

**COURSE DATA****Data Subject**

<b>Code</b>	33675
<b>Name</b>	Music and information and communications technologies (ICTs)
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2021 - 2022

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1305 - Degree in Primary School Education	Faculty of Teacher Training	3	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1305 - Degree in Primary School Education	16 - Specialist in musical education	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
TEJADA GIMENEZ, JESUS	95 - Didactics of Physical, Artistic and Music Education

**SUMMARY**

Music and ICT is a theoretical-practical course which main goal is to learn and use software and other technologies as tools for both learning music and the designing of music learning materials.

**PREVIOUS KNOWLEDGE****Relationship to other subjects of the same degree**

There are no specified enrollment restrictions with other subjects of the curriculum.



### Other requirements

General knowledge of computer tasks: management of the operative system in common operations such as: save, save as ..., editing, file management (copy, paste, cut ....), export and import (file formats), privileges, use of Windows and Linux tools, etc.. Also, general knowledge of music notation.

## OUTCOMES

### 1305 - Degree in Primary School Education

- Express oneself orally and in writing correctly and appropriately in the official languages of the autonomous region.
- Use information and communication technologies effectively as usual working tools.
- Analyse critically the most relevant issues in today's society that affect family and school education: social and educational impact of audiovisual languages and of screens; changes in gender and inter-gender relations; multicultural and intercultural issues; discrimination and social inclusion, and sustainable development; Also, carry out educational actions aimed at preparing active and democratic citizens, committed to equality, especially between men and women.
- Promote cooperative work and individual work and effort.
- Assume that teaching must be perfected and adapted to scientific, pedagogical and social changes throughout life.
- Know the processes of interaction and communication in the classroom.
- Recognise the identity of each educational stage and their cognitive, psychomotor, communicative, social and affective characteristics.
- Design, plan and evaluate teaching and learning classroom activities in multicultural and co-educational contexts.
- Know how to work as a team with other professionals within and outside the school to attend to each student, to plan the learning sequences and to organise work in the classroom and in the play space.
- Know and apply basic educational research methodologies and techniques and be able to design innovation projects identifying evaluation indicators.
- Understand that systematic observation is a basic tool that can be used to reflect on practice and reality, and to contribute to innovation and improvement in education.
- Identify and plan the resolution of educational situations that affect students with different abilities and different learning rates, and acquire resources to favour their integration.
- Design, develop and evaluate the curriculum.
- Value cooperative work and be able to implement it as a condition for improving professional activity.
- Learn strategies to promote professional development and lifelong learning as a teacher.
- Adopt a self-critical attitude towards the teaching and learning processes, valuing the experiences lived in a reflexive way.



- Acquire introductory knowledge of research.

## LEARNING OUTCOMES

Subject will enable the pupils to:

1. Known and apply several technologies for the teaching of music contents at Elementary Schools.
2. Use music software for the teaching of music theory, composition-improvisation and ear training.
3. Design both music activities and learning materials using ICT.
4. Develop their creative capacities by means of ICT.

## DESCRIPTION OF CONTENTS

### **1. Review of the technology tools for Music Education in different educative contexts. Taxonomies.**

### **2. Digital audio**

Concepts and processes in the digitalization of sound.  
Hardware and software for audio capturing, processing and storage.

### **3. MIDI protocol**

MIDI Protocol.  
MIDI Hardware.  
MIDI Connexions.  
MIDI controllers and instruments.  
Concepts and use of MIDI software.

### **4. Software for the specific purposes of Music Education**

Specific software for Music Education.  
Analysis of software for Music Education.

### **5. Music general purpose software.**

Concepts and use of sequencing software.  
Concepts and use of score edition software.  
Concepts and use of sound edition software.  
Work projects in small groups.

**6. Design of musical activities and materials for the teaching of rhythm, melody and harmony by means of music technology.**

Concepts in the design of both music activities and music materials for teaching Music at Elementary Schools.

Materials and activities for teaching and learning rhythm, melody and harmony.

Use of sequencers, music score editor programs, audio and video edition programs and specific-purpose music software.

Work projects in small groups.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	45,00	100
Study and independent work	67,00	0
<b>TOTAL</b>	<b>112,00</b>	

**TEACHING METHODOLOGY**

The methodology for teaching this course consists of:

1. Presentation of the theory with exemplifications.
2. Workshops.
3. Practical assignments and projects –individual and group- using the software approached in this matter.
4. Work projects in small groups.
5. Seminars and clinics.
6. Simulations.

**EVALUATION**

The information for assessing the students' learning will be collected by means of:

1. Project. Work in groups up to 4 students. The project will be related to the development of curriculum materials for Ed. Musical works and application of music technology in Primary Education (Portfolio, 50%).
2. Research on ICT applied to music education and the exposition of that (20%) (collaborative, in pairs).
3. Written test to demonstrate the knowledge of concepts and procedures covered in the syllabus (20%).



4. Optional attendance to formative activities not subject to evaluation. Up to 2 points for two optional training activities of workshop type.

5. Argumented self-assessment of the subject (10%).

To pass the course will need to achieve a minimum percentage of:

60% of the work projects.

60% of the research assignation.

60% of the written test.

The final scores will be adjusted according to a maximum of 10 points. Thus, if two activities are carried out, the highest score is 12 points which is equivalent to 10; if one activity is carried out, the higher score will be 11 points that will be equivalent to 10. If no optional activity is attended by the student, no adjustment will be necessary.

• **ATTENTION:** It is compulsory to attend classes by 80%. The attendance will be evidenced by signature. No need to justify truancy. Those people who do not attend at least 80% of the classes will have to perform an additional test to demonstrate evidence of learning of practical syllabus content. The test will be carried out before the assignments -whose presentation is pre-condition, pass to be evaluated.

## REFERENCES

### Basic

- CRESPO, J. (2002) Audio y vídeo digital. Madrid: Anaya Multimedia.
- FINNEY, J. y BURNARD, P. (eds) (2007) Music Education with Digital Technology. London: Continuum.
- PALOMO, M. (1995) El estudio de grabación personal. Madrid: Amusic.
- POHLMANN, K. (2000) Principios de audio digital. Madrid: McGraw-Hill.
- RUDOLPH, T. (1998) Teaching music with technology. Chicago: GIA.
- RUDOLPH, T., RICHMOND, F., MASH, D. y WILLIAMS, D. (1998) Technology Strategies for Music Education. Wyncote: T.I.M.E.
- STARLING, N. (1996) The teacher's guide to music technology. Rugeley: Champion House.
- TEJADA, J. (1998) "Music Technology as a Teacher's Tool". En Willis, D. et al. (eds) Teacher's Annual 1998. Charlottesville, VA: Association for the Advancement of Computing in Education.
- TEJADA, J. (2000) Tecnología Musical En CALMELL, C. y MIRANDA, J. (eds) Guías Praxis: Educación Musical en la ESO. Barcelona: Praxis. 393-460.





- TEJADA, J. (2001) MIDI en la Escuela, el Conservatorio y el Instituto. Encore, Finale, Band in a Box. Valencia: Rivera.
- WHITE, P. (2002) Music technology. A survivor guide. London: Sanctuary Publishing.
- WILLIAMS, D. y WEBSTER, P. (2006). Experiencing Music Technology. New York: Schirmer Books.
- TEJADA, J. (2002) Manual minimalista de Adobe Audition. No publicado.
- TEJADA, J. (2012) Manual minimalista de Audacity. No publicado.
- TEJADA, J. (2013) Apuntes de audio digital. No publicado.
- TEJADA, J. (2014) Sonido, Música y Ordenadores. En José L. Aróstegui (Ed.) La Música en Educación Primaria. Manual de Formación del Profesorado. Madrid: Dairea.

## ADDENDUM COVID-19

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

## English version is not available

### ***1. Volumen de trabajo y planificación temporal de la docencia***

Se mantiene la planificación temporal. Las sesiones se realizarán en los días y horas programadas hasta el final de la asignatura. Las sesiones que no permitan la asistencia presencial en clase contarán, además de con los materiales y lecturas habituales, con materiales curriculares alternativos tales como videoconferencias grabadas, lecturas complementarias o actividades a realizar mediante el Aula Virtual.

Se refuerza el principio de trabajo autónomo por parte del estudiantado tanto para las actividades teóricas y de reflexión, como para la realización de otros trabajos grupales.

### ***2. Metodología docente***

En la modalidad de docencia híbrida, la sesión presencial mantendrá la dinámica de trabajo habitual.

En caso de tener que migrar a la docencia a distancia, se sustituirán las clases presenciales por sesiones en videoconferencia síncrona o asíncrona mediante la plataforma Blackboard Collaborate.

Las tutorías serán virtuales.

La docencia se redistribuirá en bloques de 2 días de clase a la semana en semanas alternas atendiendo al criterio establecido desde Junta de Gobierno de buscar la máxima presencialidad y garantizar la seguridad de alumnado y profesorado. No obstante, la organización definitiva se determinará en función del contexto sanitario-académico y la normativa institucional, pudiendo dar lugar a variaciones que no pueden ser contempladas a priori.



#### **4. Evaluación**

La evaluación, tal como se plantea en la Guía Docente. Si es necesario, las actividades se presentaran únicamente en formato electrónico por el Aula Virtual.

#### **5. Bibliografía**

La bibliografía recomendada se mantiene.