UNIVERSITY OF THESSALY

School of Physical Education and Sport Science

Program of Study: Modules' Outlines

Academic Year: 2015-2016

CONTENTS

A. BASIC CYCLE: CORE MODULES

SEMESTER A

Anatomy

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0102	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Yiannis Koutedakis
Position	Professor
Office	9
Tel / e-mail	24310 47056/ y.koutedakis@uth.gr
Co-instructors	Andreas Flouris, Vaios Goulas

Objective of the course

The aim of this course is to provide students with the fundamental knowledge required for the identification of basic anatomical structures, primarily in the musculoskeletal system, as well as the functional architecture of the human body during performance of different sports.

Course contents

Cell-Tissues-Organs-Systems
Skin-Muscles-Bones-Joints
Shoulder zone
Brachium-forearm-wrist-hand
Vertebral column
Central nervous system-Spinal nerves-Peripheral nervous system
Pelvic region-femur
Knee-Patella-Tibia-Fibula-Foot
Digestive system
Functional architecture of the human body during performance of different sports

Assessment methods

Final Exams 100%

Recommended reading

Gray"s Anatomy for studentsR.L.Drake,W. Vogl, A. Mitchel 2005
Range of Motion Christian Ryf, Andreas Weyman
Dynatomy, Dynamic Human Anatomy W.C Whiting, S Rugg

Biomechanics

Course code	**Number of credits allocated**	**Student Workload (hours**	**Level of course**
MK0901	6	150	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Athanasios Tsiokanos / Yannis Giakas
Position	Associate Professor / Associate Professor
Office	8 / 3
Tel / e-mail	24310 47053 / atsiokan@pe.uth.gr, 24310 47010/ ggiakas@pe.uth.gr
Co-instructors	

Objective of the course

To familiarize the students with the basic theoretical aspects of mechanics applied to the human neuromuscular system of a sport performer, sports implements, and footwear and surfaces, and to familiarize with the methods used for estimation of the loading of the musculoskeletal system in sport and exercise.

Course contents

Metric units and coordinate systems – axes and planes in human movements.
Linear kinematics.
Angular kinematics.
Projectile motion.
Linear kinetics.
Rotational kinetics.
Equilibrium and human movement.
Mechanical work, energy and power.
Friction forces.
Impact forces.
Aerodynamics – hydrodynamics.
Anthropometry and determination of the center of mass of the human body.
Mechanical models of the skeletal and muscular system.
Free body diagrams.
Estimation of forces using free body diagrams (statically) – upper limbs.
Estimation of forces using free body diagrams (statically) – lower limbs.
Estimation of forces using free body diagrams (dynamically).

Assessment methods

Exams 70%
Homework 20% (2 homework)
Teaching 10%

Recommended reading

Class notes.
Kollias H. (1997). Biomechanics of sports movements. Thessaloniki. (in greek)
Adrian M.J., Cooper J.M. (1995). Biomechanics of Human Movement. Brown & Benchmark Publishers, IA, USA.
Hall S.J. (1995). Basic Biomechanics. McGraw-Hill Companies, USA.
Hamill J., Knutzen K.M. (1995). Biomechanical Basis of Human Movement. Williams & Wilkins, PA, USA.

Physical Education Pedagogy

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0210	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Papaioannou
Position	Professor
Office	1
Tel / e-mail	24310 47012 / sakispap@pe.uth.gr
Co-instructors	

Objective of the course

Upon completion of this course students should understand contemporary challenges in teaching school physical education and they should have the basic knowledge for effective teaching of physical education.

Course contents

Introduction.
Contemporary models of physical education.
The purpose "Lifelong health-related exercise".
Developmental differences and motivational climate in school physical education.
Rewards, punishments and interest in physical education.
Maintaining equality in physical education.
Social inequalities and physical education curricula for disadvantaged students.
Direct, practice and reciprocal styles of teaching.
Self-monitoring, guided discovery and development of creativity.
Decreasing misbehaviors and developing responsibility.
Planning and preparing the daily lesson.
Presentations of students' projects.
Summarization.

Assessment methods

Essays and projects 40% Exams 60%

Recommended reading

Papaioannou, A., Theodorakis, G., & Goudas, M. (2002). Improving Physical Education. Thessaloniki: Christoodulidi Publ.
Hatziharistos, D. (1989). Contemporary Physical Education System. Symmetria Publ.

Sport Psychology

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0108	5	125	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Lectures and Seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Nikolaos Zourbanos
Position	Assistant Professor
Office	12
Tel / e-mail	24310 47027 / nzourba@pe.uth.gr
Co-instructors	Marios Goudas, Professor

Objective of the course

By the end of the course students should be able to discuss critically the psychological factors that affect athletes' performance and development in sport.

Course contents

Introduction in sport psychology
The science of sport psychology
Psychological strategies in sport
Psychological skills in sport
Self-confidence in sport
Goal-setting in sport
Cohesion in sport
Communication in sport
Leadership in sport
Anxiety in sport
Violence and aggression in sport
Weight control and eating disorders in sport

Assessment methods

Exams 60%
Assignment 1 20%
Assignment 2 20%

Recommended reading

Theodorakis, Y., Goudas, M., & Papaioannou, A. (2001). Psychological excellence in sport. Thessaloniki: Christodoulidi Publications. (In Greek)
Papaioannou, A., Theodorakis, Y., & Goudas, M., (2003). Towards a better physical education. Thessaloniki: Christodoulidi Publications. (In Greek)
Murphy, S. (2012). *Oxford Handbook of Sport and Performance Psychology*. New York. Oxford University Press.
Papaioannou, A., & Hackfort, D. (2014). Routledge Companion to Sport and Exercise Psychology. Global Perspectives and Fundamental Concepts. London. Taylor & Francis.
Weinberg, R.S., & Gould, D. (2007). *Foundations of sport and exercise psychology* (4th ed.). Champaign, IL: Human Kinetics.

Computing

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0203	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Theory Lectures and Laboratory
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	28	Non	Greek

Lecturer

Name	Marina Papastergiou
Position	Associate Professor
Office	15
Tel / e-mail	24310 47028/ mpapas@pe.uth.gr
Co-instructors	

Objective of the course

The module aims at fostering students' understanding of basic computer science concepts, at informing students regarding the impact of information technology on society, at familiarizing them with various types of software, at helping them gain a deeper understanding of the way mobile computing devices work and of the various threats to the safety of computing devices and digital data, as well as at developing students' skills to efficiently utilize a personal computer operating system, office automation software and Internet services/applications. The intended learning outcomes are that students acquire an understanding of computer science terms, concepts and processes, that they become aware of the range and perspectives of information technology applications in society, that they are knowledgeable about security issues relevant to computing devices and digital data, and, also, that they are capable of efficiently utilizing computing devices in their studies.

Course contents

Hardware of a personal computer
System software
Application software
Computer networks – Internet
Mobile computing devices – Digital convergence
Computing devices security
Digital data protection
Windows operating system
Creating documents
Creating presentations
Utilizing Internet services
Search engines
Use of the e-Class course management system
Searching scientific bibliography in online bibliographic databases

Assessment methods

Final exams 100%

Recommended reading

Evans, A., Martin, K., & Poatsy, M.A. (2014). Technology in action - Introductrory (G. Stamatiou, Ed. Greek edition). Athens: Kritiki.
Xarhakos, K., &Karolidis, D. (2011). Learn Microsoft Office 2010 easily. Athens: Xarhakos.

Teaching of Track and Field I

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0101	2	50	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Dimitrios Soulas
Position	Professor
Office	24
Tel / e-mail	24310 47016 / dsoulas@pe.uth.gr
Co-instructors	Vasileios Voutselas, Aglaia Zafeiroudi

Objective of the course

It is the student's entrance to the subject of Track and Field, which comprises a basic sports event to the system of Physical Education, so that at the end of this cycle of their training students would be able to know all the necessary elements of specific events to respond to any occasion of demands either to the championship or to the school athletics.

Course contents

Methods and methodology of basic technique of long jump, triple jump, high jump and pole – vault.
Methods and methodology of basic technique of shot put, javelin and discus throwing.

Assessment methods

Exams 50%
Practice 50%

Recommended reading

Kellis S., Kontonasios I, Mnaou V., Pulianidis A., Saraslanidis P., Soulas D. (2009).Track and Field at School and at Athletic Union, Thessaloniki Salto
Kantsidis, D., Papaiakovou G. (1992). Track and Field at School and at Athletic Union. Thessaloniki.

Teaching Basketball

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0107	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Vassilis Gerodimos
Position	Associate Professor
Office	20
Tel / e-mail	24310 47005 / bgerom@pe.uth.gr
Co-instructors	Panagiotis Tsimeas

Objective of the course

The aim of the module is the acquaintance-practice of students with individual basketball skills and fundamentals defensive-offensive movements, as well as the development of their ability to teach them using different teaching methods. Students are also taught about the rules of the game and the utilization of the score sheet. Special emphasis is given in the playful mode of teaching.

Course contents

Skills without the ball
Stances, Running technique, Change of direction, Stops, Pivoting, Defensive slides.
Skills with the ball
Receiving the ball, Two counts rhythm, Passing(Chest pass, Bounce pass, Overhead pass),Dribbling (control, speed, crossover, reverse), Shooting (jump-shot, lay-up, hook-shot, free–throw), Getting free (perimeter-inside players), movement with the ball- fakes (perimeter-inside players).
Rebound (offensive-defensive).
Defensive block-out.
Individual defense (perimeter-inside players).
Defending the player with the ball.
Offensive movements 2 and 3 players (inside screen, opposite screen, give and go).
Defending against screens.
Zone defense-Attacking against zones (principles).
Fast-break.

Assessment methods

Exams 70% (35% practice & 35% theory)
Homework 20% (3 homework)
Teaching 10%

Recommended reading

Classnotes.
Hal Wissel (2007). Basketball: Steps to Success. Translation: S. Perkos, V. Gerodimos, M. Goudas., Thessaloniki.Christodoulidis Publications.
Tsitskaris G.,Hatziathanasiou, P. (2002). Fundamental Principles of Basic Technique, Thessaloniki, Salto Publications.
Gerodimos, V., Perkos, S. (2006). Basketball: Theory, Technique, Tactics, Methodology, Special Instructive and Rules. Thessaloniki: Salto Publications.
Kioumourtzoglou, E. & Goudas, M. (2003). Basketball Beyond Fundamentals and Tactics. Thessaloniki, Christodoulidi Publications.

SEMESTER B

Psychology of Physical Education

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0208	5	125	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Spring	Compulsory	Lectures and Seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Marios Goudas
Position	Professor
Office	16
Tel / e-mail	24310 47045 / mgoudas@pe.uth.gr
Co-instructors	

Objective of the course

By the end of the course students should be ableto discuss critically the psychological factors that affect children's performance and development in physical education and youth sport.

Course contents

The scope of psychology of physical education
Punishment, reinforcement and intrinsic motivation
Achievement motivation and achievement goals in physical education
Attributions in sport
Development of a positive self-concept in sport
Self-regulation of learning
Developing self-regulatory skills in physical education and sport
Developing life-skills through physical education and sport
Developing responsibility in physical education
Developing awareness for social inequality through physical education
Moral development in sport
Developing positive attitudes towards physical education and physical activity.
Psychological aspects of youth sport
Parents' role in youngsters' sport participation.

Assessment methods

Exams 100%
Assignments 20% (Added to exams mark)

Recommended reading

Theodorakis, Y., Goudas, M., & Papaioannou, A. (2001). Psychological excellence in sport. Thessaloniki: Christodoulidi Publications. (In Greek)
Papaioannou, A., Theodorakis, Y., &Goudas, M., (2003). Towards a better physical education. Thessaloniki: Christodoulidi Publications. (In Greek)
Kolovelonis, A., & Goudas, M. (2015). Teaching children sport skills. Christodoulidi Publication. (in Greek
Weinberg, S., & Gould, D. (1999). Foundations of Sport and Exercise Psychology. Champaign, IL: Human Kinetics.

Motor Learning

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0907	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Elisana Pollatou
Position	Associate Professor
Office	10
Tel / e-mail	24310 47068 / epolatou@pe.uth.gr

Objective of the course

The main goal of the course is to introduce to the students the basic principles and practices of motor skill acquisition and motor performance enhancement.

Course contents

Introduction to motor performance and learning.
Information processing and decision making.
Information processing approach, reaction time.
Attention, memory system.
Sensory contribution to skilled performance.
Movement production and motor programs.
Principles of motor control and movement accuracy.
Individual differences and motor abilities.
Concepts, methods and measurement of motor learning.
Preparation and strategies for designing practice.
Organizing and scheduling practice.
Feedback for skill learning.
Integration and practice applications.

Assessment methods

Written exams (40% multiple choice questions & 60% critical essays)

Recommended reading

Lesson's Lectures from internet site.
Schmidt, R., Wrisberg, C. (2004). Motor learning and performance, 3rd edition, Human Kinetics.
Schmidt, R., Lee, T. (1999). Motor control and learning-a behavioral emphasis, 3rd edition, Human Kinetics.

Teaching Methodology in Physical Education

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1100	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Spring	Compulsory	Lectures, practice, assignments
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Nikolaos Digelidis, PhD
Position	Associate Professor
Office	2
Tel / e-mail	24310 47052 / nikdig@pe.uth.gr
Co-instructors	

Objective of the course

To introduce the undergraduates to basic methods and style of teaching in physical education, with consideration to other aspects like motivation, discipline, rewards etc.

Course contents

Taxonomy of teaching methods
The spectrum of teaching style and methods in physical education.

- Command style of teaching.
- Practice style of teaching.
- Reciprocal teaching.
- Style of self-check.
- Inclusion style.
- The style of guided discovery.
- The style of convergent discovery.
- The divergent teaching style

Teacher-centered teaching and student - centered teaching.
Motivational climate.
Student assessment in physical education
Game play in physical education

Assessment methods

Final exams 100%

Recommended reading

Digelidis N. (2007). The spectrum of teaching styles: From theory to praxis. Thessaloniki, GR: Christodoulidi Publishers.
Mosston M. & Ashworth S. (2002). Teaching physical education (5th edition). San Fransisco, CA: Benjamin Cummings

Physiology

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0415	5	125	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Spring	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Ioannis Koutedakis
Position	Professor
Office	9
Tel / e-mail	24310 47056/y.koutedakis @pe.uth.gr
Co-instructors	

Objective of the course

The purpose of this subject is the students to understand the mechanisms of body function and they will receive the necessary knowledge needed to avoid damage during the exercise.

Course contents

Introduction to Human Physiology. Basic cell function.
Systems of biological control.
Control mechanisms from the Nervous System.
Sensors System.
Basic Concept of Hormonic control.
Blood, coagulation, immune system.
Respiratory system.
Circulation.
Muscle function control of human motion.
Kidneys. Balance of the body fluids and electrolytes.
Food Digestion and absorption. Metabolism and energy balance.
Reproduction.

Assessment methods

Exams 70%
Homework 30%

Recommended reading

Lecture notes.
Vander M.D. Φυσιολογια του Ανθρώπου.Μηχανισμοί λειτουργίας του οργανισμού.
Sherman Ph.D.,Luciano,Ph.D.,M.Τσιακόπουλος Εκδόσεις Πασχαλίδη 2001.

Teaching of Track and Field II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0201	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Spring	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Dimitrios Soulas
Position	Associate Professor
Office	24
Tel / e-mail	24310 47016 / dsoulas@pe.uth.gr
Co-instructors	Vasileios Voutselas, Aglaia Zafeiroudi, Vasileios Paschalis

Objective of the course

It is the student's entrance to the subject of Track and Field, which comprises a basic sports event to the system of Physical Education, so that at the end of this cycle of their training students would be able to know all the necessary elements of specific events to respond to any occasion of demands either to the championship or to the school athletics.

Course contents

Methods and methodology of the basic technique of 60m hurdles
Methods and methodology of basic technique of high jump
Methods and methodology of basic technique of javelin

Assessment methods

Exams50%
Practice50%

Recommended reading

Kellis S., Kontonasios I, Mnaou V., Pulianidis A., Saraslanidis P., Soulas D. (2009).Track and Field at School and at Athletic Union, Thessaloniki: Salto
Kantsidis, D., Papaiakovou G. (1992). Track and Field at School and at Athletic Union. Thessaloniki.

Teaching Greek Folk Dances

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0206	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Ioannis Dimas
Position	Special Teaching Staff
Office	6
Tel / e-mail	24310 47060 / jdimas@pe.uth.gr
Co-instructors	Dafni Iakovaki

Objectives

The purpose of the course is the study of dance in theory and practice, aimed to make the student to be a future scientist of a pedagogical dance teacher. To introduce him to this teaching of representative dances from all cultural communities of Hellenism, at all levels of Physical Education.

Course contents

Introduction to the concept of Greek traditional dances today
Historical evolution.
The rhythm in nature, the rhythm in human life and his role of education in physics through the dance.
The dance in education. Dance as a media of cultivating the rhythm.
The teaching of dance - Methodology: The Alphabet of Dance - "Dancing Families" - Introduction to analysis and metrics of the dance - based on musical metric, the kinetic motive and the form of the dance.
Instruction of 25 representative dances from all Hellenic cultural communities.

Assessment methods

Exams 80% (45% practice & 35% theory)
Homework 20% (2 homework)
Teaching 10%

Gymnastics for All

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1116	3	75	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	52	Non	Greek

Lecturer

Name	Elisana Pollatou
Position	Associate Professor
Office	10
Tel / e-mail	24310 47068 / epolatou@pe.uth.gr, ckaradim@pe.uth.gr
Co-instructors	Konstantina Karadimou, Special Teaching Staff

Objective of the course

The aim of the module is the learning of basic elements of human movements .Choreographic elements and useof music for structuring , organizing and performing of a Gymnastics of All program.

Course contents

Introduction to the basic GFA philosophy and goals.
Basic elements of human movement (levels, axons , dynamics, pathways ,relationships).
Terminology and technique of basichuman positions and movements.
Basic movements categories with suitable music accompaniment.
Basic acrobatic elements (forward roll, backward roll, handstand , cartwheel, headstand).
Pair and group exercises
Composition of GFA programs .

Assessment methods

Practice exams 70%
Theory exams 30%

Recommended reading

Gymnastics Canada Gymnastique (2008). Long Term Athletes Development
http://www.gymcan.org/uploads/gcg_ltad_en.pdf

Gymnastics for All Code of points (2015).
http://cosmogym.gr/document/%CE%BA%CF%8E%CE%B4%CE%B9%CE%BA%CE%B1%CF%82-%CE%B1%CE%BE%CE%B9%CE%BF%CE%BB%CF%8C%CE%B3%CE%B7%CF%83%CE%B7%CF%82-%CF%84%CE%BF%CF%85-cosmogym-contest-2015/

Beach Volleyball

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0105	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Asterios Patsiaouras
Position	Special Teaching Staff
Office	9
Tel / e-mail	24310 47060 / spats@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is the acquaintance of students with individual beach volleyball skills as well as the development of student's ability to teach these skills. Special emphasis is given in the playful mode of teaching appropriate in schools or in teams.

Course contents

History of the game.
Technique of stands & movements.
Teaching the pass.
Underhand pass.
Service.
Service perception.
Spike.
Rules of the game.

Assessment methods

Exams 70% (40% practice & 30% theory)
Homework 20% (1 homework)
Teaching 10%

Recommended reading

Class notes.
KENNY, B., and GREGORY, C. (2006). *Volleyball: Steps to Success*. Human Kinetics Publishers
HÖMBERG, S., PAPAGEORGIOU, A. (1994). *Handbuch für Beach Volleyball*. Meyer & Meyer Verlag.

Foreign Language (Sport Terminology)

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0153	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
1st	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	None	English

Lecturer

Name	Athanasios Jamurtas
Position	Associate Professor
Office	33
Tel / e-mail	24310 47054 / ajamurt@pe.uth.gr
Co-instructors	

Objective of the course

The aim of this course is to allow students learn the terminology used in sports. Students will be introduced to the terminology used in the area of health, sports management, physical education.

Course contents

Track and Field.
Ball sports.
Nautical sports.
Combat sports.
Gymnastics.

Assessment methods

Exams (80%), (2 mid-term exams (20%) & Final exam (60%)
Essay: 20%

Recommended reading

Pant. M. Kontopodis. English for Sports Purposes with Exercises.Εκδόσεις Pantelis Kontopodis, ΑΘΗΝΑ, 2006.
Σπύρος Καμπιώτης. Λεξικό επεξηγηματικών όρων της αθλητικής επιστήμης, Εκδόσεις Αθλότυπο, Αθήνα.

SEMESTER C

Sport and Recreation Management

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0114	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Koustelios
Position	Professor
Office	3
Tel / e-mail	24310 47006 / akoustel@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is to offer a basic theoretical approach in issues concerning management and its application in sports.

Course contents

Evolution of management.
Basic principles of management.
Planning.
Organizing.
Directing - Coordintaing - Controling.
Defining the area of sport management.
Introduction to human resource management.
Introduction to sport economics.
Sport Product.
Introduction to sport marketing.
Sponsorship.
Professional development in sport management.

Assessment methods

Participation 10%
Exams 90%

Recommended reading

Papadimitriou, D. (2010). Management of sport organizations. Klitharithmos: Athens.
Papadimitriou, D. &Gargalianos, D. (1997). Management of Sport. Athlotypo: Athens.

Research Methods & Statistics

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0603	5	125	Introductory
Year of study	Semester	Type of course	Teaching methods
2nd	Winter	Compulsory	Lectures and applications
Hours / week	Hours/semester	Prerequisites	Language of instruction
2	26	Non	Greek

Lecturer

Name	Athanasios Papaioannou / Antonis Hatzigeorgiadis
Position	Professor / Associate Professor
Office	1/20
Tel / e-mail	2431047012 / sakispap@pe.uth.gr, 24310 47009 / ahatzi@pe.uth.gr
Co-instructors	Nikolaos Zourbanos

Objective of the course

The aim of the module is to introduce the basic principles of research methods, to familiarize students with academic reading, research design, and the conduct of research, and to develop students' skills for writing thesis.

Course contents

Aims of research and research methods.
Types of research. and Research approaches.
Sampling.
Measurement.
Statistical applications in research.
Experimental research.
Organising and presenting data.
Measures of Central Tendency Dispersion and Variability Normal distribution.
Confidence intervals for the population mean.
Statistical hypotheses testing.
Statistical hypotheses concerning the population mean

Assessment methods

Exams 70% (40% theory & 30% applications), Homework (30%)

Recommended reading

Papaioannou A. & Zourbanos N. (2014). Statistical Applications in the science of sport and physical education with SPSS 18. Disigma.
Thomas, J. & Nelson, J. (2003). Research methods in physical activity. Paschalidis.

Pedagogy and Sociology Issues in Education

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1113	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2st	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Alexandra Bekiari
Position	Assistant Professor
Office	14
Tel / e-mail	24310 47040 / sandrab@pe.uth.gr
Co-instructors	

Objective of the course

• To understand and analyze social structures and factors influencing the education system at macro and micro level.

• At the micro-level: To analyze the pedagogical effect as well as the coactions of school, family and wider social environment.

• At macro-level: To analyze the interaction between the students and the wider social and institutional system.

Course contents

• Sociology of education and related sectors
• Sociology and the concept of power
• Knowledge as a social construction
• Classroom Management
• Cultural capital
• Types of intelligence
• Pedagogical "schools" and typology of classroom
• Teaching forms
• Family and socialization
• Childhood and adolescence
• Adult Education Theory
• Aggressive behavior / child aggressiveness
• Theories and learning incentives
• Applying theory in case studies via films.

Assessment methods

Exams 70%
Assignments 20% (Added to exams mark)
Attendance - participation 10% (Added to exams mark)

Recommended reading

Matsagouras, H. (2008). *Theory and Practice of Teaching: The classroom*. Athens, Ed. Gregory. (In Greek)

Bekiari, A. & Hasanagas, N. (2015). *Sociological insights in the education system: Unlocking the power relations*. Thessaloniki, Ed. Christodoulidi. (In Greek)

Fontana, D. (1996). *The classroom teachers* (Lotis, M.). Publications Savalas. (In Greek)

Blackledge, D., & Hunt, B. (2004). *Sociology of Education* (Deligianni, M.). Athens, Ed. Metaihmio. (In Greek)

Lamnias, K. (2002). *Sociological Theory and Education. Distinct approaches*. Athens, Ed. Metaihmio. (In Greek)

Biochemistry

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0400	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Jamurtas
Position	Associate Professor
Office	33
Tel / e-mail	24310 47054 / ajamurt@pe.uth.gr
Co-instructors	

Objective of the course

At the end of the course the students should be able:
To know the structure of the cell.
To know how nerve signals are transmitted and their role in muscle contraction.
To know how calcium and contractile proteins work during muscle contraction.
To know the role enzymes play in biochemical reactions.
To know the role of chemical thermodynamic in biochemical reactions.
To know the energy sources during exercise.
To know how intensity and duration affect energy supply during exercise.
To know how glycogenolyis, gluconeogenesis, glycogenolysis, glycogenosynthesis work.
To know how fats are broken down during exercise.
To know how muscle mass is build.
To be able to have a general understanding of the combined effect of nutrient delivery and decomposition in providing energy supply during exercise.
To know basic principles of molecular biology.
To know the effects of exercise on free radical production and the positive effects of it on diabetic persons.

Course contents

Introduction to biochemistry of exercise.
Nervous system and muscular contraction.
The structure of muscle and muscular contraction.
Proteins – Enzymes.
Chemical Thermodynamic and metabolism during exercise.
Phosphagen system.
Carbohydrate metabolism I.
Carbohydrate metabolism I.
Lipid and protein metabolism.
Metabolism integration I.
Metabolism integration II.
Nucleic acids and the effects of exercise on gene expression.
Current topics in biochemistry of exercise.

Assessment methods

Exams (100%), (2 mid-term exams (20%) & Final exam (80%)

Recommended reading

Biochemistry of Exercise, VK Mougios, 3rd Edition, 2002

Teaching Rhythmics

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0406	3	75	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Elisana Pollatou
Position	Associate Professor
Office	10
Tel / e-mail	24310 47068 / epolatou@pe.uth.gr, ckaradim@pe.uth.gr
Co-instructors	Karadimou Konstantina, Special Teaching Staff

Objective of the course

The aim of the module is the learning of basic rhythmic values with music accompaniment, combining them with technique exercises in free body movements and ball as well as the development of student's ability to teach these effectively in any educational setting.

Course contents

-Theory of rhythm, meter, rhythmic values, movement motives.
-Free body elements (balances, walking, running) with music accompaniment.
-Free body elements (jumps, gallops, turns, swings) with music accompaniment.
-Routines composition in free body elements.
-Basic technique with ball (bounces, swings, throws, rolling).
-Jumps, turns, partner exercises, play with ball with music accompaniment.
-Teaching exemplary routines with all the above gymnastic instruments.
-Routines composition with ball.

Assessment methods

Practice exams 50%
Theory exams 50%

Recommended reading

Lesson's Lectures from the e-class http://eclass.uth.gr/eclass/modules/document/?course=ANTMA151

Abramson, R.,M. (1997). Ryhthm Games for perception & cognition. Warner Bros. Publications U.S. Inc.

Bennet, J.,P., Coughenour Riemer,P. (2006). Rhythmic Activities and Dance.Human Kinetics, Champaign, IL.

Teaching Volleyball

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0305	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Asterios Patsiaouras
Position	Special Teaching Staff
Office	9
Tel / e-mail	24310 47060 / spats@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is the acquaintance of students with individual volleyball skills as well as the development of student's ability to teach these skills. Special emphasis is given in the playful mode of teaching appropriate in schools.

Course contents

Skills without the ball
Stances, Running Technique, Change of direction - foot work.
Skills with the ball
Serving the ball.
Overhand passing.
Setting,
Attacking.
Blocking, and digging.
Recent changes in the game, such as the addition of the libero position and rally scoring.
Team-oriented steps covering offense.
Defense and team strategy.
Transitioning, and out-of-system play.

Assessment methods

Exams 70% (40% practice & 30% theory)
Homework 20% (1 homework)
Teaching-attendances in courses 10%

Recommended reading

KENNY, B., and GREGORY, C. (2006). *Volleyball: Steps to Success*. Human Kinetics Publishers.
ZETOU, E. & KASABALIS, TH. (2006). *Volleyball*. Athens: Telethrion. (In Greek).
JONATHAN C. REESER, & ROLAND BAHR (2009). *Volleyball Athens*. Paschalidis Publishing. (In Greek).

Teaching Soccer

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0309	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Zissis Papanikolaou
Position	Associate Professor
Office	23
Tel / e-mail	24310 47039 / zpapanik@pe.uth.gr
Co-instructors	Hlias Patsianis, Christos Plainos

Objective of the course

This course is designed for any person who enjoys of would like to learn the game of soccer. The course will enable students the opportunity to gain the necessary skills and knowledges to participate in the game of soccer at the leisure of school level.

Course contents

Ball juggling: stationary, then moving

Ball control:

Kicking: instep, volley, inside of the foot, outside of the foot.

Trapping: sole of the foot, high inside of the foot, instep, thigh and chest trap.

Mending.

Dribbling: outside of the foot, inside of the foot.

Passing.

Tackling.

Shooting: side of the foot, instep, half volley.

Tackling.

Throw - in.

Assessment methods

Written exams 35%
Test of soccer skills 35%
Regulations of arbitration 10%
Homework 10%
Participation, capitation, collaboration 10%

Recommended reading

Παπανικολάου Ζ..(2004). Το Ποδόσφαιρο - Βασικά Βήματα Επιτυχίας.,2η Έκδοση, Τελέθριο, Αθήνα.
Yeagly,J.,(1992).Soccer Skills.U.S.A.
Rosental,G(1973)Soccer:The Game And How To Play It.Ca:Wishire Company.
Myse,Bill And White,Dan,(1976):We Can Teach Play Soccer.N.Y.:Hawthorm Books

Motor Creativity

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0150	2	50	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Winter	Elective	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Elisana Pollatou
Position	Associate Professor
Office	10
Tel / e-mail	24310 47068 / epolatou@pe.uth.gr
Co-instructors	Karadimou Konstantina, Special Teaching Staff

Objective of the course

The ability to create a choreographic composition with prototype motor elements
The comprehension of space, time, dynamics & relationship between the group members, based on which a choreography can be created

Course contents

motor elements that compose
space (personal/general)
time (fast/slow)
dynamics (sudden/fluent)
relationships (individually, in group)

Assessment methods

Group choreography & performance in front of public 50%
Individual performance in class 50%

Recommended reading

class notes in e-class
http://eclass.uth.gr/eclass/modules/document/?course=ANTMA180

Outdoor Activities and Children Summer Camps

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0151	2	50	Iintroductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2st	Spring	Elective	Lectures and Seminars Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Charilaos Kouthouris
Position	Associate Professor
Office	16
Tel / e-mail	24310 47006 / kouthouris@pe.uth.gr
Co-instructors	

Objective of the course

By the end of the course students should be able to:

- participate with success in a two days outdoor program (Trekking, Mountain Biking, Orienteering, Canoe/Kayak, Camping _spent a night in tents)
- participate with success in an two hours outdoor team building program
- participate effectively in an outdoor exercise program (Pilates / yoga)
- understand issues about 'environmental awareness' and 'nature preservation'
- recognize the profession of 'outdoor animator' and the relative professions.

Course contents

The scope of psychology of physical education
Punishment, reinforcement and intrinsic motivation
Achievement motivation and achievement goals in physical education
Attributions in sport
Development of a positive self-concept in sport
Self-regulation of learning
Developing self-regulatory skills in physical education and sport
Developing life-skills through physical education and sport
Developing responsibility in physical education
Developing awareness for social inequality through physical education
Moral development in sport
Developing positive attitudes towards physical education and physical activity.
Psychological aspects of youth sport
Parents' role in youngsters' sport participation.

Assessment methods

Exams 100%
Assignments 20% (Added to exams mark)

Recommended reading

Charilaos Kouthouris (2007). Outdoor Activities I. Edition of Thessaly University.

Learning Swimming

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME0120	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Antonis Hatzigeorgiadis
Position	Associate Professor
Office	20
Tel / e-mail	24310 47009 / ahatzi@pe.uth.gr
Co-instructors	Anastasia Mplanti

Objective of the course

The aim of the module is to educate students how to get children who can't swim acquainting with the water, and teaching them basic swimming skills through the use of aids and games.

Course contents

Getting into the water
Floating
Head immersion
Breathing
Arm drills
Leg drills
Games in the water

Assessment methods

Exams 90% (40% practice & 50% theory)
Participation 10%

Recommended reading

Nikolopoulos, G. Swimming: Technique, Teaching, and training. Artwork.

SEMESTER D

Training and Physical Conditioning

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0501	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Vassilis Gerodimos
Position	Associate Professor
Office	20
Tel / e-mail	24310 47005 / bgerom@pe.uth.gr
Co-instructors	

Objective of the course

The aim of this module is to offer, to the students, all the necessary information about the designing, the implementation, the guidance and the evaluation of training programs in athletes as well as in physically active individuals of different age-groups.

Course contents

Basic definitions of training.
Principles of designing training programs.
Long-term training plan.
Annual training plan.
Designing, implementation, guidance and evaluation of training program.
Physical fitness:
- strength (maximal strength, muscle endurance, power),
- endurance (aerobic, anaerobic),
- speed,
- flexibility,
- coordinative abilities,
- technique, tactic.

Assessment methods

Exams 80%
Homework 20%

Recommended reading

Class notes.
Martin, D., Carl, K. & Lehnertz, K (2000). Theory of Training. Komotini: Alfavito.
Grosser, M. & Starischka, S. (2007). Conditioning Training for all sports and all ages. Thessaloniki, Salto.

Kinesiology

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0903	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Tsiokanos
Position	Associate Professor
Office	8
Tel / e-mail	24310 47053 / atsiokan@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of the module is to familiarize the students with the function of the musculoskeletal system and the function of the segments around the joints of the human body and in particular the activation of muscle groups in the different sports.

Course contents

Bones - bone tissue.
Skeleton Joints.
Skeletal muscles.
Truck - human spine (vertebral spine).
Trunk - abdominal and dorsal muscles.
Upper extremity - shoulder girdle.
Upper extremity - elbow joint.
Upper extremity - wrist joint.
Lower extremity - hip joint.
Lower extremity - knee joint.
Lower extremity - ankle joint.
Kinesiological analysis of simple movements.
Kinesiological analysis of sport movements - track and field events.

Assessment methods

Exams 70%
Homework 20% (1 homework)
Teaching 10%

Recommended reading

Class notes.

Hamilton N., Luttgens K. (2002). Kinesiology, Scientific Basis of Human Motion. McGraw-Hill Companies, Inc.

Hall Susan J. (2005). Biomechanics. Parisianou Eds, Athens, (in greek).

Weineck Jurgen (1996). Sportanatomie. Perimed –spitta im Spitta Verlag GmbH.

Principles in Exercise Physiology

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0902	5	125	Core
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Winter	Compulsory	Lectures/seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Yiannis Koutedakis
Position	Professor
Office	9
Tel / e-mail	24310 470546/ y.koutedakis@uth.gr
Co-instructors	

Objective of the course

The aim of the course is to assist the students' understanding of the physiological principles involved in physical activity and exercise. At the end of the course, the student will be able – *inter alia* – to recognise the importance of muscular action and understand its association with various forms of activity, to assess the significance of the energy production systems in relation to exercise, and to understand the methods to elevate physical conditioning (e.g., strength training, aerobic training).

Course contents

Contents of the course – Factors of physical and athletic performance.
Energy and its production mechanisms.
Skeletal muscle I.
Skeletal muscle II.
Aerobic capacity.
Anaerobic capacity.
Aerobic /Anaerobic threshold.
Muscle strength I.
Muscle strength II.
Body composition I.
Body composition II.
Flexibility.
Fatigue.
Summary.

Assessment methods

Exams 80%
Teaching 20%

Recommended reading

KLEISOURAS V. (2011) *Exercise Physiology*. ISBN: 9789604892266. Athens: P.X. Paschalidis.

WILMORE J, COSTILL D. (2006) *Physiology for Exercise and Sport*. ISBN: 9789604892914. Athens: P.X. Paschalidis.

KLEISOURAS V. (2015) *Ergometry.* ISBN: 9789963258031. Publisher: BROKEN HILL PUBLISHERS LTD

Exercise, Health and Quality of Life

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1057	4	100	Mandatory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Yannis Theodorakis
Position	Professor
Office	2
Tel / e-mail	24310 47001 / theodorakis@pe.uth.gr
Co-instructors	Athanasios Kolovelonis

Objective of the course

- To familiarize the students ways in which exercise can influence and determine health and quality of life
- Students will learn how the exercise is connected with mental health and how they can create effective exercise programs for groups with particular characteristics

Course contents

1. Introduction to the psychology of exercise and mental health
2. Exercise and mental health. Exercise and personality
3. Quality of life, satisfaction, and psychological benefits of exercise
4. Exercise and psychological theories for understanding exercise and health behaviors
5. Exercise and control of stress
6. Exercise σε άτομα με ψυχολογικά προβλήματα
7. Exercise and smoking
8. Exercise, self-esteem
9. Exercise and body image
10. Exercise and depression
11. Exercise for people with disabilities
12. Psychological techniques in exercise and health programs. Part 1.
13. Psychological techniques in exercise and health programs. Part 2.

Assessment methods

A. Written exams (80%)
B. Assignment (20%)

Recommended reading

Theodorakis C. (2010). Exercise, mental health and quality of life. Publications Christodoulides.

Teaching Swimming

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0408	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Summer	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Antonis Hatzigeorgiadis
Position	Associate Professor
Office	20
Tel / e-mail	24310 47009 / ahatzi@pe.uth.gr
Co-instructors	Anastasia Mplanti, George Sakkas

Objective of the course

The aim of the module is the acquaintance of students with swimming skills and styles, as well as the development of student's ability to teach swimming.

Course contents

Basic swimming drills.
Breathing.
Freestyle.
Backstroke.
Breaststroke.
Butterfly.
Starts and turns.

Assessment methods

Exams 60% (30% practice & 30% theory)
Homework 20% (1 homework + presentation)
Participation 20%

Recommended reading

Giatsis, S. & Sampanis, M. (1993). Swimming: Technique, teaching, training, life-guarding. Salto.
Costill, D., Maglischo, E., & Richardson, A. (2007). Swimming (Handbook of sport medicine and science series). Paschalidis.

Teaching Handball

Course code	**Number of credits allocated**	**Student Workload (hours):**	**Level of course**
MK0407	3	75	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Giakas Giannis
Position	Assistant Professor
Office	Building B, 2nd floor
Tel / e-mail	24310 47010 / ggiakas@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is the familiarisation of students with individual handball skills as well as the development of student's ability to teach these skills. Special emphasis is given in the playful mode of teaching.

Course contents

Ball catching.
Passing. Pass on the move.
Forwards - backwards movements.
Shooting.
Basic shoot, jump shoot.
Shooting from various positions.
Movements without the ball.
Dribbling.
Defensive systems.
Attacking systems.
Goalkeeper.
Rules - referee.

Assessment methods

Exams 70% (42% practice & 28% theory)
Test 30%

Recommended reading

Class notes.
Natsis P, Pappas A and Giakas G (2007). Handball. Christodoulidis ISBN 960-8183-60-X

Bagios I (2002). Handball technique. ISBN 960 91152-2-5

School Practicum I (Internship in Elementary Education)

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1102	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Winter	Compulsory	Practice, teaching in school settings, systematic observation
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
3	36	Non	Greek

Lecturer

Name	Nikolaos Digelidis, Athanasios Papaioannou
Position	Associate Professor / Professor
Office	2
Tel / e-mail	24310 47052 / nikdig@pe.uth.gr, 2431047012 / sakispap@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of the course is to train students for teaching of P.E. in class in Primary Education, so that they may theory into practice and acquire the required teaching experience.

Course contents

Organizing for teaching I (signals, rules, protocols).
Organizing for teaching II (using space and athletic equipment, grouping, stations).
Teaching fitness in primary classes.
Teaching motor skills in primary classes.
Proper feedback.
Individualizing PE in primary classes.
Systematic observation in PE.

Assessment methods

Microteaching 40%, Daily lesson plans 30%, systematic observation & active participation 30%

Recommended reading

Digelidis N. & Papaioannou A. (2003). 200 daily lesson plans for the elementary school. Thessaloniki: Christodoulidis Publishers.
Derri V., Vasiliadou O., Ikonomopoulos G., Pachta M., Fragkouli M. (2007). Physical education in the 21st century: Standards and objectives. Thessaloniki: Christodoulidis Publishers.

Computing (Applications in Physical Education)

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0050	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Spring	Compulsory	Theory Lectures and Laboratory
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	28	Non	Greek

Lecturer

Name	Marina Papastergiou
Position	Associate Professor
Office	15
Tel / e-mail	24310 47028/ mpapas@pe.uth.gr
Co-instructors	

Objective of the course

The module aims at familiarizing students with the wide range of applications of information technology in the area of physical education, at introducing them to the themes and findings of the scientific research that is conducted internationally in the field, and also at developing students' skills regarding data organization, management and analysis. The intended learning outcomes are that students become familiar with the various applications of information technology in physical education, that they are aware of the recent findings of the relevant scientific research and that they are capable of utilizing efficiently software for the organization, management and analysis of data (spreadsheets, database management systems) within the context of solving problems from the area of physical education.

Course contents

Introduction to the applications of information technology in physical education
Digital measurement devices – Interactive training equipment
Fitness assessment software – Athletic training software
Systems and software for video motion analysis
Mobile applications for promoting health and exercise
Digital games for promoting health and exercise
Virtual reality in physical education and sport – Future perspectives
Introduction to SpreadSheets (SS) – Data entry to a SS
Formulas and functions in SS
Data lists in SS
Chart creation in SS
Introduction to DataBase Management Systems (DBMS)
Creation of tables and relationships in a DB
Forms, queries and reports in a DB

Assessment methods

Final exam 100%

Recommended reading

Mohnsen, B. (2014). Using technology in physical education (P. Antoniou, Ed. Greek Edition). Thessaloniki: Disigma.
Papastergiou, M. (2013). Spreadsheets in physical education: Basic functions and applications. University notes.
Karolidis, D., &Xarhakos, K. (2011). Microsoft Office Excel 2010. Athens: Xarhakos.
Cox, J., & Lambert, J. (2010). Greek Microsoft Access 2010 step-by-step. Athens: Klidarithmos.

Racket Sports

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME0154	2	50	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Summer	Optional	Practice and Seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Nikos Zourbanos
Position	Assistant Professor
Office	12
Tel / e-mail	24310 47027 / nzourba@pe.uth.gr
Co-instructors	Voutselas Vassilis PhD

Objective of the course

By the end of the course students should be able to play tennis (e.g., forehand, backhand, serve) to know the rules of the game

Course contents

Basic exercises with the ball and the racket
Groundstrokes in tennis, forehand, backhand, slice, and serve
Rules of the game, tennis court dimensions

Assessment methods

Exams 90%: 50% practice, 40% theory
Participation 10%

Recommended reading

Brown. J. (2008). Tennis, Steps to success. Human Kinetics

Downhill Skiing

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME0004	**2**	50	Iintroductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2st	Spring	Elective	Lectures and Seminars Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Charilaos Kouthouris
Position	Assistant Professor
Office	16
Tel / e-mail	24310 47006 / kouthouris@pe.uth.gr
Co-instructors	Vasilis Voutselas

Objective of the course

By the end of the course students should be able to

- perform the basic downhill skiing techniques, turns and stops
- avoid incidents at a ski resort
- cover a distance of 2 km by foot in a snowed surface
- protect themselves from the cold
- plan and play team snow games

Course contents

Introduction to basic downhill skiing techniques

1. Ski equipment
2. The environment of a ski resort.
3. The first day on the slope
4. Gliding with the ski, changing direction and other basic exercises with the ski.
5. Stepping up a slope, glide down and stop.
6. Changing directions
7. Traverse and initiation to a turn.
8. Turn up to the slope.
9. Turns with accuracy.
10. Turns with small and big radius.
11. Use of the lift and skiing down an intermediate difficulty slope.

Assessment methods

Skiing the basic downhill techniques, turns and stops	80%
Adequate Ski resort behavior	20%

Recommended reading

Charilaos Kouthouris (2007). Downhill Skiing Techniques. Edition of Thessaly University

B. SECOND CYCLE: PATHWAYS AND SPECIALIZATION

SEMESTER E

Athletes' Psychological Support

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1114	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
3º	Winter	Compulsory/optional	Lectures and Seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Nikolaos Zourbanos
Position	Assistant Professor
Office	12
Tel / e-mail	24310 47027 / nzourba@pe.uth.gr
Co-instructors	Yannis Theodorakis, Professor

Objective of the course

By the end of the course students should be able to apply psychological strategies for performance enhancement

Course contents

Introduction to applied sport psychology
Coping with anxiety
Motivation and commitment
Focus and Concentration
Applying goal-setting
Self-talk
Imagery
Relaxation psyching up
Pre-performance routines
Coping with adversity
Psychological profiling
Application of psychological skills

Assessment methods

Assignment 60%
Experiment- Practical application 30%
Participation 10%

Recommended reading

Theodorakis, Y., Goudas, M., & Papaioannou, A. (2001). Psychological excellence in sport. Thessaloniki: Christodoulidi Publications. (In Greek)

Murphy, S. (2012). *Oxford Handbook of Sport and Performance Psychology*. New York. Oxford University Press.

Papaioannou, A., & Hackfort, D. (2014). Routledge Companion to Sport and Exercise Psychology. Global Perspectives and Fundamental Concepts. London. Taylor & Francis.

Weinberg, R.S., & Gould, D. (2007). *Foundations of sport and exercise psychology* (4th ed.). Champaign, IL: Human Kinetics.

Nutrition and Exercise

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1117	6	50	Compulsory and elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd year	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Athanasios Jamurtas
Position	Associate Professor
Office	33
Tel / e-mail	24310 47054 / ajamurt@pe.uth.gr
Co-instructors	

Objective of the course

At the end of the course the students should be able:
To know the basics about the nutrients.
Discuss “myths” and “truths” about nutrition

Course contents

Introduction
Macro- and micronutrients
Sound nutrition for health and fitness
Food pyramids
Energy systems
Body weight maintenance through proper nutrition and exercise
Body weight loss through proper nutrition and exercise
Body weight gain through proper nutrition and exercise
“Myths” and “truths” about nutrition

Assessment methods

Exams 100% (1 mid-term exams (30%) & Final exam 70%)

Recommended reading

Melvin H. Williams. Διατροφή, Υγεία, Ευρωστία και Αθλητική Απόδοση (Επιμέλεια Λ. Συντώσης). Εκδόσεις Π.Χ. Πασχαλίδης

Exercise in Clinical Populations

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1118	4	100	Compulsory/Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Giorgos K. Sakkas
Position	Assistant Professor
Office	23
Tel / e-mail	24310 47015 /gsakkas@uth.gr
Co-instructors	Christina Karatzaferi

Objective of the course

The purposeof the courseis to provide further knowledge on how specific chronic conditions or illnesses affect bodily function and exercise capacity. Also it is discussed the use of exercise to the management/treatment and rehabilitation of symptoms as well asother various aspects related to the management of clinical populations.

Course contents

1. Introduction – Exercise in clinical populations
2. Exercise and diabetes I
3. Exercise and diabetes II
4. Exercise and cardiovascular disease
5. Exercise and hypertension
6. Exercise and obesity
7. Exercise and metabolic syndrome
8. Osteopenia, osteoporosis and exercise
9. Exercise and sleep disorder
10. Exercise and arthritis
11. Neurodegenerative disorders and exercise
12. Case studies
13. Review of taught subjects

Assessment methods

Exams 100%

Recommended reading

Classnotes.
ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities

Exercise Physiology

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1051	6	150	Mandatory for pathway II and optional for pathway I
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Winter	Compulsory	Lectures and Laboratory exercises
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non specific	Greek

Instructors

Name	Christina Karatzaferi
Position	Associate Professor
Office	23
Tel / e-mail	24310 47015 / ck@pe.uth.gr
Name	Yannis Koutedakis,
Position	Professor
Office	9
Tel / e-mail	24310 47056 / y.koutedakis@pe.uth.gr
Co-instructors	Vasilis Paschalis, Giorgos K. Sakkas, laboratory assistant

Objective of the course

Students will further their knowledge of the biological mechanisms underlying the physiological responses and adaptations to physical activity. Moreover, they will understand special implications for fitness elements brought about by gender differences age and environmental challenges.
Special emphasis is placed on application via laboratory exercise so that students will not only acquire advanced knowledge but will be learning practical skills related to measurement and assessment of the components of fitness. The combination of lectures and laboratory exercise aims to better prepare students for a successful and safe career as exercise professionals.

Course contents

1. Components of physical fitness – introduction to gender differences.
   - Laboratory Exercise: introduction to the exercise physiology lab
2. Body composition I- fat mass, skeleton
   - Laboratory Exercise: body measurements, body composition
3. Body composition II- muscle mass, problems in body composition
   - Laboratory Exercise: analysis of data, evaluation of results
4. Muscle function – muscle strength and power
   - Laboratory Exercise: skeletal muscle functional properties
5. Cardiovascular system I – reponse to exercise
   - Laboratory Exercise : Heart rate (HR) and blood pressure measurements
6. Cardiovascular system II –adaptations
   - Laboratory Exercise: analysis of data, using HR for exercise prescription
7. Pulmonary function – aerobic power
   - Laboratory Exercise: evaluation of maximal oxygen uptake
8. Midterm review
   - Midterm exam
9. Pulmonary function – effects of altitude
   - Laboratory Exercise : analysis of data, evaluation of results for exercise prescription
10. Development and maturation – Ageing effects
    - Laboratory Exercise : biological age
11. Thermoregulation– exercise in extreme temperatures
    - Laboratory Exercise : dehydration evaluation

12. Muscle fatigue and muscle injury
    - Laboratory Exercise : case studies
13. Overtraining – definitions, remedial actions, prevention
    - Review of taught subjects

Assessment methods

Midterm Exams 30% (multiple choice, lecture material 1 to 7)
Final Exams 70% (multiple choice, short answers and open questions)

Recommended reading

Class notes.
Performing in Extreme Environments, Lawrence E. Amstrong
ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities, Dustine J., Moore G

Adapted Physical Education

Course Code	ECTS	Student workload (hours)	Level of Course
MK1105	4	100	Core Course
Year of study	**Semester**	**Type of Course**	**Teaching methods**
3rd	Winter	Compulsory	Theory
Hours/Week	**Hours/Semester**	**Prerequisities**	**Language**
2	26	None	Hellenic

Lecturer

Name	Dimitrios Kokaridas
Position	Associate Profesor
Office	Dimitrios Kokaridas
Tel. / e-mail	24310 47008 / dkokar@pe.uth.gr
Co - Instructors	

Objective of the course

The purpose of the course is to provide students with knowledge concerning psychomotor development, Individualized Education Programming (IEP), organization and application of adapted physical education activities to students with and without disabilities within school settings, so as to promote inclusion and co-education.

Course contents

1. **Introduction – definitions - basic terms:** Disability, adapted physical education, inclusion.
2. **Psychomotor development:** Definition, basic theories, motor development.
3. **Individualized Education Programming (IEP).** Structure of IEP, evaluation & holistic approach
4. **Learning difficulties I:** Definition, motor clumsiness, identification, exercise adaptations, inclusion activities.
5. **Learning difficulties II:** ADHD, speech disorders, exercise adaptations, inclusion activities.
6. **Students with autism spectrum disorders:** Definitions, functionality levels, motor evaluation, organization of PE lesson, inclusion strategies.
7. **Levels of intelligence:** Definition, multiple intelligence, IQ, intellectual disability, gifted children.
8. **Students with intellectual disability**: Definition of intellectual disability, educable and trainable students, motor and other characteristics, adaptations of exercise and inclusion activities for children with and without Down syndrome.
9. **Students who use wheelchairs:** Modifications for body control and parallel activities, inclusion.
10. **Students with cerebral palsy:** Characteristics and classification of cerebral palsy, suggestions for parallel activities, inclusion strategies.
11. **Students with visual and hearing impairments:** Identification, characteristics, inclusion of children with visual and hearing impairments.
12. **Students with behavior disorders:** Students with internalizing and externalizing behavior, anxiety and mood disorders, PE suggestions and adaptations.
13. **Students with health conditions:** Asthma, diabetes, epilepsy. Adaptations of exercise and selection of activities.

Assessment methods

Written exams 60%, group work 20%, participation in class 20%

Recommended reading

Kokaridas, D. (2010). Adapted Physical Education: individualization, adaptations, and inclusion aspects. Thessaloniki: Christodoulidis Publishing.

School Practicum II (Internship in Secondary Education)

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1103	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2nd	Spring	Compulsory	Practice, teaching in school settings, systematic observation
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
3	36	Non	Greek

Lecturer

Name	Nikolaos Digelidis, Athanasios Papaioannou
Position	Associate Professor / Professor
Office	2
Tel / e-mail	24310 47052 / nikdig@pe.uth.gr, 2431047012 / sakispap@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of the course is to train students for teaching of P.E. in class in Secondary Education, so that they may theory into practice and acquire the required teaching experience.

Course contents

Integrating already learned teaching skills.
Designing daily lesson plans.
Teaching fitness in junior classes.
Teaching motor skills in junior classes.
Maximizing academic learning time.
Individualizing PE in junior classes.
Differentiating PE content.
Using indirect teaching methods.
Assessing learning outcomes.
Systematic observation in PE.

Assessment methods

Microteaching 40%, Daily lesson plans 30%, systematic observation & active participation 30%

Recommended reading

Digelidis N. (2007). The spectrum of teaching styles: From theory to praxis. Thessaloniki, GR: Christodoulidi Publishers.
Zakrajsek D.B., Carnes L.A. & Pettigrew F.E. (1996). Quality lesson plans for secondary physical education. Champaign, IL: Human Kinetics Publishers.

Biochemistry of Exercise

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0916	5	125	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Jamurtas
Position	Associate Professor
Office	33
Tel / e-mail	24310 47054 / ajamurt@pe.uth.gr
Co-instructors	

Objective of the course

The aim of this course is to allow students understand the metabolic function of the body and the adaptations that come with exercise. The course will discuss the effects of exercise on healthy humans and humans suffering from chronic disease.

Course contents

Introduction to cell and endocrinology.
Hormone - receptor interaction I.
Hormone - receptor interaction II.
Effects of hormones on nutrient delivery during exercise.
Fast acting hormones.
Slow acting hormones (Mid-Term exam).
Aerobic training and nutrient metabolism during exercise.
Factors affecting aerobic and anaerobic performance.
Diabetes & exercise
Gene Doping
Oxidative stress & overtraining
Muscle damage
Nutrition for long distance events

Assessment methods

Assays : 20%, Exams: (1 mid-term exam (30%) & 1 Final exam (50%)

Recommended reading

Course Notes.
Vander, Sherman, Luciano, Tsakopoulos. Human Physiology, Athens, Medical Publications Paschalidis, 2001.
Biochemistry of Exercise, Vassilis C. Mougios, Εκδόσεις Πασχαλίδη, 2008.

Sport Tourism

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1108	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Koustelios
Position	Professor
Office	3
Tel / e-mail	24310 47006 / akoustel@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module to offer a basic theoretical approach in issues concerning sport and tourism.

Course contents

Sport Tourists: Characteristics
Types of sport tourism
Models of sport tourism
Sport tourism in Greece
Development of sport tourism in Greece
Sport tourism businesses in Greece
Training in sport tourism
Case studies
EU & financing various types of alternative tourism
Management in alternative Tourism
Strategy & marketing in alternative tourism
The future of alternative tourism

Assessment methods

Participation: 10%
Essay: 30%
Exams: 60%

Recommended reading

Litras, P. (2002). The society of recreation. Interbooks: Athens.
Sotiriadis, M. &Farsari, I. (eds.) (2009). Alternatives types of tourism: Planning, management & marketing.Interbooks: Athens
Standeven, J. &DeKnop, P. (1999). Sport tourism. Human Kinetics: Champaign, Il.

Exercise in Developmental Ages

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0102	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd and 4th	Winter	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Vassilis Gerodimos
Position	Associate Professor
Office	20
Tel / e-mail	24310 47005 / bgerom@pe.uth.gr
Co-instructors	

Objective of the course

The aim of them oduleis the acquaintance of students with exercise in the developmental years for health purposes. Special emphasis is given in planning and implementing strength, power, speed and flexibility training programs for children and adolescents.

Course contents

Developmental Issues (Exercise, development and maturation).
Effects of exercise on physical and mental health of children and adolescents.
Athletic Skills.
Design and implementation of:
- strength training programs throughout the developmental years,
- power training programs throughout the developmental years,
- speed training programs throughout the developmental years,
- aerobic training programs throughout the developmental years,
- flexibility training programs throughout the developmental years,
- neuromotor training programs throughout the developmental years.

Training planning throughout the developmental years.
Evaluation of health indices (body composition, blood pressure, respiratory function) and overall fitness (strength, aerobic capacity, flexibility, speed, power, balance etc.) throughout the developmental years.

Assessment methods

Exams 50%.
Homework 40%.
Participation 10%.

Recommended reading

Classnotes.
Gerodimos, V., Karatrantou, K., Manou, V., Paschalis, V., &Kellis, S. (2013). Exercise prescription for health promotion. In V. Gerodimos (Ed.), *"Exercise as an intervention strategy for prevention and rehabilitation of chronic diseases"* (pp. 4-111). www.exerciseforhealth.gr/uploads/Book.pdf
Gerodimos, V., Karatrantou, K., Manou, V., Paschalis, V., & Kellis, S. (2014). Exercise for health. In A. Koustelios (Ed.), *"Sport for all" (*5-58).
Malina, R.M., & Bouchard, C. (1991). Growth, Maturation, and Physical Activity. Champaign, IL: Human Kinetics.
Rowland, T. (1996). Developmental Exercise Physiology.Champaingn, IL: Human Kinetics.

History of Education and Pedagogical Ideas

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME0112	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
2th, 3th, 4th	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Alexandra Bekiari
Position	Assistant Professor
Office	14
Tel / e-mail	24310 47040 / sandrab@pe.uth.gr
Co-instructors	

Objective of the course

• To understand the development of concepts, practices and institutions in the education system over time.

Course contents

• Aims and ideals of education in Homer, Ancient Greece, the Byzantine era, the Renaissance.
• Educational ideals in the course of European history.
• Old pedagogy and turn to the new pedagogy. Crucial moments in the history of education.
• Sophists / Socrates / effect Socratic spirit.
• Plato / Platonic dialogues / Aristotle.
• Dewey / Pestalozzi / Comenius / Montessori / Vygotsky etc
• Research project presentations.

Assessment methods

Exams 70%
Assignments 20% (Added to exams mark)
Attendance - participation 10% (Added to exams mark)

Recommended reading

Houssaye, J. (2000). *Fifteen educators* (Karakatsanis, D.). Ed. Metaihmio. (In Greek)
Reble, A. (2005). *History of pedagogy*. Publications Papadima. (In Greek)
Mouratides, I. (2009). *Introduction to ancient Greek philosophy. Philosophy physics topics education and sport*. Thessaloniki. (In Greek)
Pavlidis, P. (2008). *Foundations of education in philosophical thought*. Publications AUTH. (In Greek)
Pelegrinis, Th. (2006). *Principles of Philosophy*. Publications OEDB. (In Greek)
Xochellis, P. (1997). *Introduction to Pedagogy. Fundamental issues of pedagogy Science*. Publications Kyriakides. (In Greek)

Clinical Nutrition

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME 0109	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Jamurtas
Position	Associate Professor
Office	33
Tel / e-mail	24310 47054 / ajamurt@pe.uth.gr
Co-instructors	

Objective of the course

At the end of the course the students should be able:
To know the basics about the nutrients and the energy they supply.
To know the basic nutritional principles to combat diseases through nutrition.

Course contents

Energy needs.
Carbohydrates.
Fat.
Protein.
Vitamins.
Minerals.
Alcoholism.
Allergies.
Anemia.
Cancer I.
Cancer II.
Diabetes.

Assessment methods

Exams 100% (2 mid-term exams (40%) & Final exam 60%)

Recommended reading

Marion Nestle (1987). Nutrition in Clinical Practice, Athens, Parisianou Publications
Guidelines For the Nutritional Management of Diabetes Mellitus in the New Millennium: A position statement by the Canadian Diabetes Association, *Canadian Journal of Diabetes Care, 23*(3): 56-69.

SEMESTER F

Measurement Methods in Biomechanics

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0909	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Winter	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Yannis Giakas / Athanasios Tsiokanos
Position	Associate Professor / Associate Professor
Office	3 / 8
Tel / e-mail	24310 47010/ ggiakas@pe.uth.gr , 24310 47053 / atsiokan@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of the module is to familiarize the undergraduates with the methods and instruments for biomechanical measurements and analysis of sports movements.

Course contents

Measurement, Description, Analysis, and Assessment.
Direct kinematic measurement techniques (Goniometers - Accelerometers).
Optical kinematic, Measurement techniques.
Cinematography, Video, Optoelectronic techniques.
Processing of kinematic data.
Force transducers.
Force Plates.
Biomechanical parameters derived from kinetic data.
Anthropometry.
Electromyography.
Biomechanical modeling.
Biomechanical feedback in sports training.

Assessment methods

Homework 30%
Exams 60%
Teaching 10%

Recommended reading

Class notes.
Kollias H. (1997). Biomechanics of sports movements, Thessaloniki, Greece. (in greek)
Robertson G., Caldwell G., Hamill J., Kamen G., Whittlesey S. (2004). Research Methods in Biomechanics. Human Kinetics, Champaign, IL.

Development of Strength and Power

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1013	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Theory and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Vassilis Gerodimos
Position	Associate Professor
Office	20
Tel / e-mail	24310 47005 / bgerom@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is the acquaintance of students with the procedures of planning and implementing strength and power training programs in competitive sports. Additionally, they learn about testing and evaluating methods of strength and power.

Course contents

Strength and Power in Competitive Sports.
Maximalstrength.
Designing Maximal Strength Training Programs.
The Implementation of Maximal Strength Training Programs.
Strength Endurance and Designing Strength Endurance Training Programs.
The Implementation of Strength Endurance Training Programs.
Power.
Designing Power Training Programs.
The Implementation of Power Training Programs.
Strength Evaluation.
Power Evaluation.

Assessment methods

Exams 80%
Homework 20% (2 homework)

Recommended reading

Classnotes.
Baechle T., Earle T. (2009). Essentials of Strength Training and Conditioning.Athens, Greece,Pasxalidis.
Fleck, S. & Kraemer, W. (2000). Strength training. Designing Resistance Training Programs. Thessaloniki, Greece, Salto.
Fleck, S. & Kraemer, W. (2006). Designing Resistance Training Programs. Athens, Greece,Pasxalidis.

Field Tests for the Assessment of Human Performance

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1052	6	150	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
4	52	Non	Greek

Lecturer

Name	Zisi Vasiliki / Karatzaferi Christina / Athanasios Tsiokanos
Position	Associate Professor / Associate Professor / Associate Professor
Office	32 / 23 / 8
Tel / e-mail	24310 47017 / vzisi@pe.uth.gr / 24310 47015 / ck@pe.uth.gr / 24310 47053 / atsiokan@pe.uth.gr
Co-instructors	

Objective of the course

The module aims to provide basic knowledge on the choice of field tests that may be used to assess human performance away from the laboratory, and the application and scoring of these tests as well. The main emphasis is placed on tests that may be used for assessment in a general population, participants in exercise programs and leisure activities, and in school setting. There is also an effort to link the module contents with previous students' theoretical knowledge on human performance obtained from core courses.

Course contents

Introduction - Anthropometric characteristics and body composition: theory and practice.
Assessment of physical fitness: Muscle strength and endurance
Assessment of physical fitness: aerobic capacity.
Applied assessment of physical fitness: aerobic capacity – data collection.
Assessment of efficiency and learning
Test batteries for physical fitness assessment in elderly people
Applied assessment of physical fitness in elderly people – data collection
Test batteries for physical fitness assessment.
Test battery "Eurofit" : theory
Test battery "Eurofit" : practice
Assessment of flexibility and agility
Assessment of functional balance

Assessment methods

Exams 30%
Homework 70%

Recommended reading

Class notes.

Maud, P.J. & Foster, C. (1995). Physiological assessment of human fitness. Champaign, IL: Human Kinetics.

James R. Morrow..[et al.] (2005). Measurement and evaluation in human performance (3nd ed.). Champaign, IL: Human Kinetics.

Design and Implementation of Exercise Programs

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1115	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Theory and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	GerodimosVassilis
Position	Associate Professor
Office	20
Tel / e-mail	24310 47005 / bgerom@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is the acquaintance of students with the procedures of planning and implementing of exercise programs for health.

Course contents

The effects of exercise on health (cardiovascular system, muscular, system, skeletal system, body composition, lipidemic profile, mental health).
Principles of designing exercise programs.
Strength (muscle hypertrophy, muscle endurance, power).
Designingof strengthtrainingprograms in children, adults and elderly individuals.
Implementationofstrengthtrainingprograms in children, adults and elderly individuals.
Aerobic capacity.
Designingof aerobictrainingprogramsin children, adults and elderly individuals.
Implementationofaerobictrainingprogramsin children, adults and elderly individuals.
Flexibility.
Designingof flexibility trainingprogramsin children, adults and elderly individuals.
Implementationofflexibility trainingprogramsin children, adults and elderly individuals.
Neuromotor exercise.
Designing of neuromotor trainingprogramsin children, adults and elderly individuals.
Implementationofneuromotor trainingprogramsin children, adults and elderly individuals.
Training planning throughout the developmental years.
The effects of whole-body vibration training on physical fitness and health.
Evaluation of health indices (body composition, blood pressure, respiratory function) and overall fitness (strength, aerobic capacity, flexibility, speed, power, balance etc.) throughout the developmental years.

Assessment methods

Exams 70%
Homework 30%

Recommended reading

Classnotes.
Gerodimos, V. (2013). *"Exercise as an intervention strategy for prevention and rehabilitation of chronic diseases."* www.exerciseforhealth.gr/uploads/Book.pdf
Gerodimos, V., Karatrantou, K., Manou, V., Paschalis, V., &Kellis, S. (2014). Exercise for health. In A. Koustelios (Ed.), *"Sport for all" (5*-58).
Corbin C.B., Lindsey R., Welk G. (2000). Concepts of physical fitness: Active lifestyles for wellness (10th ed.), McGraw-Hill Companies, Inc, United States.
Rikli R., Jones C.J. (2001). Senior fitness test manual, Human Kinetics, Champaign, IL.
ACSM (2011). American College of Sports Medicine position stand. Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: guidance for prescribing exercise. *Med Sci Sports Exerc, 43*(7), 1334-1359.

Planning and Application of Physical Education Programmes

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1112	4	100	Compulsory
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Lectures, projects, written assignments, oral presentations
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	52	Non	Greek

Lecturer

Name	Nikolaos Digelidis, PhD
Position	Associate Professor
Office	2
Tel / e-mail	24310 47052 / nikdig@pe.uth.gr
Co-instructors	

Objective of the course

To give students i) the opportunity to understand the role, procedure and impact of curriculum design and ii) the necessary experience in curriculum and program design.

Course contents

Curriculum design principles.
Values and philosophical orientations.
Technocracy and education.
Physical education models.
The Greek curriculum and modern tensions in curriculum design
Organizing centers.
Establishing content goals.
Analyzing students' needs and capacities.
Establishing learning outcomes.
Curriculum evaluation.
Transforming education.

Assessment methods

Final exams 60%, written assignments 30%, active participation 10%

Recommended reading

Digelidis N. (2007). Planning, applying and evaluating the PE curriculum. University of Thessaly Publishers.
Melograno V.J. (1997). Designing the physical education curriculum. Champaign, IL: Human Kinetics.
National Association for Sport and Physical Education (2004). Moving into the future: National standards for physical education. Reston, VA: NASPE Publications.

Aerobic Dance

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0950	4	100	Pathways and Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3d	Spring	Ellective	Practice and Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Konstantina Karadimou
Position	Special Teaching Staff
Office	10
Tel / e-mail	24310 47068 / ckaradim@pe.uth.gr
Co-instructors	

Objective of the course

By the end of the course students should be able to teach an aerobic dance class for beginners to medium level.

Course contents

-Planning and organizing an aerobic dance class program
-Contents of an aerobic dance class program
- Importance and use of music in aerobics –Relation between the tempo of the music and exercise intensity
- Teaching individual exercise - Teaching a dance routine in organized choreography
- Methods of aerobic training – Annual Programming
- Circuit training aerobics (adapted to an aerobic dance class)
- Interval training aerobics (adapted to an aerobic dance class)
- Aerobic dance using bench- step – Bench-step choreography
-Use of hand apparatus during an aerobic dance class
- Strength training (calisthenics) without apparatus
-Stretching
-Cues and interpersonal communication with trainees
-Precautions for safe training

Assessment methods

Practice performance 70%
Exams 30%

Recommended reading

-C.H. Corbin, R. Lindsay , G. Welk. (2001) *Άσκηση , Ευρωστία ,Υγεία.(Consepts of Physical Fitness-Active life style for wellness)* Ιατρικές εκδόσεις Π.Χ. Πασχαλίδη, Αθήνα.
-Jan Galen Bishop. (2007) *Fitness through Aerobics* (Φυσική Κατάσταση μέσω του Αερόμπικ) Τελέθριον Α.Πιπέρης & ΣΙΑ ΕΕ.
-ACSM (2011). Position stand:*Quantity and Quality of Exercise for Developing and Maintaining Cardiorespiratory, Musculoskeletal, and Neuromotor Fitness in Apparently Healthy Adults: Guidance for Prescribing Exercise*.
http://journals.lww.com/acsm-msse/Fulltext/2011/07000/Quantity_and_Quality_of_Exercise_for_Developing.26.aspx

Clinical Exercise Physiology

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1119	4	100	Compulsory/Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Elective	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	none	Greek

Lecturer

Name	Giorgos K. Sakkas
Position	Assistant Professor
Office	23
Tel / e-mail	24310 47015 /gsakkas@uth.gr
Co-instructors	Christina Karatzaferi

Objective of the course

Students will get an introduction to clinical exercise physiology and some specialized knowledge and skills regarding issues of exercise for health. Emphasis is given on how selected acute conditions, chronic diseases and behavior may affect various organic systems and a person's functional capacity. Moreover, the intricacies of evaluating and testing people with such conditions are discussed.

Course contents

1. Introduction to clinical exercise physiology
2. Viral infections and exercise
3. Pain, injuries and exercise
4. Dehydration and Thermal Stress
5. Ageing effects
6. Pregnancy and exercise
7. Metabolic syndrome I – insulin resistance
8. Metabolic syndrome II – arterial hypertension
9. Metabolic syndrome III – dyslipidemia / obesity
10. Medical clearance for exercise
11. Neurodegenerative conditions
12. Qiality of life in chronic disease
13. Review of taught subjects

Assessment methods

Exams 100%

Recommended reading

Class notes.
ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities.

Theory and Practice of Physical Education Pedagogy

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1107	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3th	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Alexandra Bekiari
Position	Assistant Professor
Office	14
Tel / e-mail	24310 47040 / sandrab@pe.uth.gr
Co-instructors	

Objective of the course

• To familiarize students with the comparison between theory and practice of pedagogy and with the analysis of situations (imaginary or real) that can be described as "problematic" or "ideal" at places of implementing physical education, such as schools, gymnasiums...

Course contents

• Applying power models in practice of physical education and possibly in specific fields such as martial arts, mass sports and more.
• Applying types of intelligence in specialized fields of physical education.
• Cultural capital that may characterize the majority of teachers and learners in each sport (eg. What is “popular” and what “elit” sports).
• How different are parameters, such as aggression, learning motivation etc, between specific fields of physical education and sports.
• What pedagogical “schools” and teaching models are applied in specific fields of physical education and sports
• Effect and influence of the family on the participation of trainees in different sports.
• To what extent are introductors and coachers maintain fixed ideas about each trainee and how strongly their behaviour depend on these.
• Applying theory in case studies via films.
• Analysis of real cases through interviews by teachers’ of physical education at schools or gyms (presentation of projects).

Assessment methods

Exams 50%
2 Assignments 40% (Added to exams mark)
Attendance - participation 10% (Added to exams mark)

Recommended reading

Koliadis, E. (2010). *Behaviour at school: we exploit opportunities facing problems*. Athens. (In Greek)
Bekiari, A. & Hasanagas, N. (2015). *Sociological insights in the education system: Unlocking the power relations.* Thessaloniki, Ed. Christodoulidi. (In Greek)
Matsagouras, H. (2008). *Theory and Practice of Teaching: The classroom.* Athens, Ed. Gregory. (In Greek)
Papaioannou, A., Theodorakis, Y., & Goudas, M. (2003). *Towards a better physical education.* Thessaloniki, Ed. Christodoulidi. (In Greek)
Hatziharistos, D. (2003). *Modern system of physical education*. Athens. (In Greek)

Information Technology in Education with Emphasis on Physical Education

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0101	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Spring	Compulsory	Theory Lectures and Laboratory
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	28	Non	Greek

Lecturer

Name	Marina Papastergiou
Position	Associate Professor
Office	15
Tel / e-mail	24310 47028 / mpapas@pe.uth.gr
Co-instructors	

Objective of the course

The module aims at familiarizing students with the applications of information technology in education and especially in the teaching and learning of Physical Education (PE), at introducing students to the themes and findings of the scientific research that is conducted internationally in the field, and also at fostering students' skills regarding the design and development of interactive multimedia educational material for PE. The intended learning outcomes are that students become knowledgeable about the various applications of information technology in the teaching and learning of PE, that they are aware of the recent findings of the relevant scientific research, that they understand the broader perspectives that information technology creates for physical educators and for those involved in the design and development of educational material for PE, and, finally, that they are capable of designing and implementing interactive multimedia educational material for PE.

Course contents

Learning theories and information technology-based learning environments
Impact of information technology on the learning process
Educational software for PE
Multimedia in PE
Introduction to the utilization of the Internet in PE
Online learning activities and projects for PE
Webquests for PE
Physical educators' training and support through the Internet
Graphics processing
Video processing
Creation of digital educational movies
Design of interactive online learning activities
Construction of educational websites
Construction of simple applications for mobile devices

Assessment methods

Projects 60%
Final exam 40%

Recommended reading

Smaldino, S., Lowther, D., & Russell, J. (2010). Instructional technology and media for learning (P. Antoniou, Ed. Greek Edition). Athens: Ion.
Alesi, S., & Trollip, S. (2005). Multimedia and education (Greek Edition). Athens: Giourdas.

Gender and Equity Issues in Sport

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME0092	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Winter	Compulsory	Theory and practice
Hours / week	**Hours / semester**	**Prerequisites**	**Language of instruction**
2	26	No	Greek

Lecturer

Name	Vasiliki Zisi
Position	Associate professor
Office	32
Tel / e-mail	24310 47017 / vzisi@pe.uth.gr
Co-instructors	

Course objectives

The is to become informed and responsive to issues that appear to differentiate girls' and women's participation in sports and physical activities and how these should be managed in order to provide equal opportunities for all.
The main objective of the course is to sensitize students to gender discrimination issues in sport, to understand how these issues relate to social stereotypes for both genders, in which behaviours they usually occur and how they are accepted by athletes, parents and agents.
After the end of the course, students will be able to:
• Identify issues of gender discrimination and stereotypes in sport and their consequences
• Manage situations of gender issues and provide fair and equal opportunities to all athletes
• Support and promote increased involvement of girls and women in all levels of sport.

Course content

Social and biological gender.
Women's presentation in sports.
Psychological effects of sexual harassment in athletes
Female athletes and body Image
Media & female athletes

Assessment methods

Individual written assignment 30%
Group essay (2 students): collect and present data 20 %
Group essay (5 students): collect and present data 50 %

Recommended readings

e-class notes.
Ζάικος, Ν. (2004). Δομνίτσα Λανίτου-Καβουνίδου. Θεσσαλονίκη: Εκδοτικός Οίκος Α. Σταμούλη
Καμπερίδου, Ε. (2011). Κοινωνικό φύλο, κοινωνικό κεφάλαιο, πολυπολιτισμικότητα και αθλητισμός. Αθήνα: Εκδόσεις Τελέθριο

Track and Field I

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK0301	12	300	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
3trd	Spring	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Dimitrios Soulas
Position	Professor
Office	16
Tel / e-mail	24310 47016 / dsoulas@pe.uth.gr
Co-instructors	Athanasios Tsiokanos, Ioannis Koutsioras, Ioannis Kontonasios

Objective of the course

The aim of the courses of this semester is to introduce the students to training issues of running (sprints and middle - long distances), of jumping events and throwing events, which concern athletes of the developing phase of the Basic (12-13 of age) and the Specific training stage (14-15 years of age).

Course contents

Methods and methodology of training running events (sprint and middle and long distance running)
Methods and methodology of training jumping events (long jump, triple jump, high jump and pole – vault).
Methods and methodology of training throwing events (shot put, discus and javelin throw).

Assessment methods

Practice 40%, Homework 20%, Exams 40%

Recommended reading

Georgiadis, G. (1992). Theory and Methodology of Throwing Events. Athens: Georgiadis, G.
Dickwach, H., Gundlach, H. (1992). Jumping Events. Thessaloniki: Salto.
Dintiman,G.,Ward,R.(1992). Speed. Thessaloniki: Salto.
Fafoutis, E., Euthimiou, D. (1994). Jumping Events. Athens
Grosser M. (1994). Speed Training. Thessaloniki: Salto.
Hess, W. D., Gundlach, H. (1993). Running Events. Thessaloniki: Salto.
Hinz, L., Gundlach, H. (1991). Throwing Events. Thessaloniki: Salto.
Groupofwriters (1996). Training Programs of the Developing Phase of the Running, Jumping and Throwing Events. Athens.
Tziortzis, S. (1998). Training of the Running Events.Athens: ArtWork.
ZintlF. (1993). E. Θεσσαλονίκη. Endurance Training. Thessaloniki: Salto.

Basketball I

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0201	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Vassilis Gerodimos
Position	Associate Professor
Office	20
Tel / e-mail	24310 47005 / bgerom@pe.uth.gr
Co-instructors	Panangiotis Tsimeas

Objective of the course

The aim of this module is the practice of students in teaching effectively individual skills in basketball, as well as the familiarization with mini-basketball (planning, special topics, teaching methods-games). There is a special emphasis on various teaching methods and in the playful mode of teaching. Additionally, the students learn about planning and application of physical condition training in developmental ages.

Course contents

Skills without the ball
Stances, Running technique, Change of direction,, Stops, Pivoting, Defensive slides.
Skills with the ball
Receiving the ball, Two counts rhythm, Passing(Chest pass, Bounce pass, Overhead pass),Dribbling (control, speed, crossover, reverse), Shooting (jump-shot, lay-up, hook-shot, free–throw), Getting free (perimeter-inside players), movement with the ball- fakes (perimeter-inside players).
Rebound (offensive-defensive).
Defensive block-out.
Mini-basketball.
Long term planning: planning, application, guidance of plans about strength, flexibility, speed and endurance in developmental ages.

Assessment methods

Exams (theory) 50%
Homework 20% (6 homework)
Teaching-Application of practice plans 30%

Recommended reading

Classnotes.
Kellis, S. (1999). Physical Condition of Young Basketball Players. Salto Publications.
Vamvakoudis, E., Medilidis, N., Tsitsakaris, G., Hatziathanasiou, P. (1996). BASKETBALL: Tactics. Thessaloniki: Salto Publications.
Gerodimos, V., Perkos, S. (2006). Basketball: Theory, Technique, Tactics, Methodology, Special Instructive and Rules. Thessaloniki: Salto Publications.
Kioumourtzoglou, E. & Goudas, M. (2003). Basketball Beyond Fundamentals and Tactics. Thessaloniki, Christodoulidi Publications.
Hal Wissel (2007). Basketball: Steps to Success. Translation: S. Perkos, V. Gerodimos, M. Goudas., Thessaloniki. ChristodoulidisPublications.
Tsitskaris G.,Hatziathanasiou, P. (2002). Fundamental Principles of Basic Technique, Thessaloniki, Salto Publications.

Swimming I

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0401	12	300	Specialization
Year of study	Semester	Type of course	Teaching methods
3rd	Winter	Compulsory	Lectures, practice and teaching practice
Hours / week	Hours/semester	Prerequisites	Language of instruction
6	78	Non	Greek

Lecturer

Name	Antonis Hatzigeorgiadis
Position	Associate Professor
Office	20
Tel / e-mail	24310 47009 / ahatzi@pe.uth.gr
Co-instructors	Anastasia Mplanti

Objective of the course

The module focuses on the basic principles of swimming and the teaching of swimming in young children, as well as teaching practice.

Course contents

Age group swimming.
Training principles.
Training objectives.
Strength and power.
Flexibility.
Training schedules.
Year plans.

Assessment methods

Exams 60% (30% practice & 30% theory)
Homework 20%
Teaching practice 20%

Recommended reading

Soultanaki, E. (2007). Competitive Swimming.
Costill, D., Maglischo, E., & Richardson, A. (2007). Swimming (Handbook of sport medicine and science series). Paschalidis.

Soccer I

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0501	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Zisis Papanikolaou
Position	Associate professor
Office	15
Tel / e-mail	2431047039/ zpapanik@pe.uth.gr
Co-instructors	Konstantinos Famissis

Objective of the course

The objective of this semester is to provide the student with knowledge to teach soccer in young players. The training of the youth is very different and the coach must be a teacher to organize practical lessons and direct games in school level.

Course contents

1) YOUTH SOCCER
   6-8 years
   8-10 years
   10-12 years

   12-14 years

   14-16 years
   Teaching and learning components of each age:

   a) Level of development.
   b) Teaching program.
   c) Program of soccer lessons.
2) First aid methods and treatments.
3) Nutrition.
4) Basic principles of athletic training:
   a) Methods of teaching and coaching.
   b) Training programs.
   c) Preparation and leadership of youth team.

Assessment methods

Written exams 35%
Test of soccer skills 35%
Participation of the student:(attitude, presents, improvement, cooperation, wish success, discipline, motivation for learning, enthusiasm) 10%
Personal papers 10%
Presentation 10%

Recommended reading

Pallok, R (1983) Soceer for Junior U.S.A.: Charls Scribne's Sons.
Wabe, Allen, (1967). Football Association Guide to training and Coaching. London: Heinemannn.
Watson Bill, (1973). Football Fitness.London.:Stenley Paul.

Volleyball I

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE1001	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Teaching Volleyball	Greek

Lecturer

Name	Asterios Patsiaouras
Position	Special Teaching Staff
Office	9
Tel / e-mail	24310 47060 / spats@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of this course is to give the students the knowledge and elements of technique and tactics in order to be able to coach successful volleyball teams or teaching volleyball in schools.

Course contents

Technique, methods in teaching volleyball.
Common mistakes in volleyball and correction of them.
Developing skills in volleyball.
Keeping records of the performance of players.
Statistics, scouting the opponent.
Drills to develop agility in movement during a game.
Analysis of the technique of passing the ball with the fingers.
Coaching the setter.
Setter tactics, video analysis.
Ball perception, receiving systems.
Drills in receiving the ball Drills in sleeve let (beginners-advanced).
Technique in serving the ball.

Assessment methods

Exams 70% (40% practice & 30% theory)
Homework 20% (1 homework)
Teaching 10%

Recommended reading

Class notes.
KENNY, B., and GREGORY, C. (2006). *Volleyball: Steps to Success*. Human Kinetics Publishers.
ZETOU, E. & KASABALIS, TH. (2006). *Volleyball*. Athens: Telethrion.
BERGELES, N. (1993). *Volleyball Training*. Athens.

Greek Folks Dances I

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0901	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Ioannis Dimas
Position	Special Teaching Staff
Office	6
Tel / e-mail	24310 47060 / jdimas@pe.uth.gr
Co-instructors	Dafni iakovaki

Objective of the course

To introduce the student to the concept of a qualified pedagogical dance teacher.
To understand theoretically and practically rhythmic structures and the "Dancing Familie" of the Greek dance. Studying dance in cultural community, historic-cultural, to separates it and teaches it based on rhythmics and the “Dancing Families”of the Greek dance.

Course contents

Approach the dance by science research, starting from the assumption that there is not a mnemonic sterile process of steps and movements.
Dancing in the timeless tradition of Hellenism.
Introduction to research - qualitative method.
Rhythm: The rhythm in nature, in life, human beings, physical education, dance.
Morphology of the dance: Kinetic pattern - form of the dance - "Dancing Families"
Rhythmical analysis of the musical measures I.
Analysis of the whole dance, based on musical meter in relation to the kinetic pattern and the form of the dance. Advanced numerical and verbal metric I.
Approach the meaning (historical-social) of lyrics of folk songs. I
Teaching 55-65 dances from specific cultural communities of Hellenism I.
Seminar dancing lessons by visitors rapporteurs I.
Full historical and cultural elements of the learned dances.
Notation of the dances

Assessment methods

Exams 70% (Practice 40% and lectures 30%)
Homework 20% (2 home works)
Participation 10%

Recommended reading

- Δήμας, Ι., (2014). Πίνακας συντομευμένων-κωδικοποιημένων στοιχείων διδακτικής των Ελληνικών Παραδοσιακών Χορών, σήμερα. Σημειώσεις για τους φοιτητές.
- Δήμας, Η., (1988). Η χορευτική παράδοση της ηπείρου. Αθήνα. Έκδοση ιδίου.
  Νιτσιάκος, Β. (1994). ‘Εισαγωγή’ στο Χορός και Κοινωνία Κόνιτσα: Πνευματικό κέντρο Δήμου Κόνιτσας: 9-14.
- Λουτζάκη, Ρ., (1992). Για μια ανθρωπολογία του χορού. Εθνογραφικά (8): 11-16.
- Κυριακίδου-Νέστορος, (1978). Η θεωρία της ελληνικής Λαογραφίας. Αθήνα, Εταιρία Νεοελληνικών Σπουδών.
- Kaeppler, A., (1992). Σκέψεις για τη θεωρία και τη μεθοδολογία της ανθρωπολογικής μελέτης του χορού και των συστημάτων της ανθρώπινης κίνησης. Εθνογραφικά (8): 17-25. Ναύπλιο: Πελοποννησιακό Λαογραφικό ίδρυμα.

Adapted Physical Education I

Course Code	ECTS	Student workload (hours)	Level of Course
KE1201	12	300	Specialty Course
Year of study	**Semester**	**Type of Course**	**Teaching methods**
3rd	Spring	Compulsory	Practice and theory
Hours/Week	**Hours/Semester**	**Prerequisities**	**Language**
6	78	None	Hellenic

Lecturer

Name	Dimitrios Kokaridas
Position	Assistant professor
Office	Dimitrios Kokaridas
Tel. / e-mail	24310 47008 / dkokar@pe.uth.gr
Co - Instructors	

Objective of the course

The purpose of the course is:

1. To provide students with knowledge concerning psychomotor development, Individualized Education Programming (IEP), organization and application of adapted physical education activities for individuals with disabilities.
2. To help students acquire experience in real working conditions through their systematic practice in special schools, psychiatric and rehabilitation centers, wheelchair sport teams, and other disability settings and institutions.

Course contents

1. **Introduction – definitions - basic terms:** Disability, adapted physical education, inclusion.
2. **Psychomotor development:** Definition, basic theories, motor development.
3. **Individualized Education Programming (IEP).** Structure and content of IEP, holistic approach of evaluation, lesson planning.
4. **Learning difficulties I:** Definition, motor clumsiness, identification, exercise adaptations.
5. **Learning difficulties II:** ADHD, speech disorders, exercise adaptations.
6. **Levels of intelligence:** Definition, multiple intelligence, IQ measurement.
7. **Intellectual disability**: Definition of intellectual disability, etiology, characteristics, basic syndromes.
8. **Intellectual disability and exercise:** Motor characteristics, adaptations of exercise for children with intellectual disability with and without Down syndrome.
9. **Students with behavior disorders:** Students with internalizing and externalizing behavior, PE suggestions and adaptations.
10. **Autism spectrum disorders:** Definitions, functionality levels, main educational approaches.
11. **Autism spectrum disorders and exercise:** Motor evaluation, organization of PE lesson, teaching strategies and exercise adaptations.
12. **Asthma:** Definition, characteristics, adaptations of exercise.
13. **Diabetes:** Definition, typew of diabetes, adaptations of exercise.

Assessment methods

Written exams 50%
Practice 40%
Participation in class 10%

Recommended reading

1. Kokaridas, D. (2010). Adapted Physical Education: individualization, adaptations, and inclusion aspects. Thessaloniki: Christodoulidis Publishing.

Exercise and Health I

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE2021	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	None	Greek

Lecturer

Name	Vassiliki Zisi
Position	Associate Professor
Office	32
Tel / e-mail	24310 47017 /vzisi@pe.uth.gr
Name	Christina Karatzaferi
Position	Associate Professor
Office	23
Tel / e-mail	24310 47015 /ck@pe.uth.gr
Co-instructors	Athanasios Jamurtas, Yiannis Koutedakis

Objective of the course

The aim of the module is that the students will gain a good understanding of specialized knowledge and skills regarding issues of exercise for health. Emphasis is given on how selected chronic diseases and behavior may affect various organic systems and a person's functional capacity. Moreover, the benefits of exercise on functionality as well as on the psychological and social health of a patient are presented. Students will also become familiarized with the use of adapted laboratory functional capacity assessment methods as well as consultation techniques.

Course contents

1- Advanced Clinical Exercise Physiology - 2 hrs/wk
1.1 Introduction– characteristics of patients
1.2 Exercise and heart failure
1.3 Exercise and sleep disorders
1.4 Exercise and chronic pulmonary disease
1.5 Exercise and diabetes
1.6 Exercise and cardiometabolic syndrome
1.7 Exercise and chronic kidney failure
1.8 Exercise and arthritis
1.9 Exercise and HIV
1.10 Exercise and neurodegenerative disease
1.11 Exercise and Addictions
1.12 Exercise and Pregnancy
1.13 Exercise and ergogenic aids – alternative interventions

2. Health behavior counselling- 2 hrs/wk,
dealing with issues such as: quality of life, health and exercise, Introduction to health psychology, Health behavior models, Psychological parameters of exercise in persons with chronic illness, Exercise and quality of life in persons with chronic illness, Exercise as a mean of pain control in persons with chronic illness, Sociological parameters of exercise in persons with chronic illness, Psychological benefits of exercise in children with chronic illness

3- Physical Evaluation of Special Populations I - 2 hrs/wk (laboratory exercises)
3.1 Introduction– Body measurements, skinfolds
3.2 Aerobic testing on the treadmill
3.3 Aerobic testing on the cycle ergometers
3.4 Evaluation of muscle strength –dynamometry
3.5 Evaluation of muscle power
3.6 Mobility – balance
3.7 Indices for oxygen transport

3.8 Indices of diabeter 3.9 ECG – sodium, potassium changes 3.10 Indices for kidney and liver 3.11 Indices of dyslipidaemias 3.12 Indices of hypertension and osteoporosis 3.13 Glycemic Index – nutritional approaches

Assessment methods

Exams 60% Homework 30% (3 term papers) Participation 10%

Recommended reading

Class notes. ACSM's Guidelines for Exercise Testing and Prescription- 7th edition ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities, Dustine J., Moore G. Nutrition for Health, Fitness & Sport, Williams M. McGraw-Hill Brannon, L., & Feist, J. (2000). Health psychology: An introduction to behavior and health. Murray, M., & Chamberlain, K. (1999). Qualitative health psychology. London: Sage Publications. Ogden, J. (2000).

Gym Exercise and Sport Management

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE2031	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
4	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Athanasios Koustelios
Position	Professor
Office	3
Tel / e-mail	24310 47006 / akoustel@pe.uth.gr
Co-instructors	Pollatou, E., Saroglakis, G., Karadimou, N.

Objective of the course

The aim of the module is to offer to the students: a) the necessary knowledge for effective management of sport facilities, b) To be competent to create, develop and perform a Gymnastic for All program for national or international events and c) the knowledge concerning the correct technical execution of a high variability of exercises with weights for all body muscles.

Course contents

1. Types of sport facilities,
2. Planning- Programming
3. Maintenance,
4. Safety,
5. Economic management–Public relations,
6. Choreographic elements
7. Music and motor performance
8. Creative body combinations with hand or stable apparatus or objects.
9. Synthesis and development of GFA programs according to FIG Code of Points
10. Exercises for chest and neck muscles (dvd - technical analysis)
11. Exercises for the back and upper arm muscles (dvd - technical analysis)
12. Exercises for the shoulder and abdominal muscles (dvd - technical analysis)
13. Exercises for leg muscles (dvd - technical analysis)

Assessment methods

Participation, Practice, Final Exams

Recommended reading

Mulrooney, A., &Farmer, P. (1996). Managing the facility. In B. Parkhiuse (ed.). The management of sport: Its foundation and application (2nd ed.), 223-248, St Louis, MO: Mosby – Year Book.
Gymnastics for All Code of points (2015).

http://cosmogym.gr/document/%CE%BA%CF%8E%CE%B4%CE%B9%CE%BA%CE%B1%CF%82-%CE%B1%CE%BE%CE%B9%CE%BF%CE%BB%CF%8C%CE%B3%CE%B7%CF%83%CE%B7%CF%82-%CF%84%CE%BF%CF%85-cosmogym-contest-2015/

GymnasticçCanada (2008). Long Term Athletes Development
http://www.gymcan.org/uploads/gcg_ltad_en.pdf
Delavier, F. (2009). Strength Training Anatomy. Paris :Εκδόσεις Human Kinetics.

Outdoor Activities / Downhill Skiing & Outdoor Exercise programs I

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
KE2041	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3st	Spring	Compulsory	Lectures , Seminars Workplace environment
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instructio**
6	78 (6X13)	Outdoor Activities /Children Summer Camps & Downhill Skiing	Greek

Lecturer

Name	Charilaos Kouthouris
Position	Associate Professor
Office	16
Tel / e-mail	24310 47045 / kouthouris@pe.uth.gr
Co-instructors	Vasilis Voutselas

Objective of the course

After the end of the course, the student in knowledges, skills and abilities will be able to:

Outdoor Activities
1) know the basic principles of operation of outdoor activities: a) Mountain Hiking, b) Free Camp, c) Guidance and d) of mountain bike
2) is aware of the proper use and maintenance of the corresponding equipment by activity
3) perform adequately as an individual a "kinetic routine" with proper technique and a way absolutely safe

Downhill skiing.
4) knows the methodology of learning the basic technique in skiing downhill and rules of safe behavior in a controlled ski resort
5) ski with ease in a medium difficulty track running parallel bends middle & small radius (gradient: red run)

Outdoor Exercise Programs
6) successfully teach basic technique in groups novice skiers Exercise programs in Nature
7) theoretically aware of the basic principles and rules of implementation of exercise programs in Nature (Pilates)
8) complete a course as a trainee for at least 3 months
9) running in nature a "kinetic routine" program lasting at least 30 minutes
---
10) is aware of the Greek and European market of outdoor activities - skiing and exercise programs in Nature
11) aware for the Outdoor Environmental

Course contents

Outdoor Activities
• History, Concepts, Market ATVs Recreation
• Theories and models of behaviour of participants in outdoor recreation activities
. Knowledge, appreciation and respect of the outdoor environment.
• Definition, Principles, Benefits, difficulty levels, Accidents, escorts Qualifications - Obligations Necessary individual and collective equipment in Outdoor Activities: In Mountain Hiking in Freedom Camping, the Orientation and Mountain Bike
• Prevention and management of potential risks and prevent accidents

Skiing
• Introduction to Skiing Downhill, Equipment, Security

• Technical skiing downhill • Basic technique of downhill skiing, methods and teaching • Advanced technique in skiing downhill <u>Exercise programs in Nature</u> • History and Philosophy Benefits of Pilates • Basic principles • Basic askisiologio • Structure and Organization In Nature

Assessment methods

• Participation in the courses (theoretical and practical) 10% • Performance at 'kinetic routines / skills »(video) 20% • Teaching 20% • Course works 10% • Practical exercise on outdoor recreation workplace environment 20% • Final written exams 20%

Recommended reading

•Κουθούρης Χαρίλαος (2009). Υπαίθριες Δραστηριότητες Αναψυχής – Ακραία Αθλήματα, Μάνατζεμετν Υπηρεσιών / Εκπαίδευση Στελεχών. Εκδόσεις Χριστοδουλίδη, Θεσσαλονίκη. •Κουθούρης Χαρίλαος (2015). Χιονοδρομία. Πανεπιστημιακές Σημειώσεις, Εκδόσεις Πανεπιστήμιο Θεσσαλίας. •Μιχάλης Φιλίνης (2009). Οι διδακτικές τεχνικές της Hatha – yoga. Εκδόσεις Αθλότυπο, Αθήνα. •Αλύσια Ουνγκάρο (2004). Pilates. Μετάφραση εκδόσεις Μίνωας, Αθήνα.

SEMESTER G

Aerobic and Anaerobic Power

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK1017	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Dimitrios Soulas
Position	Professor
Office	24
Tel / e-mail	24310 47016 / dsoulas@pe.uth.gr
Co-instructors	

Objective of the course

The aim of this courses is to give the students the basic elements of theory and the methodology of aerobic training

Course contents

Basic Definitions of Training
Principles of Training
Periodization of training

Assessment methods

Exams

Recommended reading

ZintlF. (1993). EnduranceTraining. Thessaloniki: Salto.
RolfMayer,Timo Mayer (2006). Aerobic training in Soccer.Thessaloniki: Salto.

Laboratory Assessment of Exercise Performance

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1109	6	150	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Lectures and Labs
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Jamurtas / Athanasios Tsiokanos
Position	Associate Professor / Associate Professor
Office	33 / 8
Tel / e-mail	24310 47054 / ajamurt@pe.uth.gr, 24310 47053 / atsiokan@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is:

1. To allow the student to get an understanding of the organization and operation of a biochemistry of exercise laboratory. The student will be able to measure metabolites (ie glucose, lactic acid) hematocrit, hemoglobin etc that are essential for exercise performance. The course will begin with an introduction of the major equipments in the lab (phasmatophotometer, centrifugor, water bath etc) and will carry on with several experiments.
2. To familiarize the student with the biomechanical methods and instruments for the assessment of sports abilities and for analysis of technique in several sports and to develop criteria for optimization of sports performance based on quantified data.

Course contents

Assessment of hematocrit and hemoglobin (blood volume changes) prior to and after a low intensity and long duration exercise (60 min, 75% MHR) and a wingate test.
Effects of low intensity exercise (60 min, 75% MHR) on blood lactate levels **(Assignment).**
Blood lactate removal with active and passive recovery following low intensity exercise and a wingate test after passive and active recovery.
Lactate threshold assessment.
VO2max prediction through submaximal test
Assessment of VO2max
Effects of eccentric exercise on torque and creatine kinase levels.
Assessment of muscular endurance and flexibility
Assessment of sprint and hurdle running.
Assessment of high jump
Assessment of long jump
Assessment of pole - vault jump
Assessment of soccer movements
Assessment of basketball movements.

Assessment methods

Exams: Assays (20%) & 1 Final exam (70%) and Participation (10%)

Recommended reading

American College of Sports Medicine Guidelines for Exercise Testing and Exercise Prescription, 9th Edition, 2014.
Hay, J., G. (1978). The biomechanics of sports techniques (2d ed.). Englewood Cliffs, N.J.: Prentice-Hall.

Human Resource Management

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1053	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Koustelios
Position	Professor
Office	3
Tel / e-mail	24310 47006 / akoustel@pe.uth.gr
Co-instructors	

Objective of the course

The aim of the module is to analyze the importance of human resources in effective management of sport organizations.

Course contents

Introduction in HRM.
Functions of HRM
Aims HRM, Strategic HRM
HRM Planning
Recruiting
Personnel Selection
Personnel Selection
Curriculum Vitae
Selection Interviewing.
Job description.
Personnel Training
Personnel Training

Assessment methods

Participation: 10%
Exams: 90%

Recommended reading

Bourantas, D. &Papalexandri, N. (2002). Human Resource Management. Benou: Athens.
Xirotiri-Koufidou, S. (2010).Human Resource Management. Anikoula: Thessaloniki.
Chelladurai, P. (2006). Human resource management in sport and recreation. Champaign, Ill: Human Kinetics.

Aging and Exercise

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1024	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Instructor

Name	Vasiliki Zisi
Position	Associate professor
Office	32
Tel / e-mail	24310 47017 / vzisi@pe.uth.gr
Co-instructors	

Objective of the course

Upon the completion of the module, students will have acquired the basic theoretical knowledge about the effects of exercise on physiological and functional alterations, psychological wellbeing and in general quality of life in seniors. Students will also acquire practical knowledge on the design and implementation of exercise programs for seniors.

Course contents

The first part of the course includes basic theoretical knowledge about the effects of physiological alterations associated with increasing age, on functionality, mental health and quality of life of older people. The important role of exercise and physical activity in maintaining the functionality and ensure good quality of life at the earliest possible age is underlined.

The second part of the course includes basic principles and practical knowledge on the organization and designing exercise programs for older persons. In detail, the contents of the course are:

- The process of aging, physiological alterations and exercise benefits.
- Exercise and psychological parameters.
- Motor control and cognitive function
- Exercise, quality of life and functional ability in old age
- Basic principles of exercise programs for seniors.
- Individual exercises for warming up and cool down
- Muscle strengthening for trunk and upper limbs
- Muscle strengthening for abdominal and leg
- Balance training

Assessment methods

Exams 40% (midterm exams)
Individual essay 20%
Group assignment – design and present an exercise program for seniors 30%
Individual critique assignment 10%

Recommended reading

E-class notes.
Brill, P. A. (2004). *Functional fitness for older adults*. Champaign, IL: Human Kinetics.
American council on exercise (2005). Exercise for Older Adults: ACE's Guide for Fitness Professionals. Champaign, IL: Human Kinetics.
Spirduso, W.W. (1995). Physical dimensions of aging. Champaign, IL: Human Kinetics.

Health Education

Course code	Number of credits allocated	Student workload (hours)	Level of course
MK1110	6	150	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4 th	Winter	Compulsory	Lectures
Hours / week	**Hours / semester**	**Prerequisites**	**Language of instruction**
2	26	No	Greek

Lecturer

Name	Yannis Theodorakis
Position	Professor
Office	2
tel. / e-mail	24310 47001 / theodorakis@pe.uth.gr
Co-instructors	Athanasios Kolovelonis

Objective (s) of course

To clarify the terms related to recreation and health education, to explore the new trends of physical education and its orientation to health issues, to examine the interaction between health and unhealthy behaviors, and the understanding of the planning and construction of health education programs.

Course contents

- Introduction to health education
- Why schools should promote physical activity
- Social cognitive models and students' behavior
- Physical activity and the role of parents
- Exercise and health education programs
- A health education model through physical education
- Relaxation techniques in schools
- Smoking: a health education program in physical education
- Interventions programs in schools for controlling stress
- Violence and aggressive in physical education and sports
- Health education and nutrition
- Doping

Assessment methods

Assignment 60%
Written Exams 40%

Recommended Reading

Theodorakis, Y., & Hasandra, M. (2006). The planning and construction of health education programs. Thessaloniki. Christodulidi Editions.
Theodorakis, Y., Jamurtas, A., Natsis, P., Kosmidou, E. (2006). Physical education for high school. Athens. ΟΕΔΒ. Pedagogical Institute.

Muscle Skeletal Overload in Sports

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK 0925	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Yannis Giakas
Position	Associate Professor
Office	3
Tel / e-mail	24310 47010/ ggiakas@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of this module is the study of the load exerted on the muscles, bones and joints and the mechanical cause of sports injuries. Using this knowledge the students will study and familiarize themselves with the recent methods and techniques for the prediction and prevention of sports injuries.

Course contents

Mechanical characteristics of biological material.
Mechanical properties of bone.
Mechanical properties of cartilage.
Mechanical properties ligament and tendon .
Mechanical properties skeletal muscle.
Factors affecting biological material properties.
Mechanical characteristics of bone injuries.
Mechanical characteristics of muscle injuries.
Mechanical characteristics of upper limb joint injuries.
Mechanical characteristics of lower limb joint injuries.
Mechanical characteristics of spine injuries.
Techniques and equipment for the prediction and prevention of sports injuries.

Assessment methods

Homework 30%
Exams 60%
Teaching 10%

Recommended reading

Class notes.
Robertson G., Caldwell G., Hamill J., Kamen G., Whittlesey S. (2004). Research Methods in Biomechanics. Human Kinetics, Champaign, IL.
Nigg B., Herzog W. (1999). Biomechanics of Musculo-skeletal System. John Wiley & Sons, West Sussex, England.

Alternative Forms of Training

Course code	**Number of credits allocated:** 4	**Student Workload (hours):** 100	**Level of course**
MK0962			Pathway, health - recreation - organization of administration
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	George Saroglakis
Position	Special Educational Instructive Personnel
Office	Building 1, Ground floor
Tel / e-mail	24310 47060 / gsarogl@pe.uth.gr
Co-instructors	

Objective of the course

The acquisition of basic knowledge for various types of exercise that can be used either in personal programs of exercise or in group exercise within the classes of the gym.

Course contents

Exercises with the weight of the body for the muscular intensification of abductor, adductor, gluteus, Legs, abdominal and adductor.
Exercises with the use of flexible resistances (rubbers), dumbbells, fit ball, and bars.
Self-monitoring, yoga, Pilates, exercises in water and aqua aerobic .
Suspension.
Functional training.

Assessment methods

Exams 70% (35% practice & 35% theory)
Homework 20% (1 homework)
Teaching 10%

Recommended reading

Notes from the lecturer for Aqua Aerobic and gymnastics in water.
Mandroukas, K..(2005). *Operation Abdominal and* adductor. Thessaloniki: Publications of University of Macedonia.
Home , K ..(2004). *Yoga.* Thessaloniki: Publications Malliaris.

Life Skills in Education

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1020	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Lectures and Seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Marios Goudas
Position	Professor
Office	16
Tel / e-mail	24310 47045 / mgoudas@pe.uth.gr
Co-instructors	Evdoxia Kosmidou, Kolovelonis Athanasios

Objective of the course

By the end of the course students should be able:
To comprehend what the life skills is and how the life skills can be incorporated into the education and the physical education.
To deal with some the life skills through practical experience.
To acquire knowledge and experiences to apply lifeskills training programs.

Course contents

Introduction to life skills.
Life skills and physical education teacher.
Teaching life skills. Life skills training programs' results.
Goalsetting, goals' characteristics, goalladder.
Positive thinking and self-talk.
Problemsolving. Overcomingobstacles. Help seeking.
Self-confidenceandcourage. Self-esteem.
Conflicts' avoidance. Responsibilityandrightchoices.
Learning skills.
Emotionalmanagement, respecttoothersandrespect individuality.
Interpersonalrelationships. Childrenandparentsrelationships.
Lifeskillsandpositivehealthybehaviors.
Practiceindesigninglifeskillsprogramsforelementaryandsecondaryschoolsanduniversities.

Assessment methods

Attendance - participation (20%)
Written Assignment 1 (20%)
WrittenAssignment2 (30%)
Assignmentpresentation (30%)

Recommended reading

Life skills manual (2005). Department of Physical Education and Sport Science. University of Thessaly(In Greek)
Learning skills manual (2005). Department of Physical Education and Sport Science. University of Thessaly (InGreek)
Danish, S. J., &Nellen, C. V. (1997). New roles for sport psychologists: Teaching life skills through sport to at-risk youth. Quest, 49, 100-113.
Danish, S. J., Nellen, C. V., & Owens, S. S. (1996). Teaching life skills through sport: Community-based programs for adolescents. In J.L.Van Raalte, & B.W. Brewer (Eds.), Exploring sport and exercise psychology (pp. 205-223). Washington, DC: American Psychological Association.

Writing the Research Thesis

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME9900	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Winter	Compulsory	Mainly practice, e-class
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Instructor

Name	Vasiliki Zisi
Position	Associate professor
Office	32
Tel / e-mail	24310 47017 / vzisi@pe.uth.gr
Co-instructors	

Objective of the course

This module aims to improve the reading and writing skills that are important for the students to write their final thesis and also are important in writing research. The context of this module includes techniques for effective literature search, reading and writing and guidelines to write research findings from the literature avoiding plagiarism. There are also instructions for writing the references and the results section of the research thesis, in accordance with the manual of American Psychological Association (APA 5). The course is taught using e-class and the students have to apply the techniques taught and follow the instructions presented in each lecture, by submitting an essay every week.

Course contents

Stages of implementation of the final thesis. The sections of the final thesis and research papers.
Abstract: construction, precision, adequacy.
Literature: Methods and data bases for literature search, reading and writing the literature, defining the thesis topic, writing the references.
Ethics in writing research, techniques to avoid plagiarism.
Writing the results section: tables, graphs, text for analysis of variance and correlations.

Assessment methods

Exams 50% (20% midterm exams, 30% final exams)
Homework 50% (3 X 10% exercises, 5 X 4% essays)

Recommended reading

e-class notes.
Troyka, L.Q. (2002). Simon & Schuster handbook for writers, 6th ed. Upper Saddle River, NJ: Prentice Hall. pp. 105 - 113.

Use of SPSS

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME0051	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Winter	Compulsory	Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Athanasios Papaioannou
Position	Professor
Office	1
Tel / e-mail	24310 47012 / sakispap@pe.uth.gr
Co-instructors	Nikolaos Zourpanos

Objective of the course

The aim of this module is the acquaintance of students with basic data analysis techniques using the statistical package SPSS. Emphasis is given in selecting and applying the appropriate statistical procedure in relation to the research question and the nature of the data as well as interpreting of the results.

Course contents

Data entering.
Data handling.
Data transformations.
Describing data (categorical data, interval data):
- Frequencies.
- Descriptive.
- Explore.
- Crosstabs.

Create and edit a graph.
Linear correlations.
One-sample t-test.
Independent samples t-test.

Assessment methods

Exams 80%
Course participation 20%

Recommended reading

Tsantas N., et al. (1999). Data analysis with the use of statistical packages: SPSS 7.5, Excel ’97, S-Plus 3.3. Thessaloniki: Ziti Publications. [In Greek].
Gnardelis, X. (2006). Data analysis with the SPSS 14.0 for windows. Athens: Papazisi Publications. [In Greek].
Howitt, D. & Cramer, D [translation Michel Mikedis] (2006). Statistics with the SPSS 13 with applications in the psychology and social sciences. Athens: Kleidarithmos Publications. [In Greek].

Introduction to Entrepreneurship

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0119	2	50	Iintroductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
2st	Winter	Elective	Lectures and Seminars Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Charilaos Kouthouris
Position	Associate Professor
Office	16
Tel / e-mail	24310 47006 / kouthouris@pe.uth.gr
Co-instructors	

Objective of the course

At the end of the course the student / her will be able to:

- knows the contemporary social and economic realities of doing business
- develop competences of creativity, communication and leadership
- understand the concept of surplus value of a product / service for users
- conceive a business idea and to record

Course contents

- Introductory lesson What shall we do? Why; What?
- What is entrepreneurship: The ideal business
- The Entrepreneur The Entrepreneurial Group
- The Entrepreneur The Entrepreneurial Group
- The conception and development of the business idea Brainstorm
- Presentation of ideas by students - Poll-Rate Implementation Ideas: How is set up the company
- Types and ways to start a business
- Business structure and labor relations Enterprise, participation and democracy
- The business team culture and values
- Seminar by Invited speaker
- Market analysis Needs and characteristics
- Partnerships, alliances and competitors
- Show Business Ideas

Assessment methods

Exams 100%
Assignments 20% (Added to exams mark)

Recommended reading

Επιχειρηματικότητα και μικρές Επιχειρήσεις (20141). Κωδικός Βιβλίου στον Εύδοξο: 41955378
Συγγραφείς: David Deakins, Mark Freel, ISBN: 978-618-5131-01-2

Track and Field II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0302	12	300	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Lectures and Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Dimitrios Soulas
Position	Professor
Office	24
Tel / e-mail	24310 47016 / dsoulas@pe.uth.gr
Co-instructors	Athanasios Tsiokanos, Ioannis Koutsioras, Ioannis Kontonasios

Objective of the course

The aim of the courses of this semester is to introduce the students to training issues of running (sprints and middle - long distances), of jumping events and throwing events, which concern athletes of the developing phase of the Transitional training stage (16-17 of age).

Course contents

Methods and methodology of training running events (sprint and middle and long distance running)
Methods and methodology of training jumping events (long jump, triple jump, high jump and pole – vault).
Methods and methodology of training throwing events (shot put, discus and javelin throw).

Assessment methods

Practice 30%
Home work 20%
Exams 50%

Recommended reading

Georgiadis, G. (1992) Theory and Methodology of Throwing Events. Athens: Georgiadis, G.
Dickwach, H., Gundlach, H. (1992). Jumping Events. Thessaloniki: Salto.
Dintiman,G.,Ward,R.(1992). Speed. Thessaloniki: Salto.
Fafoutis, E., Euthimiou, D. (1994). Jumping Events. Athens
Grosser M. (1994). Speed Training. Thessaloniki: Salto.
Hess, W. D., Gundlach, H. (1993) Running Events. Thessaloniki: Salto.
Hinz, L., Gundlach, H. (1991). Throwing Events. Thessaloniki: Salto.
Groupofwriters (1996). Training Programs of the Developing Phase of the Running, Jumping and Throwing Events. Athens.
Tziortzis, S. (1998). Training of the Running Events. Athens: ArtWork.
Zintl F. (1993). Endurance Training. Thessaloniki: Salto.

Basketball II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0202	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Vassilis Gerodimos
Position	Associate Professor
Office	20
Tel / e-mail	24310 47005 / bgerom@pe.uth.gr
Co-instructors	Panagiotis Tsimeas

Objective of the course

The aim of this module is the familiarization and the practice of students in offensive-defensive movements of 2, 3 and 4 players. There is a special emphasis on teaching all these above in basketball players. Students also attend and record practices of various clubs and, in cooperation with their teachers, they analyze and plan various practice models.

Course contents

Individual defence-guards: defensive position-movements.
Defending the players with the ball: guard-forward (defending the dribbler, defence on the player with the ball, defence on the players who is not allowed to dribble).
Defending the post (low-middle-high).
Defending a player not having a ball: 1 pass away (guard-forward-post) & 2 passes away (guard-forward-post). Defence on strong-weak side.
2 players offensive cooperation without screen: give and go, back door.
*2 players defensive cooperation without screen:*help and recover, defending cuts, give and go, back door.
2 players offensive cooperation with screen: inside, outside and blind screen.*2 players defensive cooperation with screen.*
3 players offensive cooperation without screen: scissors, give and go.*3 players defensive cooperation without screen:* scissors, give and go.*3 players offensive cooperation with screen:* opposite, down, back, cross, flaire, weak side, ucla, staggered screen. *3 players defensive cooperation with screen. Defensive cooperation of more than 3 players:* triple and staggered screen.
Defensive transition. Offensive transition.Man to man defence (4 vs 4).
Yearly training plan.
Scouting.

Assessment methods

Exams 50%
Homework 30%
Teaching 20%

Recommended reading

Classnotes.
Calipari, J. (1998). Half court offenses. Theassaloniki: Salto Publications.
Vamvakoudis, E., Medilidis, N., Tsitsakaris, G., Hatziathanasiou, P. (1996). BASKETBALL : Tactics. Thessaloniki: Salto Publications.
Hal Wissel (2007). Basketball: Steps to Success. Translation: S. Perkos, V. Gerodimos, M. Goudas., Thessaloniki: Christodoulidis Publications.
Kioumourtzoglou, E. (1986). Team Defense in Basketball. Thessaloniki: Salto Publications.

Swimming II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0402	12	300	Specialization
Year of study	Semester	Type of course	Teaching methods
3rd	Spring	Compulsory	Lectures, practice, and teaching practice
Hours / week	Hours/semester	Prerequisites	Language of instruction
6	78	Non	Greek

Lecturer

Name	Antonis Hatzigeorgiadis
Position	Associate Professor
Office	20
Tel / e-mail	24310 47009 / ahatzi@pe.uth.gr
Co-instructors	Anastasia Mplanti

Objective of the course

The module focuses on the basic training principles, the training objectives and the training methods for young swimmers.

Course contents

Stroke elements. Technical analysis.
Monitoring training.
Principles of training.
Endurance training.
Sprint training.
Race-pace and recovery training.
Planning theories.
The year plan.
The weekly plan.
The daily plan.
Tapering.
Overtraining.
Training for different events.
Pacing and Strategy.

Assessment methods

Exams 60% (30% practice & 30% theory)
Homework 20%
Teaching practice 20%

Recommended reading

Soultanaki, E. (2007). Competitive Swimming.
Costill, D., Maglischo, E., & Richardson, A. (2007). Swimming (Handbook of sport medicine and science series). Paschalidis.

Soccer II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0502	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
3rd	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Zisis Papanikolaou
Position	Associate professor
Office	
Tel / e-mail	2431047039 / zpapanik@pe.uth.gr
Co-instructors	Konstantinos Famissis

Objective of the course

Warm - up, main training, cool down

Physical condition - Factors that influence P.C.

Developing Endurance: what is endurance.

Endurance and Energy Systems: Aerobic Endurance, Aerobic Adaptations, Anaerobic Endurance, Anaerobic Adaptations, Maximum Oxygen Uptake (VO_2 Max), Lactate Thresholds.

Endurance Training: Introduction, Endurance Training Principles, Aerobic Training.

Constructing Endurance Training Programs: Introduction, Training Time, Training Goals, Training Needs, Endurance Maintenance, Sample Soccer Programs.

Evaluating Endurance Training Programs: Introduction, Why fitness test in soccer? How often ? Which Tests? Is the test valid and Reliable? Endurance Tests (Time - trials, Twelve Minute Run, Multistage Fitness Test, Laboratory Tests).

Developing Flexibility, strength Agility Balance and Speed in soccer: Free kicks, Principles of the Game: Defense, Attack, Game squares (Theory and practice), Psychological skills Training program in soccer, Organize games and tournaments, Sociology and soccer, Statistics - Research Methods in soccer, Motivation Performance, Sports Law.
As a result of this class, the student should be able to :
Perform the skills necessary to participate in soccer.
Have an understanding of and ability to apply the rules of soccer in a game situation.
Understand and use basic strategies while participating.
Know how to prepare and contition oneself for active participation in a game of soccer.
Have the knowledge's and understanding of prevention of injuries.
Have the knowledge to take precautions in soccer.
Know the positions and functions of each player on the field.
Identify the name, the markings and lines on a soccer field.
Participate in games of soccer applying in the course.
Understand the benefices of participating in soccer.

Course contents

SOCCER AND SCIENCE:

Athletic Training.

Sports Psychology.

Psychology of soccer learning.

Organization and administration of soccer teams.

Exercise Physiology - Soccer - Energy.

Motor Development.

Methods of teaching technical and tactical components of the soccer.

Sports Marketing.

Evaluation and measurement of soccer performance.

History of soccer.

Assessment methods

Written exams 35%
Physical fitness test 20%
Soccer skills test 35%
Participation of the student:(attitude, presents, improvement, cooperation, wish success, discipline, motivation for learning, enthusiasm) 10%

Recommended reading

William, M.J.(1986)Applied sport phychology CA:Mayfield Publishing Company.
Aruheim, D.D.(1985).modem Princiles of Athletic Training U.S.A.: Times Mirror/Mosby college Publishing.
Gallery,S.(1991).soccer:Technigye-Tactics-Training.Hong Kong:The Growood Press Ltd.

Volleyball II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE1002	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
4rd	Winter	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Teaching Volleyball	Greek

Lecturer

Name	Asterios Patsiaouras
Position	Special Teaching Staff
Office	9
Tel / e-mail	24310 47060 / spats@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of this course is to give the students the knowledge and elements of technique and tactics in order to be able to coach successful volleyball teams or teaching volleyball in schools.

Course contents

Different types of serving the ball - Drills in serving the ball.
Analysis of offense in volleyball.
Drills in offensive strokes, Offensive systems.
Covering the offense, Practice of offensive players.
Technical analysis of blocking, Drills in single block, Drills in team block.
Floor defense.
Mini volley, Volleyball in elementary school and in developing ages.
Team defense.
Developing a daily training practice.
Testing and evaluating the technique.
Video analysis.

Assessment methods

Exams 70% (40% practice & 30% theory)
Homework 20% (1 homework)
Teaching 10%

Recommended reading

Class notes.
KENNY, B., and GREGORY, C. (2006). *Volleyball: Steps to Success*. Human Kinetics Publishers.
ZETOU, E. & KASABALIS, Th. (2006). *Volleyball.* Athens: Telethrion.
BERGELES, N. (1993). *Volleyball Training*. Athens.

Greek Folks Dances II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE0902	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
4rd	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Ioannis Dimas
Position	Special Teaching Staff
Office	6
Tel / e-mail	24310 47060 / jdimas@pe.uth.gr
Co-instructors	Dafni Iakovaki

Objective of the course

Introduction to pedagogical and scientific training of the student.
Fluency in thought, as the key element of his work, for confrontationof the dance phenomenon as a special teacher - dance teacher, practical applications.
Fluency in dance as one of the key elements of his work, practical applications.
Confidence and certainty for creating his own teaching personality.

Course contents

Introduction to the concept and philosophy of Greek traditional dances today.
On-site notation - research.
Rhythmical analysis musical measures II.
Approach the meaning (historical-social) of lyrics of folk songs. II
Historical and cultural elements of Greek dance.
Instruction of 50-60 dances of specific Hellenic cultural communities II.
Morphology and complete rhythmic-kinetic analysis of the taught dances, specialized in numerical and verbal metric.
Methods for practical exercises for dance fluency.
Introduction to organizing cultural dance performances.
Seminar dancing lessons by visitors rapporteurs II.
Educational tours to on-site research and participating in observing popular events.
Introduction to the philosophy of creative culture focusing on their knowledge and the new generation, right now!

Assessment methods

Exams 70% (practice 35% and theory 35%)
Homework 20% (2 home works)
Participation 10%

Recommended reading

Selma Jeanne Cohen (editor), (1998), International Encyclopaedia of Dance: a project of dance perspectives. Oxford and New York: Oxford University Press.

Adapted Physical Education II

Course Code	**ECTS**	**Student workload (hours)**	**Level of Course**
KE1202	12	300	Specialty Course
Year of study	**Semester**	**Type of Course**	**Teaching methods**
4th	Winter	Compulsory	Practice and theory
Hours/Week	**Hours/Semester**	**Prerequisities**	**Language**
6	78	None	Hellenic

Lecturer

Name	Dimitrios Kokaridas
Position	Assistant professor
Office	Dimitrios Kokaridas
Tel. / e-mail	24310 47008 / dkokar@pe.uth.gr
Co - Instructors	

Objective of the course

The purpose of the course is:

3. To provide students with knowledge concerning psychomotor development, Individualized Education Programming (IEP), organization and application of adapted physical education activities for individuals with disabilities.
4. To help students acquire experience in real working conditions through their systematic practice in special schools, psychiatric and rehabilitation centers, wheelchair sport teams, and other disability settings and institutions.

Course contents

1. **Cerebral palsy:** Characteristics and classification of cerebral palsy, therapy approaches and interventions.
2. **Cerebral palsy and exercise:** Adaptations of exercise according to type of cerebral palsy and functionality level.
3. **Spinal cord injury – poliomyelitis.** Definitions, critical points of spinal cord injury, post-polio syndrome, adaptations of exercise.
4. **Other disabilities:** Amputations, adaptations of exercise for upper and lower parts, cystic fibrosis, spina bifida, hydrocephalus, epilepsy.
5. **Spinal cord deviations, achondroplasia, arthrogryposis, osteogenesis imperfecta.** Skoliosis, lordosis, kyphosis and exercise. Bone diseases, characteristics, adaptations of exercise.
6. **Neuromuscular disorders I:** Multiple sclerosis, Guillain-Barré syndrome, myasthenia Gravis. Etiology, characteristics, adaptations of exercise.
7. **Neuromuscular disorders II:** Muscular dystrophy, Friedreich ataxia, muscular atrophy. Etiology, characteristics, adaptations of exercise.
8. **Psychiatric disorders: IC-10 & DSM classification**. Psychosis, mood and anxiety disorders. Exercise, token economy system, adaptations.
9. **Dementia and exercise.** Dementia, Alzheimer disease, stages, therapeutic approaches. Exercise principles and adaptations for dementia patients.
10. **Students with visual impairments:** Identification, characteristics, adaptations of exercise.
11. **Students with hearing impairments:** Identification, characteristics, adaptations of exercise**.**
12. **Wheelchair sports.** Classification of athletes, functionality levels, wheelchair basketball and other sports, rules and regulations.
13. **Therapeutic swimming:** Main methods of therapeutic swimming and hydrotherapy.

Assessment methods

Written exams 50%, Practice 40%, Participation in class 10%

Recommended reading

Kokaridas, D. (2010). Adapted Physical Education: individualization, adaptations, and inclusion aspects. Thessaloniki: Christodoulidis Publishing.

Sherrill, C. (2004). *Adapted physical activity, recreation and sport: Crossdisciplinary and lifespan (6th ed).* Dubuque, IA: Brown & Benchmark.

Exercise and Health II

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE2022	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Winter	Compulsory	Lectures and laboratory exercises
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	none	Greek

Lecturer

Name	Christina Karatzaferi
Position	Associate Professor
Office	23
Tel / e-mail	24310 47015 / ck@pe.uth.gr
Name	Georgios Sakkas
Position	Assistant Professor
Office	23
Tel / e-mail	24310 47015 / gsakkas@uth.gr
Co-instructors	Yiannis Koutedakis, Yiannis Giakas

Objective of the course

Exercise and Health II specialization, offers specialized knowledge and skills related to exercise for health. Through **Case Studies** discussion emphasis is placed on modern knowledge and skills for the recognition of the needs of a person wanted to start exercise, the ways by which exercise applications may contribute to secondary and tertiary prevention of health as well as to familiarize students with the practical implementation of exercise implementation to patients (in collaboration with health units of Thessaly) .

Students will further their specialized knowledge and skills regarding issues of exercise for health. Emphasis is given on how selected chronic diseases and behavior may affect various organic systems and a person's functional capacity. Moreover, the intricacies of evaluating and testing people with chronic illnesses are discussed. Students will learn to apply specialized laboratory and field functional capacity assessment methods.

In the laboratory part of the specialty (**Physical Evaluation of Special Populations II**) students are educated in special populations laboratory and field evaluation techniques (motion analysis, use of questionnaires / interviews, functional capacity evaluation and physical activity levels assessment). In this semester the main part of the course (**Exercise Implementation in Special Populations**) is implemented in practice (in collaboration with health units of Thessaly).

Course contents

4- Physical Evaluation of Special Populations II -2 hours/week

4.1. Introduction to gait analysis
4.2. Gait analysis system -Laboratory exercise.
4.3. Evaluation of range of motion, strength, spacticity (paper assignment)
4.4. Clinical Evaluation - Laboratory exercise
4.5. Recap- discussion of paper assignment
4.6. Submaximal field testing-αερόβια ικανότητα -Laboratory exercise
4.7. Submaximal field testing – δύναμη και ισχύς - Laboratory exercise
4.8. Combination of testing – ability for independent living - Laboratory exercise
4.9. Evaluation of physical activity levels (questionnaires- pedometers, paper assignment)
4.10. Evaluation of perceived quality of life (questionnaires -interviews)
4.11. Analysis of data – energy calculations
4.12. Managing data & collaboration with other specialties (medical doctors and health allied professionals)
4.13. Case– designing an evaluation (in class exercise)

5- Case studies- designing exercise programmes, 2 hrs/wk

(Twelve real life cases from obesity to alcoholism are covered)
5.1. Introduction to case studies
5.2. Case1
5.3. Case 2
5.4. Case 3
5.5. Case 4
5.6. Case 5
5.7. Case 6
5.8. Case 7
5.9. Case 8
5.10. Case 9
5.11. Case 10
5.12. Case 11
5.13. Case 12

6- Exercise Implementation in Special Populations – Clinical practice, 2 hrs/wk

6.1. Structure of the health system – hospital sites visit
6.2. Inpatient exercise - safety, efficacy
6.3. Visit at the Hemodialysis (HD) Unit – meeting the patients enrolled in the intradialytic exercise programme
6.4. Life long therapeutic exercise – personal trainer
6.5. Exercise implementation at the HD Unit – pharmacology (test)
6.6. Life long therapeutic exercise- cancer patient
6.7. Exercise implementation at the HD Unit – CVD (test)
6.8. Life long therapeutic exercise – heart patient
6.9. Exercise implementation at the HD Unit – glucose levels, dehydration (test)
6.10. Life long therapeutic exercise- diabetic
6.11. Exercise implementation at the HD Unit – dementia, neurological disorders (test)
6.12. Life long therapeutic exercise- Parkinson's patient
6.13. Exercise implementation at the HD Unit – exam in real practice.

Note: This specialization maintains a continuous collaboration with the local General Hospital at Trikala , the University of Thessaly General Hospital at Larissa συνεχή συνεργασία με το ΓΝ Τρικάλων, various rehabilitation centers at the Thessaly area, private doctors and other health prroffesionals. The cases of exercise implementation outside the hospital units may change according to the interest and needs of patients and the number of students.

Assessment methods

A combination of formative and summative evaluations including evaluation of lab books, tests (20%), 2 small papers (20%) and final exams Exams (60%).

Recommended reading

Class notes.
ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities.
ACSM's Guidelines for Exercise Testing and Prescription- 7th edition
Resources for the personal trainer (ACSM)
Exercise as a means of prevention and rehabilitation of chronic disease, V. Gerodimos ed., University of Thessaly (e-book – www.exerciseforhealth.gr).

Gym Exercise & Sport Management

Course code	Number of credits allocated	Student Workload (hours)	Level of course
KE 2032	12	300	Specialization
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
6	78	Non	Greek

Lecturer

Name	Athanasios Koustelios
Position	Professor
Office	3
Tel / e-mail	24310 47006 / akoustel@pe.uth.gr
Co-instructors	E. Pollatou, G. Saroglakis, N. Karadimou

Objective of the course

The aim of the module is to offer to the students: a) the necessary knowledge for organizing successfully a sporting event, b) by the end of the course students will be able organizing, programming and teaching to aerobic dance classes medium-advanced level.
and c) the knowledge concerning the design and implementation of training programs with weights for exercise and sports for all.

Course contents

Programming of sport events
Promotion of sport events
Financial planning of sport events
Safety of sport events
Evaluation of sport events
Promoting physical fitness through aerobic dance
Teaching composite dance movements to an advanced level choreography
Compilation of adapted music to the age and level of trainees
Precautions for safe training
Basic design principles of a training program with weights (coaching unit, micro-cycle, middle-term cycle, intensity, duration, density and stimulus frequency, graphic formalities of training programs).
Methods of weight training (isometric, eccentric, isokinetic, electro-stimulation, contraction).
Combinations of numerical parameters of weight training (eg. selection of muscle groups, instrument selection, sets, number of repetitions of exercises, order execution, breaks).
Analysis of model programs of training with weights for men, women, young and the elderly.

Assessment methods

Participation, Practice, Final Exams

Recommended reading

-American sport education program. (1996). Event management for sport directors. Human Kinetics, IL.
-Jan Galen Bishop. (2007) *Fitness through Aerobics* (ΦυσικήΚατάστασημέσωτουΑερόμπικ) Τελέθριον
-ACSM (2011). Position stand:*Quantity and Quality of Exercise for Developing and Maintaining Cardiorespiratory, Musculoskeletal, and Neuromotor Fitness in Apparently Healthy Adults: Guidance for Prescribing Exercise*.http://journals.lww.com/acsm-msse/Fulltext/2011/07000/Quantity_and_Quality_of_Exercise_for_Developing.26.aspx
Fleck. St. &Kraemer. W. (2004). Designingresistancetrainingprograms. Athens:Paschalidis Medical Publishing.
Thomas R. Baechle, RogerW. Earle.(2009). Essentials of strength training and conditioning. Athens:Paschalidis Medical Publishing.

Outdoor Activities / Downhill Skiing – Outdoor Exercise programs _II

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
MK2042	12	300	Speciality
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Eastern	Compulsory	Lectures, Seminars, Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language**
6	78 (6X13)	Outdoor Activities / Skiing – Outdoor Exercise Programs _I	Greek

Lecturer

Name	Charilaos Kouthouris
Position	Associate Professor
Office	16
Tel / e-mail	24310 47045 / kouthouris@pe.uth.gr
Co-instructors	Vasilis Voutselas

Objective of the course

After the end of the course, the student / her in knowledge level, skills and abilities will be able / to:

Outdoor Activities
1) understand the basic principles of operation Outdoor activities: a) canoe on the lake, b) insure a climbing wall with top - rope.
2) aware of the proper use and maintenance of the corresponding equipment by activity
3) perform adequately as an individual a "kinetic routine" with proper technique and a way absolutely safe

Downhill Skiing
4) understand the methodology of skiing and teaching methods for children.

Outdoor Exercise programs
5) aware theoretically of the basic principles and rules of implementation of exercise programs in Nature (Pilates)
6) complete a course as a trainee for at least 3 months
7) performs "kinetic routines" outdoor programs lasting at least 30 minutes
---
8) is aware of the Greek and European market of outdoor activities - skiing and exercise programs in Nature
9) knows the importance of providing Friendly to the Environment Service of the sports and recreation centres

Course contents

Outdoor Activities
• Canue at Lakes
• Outdoor Development Management programs
• Planning and participate in outdoor activities event for two days

Downhill Skiing
• Skiing for children
• Methods of pro environmental services in ski resorts

Outdoor Exercise programs
• History and Philosophy Benefits of Pilates
• Basics & Pilates principles
• Basic Pilates routines.

•Practice and teaching

Assessment methods

Attendance - participation (20%) Written Assignment 1 (20%) Written Assignment 2 (30%) Assignment presentation (30%)

SEMESTER H

Agility and Speed Development

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1012	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Zissis Papanikolaou
Position	Associate Professor
Office	23
Tel / e-mail	24310 47039 / zpapanik@pe.uth.gr
Co-instructors	Elias Patsianis

Objective of the course

In this course we will explain and train for two kinds of speed. The most often trained is straight-line or sprint speed. However, most important for an athlete is sport speed. An athlete's impressive straight-line speed may not be valuable to his/her team if he/she cannot convert it to sport-specific movements. With the exception of track events, few sports rely on straight-line running. Instead a combination of agility and quickness is required. These are the main components of sport speed. Conditioning is also integral to sport speed. A very fast athlete who tires quickly will not be able to use his/her speed in the final period on last few minutes of a game. Sport speed is affected by the athlete's ability to rapidly shift direction (agility). If an athlete cannot change direction and regain speed, he or she will not be successful. Quickly changing direction requires precise footwork and the ability to accelerate rapidly after the direction change.

Course contents

Definition of speed: Aspects of speed's dependence.
Kinds of speed: General - Specific speed, reaction speed, training methods of reaction speed, movement speed, training methods of movement speed, speed and inheritance.
Example of speed training (practical).
Basic principles of speed training.
Nutrition and speed training.
Aspects that affect speed.
Flexibility and speed.
The characteristics of speed.
Speed training in various sports.
Definition of agility and flexibility, agility and its advantages, aspects that affect agility, training methods of agility and flexibility, flexibility and stretching (practical), measurement tests of agility and flexibility, flexibility and the athletic performance in various sports (practical).

Assessment methods

The student's assessment is done with:
Written semester exam (50%)
Procedures of athletes' speed and agility measurements (30%)
Written task, article (10%)
Participation, attribute, cooperation (10%)

Recommended reading

Dintiman G., Ward R., (2003). Sports Speed, 3rd edition, Human Kinetics, Illinois, USA.
Sandler David (2005). Sports Power, Human Kinetics, Illinois, USA.

Bompa Tudor, (2000). Total Training for Young Champions, Human Kinetics, Illinois, USA.
Dick F., (1989) Sports Training Principles, A§C Black, London.
Baechle, T.R (ed.), (1994) essentials of Training and Conditioning, Human Kinetics, Champaign, Illinois, USA.
Rushall, B. S. and F. S. Pyke (1990) Training for Sports and Fitness, McMillan, Melbourne.

Weight Training Techniques

Course code	**Number of credits allocated:** 4	**Student Workload (hours):** 100	**Level of course**
MK0917			Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	George Saroglakis
Position	Special Educational Instructive Personnel
Office	Building 1, Ground floor
Tel / e-mail	24310 47060 /g sarogl@pe.uth.gr
Co-instructors	

Objective of the course

The purpose of the course is to introduce to the students the right technical execution of a large number of exercises with weights and with their body weigth, which they can use in order to increase the athletic performances of the athletes in various sports.

Course contents

Exercises for the chest and neck (dvd –technical analysis & practical training of exercises).
Exercises for upper and lower back (dvd –technical analysis & practical training of exercises).
Exercises for legs (dvd –technical analysis & practical training of exercises).
Exercises for arms (dvd –technical analysis & practical training of exercises).
Exercises for shoulders and abdominal (dvd –technical analysis & practical training of exercises).
Multiple joints exercises (dvd –technical analysis & practical training).

Assessment methods

Exams 70% (35% practice & 35% theory)
Homework 20% (1 homework)
Teaching 10%

Recommended reading

Delavier, F. (1998). *Strength Training Anatomy*. Paris : Publications Human Kinetics.
Villepigue, J. & Rivera, H.(2004*). The Body Sculpting Bible for Men*. Long Island City, NY 11101. : Publications A Hatherleigh Press/ Getfitnow.com Book.
Saroglakis, G. & Zarzavatsidis, D. (2000). *Weightlifting*.Thessaloniki: Publications Christodoulidis, K..

Marketing in Sports and Recreation

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1111	4	100	Iintroductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
4st	Spring	Compulsory KAYA & Elective KAA	Lectures, Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Charilaos Kouthouris
Position	Associate Professor
Office	16
Tel / e-mail	24310 47045 / kouthouris@pe.uth.gr
Co-instructors	

Objective of the course

After the end of the course the student / her in knowledge level, skills and abilities will be able / to:
• know the fundamentals of marketing science
• recognize applications at marketing in modern Greek and International Sports and Recreation industry
• design a marketing plan for an Sports or Recreation organization
• communicate in public and conduct market research

Course contents

1. The sports industry. The sports product
2. Particular features of the services
3. The environment of the sports organization
4. Price / Pricing, Distribution Channels, Marketing and Communication
5. Market segmentation, product positioning service
6. Consumer behavior in Sport and Recreation
7. Quality of the services, Satisfied Customer, Loyalty, Sponsoring in Sport
8. Marketing Plan

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9. Market Research Organization (clustered)
10. Prepare a questionnaire and carry out research in a public place.
11. Data collection, analysis, outline the consumer profile
12. Presentation of the results of a survey

Assessment methods

Coursework	20%
Preparation and participation in market research	20%
Analysis and presentation of results	20%
Written Examination	40%

Recommended reading

Alexandris K. (2006). Marketing in sport and leisure organizations. Edition Christodoulidis, Thessalonica, GR

Exercise Safety and First Aid

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1120	6	150	Pathway II compulsory pathway I elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Practice and lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	None	Greek

Instructors

Name	Christina Karatzaferi
Position	Associate Professor
Office	23
Tel / e-mail	24310 47015 / ck@pe.uth.gr
Name	Athanasios Jamurtas
Position	Professor
Office	33
Tel / e-mail	24310 47054 / ajamurt@pe.uth.gr
Co-instructors	G. K. Sakkas (DPESS), E. Polyzou (MD at the Gen Hospital), and guest instructors

Objective of the course

An exercise specialist works in schools, public and private sport settings and in the field. Often s/he has to respond to emergency situations. Moreover, s/he should be able to apply prevention as well as organise procedures for the safe response to emergency situations. When completing this module students will be able to recognise possible dangers, will know what are the usual risks in the school or other environment where minors or adults are engaged in sport and exercise activities, recognise which situations pose an immediate threat to life and which not, know what steps to follow in first aid provision, including calling for help, providing cardiopulmonary resuscitation (CPR), as well as learn the procedures to get externally qualified as a first aid provider.

Course contents

1. Introduction –Safety and hygiene at school and sports facilities
2. Recognition of dangers – international signs
3. Types of injury; Contents of a First Aid Kit; Fever and exercise
4. CPR and the use of the AED (automated external defibrillator)– recognition and provision of First Aid & Practical –CPR (without AED) (throughout weeks 5 to 8)
5. Common injuries: Bruises, skin abrasions puncture wounds, sprains, dislocation -recognition, prevention and provision of First Aid
6. Fainting: recognition, prevention and provision of First Aid
7. Allergies: prevention and responding to an anaphylactic shock
8. Suffocation: recognition and provision of First Aid
9. Thermal injuries: recognition, prevention and provision of First Aid
10. Poisoning: recognition, prevention and provision of First Aid
11. Diabetes: prevention protocol, recognition of hypoglycemia, recognition of hyperglycemia, provision of First Aid
12. Head and spinal cord injuries: recognition, prevention and provision of First Aid
13. Heat related injuries: recognition, prevention and provision of First Aid – Review of taught subjects

Note: The order of the lectures may be altered depending on guest instructor's availability

Assessment methods

Class participation 20% (including 10% from participation to practicals)
Exams 80%

Recommended reading

Class notes. First aid chapters in available textbooks

Developmental Psychology

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0939	4	100	Pathway
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Lectures and Seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Marios Goudas
Position	Professor
Office	16
Tel / e-mail	24310 47045 / mgoudas@pe.uth.gr
Co-instructors	

Objective of the course

By the end of the course students should be able:
To discuss critically basic theories of development.
To understand basic developmental processes.

Course contents

Introduction to developmental psychology.
Piaget's cognitive development theory I.
Piaget's cognitive development theory II.
Development of cognitive processes.
Development of language.
Development of metacognitive processes.
Development of intelligence.
Development of emotional intelligence
Development of self - concept.
The role of family in child's development.

Assessment methods

Exams 50%
5 Assignments 50%

Recommended reading

Michael Cole, Sheila R. Cole Cynthia Lightfoot (2005) The development of children.

Effective Coaching

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK0108	4	100	Introductory
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory/optional	Lectures and Seminars
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Nikolaos Zourbanos
Position	Assistant Professor
Office	12
Tel / e-mail	24310 47027 / nzourba@pe.uth.gr
Co-instructors	Yannis Theodorakis, Professor, Stefanos Perkos PhD

Objective of the course

By the end of the course students should be able to to recognize the factors and characteristics which can affect either positively or negatively coaches' profession

Course contents

Introduction to effective coaching
Effectiveness and success of the coach
Effective communication at the bench
Concentration in training and matches
Test 1
Conflicts
From the player to the team…
Coaching males and females
Test 2
Communicating with the referees
The coach as a leader
After the game
Test 3

Assessment methods

Tests 40%
Assignment 60%

Recommended reading

Theodorakis, Y., Goudas, M., & Papaioannou, A. (2001). Psychological excellence in sport. Thessaloniki: Christodoulidi Publications. (In Greek)
Perkos S., & Christopoulos, I (2011). Effecting coaching. Thessaloniki: Christodoulidi Publications. (In Greek)
Murphy, S. (2012). *Oxford Handbook of Sport and Performance Psychology*. New York. Oxford University Press.
Papaioannou, A., & Hackfort, D. (2014). Routledge Companion to Sport and Exercise Psychology. Global Perspectives and Fundamental Concepts. London. Taylor & Francis.
Weinberg, R.S., & Gould, D. (2007). *Foundations of sport and exercise psychology* (4th ed.). Champaign, IL: Human Kinetics.

History of Physical Education and Sports

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1025	4	100	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Spring	Compulsory	Lectures
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Alexandra Bekiari
Position	Assistant Professor
Office	14
Tel / e-mail	24310 47040 / sandrab@pe.uth.gr
Co-instructors	

Objective of the course

- To offer a theoretical approach in basic (fundamental) issue related with the history of physical education. More specifically, to help students perceive physical education and sports as educational history and civilization of the human body.
- To be defined the role of the physical education in Minoan, Mycenae, Homeric and Ancient Classical Greek era, also an effort to be approached ancient and modern Olympic games.

Course contents

1. Physical education and athletics as history of education and civilization of the human body.
2. Physical education and athletics in Minoan-Mycenae era, Homeric epoch and Ancient Classical Greek era.
3. Classical and modern Olympic games.
4. Presentations.

Assessment methods

A. Written exams (50%)
B. Assignments (50%)

Recommended reading

Mouratidis, I. (1998). *History of Physical Education and Sports.* Thessaloniki, Publ. Hristodoulidis.
Giannakis, Th. (1990). *History of Physical Education*. Athens.
Goggaki, K. (2003). *The aspects of ancient Greeks for sports*. Athens, Publ. Typothito.
Mouratidis, I. (2008). *Introduction in Olympic Education*. Thessaloniki, Publ. Platon.
Farandos, G. (2004). *Introduction in Olympic Education*. Athens, Publ. S. I. Zaharopoulos.

Environmental Exercise Physiology: Performance and Survival in Extreme Conditions

Course code	**Number of credits allocated**	**Student Workload (hours)**	**Level of course**
ME0103	2	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
All years	Spring	Compulsory	Lectures & Laboratory
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	None	Greek

Lecturer

Name	Christina Karatzaferi
Position	Associate Professor
Office	23
Tel / e-mail	24310 47015 / ck@pe.uth.gr
Co-instructors	Guest speakers

Objective of the course

Students will familiarize themselves with the biological principles underpinning the physiological responses and adaptations to exercise in extreme environmental conditions. Through the study and discussion of real and hypothetical scenarios they will be better prepared, as athletes, coaches, educators or outdoors activities leaders, to promote safe exercise and physical activity practices in adverse environmental conditions.
At the end of the course the student will understand the ways in which different environmental conditions affect athletic performance. In addition s/he will be able to anticipate potential problems and accordingly to prepare and adapt the implementation of the exercise to ensure the health of the trainee in harsh environmental conditions.

Course contents

The human environment: basic understanding of environmental conditions.
Survival and Adaptation: mechanisms of acclimatization.
Hydration: metabolic needs and water intake - the mechanism of dehydration.
The physiology of temperature regulation: hypothermia and hyperthermia.
Exercise in the cold: cold acclimatization - exposure to cold stress
Exercise in the water: water temperature, performance and survival - discussion of case.
Exercise in high altitude: physiological adaptations and limits for survival.
Exercise in hyperbaric conditions: free and scuba diving - discussion of case.
Exercise in the heat I: heat acclimatization - exposure to thermal stress - case.
Exercise in the heat II: examples from everyday life and from competitive sports - discussion of case.
The physiology of the pilot - discussion of case.
Man in space.
Pollution and exercise - Summary and review of module.

Assessment methods

Written exams 100%

Recommended reading

Class notes.
ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities, Dustine J., Moore G

Business Plan

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ME0118	**2**	50	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
2st	Spring	Elective	Lectures and Seminars Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Charilaos Kouthouris
Position	Associate Professor
Office	16
Tel / e-mail	24310 47006 / kouthouris@pe.uth.gr
Co-instructors	

Objective of the course

By the end of the course students should be able to:
• Know the process for analyzing a Business Plan
• Know the contents of a Business Plan
• Does planning a Business Plan
• Be able to work with a group of students.

Course contents

• Introductory Course
• Analysis of Contents Ep. Plan
• Sample Business Plan
• Development of products and services Working in groups
• Marketing Plan Lecture guest
• Estimate Demand Group work
• Operational Budget Work in groups
• Sources of Funding funding Working groups
• Visit to company visits to companies
• Price Fixing Work in groups
• Human Resources Management Lecture guest
• Evaluation of Investment
• Deposit Business plan

Assessment methods

Exams 100%
Assignments 20% (Added to exams mark)

Recommended reading

Create startups (2011). Spinelli Stephen, Adams Rod, Translation Papadakis Basil. Code Eudoxos 41,955,510.

Practicum

Course code	Number of credits allocated	Student Workload (hours)	Level of course
MK1010	4	100	Mandatory
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Compulsory	Practice
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
2	26	Non	Greek

Lecturer

Name	Panagiotis Tsimeas
Position	Special Teaching Staff
Office	
Tel / e-mail	
Co-instructors	

Objective of the course

The practical exercise aims to the practical application of knowledge that each student receives in the frame of each specialty, the acquisition of experience and the connection of each student with the employment market.

Course contents

Initial contact of student with the corresponding institution chosen for practical exercise, always in accordance with the selected speciality and the consent of specialty teacher.
Signature of a collaboration protocol between the Department with the corresponding institution, with the duration of student practice specified.
Beginning of practice equal to 25 working days for each student, with the duration that each student is occupied depending on the frequency of days of practice per week.
Regular communication between the specialty teacher with the student and the institution during practice.
Completion of practical exercise with each student submitting a series of documents used for his/her evaluation of practice by the specialty teacher.
Assessment of student in the particular course from the specialty teacher, based on the documents submitted.

Assessment methods

Assessment is accomplished by the specialty teacher by taking into consideration:
The practical exercise sheet completed by the student, describing in five pages the whole practice in detail.
The evaluation sheet of student progress completed and signed by the institution.
Information resulted from the regular communication of the specialty teacher with the corresponding institution.

Recommended reading

Notes given by the specialty teacher to provide support and guidance during students' practice.

Project

Course code	Number of credits allocated	Student Workload (hours)	Level of course
ΣΧΕ151	10	250	Elective
Year of study	**Semester**	**Type of course**	**Teaching methods**
4th	Spring	Elective	Project
Hours / week	**Hours/semester**	**Prerequisites**	**Language of instruction**
-	250	Non	-

Lecturer

Name	Nikolaos Digelidis, PhD
Position	Associate Professor
Office	2
Tel / e-mail	24310 47052 / nikdig@pe.uth.gr
Co-instructors	

Objective of the course

The course aims in interdisciplinary project implementation after student decision and initiation.

Course contents

Aim and content of the project is defined after a teacher-student agreement. There is at least one supervisor for each project although that teachers' collaboration within this framework is welcomed. Content of the project can be related with a research project, voluntary participation, collaboration and teamwork inside and outside of the University.
The Project is supplementary to our curriculum.

Assessment methods

The supervisor of each project is responsible for students' evaluation.