

Ministry of Higher Education and Scientific Research  
Supervision and Scientific Evaluation Apparatus  
Department of Quality Assurance and Academic Accreditation  
Section of Accreditation



## **Academic program description guide**

**2024**

**Sports Biomechanics**

## **Introduction:**

An educational program is a coordinated and organized package of courses that includes...

- It consists of procedures and experiences organized into academic vocabulary, the main purpose of which is to build and refine skills.
- Graduates, which makes them qualified to meet the requirements of the labor market, are reviewed and evaluated annually via Internal or external audit procedures and programs such as the external examiner program.
- The academic program description provides a brief summary of the main features of the program and its courses.
- The skills that students are working on acquiring are based on the objectives of the academic program and are evident.
- The importance of this description is that it represents the cornerstone of obtaining programmatic accreditation and participation in writing the teaching staff under the supervision of the scientific committees in the scientific departments.

This guide, in its second edition, includes a description of the academic program after updating vocabulary and paragraphs the previous guide in light of the latest developments in the educational system in Iraq, which included a description the academic program is in its traditional form (annual, quarterly), in addition to adopting the program description the academic circulated according to the letter of the Department of Studies T.M. 3/2906 on 5/3/2023 regarding programs that rely on the Bologna Process as a basis for their work.

In this area, we can only emphasize the importance of writing descriptions of academic programs and courses courses to ensure the smooth running of the educational process.

## **Concepts and terminology:**

Description of the academic program: The description of the academic program provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course description: Provides a necessary summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It is gallow, according to the program description.

Program Scop: An ambitious picture for the future of the academic program to be a developed, inspiring, motivating, realistic and applicable program.

Program mission: The goals and activities necessary to achieve them in a brief way. It also defines the program's development paths

Program objectives: These are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Program structure: All courses/study subjects included in the academic program according to the approved learning system (semester, annual, Bologna track), whether you are required (ministry, university, college, or scientific department), along with the number of study units.

Learning outcomes: A consistent set of knowledge, skills, and values that the student has acquired after successfully completing the academic program. The learning outcomes for each course must be determined in a way that achieves the program objectives.

Teaching and learning strategies: They are the strategies used by the faculty member to develop the student's teaching and learning, and they are plans that are followed to reach the learning goals. That is, it describes all classroom and extracurricular activities to achieve the learning outcomes of the program.

## Academic program description forms for Biomechanics

University name: Diyala University

College/Institute: College of Physical Education and Sports Sciences

Scientific Department: Theoretical science Branch

Name of the academic or professional program: **Bachelor of Physical Education and Sports Sciences.**

Name of final degree: **Bachelor's in Physical Education and Sports Sciences.**

School system. annual

Description preparation date: March 25, 2024

Date of filling the file: March 25, 2024

Signature:

Name of the branch head: **Prof. Dr. Naseer Kasem Khalaf**

Signature

Name of the scientific assistant: **Prof. Dr. Muhammad Walid Shihab**

Check the file by:

Division of Quality Assurance and University Performance

Name of the Director of the Quality Assurance and University Performance Division: **Prof. Dr. Hanan Adnan Abaoub**

the signature:

**The Dean Authentication**

## **1- The scop**

The Scop statement as stated in the university brochure and its website

. Diyala University seeks scientific leadership, excellence and creativity in the fields of higher education and scientific research to serve the community and enhance its local, regional and international standing to reach the highest levels of quality and international accreditation

## **2- The program's mission**

The program's mission statement as stated in the university brochure and its website.

Providing effective academic university education through continuous development of academic programs in many specializations in light of the requirements of development plans to serve the labor market and contribute to promoting sustainable development.

## **3- The program's objectives:**

General phrases describing what the program or institution intends to achieve.

- 1- Establishing a distinguished educational institution meeting global standards to fulfill the needs of the local, regional, and international communities, in accordance with the directives of the Ministry of Higher Education and Scientific Research.
- 2- Creating a stimulating environment for education, learning, and innovation by continuously enhancing and updating academic curricula, training methods, and assessment techniques to align with the requirements of the job market.
- 3- Keeping pace with technological advancements in blended e-learning and developing educational and academic programs to adapt to the needs of both students and faculty members of the university.

#### **4- Program Accreditation:**

Has the program obtained programmatic accreditation? From which body? No

#### **5- Other External Influences:**

Is there a sponsoring body for the program? No.

#### **6- Program structure**

Program component	Number of Courses	Study Unit	Percentage	Notes
<b>Institutional Requirements</b>	1	2		Core
<b>College Requirements</b>				
<b>Department Requirements</b>				
<b>Summer Training</b>				
<b>Others</b>				

### 7- Program description:

Year/Level	Course Code	Course Name	Credit Hours	
			Theory	Practical
2023-2024		Weightlifting		
			√	√

### 8- Expected Learning Outcomes for the Program:

Knowledge	
1- Learning outcomes	1- Learning results
Empower students to acquire the necessary knowledge to understand mathematical theories and laws. Assist students in understanding the relationship between the program and its academic components (core courses or subjects) with the awarded degree and future professional qualifications.	Highlighting the student's personality to facilitate their development.
Assisting students in understanding teaching and learning methods that aid them in achieving the targeted learning outcomes in theoretical courses.	<ul style="list-style-type: none"> <li>- Boosting students' self-confidence.</li> <li>- Unveiling hidden talents within students.</li> </ul>
Enabling students to perform and apply practical skills in all individual and team sports.	Highlighting teamwork skills among students.

<b>Skills</b>	
<b>2- Learning outcomes</b>	<b>2- Learning results</b>
Assisting students in applying what they have learned from theoretical and practical courses within and beyond the academic context	Developing students' proficiency in practical gameplay skills included in the program.
<b>3- Learning outcomes</b>	<b>3- Learning results</b>
Assisting students in implementing their ideas and talents both within and outside the academic context.	Increasing interpersonal communication among individuals, contributing to the development of a learning community.
<b>Value</b>	
<b>4- Learning Outcomes</b>	<b>4-- Learning Results</b>
Developing cooperation and brotherhood and developing the spirit of determination among students.	Learn to set the right priorities for any problem
<b>5- Learning Outcomes</b>	<b>5-- Learning Results</b>
Self-evaluation - leadership evaluation - valuing the efforts of scholars	Developing respect for time and time in completing and implementing work. Developing the spirit of fair competition among work groups in pursuit of quality work, excellence and diversity in performance



**9- Teaching and learning strategies:** Teaching and learning strategies and methods adopted in implementing the program in general.

- Cooperative education strategy.
- Learning strategy improvisation games.
- Teaching strategy brainstorming.
- Panorama education strategy.
- Education strategy collaborative concept planning.
- Teaching strategy one minute paper.
- Real-time feedback strategy education
- Education strategy notes series.
- Mind mapping education strategy
- Modeling learning strategy: It is known as social learning, in which the individual acquires and learns responses and new behavioral patterns within a social context or situation through observation or attention. In general, it is an illustrative method of education in which experiments are employed as well as methods and models

**10- Evaluation methods:** Implemented in all stages of the program in general.

(Written tests), (Oral tests), (Electronic tests)and (Daily tests)

The college has relied on clear, high-quality evaluation methods and tools for student learning in order to maintain the quality of the graduate and the academic reputation of the college. This is embodied in the university's regulations and the requirements for continuous evaluation of students, provided that there are several types of evaluation methods in order to ensure the quality of the quality of the

graduate, which constitutes the final outcome of the educational process, and the most important methods of evaluation are:

**A- Cognitive Objectives:**

- Assist students in understanding the basics of sports biomechanics, enabling them to achieve the learning outcomes of this course.
- Help students understand their rights and responsibilities.
- Guide students to understand the relationship between the program and its academic components (courses or subjects) with the awarded degree and future job qualifications.
- Equip students with complete knowledge of the fundamentals of biomechanical variables.

**B- Educational Objectives:**

- Assist students in applying what they have learned from theoretical materials outside the academic framework.
- Instill in students the love for cooperation, respect, and not infringing on the rights and freedoms of others in their environment.
- Guide students towards love of cooperation and brotherhood among themselves.

**C- Emotional and Moral Objectives:**

- Self-denial.
- Participation in community service through activities and participation in civil society institutions.
- Instilling leadership qualities in students.
- Fostering a spirit of brotherhood and love among students.

**D- General and Transferable Skills:**

- Other skills related to employability and personal development.
- Highlighting the student's personality in a way that contributes to their development.
- Increasing confidence in biomechanics among students.
- Revealing personal abilities capable of defending the rights of others in all areas of life.

- Creating a leadership personality capable of managing the classroom in a way that qualifies them to create a generation equipped with skills, morals, and sports discipline.

### 1- **Teaching profession:** Faculty members.

Academic Rank	Specification		Special Requirements / Skills	Number of faculty members	
	General	Specific		Permanent Staff	Temporary Staff
Prof	Physical Education and Sports Sciences	Biomechanics	Gymnastic Weightlifting tennis	3	
Assist. Prof.	Physical Education and Sports Sciences	Biomechanics	Volleyball Gymnastics Track&field Handball	6	
Lecturer	Physical Education and Sports Sciences	Biomechanics	Handball	1	

## **11- Key Information Sources about the Program:**

- Scientific sources approved within the curriculum of the stage at which education is conducted.
- The curriculum approved by the Ministry of Higher Education and Scientific Research and its advisory guidelines.
- Curricula and recommendations of scientific committees in Physical Education and Sports Science.
- Courses in teaching methods.
- Description of study materials.
- Courses in civil society organizations.
- Conferences, seminars, workshops, and discussion sessions.
- Relevant government institutions.
- Alumni unit.
- Internet research for similar experiments.
- Personal experiences.

## **12- Course Development Plan:**

The program works on developing the academic persona of the student in line with the aspirations of the modern state.

- Highlighting the strengths of students in a way that allows for the formation of future leadership personalities.
- Uncovering students' hidden talents to develop their field of work and elevate the level of education.
- Regular consultation of the latest scientific sources and recent research, through which the curriculum is developed.
- Integration of theoretical and practical aspects to enhance the curriculum.

Program skills chart															
				Learning outcomes required from the program											
Year/ level	Course code	Course name	Essenti al or optiona l?	Knowledge				Skills				Evaluation			
				A1	2A	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2023- 2024		Biomechanics	Essn.	√	√	√	√	√	√	√	√	√	√	√	√

### 13- Course description form

1. Course name: <b>Biomechanics</b>
2. Course Code:
3. Semester/Year: <b>Annual</b>
4. The date this description was prepared is <b>March 25, 2024</b>
5. Available forms of attendance: <b>2 hours per week and daily attendance</b>
6. Number of study hours (total) / Number of units (total) <b>60 hours / 60 units</b>

7. Name of the course administrator (if more than one name is mentioned)

- 1- Prof. Safaa A. Ismaeel - Head of Scientific Group
- 2- Prof. Ferdous Majid Amin
- 3- Prof. Shimaa Sami
- 4- Assoc. Prof. Jamal Abdul Kareem
- 5- Assoc. Prof. Rafid Habib Mahdi
- 6- Assoc. Prof. Sadaah Ibrahim Wali
- 7- Assoc. Prof. Omar Abdul Hadi Salama
- 8- Assoc. Prof. Riadh Abdul Ridha Farhan
- 9- Assoc. Prof. Marwa Khalid Jihad
- 10- Dr. Alaa Kamel

8. Syllabus objectives

Course objectives

- Assisting students in understanding the variables of sports biomechanics to ensure they achieve the targeted learning outcomes.
- Recognizing the importance of sports biomechanics and its relationship with guidance, diagnosis, classification, and scientific research.
- Understanding the scientific foundations for building and implementing counseling programs.
- Familiarizing students with the best methods and techniques for developing personal characteristics for both teachers and students.

9. Teaching and learning strategies

The strategy	<ol style="list-style-type: none"><li>1- Activating the role of the learner in practical and theoretical educational situations.</li><li>2- Motivating learners to learn correctly through repetition and practice, as well as through seeking correct answers to all posed questions or possible solutions to the inquiries presented to them in the rules of the game.</li><li>3- Students becoming accustomed to respecting and valuing the opinions of others.</li><li>4- Students becoming accustomed to benefiting from the ideas of others by developing and building upon them.</li></ol>
--------------	---

**14- Course Structure (Sports Biomechanics)**

<b>Week</b>	<b>Hours</b>	<b>Unit/Topic</b>	<b>Learning Outcomes</b>	<b>Assessment Method</b>	<b>Teaching Method</b>
<b>1st</b>	2	Introduction to Biomechanics and Sports Biomechanics	Biomechanics in sports	Oral	Lecture
<b>2nd</b>	2	Fields of Sports Biomechanics, Tasks of Sports Biomechanics	Biomechanics in sports	Oral	Lecture
<b>3rd</b>	2	Science of Motion, Necessities, Steps, Theories	Biomechanics in sports	Oral	Lecture
<b>4th</b>	2	Basic Movements	Biomechanics in sports	Oral	Lecture
<b>5th</b>	2	Axes and Planes	Biomechanics in sports	Oral	Lecture
<b>6th</b>	2	Distance and Displacement	Biomechanics in sports	Oral	Lecture
<b>7th</b>	2	1 <sup>st</sup> monthly Exam		Oral	Lecture
<b>8th</b>	2	Linear Kinematics	Biomechanics in sports	Oral	Lecture
<b>9th</b>	2	Calculating Distance and Velocity as Quantitative and Qualitative Values	Biomechanics in sports	Oral	Lecture
<b>10th</b>	2	Speed Rate and Average Speed	Biomechanics in sports	Oral	Lecture
<b>11th</b>	2	2 <sup>nd</sup> monthly Exam		-	-
<b>12th</b>	2	Types of Linear Acceleration	Biomechanics in sports	Oral	Lecture
<b>13th</b>	2	Projectile Motion	Biomechanics in sports	Oral	Lecture
<b>13th</b>	2	Projectile Motion (Practical)	Biomechanics in sports	Oral	Lecture
<b>14th</b>	2	Levers	Biomechanics in sports	Oral	



<b>15th</b>	-	-	Biomechanics in sports	-	Lecture Lecture
<b>16th</b>	2	Levers (Practical)	Biomechanics in sports	Oral	Lecture
<b>17th</b>	2	Newton's Laws of Motion	Biomechanics in sports	Oral	Lecture
<b>18th</b>	2	Free Fall	Biomechanics in sports	Oral	Lecture
<b>19th</b>	2	Interaction between Mechanical Factors and Athletic Performance	Biomechanics in sports	Oral	Lecture
<b>20th</b>	2	Kinetic Energy	Biomechanics in sports	Oral	Lecture
<b>21st</b>	2	1 <sup>st</sup> Semester Exam		Written	-
<b>22nd</b>	2	Kinetics	Biomechanics in sports	Oral	Lecture
<b>23rd</b>	2	Angular Motions	Biomechanics in sports	Oral	Lecture
<b>24th</b>	2	Angular Kinematics	Biomechanics in sports	Oral	Lecture
<b>25th</b>	2	Mechanical Work	Biomechanics in sports	Oral	Lecture
<b>26th</b>	2	Momentum	Biomechanics in sports	Oral	Lecture
<b>27th</b>	2	Friction	Biomechanics in sports	Oral	Lecture
<b>28th</b>	2	Exam	Biomechanics in sports	Oral	Lecture
<b>29th</b>	2	Review	Biomechanics in sports	Oral	Lecture
<b>30<sup>th</sup></b>	2	2 <sup>nd</sup> Semester Exam	-	Written	-

## 15- Infrastructure

***Required Textbooks:*** - **Sports Biomechanics**

*Main References (Sources):*

- Sports Biomechanics

*Recommended Books and References:*

- Scientific journals, reports, etc.
- Theses, dissertations, and published research
- Books authored by experts in Sports Biomechanics

*Internet resources*

Electronic references relevant to Sports Biomechanics

Preparation  
Prof. Dr. Safaa A. Ismaeel