to the approved study plan. This restriction does not apply to students whose cumulative GPA is 3.5 or higher.
- Students are not allowed to withdraw from the same course more than once throughout their period of study.
- A student who withdraws from a course shall receive the grade designation “Withdrawn with Excuse (W).”
- Students may not withdraw from a course during the summer semester, in First-Year Programs, Preparatory Year Programs, or courses offered under the full academic year system.
- Course withdrawal must not result in reducing the student’s academic load below the minimum required semester credit hours.
- If a student is registered in only one course, including cooperative training or its equivalent, the student is not permitted to withdraw from that course. However, the student may apply for deferment or official withdrawal from the semester in accordance with Articles (16) and (18) and their implementing regulations.

Assessment, Examinations, and Grade Recording Regulations

- Faculty members shall adhere to the approved mechanism for calculating coursework grades, final examination grades, and assessment methods as specified in the official course specification.
- Students must be informed of their coursework grades at least one week before the final examination.
- The schedules of midterm and final examinations, as well as all academic procedures and deadlines, shall be included in the annual academic calendar prepared by the Deanship of Admission and Registration and approved by the University Council before the beginning of the academic year.
- The College Council may, when needed, form a committee to cooperate with the department in organizing final examination procedures. The committee shall undertake the following responsibilities:
 1. Monitoring the conduct of examinations according to the approved schedules and designated venues.
 2. Following up on grade submission processes by academic departments after ensuring compliance with all official procedures and regulations.
- Final examination answer sheets shall be submitted to the Head of the Department offering the course and retained for one year, after which they shall be destroyed through an official documented process.
- Electronic response records shall be retained for one academic year within the university's approved electronic systems.
- Faculty members shall be granted access to grade submission according to the procedures established by the Deanship of Admission and Registration and within the deadlines specified in the academic calendar. The final course grade must be submitted within a maximum period of 48 hours from the end of the final examination period for the course.
- In cases where a grade has been incorrectly recorded after official approval, the following procedures shall be applied:
 1. An official report explaining the reasons for the requested amendment shall be prepared and signed by the course instructor, the Head of the Department offering the course, the Vice Dean for Academic Affairs, and the Dean of the College, with all supporting evidence and documentation attached.
 2. The grade amendment must be completed no later than the fifth week of the following semester or the subsequent academic year.

Regulations Governing Denial of Entry to the Final Examination

- A student shall be denied entry to the final examination if their attendance falls below the required threshold, where absence exceeds 25% with an excuse or 15% without an excuse of the total lectures, practical sessions, fieldwork, and clinical training sessions, as applicable.
- A student who is denied entry to the final examination shall be considered to have failed the course, and the grade “Denied (DN)” or “(H)” shall be recorded in the grade sheet.
- Students shall be formally notified of their denial from entering the final examination in advance of the exam date, once the maximum absence limit has been exceeded.

Regulations Governing Make-Up Examinations and Excuses for Final Examinations

- If a student is unable to attend the final examination due to a valid excuse, the College or Institute Council may accept the excuse and permit the student to take a make-up examination no later than the end of the following academic level, the following semester, or the following academic year for colleges or institutes operating under the full academic year system. The student shall receive the grade earned in the make-up examination, or a failing grade “F” if the student does not attend the make-up examination.
- A student absent from the final examination must submit their excuse to the Head of the Department offering the course.
- The Head of the Department shall forward the student’s request, together with their recommendation, to the College Council. If the excuse is approved by the College Council, the student shall be granted a make-up examination no later than the end of the following semester. The student shall be notified through the university email system of the date and venue of the make-up examination. The student’s final course grade shall then be calculated based on the make-up examination score combined with the coursework grades.
- A make-up examination may be granted to a student upon approval of the College Council when a valid excuse exists, such as illness supported by an approved medical report, death of a relative up to the third degree, imprisonment or detention, natural disasters, accidents, or similar circumstances.
- If a student is absent from the make-up examination without an excuse accepted by the College Council, the student’s grade shall be calculated in accordance with the provisions stated in Article Thirty-One of these regulations.

Grade Symbols in the Academic Record						
Percentage Grade	Grade in English	Grade in Arabic	Symbol in English	Symbol in Arabic	Grade Weight (Out of 5)	Grade Weight (Out of 4)
100 - 95	Exceptional	ممتاز مرتفع	A+	أ+	5.0	4.0
95 إلى أقل من 90	Excellent	ممتاز	A	أ	4.75	3.75
90 إلى أقل من 85	Superior	جيد جداً مرتفع	B+	ب+	4.5	3.5
85 إلى أقل من 80	Very Good	جيد جداً	B	ب	4.0	3.0
80 إلى أقل من 75	Above Average	جيد مرتفع	C+	ج+	3.5	2.5
75 إلى أقل من 70	Good	جيد	C	ج	3.0	2.0
70 إلى أقل من 65	High Pass	مقبول مرتفع	D+	د+	2.5	1.5
65 إلى أقل من 60	Pass	مقبول	D	د	2.0	1.0
أقل من 60	Fail	راسب	F	هـ	1.0	0
-	In-Progress	مستمر	IP	م	-	-
-	In-Complete	غير مكتمل	IC	ل	-	-
-	Denile	محروم	DN	ح	1.00	0
60 وأكثر	No grade-Pass	ناجح دون درجة	NP	ند	-	-
أقل من 60	No grade-Fail	راسب دون درجة	NF	هد	-	-
-	Withdrawn	منسحب بعذر	W	ع	-	-
-	Exemption	معفى	E	عف	-	-



Student Guidance Manuals



<https://urlink.ai/eezyKN>

Student Assessment
Procedures Guide



<https://urlink.ai/5RMTJt>

Admission Guide at Umm Al-
Qura University



<https://urlink.ai/QZdPep>

Admission Guide at Umm Al-
Qura University



<https://urlink.ai/68CK6R>

Organizational Guide for
General Appearance



<https://urlink.ai/NJxpRg>

Code of Conduct and
Discipline Guide

**Scientific Research in the
Biology Department**

Research Plan of the Biology Department

In light of the rapidly evolving biological and environmental challenges, the Biology Department has developed a five-year research plan beginning in 2025. The plan aims to direct research efforts toward scientific and applied priority areas that contribute to addressing issues such as food security, environmental changes, and public health.

The plan focuses on enhancing the research capabilities of faculty members and students, developing research infrastructure, and supporting interdisciplinary research. It also emphasizes building scientific partnerships with research institutions at both local and international levels in order to promote scientific excellence.

The plan covers research themes related to biotechnology, environmental systems, and health applications, reflecting the department's role in producing applicable scientific knowledge.

The department is committed to monitoring the implementation of this plan through the preparation of an annual report documenting its achievements in scientific publication and research projects. This evaluation process is used to support continuous improvement and guide research efforts efficiently.

This plan represents a structured framework that strengthens the department's research standing and supports its contribution to knowledge development and community service.



<https://urlink.ai/aEp8pX>

Research Plan of the Biology
Department



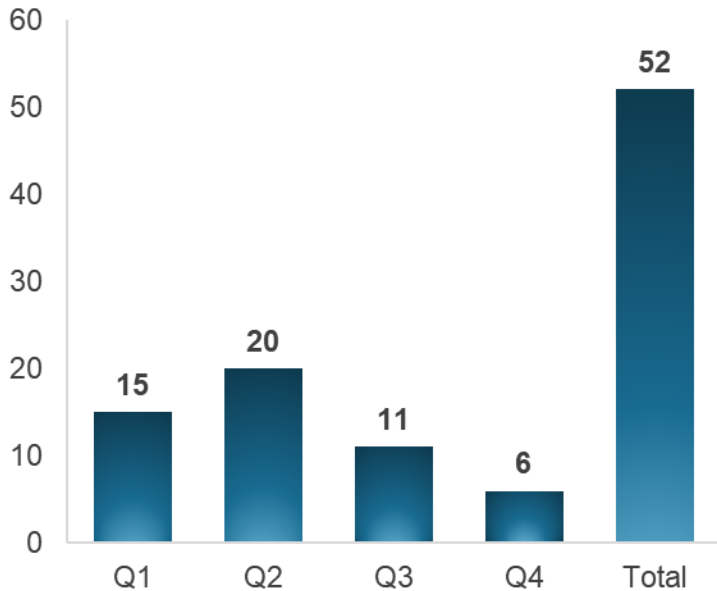
<https://urlink.ai/hCmrz7>

Research Plan Report for the
Academic Year 1446 AH

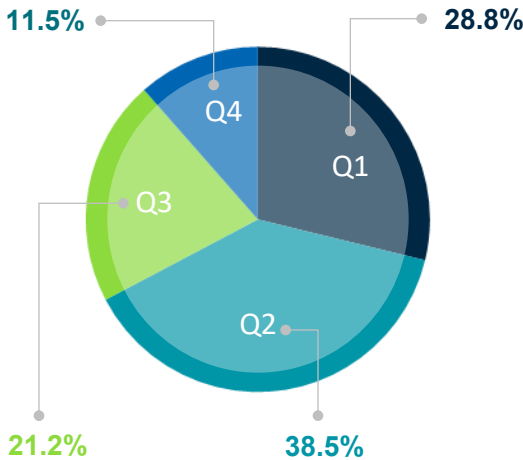
Summary of the Scientific Research Outputs of the Biology Department

Academic Year 1446 AH - 2025

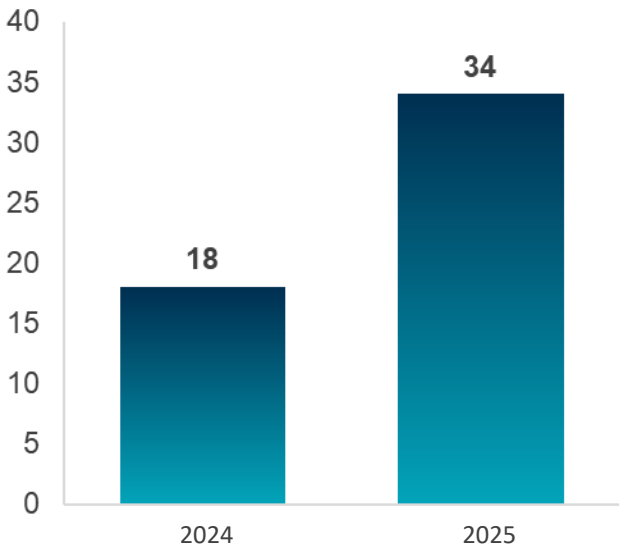
Distribution of Publications by Quartile 1446H – 2025



Journal Classification over 1446H – 2025



Publications during 1446H – 2025



58

Total number of citations

67%

Percentage of Q1/Q2 publications

52

Total number publications



Community Service in the Biology Department

Community Service Activities in the Biology Department

The Biology Department places strong emphasis on its role in community service and in promoting scientific awareness in the biological sciences. Faculty members and students actively participate in organizing and implementing a range of activities and events targeting different segments of society, particularly in the areas of health awareness, environmental education, and scientific literacy.

These activities are carried out in cooperation with the Volunteer Work Platform, which provides an institutional framework for organizing community initiatives in a structured and systematic manner. This collaboration also broadens student engagement in community participation and fosters values of social responsibility. In addition, these activities are aligned with learning outcomes that support the development of communication skills, teamwork, and the practical application of scientific knowledge.

The department ensures that all activities and events are documented annually through the Volunteer Work and Community Responsibility Committee. Periodic reports are prepared to reflect the level of participation and the nature of implemented initiatives, contributing to impact assessment and continuous improvement.

These activities represent an extension of the department's academic mission and a manifestation of the integration between education and community service, thereby enhancing the department's presence within its social and scientific environment.



<https://urlink.ai/Ej9LfJ>

Community Service Documentation
for the Academic Year 1445 AH



<https://urlink.ai/DWNZF6>

Community Service Documentation
for the Academic Year 1446 AH



Laboratories and Facilities in the Biology Department

Biology Department Laboratories

The Biology Department maintains an integrated laboratory system that constitutes a fundamental pillar in supporting teaching, training, and scientific research. The department comprises a total of (22) laboratories distributed between the male campus in Al-Abdiyyah (15 laboratories) and the female campus in Al-Zahir (7 laboratories). These laboratories are designed to cover the various branches of biological sciences, ensuring integration between theoretical and practical aspects and enhancing the quality of practical and research-based training.

At the male campus in Al-Abdiyyah, the laboratories are organized into specialized scientific units. These include two General Biology laboratories dedicated to foundational courses and introductory applications, and five Microbiology laboratories covering fungi, bacteria, fermentation processes, microbial physiology, medical microbiology, and food microbiology. The campus also includes a laboratory for animal physiology, a dissection laboratory, and two laboratories for genetics and biotechnology focusing on DNA studies and genetic engineering applications. In addition, there is a plant tissue culture laboratory, a plant physiology and environmental pollution laboratory, as well as specialized laboratories in zoology, the fauna of the Kingdom, invertebrates, and parasitology, reflecting the comprehensive scientific structure in studying biodiversity. Research activities are further supported by four dedicated laboratories for microbiology, animal, and plant research.

At the female campus in Al-Zahir, the department includes seven scientific laboratories that serve all specializations within the department. These laboratories provide an integrated applied learning environment that contributes to the development of practical skills and the enhancement of research competencies across various fields of biological sciences.

Laboratory Equipment and Instruments

Laboratory Equipment	الأجهزة المعملية
Sensitive Balance	ميزان حساس
pH Meter	جهاز قياس الأس الهيدروجيني
Centrifuge	جهاز الطرد المركزي
Gel Electrophoresis System	جهاز الرحلان الكهربائي للحمض النووي
UV-Visible Spectrophotometer	جهاز قياس الطيف الضوئي
Autoclave	جهاز تعقيم
Hot Air Oven (Drying Oven)	فرن تجفيف حراري
Water Bath	حمام مائي
Bacterial Incubator	حاضنة بكتيرية
Shaking Incubator	حاضنة هزازة
Orbital Shaker	هزاز مخبري مداري
Magnetic Stirrer with Hot Plate	جهاز تحريك مغناطيسي مع تسخين
Hot Plate	جهاز تسخين كهربائي
Light Microscope	مجهر ضوئي
Dissecting Microscope	مجهر تشريحي
Digital Imaging Microscope	مجهر مزود بنظام تصوير رقمي

Laboratory Equipment and Instruments

Laboratory Equipment	الأجهزة المعملية
Biosafety Cabinet (Fume Hood)	كابينة السلامة الحيوية (دولاب غازات)
Gas Cylinder Cabinet	دولاب أسطوانات الغازات
Distillation Unit	جهاز تقطير المياه
Gel Documentation System (UV Transilluminator)	جهاز توثيق الجل بالأشعة فوق البنفسجية
Colony Counter	جهاز عد المستعمرات البكتيرية
Hemoglobin Meter	جهاز قياس الهيموجلوبين
Hematology Analyzer	جهاز تحليل الدم
Ultra-Low Temperature Freezer	مجمد فائق التبريد
Laboratory Refrigerator	ثلاجة مختبرية
Ice Maker	جهاز صنع الثلج
Rotary Microtome	ميكروتوم دوار
Slide Projector	جهاز عرض الشرائح
Computer and Data Analysis System	حاسوب تحليلي
Water Filtration System	جهاز ترشيح المياه
Rain Gauge	مقياس المطر

Laboratory Equipment and Instruments

Laboratory Tools	الأدوات المعملية
Beakers	بيكرات زجاجية
Erlenmeyer Flasks	دوارق مخروطية
Volumetric Flasks	دوارق حجمية
Graduated Cylinders	مخبار مدرج
Test Tubes	أنابيب اختبار
Centrifuge Tubes	أنابيب طرد مركزي
Glass Pipettes	ماصات زجاجية
Pasteur Pipettes	ماصات باستير
Petri Dishes	أطباق بتري
Watch Glass	زجاجة ساعة
Glass Funnel	قمع زجاجي
Glass Stirring Rod	قضيب زجاجي للتحريك
Sample Storage Bottles	زجاجات حفظ العينات
Staining Jars	جارات صبغ الشرائح
Glass Filtration Apparatus	أدوات ترشيح زجاجية



Appendices





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<https://urlink.ai/TPBPtA>

قسم الأحياء - كلية العلوم - جامعة أم القرى

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