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Comparative analysis of fitness tests using field measurement For first, second, and third grade students Faculty of Physical Education and Sport Sciences

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ABSTRACT

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Keywords: Comparative analysis, physical fitness elements This research aims to conduct a comparative analysis of the level of physical fitness elements (muscular strength, endurance, speed, flexibility, agility, balance, and compatibility) among first, second, and third grade female students at the Faculty of Physical Education and Sport Sciences — Diyala University, using standardized field tests, in order to reveal the extent of physical development related to academic progress and training experience. The objectives of the research were determined to: identify the level of physical fitness elements of female students at each stage, conduct a statistical comparison between the stages, and reveal significant differences between them.

The researcher followed the descriptive method by comparison method, and the research sample reached (132) female students distributed over the three academic stages. A set of scientifically validated field tests has been applied to evaluate the items under study.

The results revealed a significant superiority of female students in most of the elements of physical fitness compared to their female colleagues in the first and second stages, while there were no statistically significant differences among female students in some elements, especially agility, endurance, and compatibility. This disparity is due to the accumulation of training experience and extensive exposure to practical courses at the advanced stages.

The study concluded that it is necessary to prepare specialized and intensive training programs for first-stage students, and to work on integrating modern training such as HIIT and Tabata into the practical curricula, as they have a positive impact on improving endurance and agility. It also recommended enhancing interaction and exchange of experiences between female students at various stages, and conducting extensive future studies to analyze the differences more accurately and in-depth.

1- Introduction and the importance of research

1-1 Research Introduction:

Physical fitness is the most important pillar in building the skill and motor capabilities of female students in the faculties of physical education and sports sciences, as it is related to the level of physical, health, and skill performance that female students must have during their study stages. Physical fitness does not only represent a state of ideal readiness for physical performance and physical abilities, as it instills various qualities and abilities such as muscular strength, endurance, speed, agility, and flexibility, all of which directly affect the individual's efficiency in performing various sports activities (Ahmed Al-Shammari, p. 45, 2020).

The study of the differences between the three stages of physical fitness is of great importance, as it reflects the extent to which the students' physical abilities develop as they progress in the academic and training level. The first stage often represents the elementary level and the initial capabilities of the student before identifying the physical elements of fitness and the importance of each element in physical experiences, while physical skills and knowledge are accumulated in the second and third stages. In this sense, the comparative analysis between these stages is an important tool for evaluating the effectiveness of educational programs followed and trained at the college (Suad Ali et al., p. 67, 2022).

Field measurement tools are one of the most important and effective methods in monitoring and determining the level of physical fitness elements, due to their objectivity and simplicity in field application, in addition to their ability to provide quantitative data that can be scientifically analyzed to identify the capabilities of female students and the extent of the development of physical fitness elements. Previous studies have shown that the use of field measurement contributes to revealing individual differences between students and helps in building more accurate training programs (Yannis Koutedakis, p. 210, 1999).

Since the academic stage differs in terms of physical, psychological and educational characteristics, it has become necessary to study the extent of the disparity in the elements of physical fitness among the students of the different stages within the college, which enables those in charge of improving educational programs in accordance with the needs of female students. Recent studies emphasize the need to adopt accurate scientific comparative methods to identify these differences and benefit from them in directing physical activities (Edward Howley, p. 88, 2007).

Based on the above, the idea of this research came to provide a comparative analysis of the tests of physical fitness elements using field measurement, with the aim of determining the extent of disparity in physical abilities among female students in the first, second and third grades of the Faculty of Physical Education and Sport Sciences, and to provide scientific indicators that contribute to the development of academic and training work in this field, as the importance of the research is highlighted in the use of field measurement as an accurate and direct means to evaluate the elements of physical fitness among female students, and to detect the differences between the study stages, which helps In developing training programs and curricula in accordance with their actual levels.

1-2- Research Problem:

The improvement and development of the elements of physical fitness among female students throughout the academic stages is supposed to be growing and gradually, and this is a result of

continuous learning and training during the academic stages and the identification of the minimum and skill experiences in the Faculty of Physical Education and Sport Sciences, but the realistic observation often indicates that there are unexpected disparities in physical performance between the students of the first, second and third stages, which raises serious questions about the effectiveness of the training programs, and their suitability to the levels of female students and the needs of each stage of study and the universe. The researcher is a teacher who wanted to identify this variation through the use of field measurement as it is an accurate and objective scientific method to evaluate performance.

By reviewing the previous studies, it is shown that the reliance on standardized field tests can clearly reveal the defects or development of different physical abilities, but despite the importance of these indicators, only a few studies have dealt with the analytical differences between the three stages in a direct comparative manner, and using accurate field measurement tools. Hence, the research problem emerges in the importance of analyzing the physical differences among female students across the three academic stages, to find out whether the approved curricula perform Indeed, to improve physical fitness in a gradual, growing and balanced way, and through the above, we can ask a certain question, which is the extent of the statistically significant differences in the tests of physical fitness elements between female students of the first, second and third stages in the Faculty of Physical Education and Sport Sciences using field measurement?

1-3- Research Objectives:

- 1. To identify the level of physical fitness elements (muscular strength, endurance, speed, flexibility, agility) among first, second and third stage students at the Faculty of Physical Education and Sport Sciences, Diyala University.
- 2. Conducting a comparative analysis between the results of the female students of the three stages in the tests of the elements of physical fitness using field measurement.
- 3. Detecting statistically significant differences in physical fitness elements between different school levels.

1-4- Research Hypotheses:

- 1. There are significant differences between the results of first, second, and third stage students in muscle strength tests.
- 2. There are significant differences between the results of first, second, and third stage students in endurance tests.
- 3. There are significant differences between the results of first, second, and third stage students in the speed tests.
- 4. There are significant differences between the results of first, second, and third stage students in the flexibility tests.
- 5. There are significant differences between the results of first, second, and third stage students in the fitness tests.

1.5. Research Areas (Research Limits)

- **1. Human Field: First**, Second, and Third Stage Students at the Faculty of Physical Education and Sport Sciences, Diyala University for the Academic Year **(2024-2025)**
- **2. Spatial Field: Halls** and Playgrounds, Faculty of Physical Education and Sport Sciences, University of Diyala

- 3. Temporal Domain: The period of time during which the field experiment was conducted, which is specified in the second semester of the academic year (2024-2025) from 3/3/2025 to 2/4/2025 on Wednesday after analyzing and discussing the final results.
- .2- Research methodology and field procedures

2-1 Research Methodology:

The researcher adopted the descriptive method of comparison, in order to suit the nature of the problem and the purpose of the study in analyzing the differences between the results of the tests of physical fitness elements among first, second, and third stage students. The descriptive-comparative approach is one of the most used methods in studies that aim to diagnose reality and discover the differences and relationships between variables in natural conditions without the researcher's intervention in the variables

2-2 Research Population and Sample:

The research population consisted of female students of the Faculty of Physical Education and Sport Sciences, Diyala University, and the sample included (132 female students) distributed in three stages: the first (50 female students), the second (45 female students), and the third (37 female students). They were deliberately selected for the purposes of the research, as the sample of the exploratory experiment amounting to (40) female students and some female students due to chronological age and the (30) female players who have a training age with a sports history were excluded, and the percentage of the sample (53.65%) of the research population is as shown in the following table.

Table (1) shows the distribution of the sample

Female	Excluded	Math	Sample	Number	Number	Academic
students	Because of	Excludes	Exploratory	of	of	Stages
excluded	the		Experiment	Sample	Female	
due to	chronological			Students	Students	
absence and	age			for Each		
non-				Stage		
commitment						
27	4	17	30	50	128	Phase I
7	3	15	10	45	80	Phase II
0	0	1	0	37	38	Third
						Stage
34	7	33	40	132	246	Total

2.3 Devices and Tools:

- 1- Laptop Computer (HP)
- 1- Manual calculator
- 2- Tape Measure & Elastic Tape
- 3- Scale and Wooden Stepped Ruler
- 4- Stopwatch
- 5- Medical ball weighing 3 kg and chair
- 6- Signs, ropes and rugs
- 7- Data Registration Lists
- 8- Track for the enemy and a balance beam

2-4 Tests used in the research:

2.4.1 Fitness Tests

1- Sitting Test from Lying with Knees Bend to Measure Strength Endurance Adel Helmy, p. 121, 2017

Purpose of the test: To measure the strength tolerance of the abdominal muscles.

Tools: Mat and stopwatch.

Performance Description: A sitting test from a recliner with knees bent to measure force tolerance performed so that the palms are intertwined behind the neck.

Test Bike Calculation: Calculate the number of times for as long as possible.

2- Medical ball pushing test weighing (3 kg) with the hands of Muhammad Hassan Allawi, p. 148, 2002

Purpose of the test: Measurement of the muscular capacity of the arms and shoulder strap.

Tools: Chair with a backrest - Rope - Medical ball weighing 3 kg - Measuring tape - Iron signs or flags?.

Performance Description: 1. The tester sits on a chair with his back secured with a rope by a colleague and holds the medical ball with his hands.

2. The ball is pushed forward and upward with both hands for the farthest distance, and the tester is given three attempts to get the best result.

Test score calculation: The best three attempts to measure the distance from the front edge of the chair to the farthest point the ball leaves on the ground are calculated.

3 - Speed Test (100 m Enemy): Wajih Mahjoub, p. 88, 2005

Purpose of the test: Measurement of the transition velocity

Tools: Whistle, stopwatch, tape measure, start line, finish line, sprint track

Performance Description: The laboratory takes the low start position behind the starting line in its assigned location.

- The call is made (take your place get ready run)
- When the tester hears the command to run, he starts at full speed in a straight line and continues to run until the end of the finish line

Calculation of grades: The laboratory score is the time of arrival of the finish line in one hundred meters.

4- The Wide Jump Test of Stability: Ali Abdel Amir, p. 136, 2008

Purpose of the test: to measure the muscular capacity of the legs

Tools: Suitable place for jumping, tape measure, colored signals

Performance Description:- The tester stands behind the starting line, the feet are spaced and parallel

- The tester starts by weighting the arms backwards with the knees bent, leaning forward slightly and then jumping forward with maximum force and as far as possible by extending the knees and pushing the feet, with the arms weighted forward.
- Each laboratory has three consecutive attempts, the best of which is counted

Calculation of Grades: The distance of the jump is measured from the starting line to the last part of the body touching the ground towards the beginning

5- Agility test: Oasim Hassan Hussein, p. 94, 2012

Purpose of the test: Measuring agility

Tools: Stopwatch, Clean Playground

Performance Description: The tester takes a standing position on the floor (starting position) when giving the signal, he bends the knees completely to place the palms on the floor so that the sitting position is on the heels and knees between the arms, and the legs are thrown backwards to reach the inclined procrastinating position, then the legs are thrown forward to reach the kneebent position, then the knees are extended to reach the standing position, and the tester repeats the previous performance as many as possible within a minute.

Calculation of Scores: The number of correct repetitions is calculated during the specified time.

6- Flexibility test: (Ibrahim Sharif, p. 101, 2014)

Purpose of the test: To measure the flexibility of the arm and trap in forward bending motions from a standing position

Tools: - Stepped scale made of wood (inserted ruler) height 30 cm

- A bench or chair that bears the weight of the laboratory is mounted on the ruler so that the scale is zero to the highest level of the edge of the chair

Performance Description: The tester takes a standing position on the edge of the seat so that the feet are in contact with both sides of the scale, and the testator bends the torso forward and down so that the fingers are in front of the scale, and from this position, the testator tries to bend the torso as far as possible strongly and slowly, noting that the fingers of the hands are in the same plane and move down parallel to the scale.

Calculation of Scores: The lab score is the maximum point on the scale that the tester reaches from the position of bending the torso forward and down.

7- Endurance Test: (Abdel Hamid Shawky, p. 112, 2011)

The purpose of the test is to measure the efficiency of the circulatory and respiratory systems (endurance).

Tools: Stopwatch, Tape Measure, Start Line, Finish Line, Running Track

Performance Description: The laboratory takes the high start position behind the starting line in the designated location.

- Calling (Get Ready Run)
- When the tester hears the command to run, he starts at full speed in a straight line and continues to run two full 800 m cycles until the finish line

Calculation of Grades: The laboratory score is the time of arrival of each laboratory from the time the start signal was given to the finish line in 800 meters.

9- The test of walking on the bar (Mounir Bassam, p. 142, 2009)

Purpose of the test: Measure balance through movement

Tools: Balance beam with a width of (10) cm, length of (4) m and thickness of (3-5) cm, flat ground, stopwatch.

Test Specifications: When hearing the signal to start, the tester walks on the beam to the end, then turns and returns again to the starting point at full speed and without touching any part of the ground body outside the beam.

Recording: The time taken to walk on the beam is calculated to be less than 1/10th of a second when any part of the object touches the ground outside the crossbar.

10- Jumping Rope Test (Nabil Jawdat Al-Salim, p. 131, 2010)

Purpose of the test: Measuring compatibility.

Tools: A rope is 24 inches long, so that it is held at the end of the knots with a distance of 16 inches (the distance from which the rope will be jumped) leaving a distance of 4 inches outside each knot to be used for holding the rope.

Performance Specifications The testator holds the rope from the specified places, the tester jumps over the rope so that the rope passes in front and below the feet (repeat this action five times)

Registration: Record the correct number of jumps from the five attempts made by the laboratory.

3. Exploratory Experiment:

The exploratory experiment is one of the basic conditions in scientific research, through which the researcher can identify many things related to the mechanism of conducting the research, as it deals with topics that do not have information or data or the researcher is ignorant of many aspects and dimensions, as it is "a small experiment or miniature work of the existing study carried out by the researcher in order to identify the negatives that may accompany conducting the main experiment of the research" (Nouri Ibrahim Al-Shouk and Rafe Saleh Fathy: 2004:89).

The exploratory experiment (Mohammed Al-Yasiri, 2010, 39) aims to:

1. Identify the response of the sample and apply the test.

- 2. Training and arranging the assistant staff.
- 3. Ensure the safety of the devices used in the research and their suitability to complete the tests.
- 4. Recognize the time taken to perform the tests.
- 5. Know how data is obtained and how it is collected in order to be processed statistically.
- 6. Finding the scientific parameters of the tests.

The exploratory experiment for the exams was conducted on Monday, 9/3/2025 at ten o'clock in the morning in the playgrounds and halls of the Faculty of Physical Education and Sport Sciences on a sample of 25 female students, and the aim of conducting the exploratory experiment was to identify the obstacles that the researcher may face during the implementation of the main experiment, and to know the extent of the students' understanding of the vocabulary of the tests under research, to know the time taken to conduct the tests and to know the efficiency of the assistant work team.

4. Main Experience:

The researchers conducted the main experiment as follows:

The main experiment was conducted on Monday 16|3|2025 on the students of the second and third stages at ten in the morning and on Tuesday 17/3/2025 on the students of the first stage at ten o'clock in the morning.

5- Statistical means:

The researcher used the **statistical assistant program** to process the data.

5.1 Presentation, analysis and discussion of the results:

The descriptive variables of the research variables are as follows:

Table(2)
Homogeneity of Sample Variables Age, Height, Weight

Significance	Torsion	Minimu	Highes	Standard	Broke	Arithmeti	Variabl
	coefficien	m Value	t Value	deviatio	r	c mean	е
	t			n			
Insignifican	0.47	18	22	1.02	20.00	20.18	Age
t							(year)
Insignifican	0.14	153	172	4.9	162.5	162.6	Length
t							(cm)
Insignifican	0.23	47	69	5.5	57.9	58.3	Weight
t							(kg)

Table (3)
Shows the arithmetic averages and standard deviations of the research tests for the first, second and third stages

Standard deviation	Arithmetic mean	Stage	audition
3.1	26.4	The first	Sitting from Lying Down
2.8	28.7	The second	
2.4	30.2	The third	
0.45	4.1	The first	Medical Ball Push
0.38	4.5	The second	
0.36	5.0	The third	
0.25	1.65	The first	Wide Jump
0.22	1.82	The second	
0.18	1.95	The third	

1.8	16.1	The first	Speed
1.5	15.3		Speed
		The second	
1.3	14.6	The third	
3.0	22	The first	Agility
3.2	25	The second	
2.8	28	The third	
1.4	4.0	The first	Flexibility
1.5	6.2	The second	
1.6	8.9	The third	
14	235	The first	Endurance
12	220	The second	
11	208	The third	
1.8	13.2	The first	homeostasis
1.5	11.8	The second	
1.3	10.5	The third	
0.6	3.5	The first	Compatibility
0.7	4.1	The second	
0.5	4.8	The third	

Table (4)
Shows the variance of the research tests for the first, second and third stages

Significance	F calculated	Average Squares	Degrees of Freedom	Total Squares	Source of Contrast	audition
Moral	8.21	64.2	2	128.4	between	Sitting from Lying Down
		7.78	129	1003.6	inside	
			131	1132.0	Total	
Moral	7.08	0.51	2	1.02	between	Medical Ball Push
		0.072	129	9.31	inside	
			131	10.33	Total	
Moral	5.15	0.43	2	0.86	between	Wide Jump
		0.083	129	10.75	inside	
			131	11.61	Total	
Moral	6.42	86.8	2	173.6	between	Speed
		13.53	129	1746.3	inside	
			131	1919.9	Total	
Insignificant	2.45	159	2	318	between	Agility
		32.1	129	4143	inside	
			131	4461	Total	
Moral	26.9	96.15	2	192.3	between	Flexibility
		3.57	129	461.2	inside	
			131	653.5	Total	
Insignificant	2.7	2124	2	4248	between	Endurance
		307.8	129	39706	inside	
			131	43954	Total	
Moral	12.7	44.2	2	88.4	between	homeostasis
		3.48	129	448.5	inside	
			131	536.9	Total	
Insignificant	2.45	5.6	2	11.2	between	Compatibility
		0.60	129	76.8	inside	

Tukey HSD test for physical fitness tests for stage 1, 2, and 3

Significance	Critical Value	troupes	Comparison	audition
Moral	1.9	2.3	First – Second	Sitting from Lying Down
Immoral	1.9	1.5	Second – Third	
Moral	1.9	3.8	First – Third	
Moral	0.28	0.4	First – Second	Medical Ball Push
Moral	0.28	0.5	Second – Third	
Moral	0.28	0.9	First – Third	
Moral	0.12	0.17	First – Second	Wide Jump
Moral	0.12	0.13	Second – Third	
Moral	0.12	0.30	First – Third	
Moral	0.6	0.8	First – Second	Speed
Moral	0.6	0.7	Second – Third	
Moral	0.6	1.5	First – Third	
Insignificant	3.2	3	First – Second	Agility
Insignificant	3.2	3	Second – Third	
Moral	3.2	6	First – Third	
Moral	1.4	2.2	First – Second	Flexibility
Moral	1.4	2.7	Second – Third	
Moral	1.4	4.9	First – Third	
Insignificant	13.5	15	First – Second	Endurance
Insignificant	13.5	12	Second – Third	
Moral	13.5	27	First – Third	
Moral	0.9	1.4	First – Second	homeostasis
Moral	0.9	1.3	Second – Third	
Moral	0.9	2.7	First – Third	
Insignificant	0.4	0.6	First – Second	Compatibility
Moral	0.4	0.7	Second – Third	
Moral	0.4	1.3	First – Third	

5.2 Discussion of the results:

The results of the physical fitness tests for the three stages showed the preference for the third stage despite the fact that it was the smallest sample and the largest sample was in the first stage (50 female students), and despite this numerical superiority, not all the results of this stage showed significant in some of the physical fitness elements studied in the research. This is the reality of the internal natural distribution of data and the actual level of performance of female students in this stage, which may be characterized by great variation between individuals or due to lack of experience. The cumulative size of physical abilities and qualities that are formed as a result of experience, practice, and exercise that takes place during physical fitness lectures and lectures in other practical subjects, which weakens the strength of statistical significance despite the abundance of numbers (Ahmed Al-Najjar, p. 45, 2021). A number is not necessarily an indicator of progress or superiority, unless it is combined with other factors such as exercise, experience, and level of physical commitment.

The researcher believes that the results that are not significant for the first stage, despite the exercises and their intensity in the curriculum followed and their repetitions according to the

specificity of each physical attribute of physical fitness, as it is one of the physical fitness teachers, is due to a set of reasons, the most important of which is that female students in this stage are still in their physical and skill beginnings, and face challenges related to the stability of the physical level, poor motor control, and the disparity of previous sports backgrounds. Differences in adaptation to commitment in performing exercises and how to perform correctly may also be a factor in poor statistical results. The researcher points out that this stage needs an organized and early training intervention that helps build basic physical bases and stabilize motor skills, which prepares students for a more effective training stage in the coming years.

On the other hand, the third stage showed a clear statistical and physical superiority in most of the physical fitness variables, although the sample size was lower compared to the first stage. This is due to the accumulation of physical and skill experience, and the breadth of the students' motor and training understanding in this stage, which gives them a higher ability to perform regularly and sedentically (Mohamed Al-Hassani, p. 37, 2020). Also, the length of exposure to practical curricula and the frequency of training sessions contribute to raising physical efficiency and stabilizing skill performance, which is reflected in the development of physical fitness and consequently on the results.

By comparing the results across the stages, it is observed that there is a gradual improvement from the first to the third stage in most of the studied variables, which reflects the effect of training accumulation and the natural development of physical and mental growth as the school stage **progresses (Sami Al-Khodari, p. 59, 2019).** The researcher supports this interpretation based on her experience of the training field and the students' interaction with practical programs, where it was observed that the regularity and continuity of training directly contributes to raising the performance of female students and the development of their level in field tests.

One of the most prominent findings revealed was the superiority of female third-stage students in elements such as muscular strength, speed, flexibility, balance, and motor coordination, which are consistent with recent studies that have shown the effectiveness of complex programs and high-intensity training in developing these elements in an integrated manner (Wang et al., 2025, p.21538; Guo et al., 2023). Through the analysis of field performance, the researcher observed that these elements clearly respond to continuous focused training, making them an accurate indicator of progress in the level.

Despite this, there were no significant differences in some variables such as agility and endurance among the students of the first and third stages, which the researcher explained by the weakness of the intensification of aerobic training, i.e. focusing on the exercises followed for interval training, either due to the lack of lecturer time or the presence of other elements that require development in which aerobic exercise, whether low-intensity or high-intensity, is useless, and that the course is limited to fifteen lectures for the first course and the same for the second course in The current curriculum, as the development of these two elements requires specific training programs such as high-intensity interval training (HIIT) and Tabata exercises, which have been scientifically proven to improve aerobic abilities and dynamic endurance over short periods of time Yin et al., 2025; Kv et al., 2024).)

Based on her academic and applied experience, the researcher emphasizes that the integration of programs such as HIIT and Tabata into practical lectures is an urgent necessity, especially in the first and second phases. The HIIT program relies on the implementation of high-intensity exercises in short intervals, which improves endurance, speed, and strength, while the Tabata program relies on intense performance during very short periods with limited rest, which significantly enhances agility and motor coordination. Studies have shown that the implementation of these programs twice a week Only a noticeable difference in performance can occur within 6–8 weeks (**Pérez-Ramírez et al., 2025**).

The researcher believes that the inclusion of these programs in the classroom contributes to breaking the training routine, increasing the self-motivation of female students, and achieving

justice in physical development between the different stages. It also helps to reduce the variation of results, and to achieve clear significance even in the early stages that showed non-significant performance in some variables.

Accordingly, the researcher believes that the development in skill and physical performance is not just a natural result of the progress of the academic stages, but rather a direct reflection of the quality, intensity and intensity of the training programs. Therefore, the development of practical curricula through the integration of effective and proven training such as HIIT and Tabata is an essential step towards raising the quality of performance and achieving more consistent and fair results among female students at different stages.

6. Conclusions and Recommendations

6.1. Conclusions

- 1. Performance excellence is not always related to the sample size, as the third stage showed better results despite the smaller number of female students compared to the first stage.
- 2. The gradual improvement in performance and physical fitness between the stages reflects the impact of the accumulated training experience during academic study.
- 3. There is a need to develop specialized training programs for each school level, focusing on raising the level of fitness and skills rather than relying solely on sample size or number.

6.2. Recommendations

- 1. Attention was paid to the development of customized training programs for the first phase to enhance the significance of performance results and achieve continuous development.
- 2. Continuing intensive training programs for the third phase to benefit from the gained experience and maintain high performance.
- 3. Conducting future studies with a larger sample of different levels of study to examine the impact of training and experience on performance more accurately.
- 4. Encourage continuous interaction between female students at different stages to exchange experiences and increase motivation towards training and improve performance.

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 Appendix (1)

Shows the names of the assistant team

Workplace	Specialization	Scientific Title	Name
Physical Education and Sport Sciences Diyala	Biomechanics/Gymnastics	Prof. Dr.	Ferdous Majid Amin
Physical Education and Sport Sciences Diyala	Test & Measure / Weights	Assoc. Prof.	Haidar Saud Hassan
Physical Education and Sport Sciences Diyala	Test & Measure / Basket	Assoc. Prof.	Nizar Ali Jabbar
Physical Education and Sport Sciences Diyala	Training/Arena	Assoc. Prof.	Eng. Dr. Oras Adnan Hatroush
Physical Education and Sport Sciences Diyala	Training Physiology/Arena	Assoc. Prof.	Nebras Adnan Hatrush
Physical Education and Sport Sciences Diyala	Sports Psychology	M.M.	Sara Akram Hamid

Physical Education and Sport Sciences Diyala	Sports Psychology/Gymnastics	M.M.	Nour Essam
Physical Education and Sport Sciences Diyala	Learn / Racquet Games	M.M.	Inas Yahya Ahmed