Course Unit Title:	Music Technology in Education
Course Unit Code:	MUS 608
Type of Course Unit: (Compulsory/Optional)	Compulsory
Level of Course Unit: (first, second or third cycle)	Master (2 nd Cycle)
Year of Study:	1 or 2
Semester when the unit is delivered:	2 or 3
Number of ECTS credits allocated:	10
Name of lecturer(s):	T.B.A.

Learning Outcomes of the course unit:

Upon successful completion of this course students should be able to:

- Define and classify the various forms of music technology and information and communication technology (ICT).
- Explain and substantiate the importance of using technology in music education, according to recent findings from music technology research.
- Discuss the issues and challenges related to technology in Music Education and its application in learning and teaching.
- Operate, at an advanced level, music semiography/notation software.
- Employ a variety of software and appliances indented for music creation (eg. multichannel audio systems, Audio and MIDI sequencer, sound wave editing software and sound design software).
- Apply the principles of acoustics and sound engineering in live streaming and music performance (handling console, microphones, etc.).
- Evaluate educational software, internet technologies and multimedia, in terms of their content and application for supporting/reinforcing teaching and learning in music.
- Create/Establish educational applications, incorporating a broad selection of music technology and information and communication technology (ICT).

Mode of Delivery:	Distance Learning
Prerequisites and co- requisites:	MUS 650
Recommended optional program components:	None

Course Contents:

The aim of the course is the critical evaluation of research and practice in integrating tools of technology in Music Education. During the course, students will study the contemporary

literature in regards to the use of music technology in education; where at the same time develop skills in employing the use of music technology and other information and communication technologies (ICT) in the learning process.

Description:

For the past years, music technology and ICT have dramatically affected the way we listen to, create, execute, understand and share music. These technologies have created new opportunities and challenges for Music Education.

During this course, students will be asked to critically evaluate current research data and integrate practices of technology in Music Education. Additionally, they will study and assess the advantages, disadvantages and transformations of the educator/student, as a result of the use of technological in music education. Furthermore, they will develop/establish criteria in evaluating the available technological resources, tools and software; and will explore ways in which they can enhance their own creative teaching by employing technology.

At the same time, emphasis will be given in developing dexterities in specialized music technology applications. This aspect of the course is organized around seven music technology classes, as those are defined by the Technology Institute for Music Education (Technology Institute for Music Education, TI:ME) and which are:

- 1. Electronics:
- 2. Music Semiography/Notation software;
- 3. Educational software:
- 4. MIDI and digital audio sequencing;
- 5. Communication technologies and the Internet;
- 6. Multimedia and electronic media:
- 7. Information processing and lab management.

According to these areas, students will become familiar with the key conceptions of acoustics and sound engineering (eg. frequency, intensity, envelopes, harmonic series, filters). Moreover, they will study the capacities of the music software (prepare score, exporting parts, instrumentation, teaching material). Also, students will learn how to handle MIDI and digital audio data, by employing/using programs and devises of musical creation (eg. multichannel audio systems, Audio and MIDI sequencer, sound wave editing software, sound design software).

Students will also be provided with the opportunity of becoming familiar with the electronic classroom music equipment (electronic keyboard, sound card, MIDI controllers, samplers, loopers, etc.), as well as handling mixing, recording and broadcast music systems (console, microphones, loudspeakers etc.). Finally, through the duration of the course, students will evaluate/review a wide range of educational teaching music software (drill and practice, games, aural training software, escort etc.), multimedia and Internet applications.

Note: Given that technologies and software are reviewed and upgraded rapidly, each semester the course will be enhanced with the latest developments and opportunities in the relevant areas.

Required or Recommended Reading(s):

Selection of articles, sources from the Instructor.

English

Brown, A. R. (2007). *Computers in Music Education: Amplifying musicality*. New York: Routledge. (ISBN-10: 0415978513)

Burns, A. M. (2008). *Technology integration in the elementary music classroom*. Milwaukee, WI: Hall Leonard Corporation. (ISBN-10: 1423427572)

Hosken, D. (2011). *An introduction to music technology.* New York: Routledge. (ISBN-10: 0415997291)

Richmond, F. (2005). *Technology Strategies for Music Education*. 2nd ed. Philadelphia: TI:ME publications. (ISBN-10: 0634090607)

Rudolph, T. E. (2004). *Teaching Music with Technology*. 2nd ed. Chicago: GIA Publications. (ISBN-10: 1579993133)

TI:ME. (2005). *Technology Guide for Music Educators*. Boston, MA: Artistpro. (ISBN-10: 1592009816)

Watson, S. (2011). *Using technology to unlock musical creativity*. New York: Oxford University Press. (ISBN-10: 0199742766)

Williams, D. B. & Webster, P. R. (2008). *Experiencing Music Technology*. 3rd ed. Belmont, CA: Schirmer. (ISBN-10: 0495565547)

Ελληνικά

Πλέσσας, Α. (1998). *Μουσική και Τεχνολογία, Α΄ Τόμος.* Αθήνα: Σύγχρονη Μουσική. (ISBN: 9607287274)

Πλέσσας, Α. (2002). Μουσική και Τεχνολογία, Β΄ Τόμος: Μουσικά προγράμματα, ψηφιακή εγγραφή ήχου, ΜΙΟΙ και Audio Studio. Αθήνα: Σύγχρονη Μουσική. (ISBN: 9607287274)

Planned learning activities and teaching methods:

Virtual lectures, labs, group work, assignments and exams.

Assessment methods and criteria:	Ongoing Evaluation Activities Final Examination 50 % 50 % 100 %
Language of Instruction:	English
Work Placement(s):	No
Place of Teaching:	Blackboard Virtual Learning Platform