

### ***Research methods in Physical Education PE 635***

This course contains research proposal design, research types, its elements, literature review, hypotheses, sample selecting, designing experiments, demonstration of results and referencing. This course aims to improve students skills in finding research gap and selecting an appropriate study approach, data collection method, data analyzing and making conclusions.

At the end of this course expected outcomes from students are:

- 1- finding research gap and selecting an appropriate research approach and samples in addition to correct referencing.
- 2- develop measurements used in sport sciences.
- 3- criticize and analyze research in sports field.

### ***Advanced Sport Psychology SS610***

This course contains personal traits, motivation, psychological methods for improving performance, creativity, and self-confidence. It focuses on applied research in sport psychology. This course aims to join sport psychology theories to the real situations,

At the end of this course expected outcomes from students are:

- 1- analyze and criticize sport psychology theories.
- 2- use sport psychology theories in solving various sport issues.
- 3- conduct qualitative research in sport psychology.

### ***Measurements and Statistics in Sport Sciences SS621***

This course contains principles of selecting measurements, its scientific conditions and statistical processes using specific programs for data analysis. This course seeks for conducting practical measurements through choosing an appropriate instruments which validity and reliability have been examined. This instruments are applied in sports field and after analyzing results and conclusions are made.

At the end of this course expected outcomes from students are:

- 1- scientifically examined instruments for data collection are.
- 2- use instruments in the sport field .

3- practice statistical analyzing and select an appropriate analyzing for study hypotheses.

### ***Exercise Physiology SS650***

This course contains blood changes as a resultant of exercise, heart changes pre and post exercise and its size for athletes and non-athletes, physiological adaptation to exercise, exercising in high and low levels, exercising in hot and cold weather, exercising in water and outside water. This course aims to join principles of athletes physiological analyzing and real training situations to gain desired physiological adaptations.

At the end of this course expected outcomes from students are:

- 1- knows physiological changes as a resultant of various exercises.
- 2- design sport programs based on anatomical and physiological principles.
- 3- measure physiological changes due to exercising within different conditions.

### ***Mechanical Performance of Sport Movements SS651***

This course contains mechanisms of performance, various types of movement, movement analysis methods, diagnosis of performance to identify mistakes during learning process. The course also contains movement applications within physician rules: mass, force, push, energy, power, torque, This course aims to enable students in morphological, anatomy, education, and functional analyzing of the movement and using accurate equipments for measuring physical rules.

At the end of this course expected outcomes from students are:

- 1- use resistance equipments to determine working muscles and methods for strength development.
- 2- Join between mechanical functioning of muscles and body levers.
- 3- Applying technological programs in movement analysis.

### ***Social Issues in Sports SS612***

This course contains scientific and technological development, political, economic, media, and cultural impact on various sport events. The course also explores how can sport society limit negative issues and improve positive effects. The course aims to analyze and criticize new social

issues in sport and investigate a relationship between social issues and their impact on sport society (club supporters, athletes, referees, media workers, sports federations...etc).

At the end of this course expected outcomes from students are:

- 1- analyze and criticize social issues related to sports.
- 2- apply research in solving social problems that occur in sports.
- 3- join between technological development and sports.

### ***Measurements and Tests in Physical Education SS622***

This course contains tools for data collection and principles for their selecting in addition to attaining required scientific conditions. This course explores developing questionnaires, cognitive, emotional, psycho-physical battery tests, body measurements, and applying research in the sport field. This course aims to improve students knowledge about theoretical and practical principles for developing measurement tools such as questionnaires, physical, skills', cognitive, and perceptual tests as well as body measurements and body fat percentage.

At the end of this course expected outcomes from students are:

- 1- determine an appropriate measurement.
- 2- develop measurement tools according to scientific standards.
- 3- use measurement tools in sport settings.

### ***Sports Injury Prevention and Rehabilitation SS630***

This course contains sport injuries, first aid through cooling and heating, new methods of fixing injuries, and athletes rehabilitation. This course aims to increase students' knowledge about sport injuries, their prevention and treatment.

At the end of this course expected outcomes from students are:

- 1- distinguish various sports injuries according to their type and degree.
- 2- effectively perform first aids when sport injury occurs.
- 3- apply appropriate treatment exercise for athletes rehabilitation.

### ***Sport Coaching of People with Disability SS631***

This course contains principles of sport training for people with disability, special learning difficulties, and ADHD. In addition, this course addresses physical tests for this population group. This course aims to provide students knowledge about physical, psychological, and social benefits of physical activity participation for people with disability. Within the course students should learn how to develop physical training programs for people with disability and how to use appropriate equipment during the training. In this course students will also apply recent research in the field of adapted physical activity in Jordanian environment.

At the end of this course expected outcomes from students are:

- 1- distinguish between different types of disability and apply training programs for each disability group.
- 2- apply physical tests for people with disability.
- 3- apply physical training within safe environment in the gym.

### ***Public Health for Athletes SS640***

This course contains new understanding of health concepts due to physical activity, obesity and physical activity, heart diseases due to sedentary life style osteoporosis, the importance of good nutrition, and conducting research related to health and sports. This course aims to join the importance of studying sport health and current life style in addition to people's behaviour changes in their sedentary life style.

At the end of this course expected outcomes from students are:

- 1- to know new approaches about public health and sports and be aware about the importance of physical activity in reducing diseases.
- 2- perform various physical actives according to the scientific standards.
- 3- perform exercises for improving muscular and cardiovascular fitness and body composition and its measurement.

### ***Sport Nutrition and Energy Sources SS641***

This course contains nutrients and how they are digested in addition to the importance of nutrition in building tissues and energy production and the importance of vitamins and minerals. Within the course the students should develop nutrition programs and research in order to improve sport levels. This course aims to join sport nutrition programs to improve exercise practitioners and conducting research related to sport nutrition and energy production.

At the end of this course expected outcomes from students are:

- 1- join between nutrients and digestive system.
- 2- perceive the importance of nutrition and energy sources in sports.
- 3- develop nutrition programs according to the applied sport

### ***Applied Sport Physiology SS652***

This course contains energy systems used in various sports, breathing,  $VO_2$ max, heart rate, lactic acid, examining fats, and conducting lab tests. This course aims to provide information about sport physiology and to explain common phenomena that may occur during the games such as swallowing the tongue, liver inflation, sudden death.

At the end of this course expected outcomes from students are:

- 1- know principles of physiological measurements within different athletic settings.
- 2- apply laboratory tests to find changes in physiological variables as a result of training.
- 3- improve training principles according to physiological statement of the athletes.

### ***Motor Learning and Development SS653***

This course contains motor learning theories, learning stages, learning models classical conditional learning, conditional learning, learning from the models, and applying motor learning research. This course aims to explore learning theories and neurosis principles of motor learning and related factors as well as methods of processing information and various models that are used in motor learning and motor control in addition to measuring movement skills.

At the end of this course expected outcomes from students are:

- 1- determine the factors that impact motor learning.
- 2- choosing an appropriate feedback for movement development.
- 3- analyze movement skills within different athletic situations.

### ***Special Topics in Sports Medicine SS654***

This course addresses introduction to sports medicine and related sciences, fractures, injuries, trauma, CPR, and practical applications within different settings. This course aims to provide

students knowledge about specific topics in sports medicine such as doping, alcohol, smoking, and sport injuries and their impact on athletic performance.

At the end of this course expected outcomes from students are:

- 1- know the importance of sports medicine principles.
- 2- explore medical sport issues and find appropriate solutions.
- 3- use sports medicine applications in real situations.