Kurdistan Regional Government- Iraq
Ministry of Higher Education & Scientific Research
Presidency of Soran University
Faculty of Science

No: 132
Date: 8/7/2026

دەرکردە

Administrative Order

Subject: Approval of Program Learning Outcomes

Based on the recommendation of the Council of the Department of Computer Science, as recorded in the minutes of its meeting No. (20) held on 29 / 06/ 2026, and in accordance with the university's academic and quality assurance requirements, we hereby order the approval and adoption of the Program Learning Outcomes (PLOs) of Computer Science Department, as attached to this Administrative Order. This order shall be effective from the date of its issuance.

PROGRAM LEARNING OUTCOMES

Upon successful completion of the program, graduates will be able to:

1. Apply fundamental knowledge of computer science, mathematics, programming, digital logic, and computational principles to analyze and solve computing problems.
2. Analyze computing problems and develop effective solutions using computational thinking, algorithms, data structures, mathematical reasoning, and appropriate programming techniques.
3. Design, implement, test, and evaluate software applications and computing systems using programming, database, web, mobile, and software engineering principles and practices.
4. Design, analyze, and evaluate computer systems, networks, communication technologies, and computing infrastructures using appropriate architectures, protocols, and modern tools.
5. Apply artificial intelligence, machine learning, data science, data mining, and digital processing techniques to analyze data and develop intelligent solutions to contemporary computing problems.
6. Apply cybersecurity principles and emerging computing technologies, including cryptography, cloud computing, robotics, and the Internet of Things, to develop secure and innovative computing solutions.
7. Conduct systematic investigations and computing projects by identifying problems, selecting appropriate methods, analyzing and evaluating results, and developing innovative solutions to technological and societal challenges.
8. Demonstrate effective communication, teamwork, ethical and professional responsibility, entrepreneurial awareness, and lifelong learning to contribute effectively to industry, society, and sustainable technological development.

Dean of the Faculty of Science
Assit. Prof. Dr. Ayad Nuri Faqi

Copy to:

- Office of the President
- Vice President for Academic Affairs
- Head of the Department of Computer Science
- Quality Assurance and Academic Accreditation Unit
- Faculty of Science File

Kurdistan Regional Government- Iraq
Ministry of Higher Education & Scientific Research
Presidency of Soran University
Faculty of Science

No. 141
Date: 8/7/2026

Administrative Order

Subject: Approval of Program Learning Outcomes

Based on the recommendation of the Council of the Department of Chemistry, as recorded in the minutes of its meeting No. (15) held on 30 / 06/ 2026, and in accordance with the university's academic and quality assurance requirements, we hereby order the approval and adoption of the Program Learning Outcomes (PLOs) of Chemistry Department, as attached to this Administrative Order. This order shall be effective from the date of its issuance.

PROGRAM LEARNING OUTCOMES

Upon successful completion of the program, graduates will be able to:

1. Demonstrate comprehensive knowledge and understanding of the core areas of chemistry, including analytical, organic, inorganic, physical, and biochemistry.
2. Apply chemical theories and quantitative methods to analyze and solve complex chemical problems.
3. Perform laboratory experiments safely and effectively using modern chemical techniques, instrumentation, and standard operating procedures.
4. Collect, analyze, interpret, and evaluate experimental data using appropriate statistical and computational methods.
5. Design and conduct scientific investigations, formulate hypotheses, evaluate results, and communicate research findings effectively.
6. Utilize modern chemical instruments, and emerging technologies relevant to chemical analysis.
7. Communicate scientific information effectively in written, oral, and graphical forms to both scientific and non-scientific audiences.
8. Work effectively as an individual and as a member or leader of multidisciplinary teams in laboratory, academic, and industrial settings.
9. Demonstrate ethical conduct, professional responsibility, environmental awareness, and adherence to laboratory safety regulations.
10. Apply chemical knowledge and practical skills in academic, industrial, environmental, pharmaceutical, educational, and research careers.

Dean of the Faculty of Science
Assit. Prof. Dr. Ayad Nuri Faqi

Copy to:

- Office of the President
- Vice President for Academic Affairs
- Head of the Department of Chemistry
- Quality Assurance and Academic Accreditation Unit
- Faculty of Science File

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Kurdistan Region, Iraq

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Ministry of Higher Education & Scientific Research
Presidency of Soran University
Faculty of Science

No. 130
Date: 8/7/2026

Administrative Order

Subject: Approval of Program Learning Outcomes

Based on the recommendation of the Council of the Department of Biology, as recorded in the minutes of its meeting No. (27) held on 30 / 06/ 2026, and in accordance with the university's academic and quality assurance requirements, we hereby order the approval and adoption of the Program Learning Outcomes (PLOs) of Biology Department, as attached to this Administrative Order. This order shall be effective from the date of its issuance.

PROGRAM LEARNING OUTCOMES

Upon successful completion of the program, graduates will be able to:

1. Knowledge Acquisition: Understanding fundamental biological concepts, including cell biology, genetics, ecology, and evolution.
2. Practical Skills: Developing laboratory techniques and fieldwork skills necessary for biological research.
3. Critical Thinking: Analyzing and interpreting biological data, and applying scientific reasoning to solve problems.
4. Research Expertise: Conducting independent research, including formulating hypotheses, designing experiments, and presenting findings.
5. Environmental Awareness: Appreciating the importance of biodiversity and ecological balance, and understanding human impacts on the environment.
6. Communication Skills: Effectively communicating scientific information in both written and oral formats to diverse audiences.
7. Ethical Understanding: Recognizing ethical issues in biological research and practice, including considerations related to biodiversity and biotechnology.
8. Lifelong Learning: Developing the capacity for independent learning and professional development in biology and related fields.

Dean of the Faculty of Science
Assit. Prof. Dr. Ayad Nuri Faqi

Copy to:

- Office of the President
- Vice President for Academic Affairs
- Head of the Department of Biology
- Quality Assurance and Academic Accreditation Unit
- Faculty of Arts File

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Presidency of Soran University
Faculty of Science

No. 133
Date: 8/7/2026

Administrative Order

Subject: Approval of Program Learning Outcomes

Based on the recommendation of the Council of the department of Petroleum Geoscience, as recorded in the minutes of its meeting No. (14) held on 24 / 06/ 2026, and in accordance with the university's academic and quality assurance requirements, we hereby order the approval and adoption of the Program Learning Outcomes (PLOs) of Petroleum Geoscience department, as attached to this Administrative Order. This order shall be effective from the date of its issuance.

PROGRAM LEARNING OUTCOMES

Upon successful completion of the program, graduates will be able to:

1. Demonstrate comprehensive knowledge of geological sciences, including mineralogy, petrology, sedimentology, stratigraphy, structural geology, geophysics, and basin analysis, and apply these principles to petroleum-related geological systems.
2. Analyze and evaluate petroleum systems, including source rock characterization, reservoir properties, trap formation, migration pathways, and hydrocarbon accumulation using surface and subsurface data.
3. Conduct professional geological fieldwork and subsurface investigations, including mapping, structural measurements, stratigraphic logging, well-log interpretation, and seismic data analysis.
4. Apply GIS, remote sensing, and industry-relevant geoscience software for spatial analysis, geological modeling, data integration, and technical visualization.
5. Analytical Integration and Risk Assessment: Integrate multidisciplinary geological, geophysical, and geospatial datasets to solve exploration and development challenges and assess geological risks and uncertainties.
6. Evaluate environmental impacts associated with petroleum activities and propose mitigation strategies aligned with sustainability principles and regulatory frameworks.
7. Design and execute scientific investigations, analyze and interpret quantitative and qualitative data, and communicate findings effectively in written, graphical, and oral formats.
8. Demonstrate professional ethics, teamwork, leadership, and adherence to health, safety, and environmental (HSE) standards in academic and professional geoscience practice.

Dean of the Faculty of Science
Assit. Prof. Dr. Ayad Nuri Faqi

Copy to:

- Office of the President
- Vice President for Academic Affairs
- Head of the Department of Petroleum Geoscience
- Quality Assurance and Academic Accreditation Unit
- Faculty of Arts File

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Ministry of Higher Education & Scientific Research
Presidency of Soran University
Faculty of Science

No. 142
Date: 8/7/2026

Administrative Order

Subject: Approval of Program Learning Outcomes

Based on the recommendation of the Council of the Department of Physics, as recorded in the minutes of its meeting No. (4) held on 30 / 06/ 2026, and in accordance with the university's academic and quality assurance requirements, we hereby order the approval and adoption of the Program Learning Outcomes (PLOs) of Physics Department, as attached to this Administrative Order. This order shall be effective from the date of its issuance.

PROGRAM LEARNING OUTCOMES

Upon successful completion of the program, graduates will be able to:

1. To equip the graduates an intellectually stimulating and satisfying life-long learning experience in the field of physics.
2. To provide graduates with deeper basic understanding of major concepts of physical processes in their environment.
3. To enhance the ability of the graduates to apply their knowledge of physics and skills to solve theoretical and practical problem and deal with physical models and formulas mathematically.
4. To equip the graduates with the necessary analytical skills to solve practical problems and develop appropriate design solutions based on a thorough understanding of technology, instrumentation and techniques.
5. To equip the graduates with the knowledge and skills to implement new technological approaches in physics teaching.

Dean of the Faculty of Science
Assit. Prof. Dr. Ayad Nuri Faqi

Copy to:

- Office of the President
- Vice President for Academic Affairs
- Head of the Department of Physics
- Quality Assurance and Academic Accreditation Unit
- Faculty of Arts File

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