

رؤية
VISION
2030

College Of Science
Jouf University
Biology Department


جامعة الجوف
Jouf University


كلية العلوم
College of Science

Biology Program Guide

Designed

By

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

السلام عليكم ورحمة الله وبركاته



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Welcoming word

On behalf of my fellow staff members and students in the department of Biology, it is an honor of mine to welcome your visit to the site of our department. The College of Biology has a team of approximately forty male and female administrators and technicians who dedicate their time in order to facilitate the services of the department. Over the past few years, the university has recognized the importance of the Saudi vision of 2030; therefore, it took bold and confident steps to compete locally and internationally. The university has started developing the field of education by raising the level of the scholarly outputs because the vision urges the university to meet the requirements of society and the labor market. The university is preparing its students to effectively serve their country with knowledge and skills. Accordingly, the Biology program has been consistently developing.

Currently, the department is seeking to activate partnerships with the local community of society, especially with the graduates' fields of work. Finally, the spirit of collaboration and sincere efforts are crucial principles that assist the Department of Biology to achieve its goals.



Program Coordinator

Dr. Barakat Al-Rashidi

Contact US

Contact  info

Program Coordinator

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Emergence of the program

- The Biology Department was established with the establishment of the College of Science in 21/10/1427 AH (2006 AD) at Jouf University as one of the faculty's departments (Mathematics, Biology, and physics).
- The department was opened by three faculty members in their various specializations (two associate professor and one assistant professor), and now it includes more than thirty members and one faculty member. The Department of Biology includes various majors, including zoology, botany, and microbiology. A student obtains a bachelor's degree in biology after passing 133 credit hours.
- Since its establishment, the department has developed a new study plan aiming at keeping pace with the stage, so that specialized scientific cadres could be prepared to contribute to the process of scientific progress and the advancement of the graduate's level who we consider a productive and effective human resource in the society. The graduate as we aim should have the ability to develop solutions and address environmental problems that his society is exposed to as well as issues Scientific he faces in life.



- The department's career has continued to grow since then, both in the numbers of students and faculty members, study plans and course contents, as the department currently includes a number of faculty members in various experimental and precise theoretical disciplines in the field of biology, as well as a number of teaching assistants, instructors, lecturers, and qualified laboratory specialists from both genders.
- There are a number of laboratories equipped with the latest scientific equipment.
- The department contributed to providing the labor market with graduates who are qualified to work in the education sector as teachers in the various stages of education. The department also contributed with proposals to establish a central research laboratory, which, God willing, will be a new scientific start in the Kingdom of Saudi Arabia.



Program description

The Biology department offers a Bachelor of Science degree in Biology. The program offers numerous opportunities for careers in education, health, agricultural, industrial, and environmental research. This program also allows students to continue their higher education and research in various fields of life sciences. The academic accreditation requirements, the standards of the National Commission for Academic Accreditation and Assessment (NCAAA), and the national qualifications framework for higher education in the Kingdom of Saudi Arabia guided the department's curriculum development. With the ability to continuously improve curricula and study plans.



Vision

Global leadership in providing outstanding educational and research services in biology that contribute to building the country and meeting the needs of society and the labor market.



Mission

Providing educational outputs to prepare qualified graduates

meet the needs of the labor market and scientific research in biology

to serve the community.

Goals

1. Implementation of academic quality standards in the field of biological sciences.
2. Preparing qualified graduates to meet the needs of the labor market.
3. Providing a distinct educational environment in the field of biological sciences.
4. Providing scientific outcomes in the field of biological sciences through scientific research.
5. Providing advice and services in the field of biological sciences to the Saudi community.



Program organization Skeleton



List of Teaching Staff in Biology Program

No.	Name	Nationality	Highest degree	Degree	General specialty	Specific Specialty
1	Dr. Barakat Muayli ALRashidi	Saudi	Doctorate	Assistant Prof.	Zoology	Molecular Physiology and immunology
2	Prof. Mousa Osman A Germoush	Saudi	Doctorate	Professor	Zoology	cell Biology, Histology and Genetics
3	Dr. Abdusalam Abulhadi ALkaldi	Saudi	Doctorate	Associate Professor	Zoology	Parasitology
4	Dr. Bassam Fares Alowaiesh	Saudi	Doctorate	Assistant professor	Agriculture	Horticulture
5	Dr. Usama Ahmed Mahalel	Egyptian	Doctorate	Associate Professor	Botany	Plant Physiology
6	Dr. Ibrahim Bayoumi Abdel-Farid	Egyptian	Doctorate	Associate Professor	Botany	Plant Physiology
7	Dr. Maged Mohmaed Ali Fouda	Egyptian	Doctorate	Associate Professor	Zoology	Immunohistochemistry



9	Dr. Fayez amohamed Shaldhoum	Egyptian	Doctorate	Associate Professor	Zoology	Immunology and parasitology
10	Dr. Mohamed Mahmoud Rwizag	Egyptian	Doctorate	Assistant professor	Botany	Floriculture
11	Dr. Yasser Mohamed Ahmed	Egyptian	Doctorate	Associate Professor	Botany	Horticulture
12	Dr. Mohamed Hamza Abdel Hamid	Egyptian	Doctorate	Associate Professor	Botany	Oil crops Production
13	Dr. Mohamed Mahmoud Essayed Elmaghazi	Egyptian	Doctorate	Associate Professor	Zoology	Invertebrates
14	Dr. Diaa Fawzi Mohamed Massoud	Egyptian	Doctorate	Assistant Professor	Zoology	Vertebrates



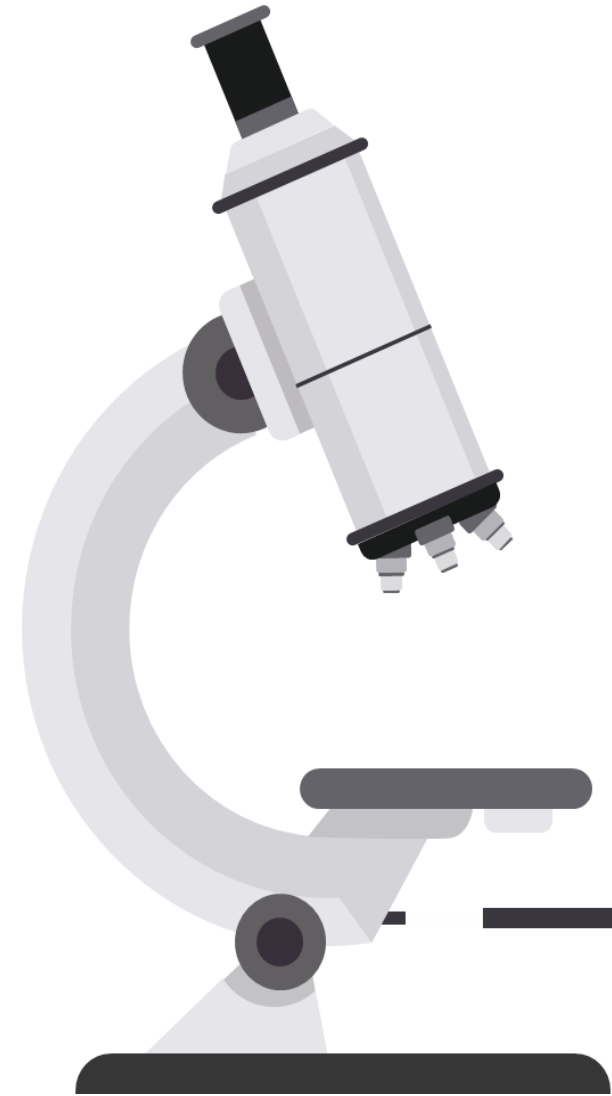
15	Dr. Haifa Abdul Aziz Sakit Alhaithloul	Saudi	Doctorate	Associate Professor	Botany	Plant Ecology
16	Dr. Mashael alhumaidi alotaibi	Saudi	Doctorate	Assistant Professor	Zoology	cell Biology, Histology and Genetics
17	Dr. Ameena Abraham Alsurhani	Saudi	Doctorate	Assistant Professor	Botany	Microbiology-Fungi
18	Dr. Salam Salem Al sharari	Saudi	Doctorate	Assistant Professor	Botany	Microbiology
19	Dr. Ghalia Sattam Alnusairi	Saudi	Doctorate	Assistant Professor	Botany	Plant Ecology
20	Dr. Taghreed Stum Alnusaire	Saudi	Doctorate	Assistant Professor	Botany	Plant Physiology
21	Dr. Asma Almuhammadi	Saudi	Doctorate	Assistant Professor	Biomedical Science	Neurogastroentology
22	Dr. Fatma Hussein Galal	Egyptian	Doctorate	Associate Professor	Zoology	Entomology
23	Dr. Mervat Ahmed Bekhit Abdrabou	Egyptian	Doctorate	Associate Professor	Zoology	Embryology
24	Dr. Shaima Mohamed Nabil Moustafa	Egyptian	Doctorate	Assistant professor	Botany	Microbiology



25	Dr. Mona Saber Afifi	Egyptian	Doctorate	Assistant professor	Zoology	Molecular biology
26	Dr. Sherifa Hamed Ahmed Mahmoud	Egyptian	Doctorate	Assistant professor	Zoology	Animal Physiology
27	Dr. Dalia said El Sayed Mohamed Hamza	Egyptian	Doctorate	Assistant professor	Zoology	Invertebrates
28	Dr. Naglaa Rashad Atta Allah	Egyptian	Doctorate	Assistant professor	Zoology	Animal Physiology
29	Dr. Hanan Taher Hamza	Egyptian	Doctorate	Assistant professor	Zoology	Parasitological Invertebrates
30	Dr. Raja Mohamed Jarboui	Tunisian	Doctorate	Assistant Professor	Biology	Microbiology

Main research interests

- **Molecular Biology and Embryology**
- **Immunology and Disease Research**
- **Water and microbiology research**
- **Olive and other plants research**





Program Advisory Board

The program has an advisory committee, the members are selected to represent a cross section of biology with representatives from many different disciplines within the field; a cross section of institutional stakeholders of industries and local governmental institutions, and students are represented. It meets twice in the academic term; one meeting before the beginning of the term and the second by the end.



Main Tasks include the following

- Reviewing and discussing the vision, mission, and objectives of the program to determine their compatibility with the labor market.
- Discuss study plans and course descriptions to determine the extent to which the outcomes of the educational process are compatible with the labor market.
- Determining the requirements of the program to raise and develop performance in the methods of education and training in line with the labor market.
- Aid in mentoring of graduate students and provide critical feedback on the student's ideas and progress.
- Discussing the current and future situation facing the program and working to develop it.
- Reviewing and evaluating the strategic plan of the program, to ensure that it is on the right track; keeping abreast of the college and university's plan and the Kingdom's vision 2030.
- Discussing and evaluating the program's operational plan.
- Discussing the performance indicators report
- Discussing the annual Progress Report form to identify strengths and weaknesses and to make specific recommendations for future improvement.

Biology program admission requirements

- Applicants for Biology program must meet the entry requirements set by the College of science and the Deanship of Admissions and Registration. meet any other criteria specified by the University Council.
- This is according to the admission guide announced on the website of the Deanship of Admission and Registration:
- The application is made electronically according to the electronic portal guide for admission announced on the Deanship of Admission and Registration.



The screenshot shows the website for the Deanship of Admission and Registration at the University of Al-Qadisiyah. The header includes the university's name in Arabic and English, and the text "للطلاب والطالبات السعوديين الفصل الأول من العام ١٤٤٢ هـ". The main content area displays the admission dates: "الثلاثاء ٢٢ - ١١ - ١٤٤١ هـ الساعة العاشرة صباحا" and "ولغاية الاثنين ٢٩ - ١١ - ١٤٤١ هـ". A navigation menu at the bottom lists various services such as "تسجيل الدخول", "دليل القبول", "الصفحات المطروحة", "الخطب الدراسية", "طلب إجازة من خارج الحرم", "طلب تحويل الجامعة", "طلب عودة فرائض", "خدمة التسجيل من جهة المستشفيات", "الرسالة الرسمية", "التفصيل عن الكلية", "الصفحة الرئيسية", and "جامعة القادسية".

Academic record and grade symbols

Symbol	Marks Range	Points	Meaning
A+	95 till 100	5.0	Exceptional
A	90 till less than 95	4.75	Excellent
B+	85 till less than 90	4.5	Superior
B	80 till less than 85	4.0	Very good
C+	75 till less than 80	3.5	Above average
C	70 till less than 75	3.0	Good
D+	65 till less than 70	2.5	High Pass
D	60 till less than 65	2.0	Pass
F	Less than 60	1.0	Fail
IP	-----	-----	In progress
IC	-----	-----	In complete
DN	-----	1.0	Denile
NP	60 and more	-----	Nograde-Pass
NF	Less than 60	-----	Nograde-Fail
W	-----	-----	Withdrawn



E-learning



Blackboard

The blackboard system allows teaching staff to submit course materials, discussion and chat forums, short exams to students on the Internet, in addition to academic resources and many more. The blackboard system provides students with great opportunities to communicate with courses and with course professors outside the lecture hall at any time and anywhere. In addition to communicating with the course professor and the rest of the students registered in the same course, by multiple electronic means. The blackboard system provides students with various tools to view the course contents and interact with them in an easy way. To view the Blackboard Guide you can go through the following hyperlink. To view the virtual classroom system (attend lectures from anywhere) through the link.



Academic counselling

An academic file is prepared for each student, including contact information. The student is directed to how to use the electronic portal of the university (Edugate) in order to take advantage of all the services it provides to the student. www.edugate.ju.edu.sa a file is prepared for the academic advisor and various indicative forms have been activated for different student cases. Enumeration of students who have excelled in studies and enumerated students who are academically dismissed have been counting students who have failed to study. The registration of students for the second semester courses is followed up and they are instructed on the correct way to register and send the forms to them via a scanner via the Blackboard



Academic counselling tasks

- Supervision of the process of academic guidance in the College according to the approved mechanisms.
- Organizing an orientation meeting at the beginning of each semester of each year to introduce the student, the new curriculum, The College, its system, its nature and its departments. The expected Jobs for each department, and the College Administration (The Dean and the Heads of Departments) and the academic guides.
- Provide Counseling tools from university sources and deliver them to academic advisors.
- Organizing courses, training sessions, workshops and lectures to teach students some skills and to prepare the students of the college for Exams.
- Helping students solve their psychological and social problems that directly affect Academic achievement.
- Coordinating with the Center for Academic Guidance and students at the university and carrying out other tasks entrusted to the unit.
- Early guidance for students to register their courses of next semester and to prevent conflicts and problems and avoid them in the last semester.
- Address the problems of students who fail and guide them appropriately.
- Activation of the E- Counseling.

[University counselling guide](#)



Aid provided to struggling students

The student is assisted and guided in all educational, psychological, social, ethical, educational and professional aspects in order to understand his personality, know his capabilities and solve his problems within the framework of Islamic teachings to reach the achievement of his goals within the framework of the general objectives of education in the Kingdom of Saudi Arabia and to become an active member of the university community.

Through the achievement of meeting and direct meeting with students to research and diagnose the indicative situation and knowledge of students' academic, social and psychological problems and try to work to solve the obstacles that hinder their superiority and continue to study, either by directing faculty members with the help of students or by directing the student to the best way to continue studying, and how to take The decision regarding the choice of academic subjects, additive and deletion materials, and other: sound study methods, determining future aspirations in the field of education and the profession, and developing self-abilities.

Pay special attention and advance (at the beginning of the semester and after the first semester) to guide students with a lower level or who have more warnings than the normal level (three or more), in order to help them raise their educational level and overcome academic obstacles

The student shall be assisted in registering the academic hours that are compatible with his abilities and are compatible with the university system in its upper, lower, and default limits the mechanism for communicating with the guided students

The continuous advertisements posted on the door of the office. Phone calls and advertising through groups and WhatsApp Blackboard.

During the lectures (before or after the lecture, to maintain privacy) for the students I teach, or I go to the lectures for the students I do not teach.

Templates of Academic Counselling Unit

Academic Counseling Unit

Student Time table Review

Stumble students

Student regarding average

Stumble over form

Student not committed his plan

Talented students

Counseling Hours form

Time Table form

Course Registration Form

Delete or add courses

Adviser report form

Case study form

Schedule meetings

Counseling meetings





Graduate Specifications

- The ability to remember knowledge and improve a wide range of skills they have acquired and the continuity to enrich it.
- Acquaintance of comprehensive, holistic and organized knowledge in a specific field and of principles and theories related to it.
- The ability to research complex problems, find innovative solutions with only limited guidance, using insights relevant to their field of study any other similar areas.
- The ability to identify and use appropriate mathematical and statistical methods in analysis, find solutions to complex issues, and the ability to select and use the most appropriate mechanisms to deliver results to different recipients.
- The ability of leadership and willingness for complete cooperation with others in joint projects and initiatives.
- In the case of a professional program, a wide and integrated range of knowledge and skills necessary for effective professional practice is required.
- In the case of academic program that does not need professional practice, it is necessary to acquire a thorough knowledge and understanding of research literature in the area of specialization as well as the ability to interpret, analyze and evaluate the importance of such research in enriching knowledge in the field of study.



Career after graduations

The biology program is aimed to equip students with the professional abilities they will need to be successful and distinguished in their careers. The possibilities for a career in biological sciences are nearly limitless! Those with a biology degree have a plethora of professional options. The degree can be used to apply for advanced level programs (e.g., postgraduate studies). A bachelor's degree in biology is required to teach biology at the secondary school level. Graduates with a B.Sc. in biology can work in a variety of sectors, including:

- Ministry of Health.
- Ministry of Education
- Ministry of Agriculture, water and environment.
- The specifications and standards Agency.
- Medical Research Centers.
- Medical Laboratories.
- Pharmacy Research Centers.
- Companies Specialized in Environmental Affairs & Risk assessment.
- Companies Specializing in the Pharmaceutical Industry.



Program Achievements and participations in social activities

Staff members publication in 2021	Research published in cooperation with the top 200 universities	Projects funded by the deanship of scientific research	Research group	Reviewers and editors in scientific journals	Books published with the participation of the program members
106 research articles indexed in web of science	14 research articles	14 funded projects	5 groups	8 reviewers	6 books

Study plan

Level	CourseCode	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level 1	BIO 101	General Biology	Required	---	3	College
	CIS 101	Computer Skills	Required	---	3	Institution
	EDU 101	University Life Skills	Required	---	2	Institution
	ENGL 103	English Language I	Required	---	3	Institution
	ISL 101	Fundamentals of Islamic culture	Required	---	2	Institution
	MTH 101	Introductory Mathematics	Required	---	3	College
Level 2	ARB 100	Language Skills	Required	---	2	Institution
	CHM 101	General Chemistry (1)	Required	---	4	College
	ENGL 104	English Language II	Required	ENGL103	3	Institution
	ISL 100	Studies in the Biography of Prophet	Required	---	2	Institution
	MTH 102	Differential Calculus	Required	MTH101	3	College
	PHS 101	General Physics (1)	Required	---	4	College



Level3	ARB 102	Editing	Required	ARB100	2	Institution
	BIO 211	General Zoology	Required	BIO 101	3	Department
	BIO 221	General Botany	Required	BIO 101	4	Department
	BIO 231	Microbiology	Required	BIO 101	3	Department
	CHM 213	Organic Chemistry	Required	CHM 101	3	Outside Department
	MTH 271	General Statistics	Required	MTH 101	2	College
	ISL xxx	Elective course from University requirement*	Elective	---	2	Institution
Level4	BIO 212	Chordata	Required	BIO 212	3	Department
	BIO 222	Plant Morphology and Anatomy	Required	BIO 212	3	Department
	BIO 241	Fundamental Ecology	Required	BIO 212	3	Department
	BIO 251	Cell Biology	Required	BIO 212	2	Department
	CHM 342	Biochemistry	Required	CHM 213	3	Department
	ISL xxx	Elective course from University requirement*	Elective	-	2	Institution



Level5	BIO 313	Invertebrates	Required	BIO 211	3	Department
	BIO 314	Animal Physiology	Required	BIO 211 CHM 342	2	Department
	BIO 315	Animal Histology	Required	BIO 251	2	Department
	BIO 323	Plant Physiology	Required	CHM 342	3	Department
	BIO 332	Viruses and Bacteria	Required	BIO 231	2	Department
	BIO 352	Microtechniques	Required	BIO 251	3	Department
	EDU 102 or BUS 101	Elective course from University requirement**	Elective	-	2	Institution
Level6	BIO 316	Entomology	Required	BIO 313	3	Department
	BIO 317	Embryology	Required	BIO 315	3	Department
	BIO 324	Taxonomy of Flowering plants	Required	BIO 222	3	Department
	BIO 342	Pollution and Environment Protection	Required	BIO 241	3	Department
	BIO 353	Genetics	Required	BIO 251 MTH 271	3	Department
	BIO xxx	Elective course (List A)	Elective	BIO xxx	2	Department



Level7	BIO 433	Phycology	Required	BIO 332	2	Department
	BIO 434	Mycology	Required	BIO 332	2	Department
	BIO 443	Desert Ecology	Required	BIO 342	2	Department
	BIO 454	Molecular Biology	Required	BIO 353	3	Department
	BIO 498	Field Training	Required	Pass 90 units	3	Department
	BIO xxx	Elective course (List B)	Elective	BIO xxx	2	Department
	BIO xxx	Elective course (List B)	Elective	BIO xxx	2	Department
Level8	BIO 418	Parasitology	Required	BIO 316	3	Department
	BIO 419	Comparative Anatomy	Required	BIO 212	3	Department
	BIO 444	Flora of KSA	Required	BIO 443	2	Department
	BIO 499	Research Project	Required	Pass 100 units	3	Department
	BIO XXX	Elective course (List C)	Elective	BIO XXX	2	Department
	BIO xxx	Elective course (List C)	Elective	BIO xxx	2	Department



Elective course (A)

Level	CourseCode	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level6	BIO 361	Animal Physiology - Advance	Elective	BIO 314	2	Department
	BIO 362	Archegoniates	Elective	BIO 221	2	Department
	BIO 363	Immunology	Elective	BIO 314	2	Department

Elective course (B)

Level	CourseCode	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level7	BIO 471	Medical and Economic Arthropods	Elective	BIO 316	2	Department
	BIO 472	Histochemistry	Elective	CHM 342	2	Department
	BIO 473	Plant Tissue Cultures	Elective	BIO 323	2	Department
	BIO 474	Stress Physiology	Elective	BIO 323	2	Department
	BIO 475	Plant Diseases	Elective	BIO 332	2	Department
	BIO 476	Biotechnology	Elective	CHM 342	2	Department

Elective course (C)

Level	CourseCode	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College or Department)
Level8	BIO 481	Animal Behaviour	Elective	BIO 443	2	Department
	BIO 482	Bioinformatics	Elective	BIO 454	2	Department
	BIO 483	Economic Plants of KSA	Elective	BIO 324	2	Department
	BIO 484	Plant Communities	Elective	BIO 324	2	Department
	BIO 485	KSA Fauna	Elective	BIO 443	2	Department
	BIO 486	Microbial Environment	Elective	BIO 332	2	Department



Program learning Outcomes

Knowledge and Understanding	
By the end of the program, student will be able to:	
K1	Demonstrate integrated the principles, main concepts, theories and terminology of Biology disciplines.
K2	Demonstrate the recent scientific developments in the fields of biology including techniques and applications of advanced fields of biology.
Skills:	
By the end of the program student will be able to	
S1	Formulate, and solve broadly defined scientific problems by applying knowledge of science to areas relevant to Biology.
S2	Formulate or design a system, process, procedure or program to meet desired needs in biology.
S3	Evaluate, develop and conduct biological experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions and make a criticism.
S4	Examine microscopic specimens in laboratories basic experiments of biology in safe and effective way.
S5	Communicate effectively with a range of audiences, work effectively with information technology, and library resources in related to the required biology disciplines.
Values:	
By the end of the program student will be able to	
V1	Sustain effectively Islamic values, ethical and professional responsibilities and the impact of scientific solutions in global, economic, environmental, and societal contexts.
V2	Collaborate effectively within teams via establishing goals, planning tasks, meeting deadlines, and analyzing risk and uncertainty.



Program facilities and equipment's

The program has laboratories, computer and technical equipment, laboratories, and materials appropriate for the specialty and sufficient for conducting scientific research and studies according to its objectives, and appropriate mechanisms are applied for their maintenance and updating.

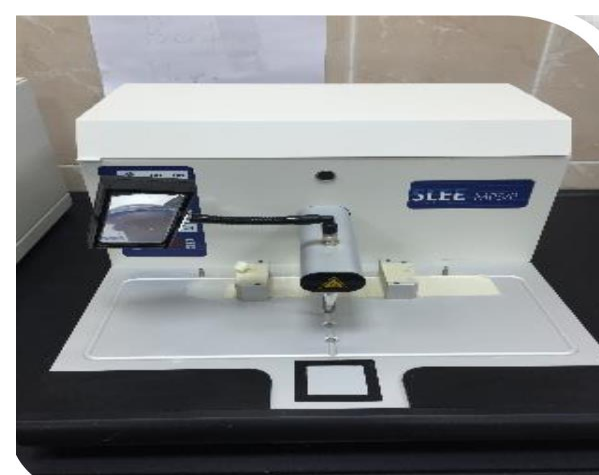
Department of biology labs and equipment's

The program has specialized electronic resources (such as: digital references, multimedia, software), databases and appropriate electronic systems that allow beneficiaries to access information, research materials and scientific journals from inside or outside the institution. The program has the appropriate technologies, services and environment for the courses that are submitted electronically or remotely according to their own criteria. The library provides the adequate number of various easily accessible resources commensurate with the needs of the program and students and is available for both male and female students at adequate and appropriate times and is updated periodically.



Program facilities and equipment's





*Thank
you*



College of science

Department of biology



كلية العلوم
College of Science

2021 - 2022

Biology

is LIFE

كلنا
مسؤول



رؤية
VISION
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المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA



جامعة الجوف
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