DEMOCRITUS UNIVERSITY OF THRACE DEPARTMENT OF PHYSICAL EDUCATION & SPORT SCIENCE

UNDERGRADUATE PROGRAM OF STUDY

| COURSE TITLE: | | | | | | | | |
|---|------------------------|--|----------|---------|------------------------------------|---|-------------------------|------------|
| I | nternet ar | nd multi | media t | echnolo | ogies | | | |
| COURSE CODE: | | | | | E.C. | T.S. CI | REDIT | 5 |
| N086 | | E.C.T.S. CREDITS | | | | | | <i>,</i> |
| 1000 | | | | | | | | |
| RESPONSIBLE FOR T | HE COU | JRSE: | | | | | | |
| NAME | Nikos | Nikos Vernadakis | | | | | | |
| POSITION | Lectu | Lecturer | | | | | | |
| SECTOR | Sport | Sports Management, School Physical Education & | | | | | | |
| | Recre | Recreation | | | | | | |
| OFFICE | B1 - 1 | 12 | | | | | | |
| TEL. / E-MAIL | 25310 |) - 3973 | 57 | nve | nvernada@phyed.duth.gr | | | |
| CO-INSTRUCTORS | | | | | | | | |
| SEMESTER: COURSE TYPE: | Direc Spec Prere | ializatio | for spec | | 3 rd 7 th | [] [] [] [] [] [] [X] | $4^{ m th}$ $8^{ m th}$ | [] [X] |
| HOURS (per week): DIRECTION (only for 3' | r^{d} & 4^{th} y | ear cou | rses): | 2 | | | | |
| SPECIALIZATION (on | ly for 3 rd | & 4 th ye | ear coui | rses): | | | | |
| LANGUAGE OF TEAC | HING: | | GREE | K [X] | | ENGI | LISH [] | |

AIM OF THE COURSE (content and acquired skills):

The aim of this course is to: a) inform and familiarize students with internet technologies and multimedia, b) prompt them to understand the technologies' capabilities and limitations in relation with the cognitive field of physical education and c) certify the knowledge and skills they will acquire.

COURSE CONTENTS (*outline – titles of lectures*):

- 1. Introduction to multimedia hypermedia I (a. definitions fundamental concepts, b. nodes and links, c. autonomous and networked multimedia).
- 2. Introduction to multimedia hypermedia II (a. multimedia b. multimedia components).
- 3. Creation and management tools of multimedia elements I (a. drawing fonts tools, b. tools for audio editing, c. digital drawing, d. vector graphics tools, e. image editing tools).
- 4. Application development tools necessary to develop Image I Ms Paint.
- 5. Application development tools necessary to develop Image II Picasa.
- 6. Creation and management tools of multimedia elements II (a. digital photo libraries, b. tools & photorealistic 3-D drawing, c. animation cartoon, d. tools of video capture and processing, e. morphing & caricatures).
- 7. Application development tools necessary to develop videos I Windows Movie Maker.
- 8. Application development tools necessary to develop videos II Windows Movie Maker.
- 9. Using the Internet I Meet browsers.
- 10. Use of the Internet II Adapting the browser.
- 11. Security and privacy policy online.
- 12. Looking for information on the Internet.
- 13. Email (a. Webmail, b. Gmail).

TEACHING METHOD (lectures – labs – practice etc.):

- 1. Lectures in computer lab.
- 2. Theoretical presentation of the materials.
- 3. Applied practice exercises.
- 4. Problem solving projects.

ASSESSMENT METHOD(S):

- 1. Mid-term exams.
- 2. Problem-solving projects.
- 3. Final (written) exams.

LEARNING OUTCOMES:

Upon the completion of this course the student will be able to:

- 1. Understand the basic concepts of multimedia & Internet technologies for use in teaching of physical education.
- 2. Gain skills for the use of educational multimedia & Internet applications in teaching physical education.
- 3. Exploit the technological applications of multimedia & Internet technologies and the new learning environments in educational programs that promote physical education.
- 4. Evaluate the use and the integration of multimedia & Internet technologies in the

LEARNING OUTCOMES – CONTINUED:

| LEARNING OUTCOMES - CONTINUED: | | | | | | | | | |
|-------------------------------------|-------------------|-----------------|-----------|--|--|--|--|--|--|
| Learning | Educational | Assessment | Students | | | | | | |
| Outcomes | Activities | | Work Load | | | | | | |
| | | | (hours) | | | | | | |
| Understanding of the basic | Lectures, | Mid-term exams, | 10 | | | | | | |
| concepts of multimedia & Internet | understanding | final written | | | | | | | |
| technologies for use in teaching | project, home | exams. | | | | | | | |
| physical education. | study. | | | | | | | | |
| Skills for the use of | Lectures, | Mid-term exams, | 20 | | | | | | |
| educational multimedia & Internet | understanding | problem solving | | | | | | | |
| applications in teaching physical | project, problem | project, final | | | | | | | |
| education. | solving projects, | written exams. | | | | | | | |
| | home study. | | | | | | | | |
| Ability to exploit the | Lectures, | Mid-term exams, | 20 | | | | | | |
| technological applications | understanding | problem solving | | | | | | | |
| multimedia & Internet | project, problem | project, final | | | | | | | |
| technologies and the new learning | solving projects, | written exams. | | | | | | | |
| environments in educational | home study. | | | | | | | | |
| programs that promote physical | | | | | | | | | |
| education. | | | | | | | | | |
| Ability to evaluate the use and the | Lectures, | Mid-term exams, | 10 | | | | | | |
| integration of multimedia & | understanding | final written | | | | | | | |
| Internet technologies in the | project, home | exams. | | | | | | | |
| educational process. | study. | | | | | | | | |
| | | TOTAL | 60 | | | | | | |

OBLIGATORY & SUGGESTED BIBLIOGRAPHY:

- 1. Karakos, A. (2007). Internet, web & programming techniques. Athens: Giourdas.
- 2. Deligiannis, J. (2006). The information society and the role of interactive multimedia. Athens: Fagotto books.
- 3. Alessi, S.M. (2005). Multimedia & education. Athens: Giourdas.
- Vernadakis, N., Giannousi, M., Derri, V., Kellis, I. & Kioumourtzoglou, E. (2010). Athens 2004 Team Leaders' Attitudes toward the Educational Multimedia Application "Leonidas". Journal of Educational Technology & Society, 13(1): 208-219.
- 5. Vernadakis, N., Antoniou, P., Giannousi, M., Zetou, E. & Kioumourtzoglou, E. (2011). Comparing hybrid learning with traditional approaches on learning the microsoft office power point 2003 program in tertiary education. Computers & Education, 56(1): 188-199.