

Course of study in  
**"Science and technology in education and childcare" - [L19].**  
 a.y. 2021/2022

**SUBJECT**  
**EDUCATION AND LEARNING TECHNOLOGIES**

SDS: **M-PED/03** - ECT: 6  
 III YEAR; I SEMESTER

Lecturer: **Prof. Paola Nencioni**  
 Disciplinary tutor **Prof. Francesca Calzolari**

<p><b>Qualification and scientific background of the lecturer</b></p>	<p><b>Paola Nencioni</b>          She graduated cum laude in Education Science at the University of Florence. Since 2001, she has been collaborating with INDIRE and her research activity in the Institute has focused on teachers' training, both disciplinary and technological. She currently works on research activities related to innovation, school improvement and leadership for learning. Since 2017, she has been collaborating with IUL in the courses: Education and Learning Technologies and Research Methods in Multimedia Environment.          She is editor-in-chief of the journal "IUL Research".</p>
<p><b>Description of contents and subdivision of the programme into teaching modules</b></p>	<p>The course is organised in <b>2 modules</b>:</p> <ul style="list-style-type: none"> <li>➤ <b>Module 1 - Methodological and technological approaches to didactics</b></li> </ul> <p>Within this module the various methodological and technological approaches to didactics will be analysed. Starting from a historical dimension, the plans for the introduction of digital education technologies in Italian schools through experiences and projects will be examined. The focus will be on the main teaching-learning methods that characterise teaching in schools (active and cooperative methods. Laboratory and transmedia methods) and on the meaning of teaching design in the educational profession. Digital technologies and the design of didactic paths aimed at the</p>

	<p>development of competences. Designing educational interventions with digital technologies in the direction of personalisation and inclusion. Finally, the communicative and educational function of images will be explored. Eventually, the use of educational media and active teaching.</p> <p><b>A. Module 2 - Technology and creativity at school</b></p> <p>Within this module the issue of media education, the acquisition of digital competences in the perspective of digital citizenship will be addressed, through a critical analysis of digital media and the responsible use of digital technologies as educators and citizens. As well as the theme of using digital tools as <i>readers</i>, how you can guide students to make an informed search for information on the web and the theme of using media as <i>writers of</i> and in the media will be addressed.</p>
<p><b>Abstract</b></p>	<p>The proposed course offers a thematic in-depth study and moments of reflection on the themes of technological innovation at school and on teaching methods to be used in the classroom with ICTs.</p>
<p><b>Learning objectives</b></p>	<p><b>A. Knowledge and understanding</b></p> <p>To know and understand the evolution of teaching methods and techniques linked to the introduction of media in educational contexts. To understand how learning technologies can contribute to the construction of the curriculum in a laboratory and inclusive perspective. To know, also from a historical perspective, the contributions that digital technologies have made to the development of educational systems, understanding how they can be adopted in the development of a social and cooperative learning environment.</p> <p><b>B. Applied knowledge and understanding</b></p> <p>To know how to use the main methodologies and techniques of educational research. To be able to define the actions of a training intervention (from the design of the teaching sequence to the evaluation) knowing how to promote the social dimension of the network.</p> <p><b>C. Autonomy of judgement</b></p>

	<p>To know how to critically analyse an educational problem, to know how to analyse the different methodological and technological approaches of didactics. To possess advanced digital and media skills, expressed in terms of knowledge, responsible use and critical awareness.</p> <p><b>D. Communication and interpersonal skills</b> To be able to communicate the knowledge acquired in relation to research in the field of education and didactic design. To be able to rethink the educational relationship in a flexible and creative way, enhancing it in all kinds of learning environments.</p> <p><b>E. Learning ability</b> Knowing how to manage one's own learning process by choosing independent paths of study.</p>
<p><b>Expected learning outcomes</b></p>	<p><b>A.</b> Use of resources provided in the course, textbooks, knowledge of some cutting-edge topics within the subject studied.</p> <p><b>B.</b> Professional approach to work and possession of adequate skills to devise arguments, support them and solve problems within the subject studied.</p> <p><b>C.</b> Ability to collect and interpret data useful for making autonomous judgements.</p> <p><b>D.</b> Ability to communicate information, ideas, problems and solutions to specialists and non-specialists.</p> <p><b>E.</b> Ability to undertake further studies with a high degree of autonomy.</p>
<p><b>Skills to be acquired</b></p>	<ul style="list-style-type: none"> <li>➤ To be able to critically analyse the themes discussed in the course.</li> <li>➤ To know, and be able to compare, the different: media, environments and tools analysed in the course.</li> </ul>
<p><b>Didactics organisation</b></p>	<p><b>DIDACTICS PROVISION</b></p> <ul style="list-style-type: none"> <li>➤ 12 video lessons;</li> <li>➤ 1 synchronous video lesson;</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Podcasts of all the video lessons mentioned above.</li> </ul> <p><b>INTERACTIVE DIDACTICS</b></p> <ul style="list-style-type: none"> <li>➤ 1 orientation forum;</li> <li>➤ 2 thematic follow-up forums (2 per each module);</li> <li>➤ 2 structured e-activities (as described in the section <i>“in itinere assessment methods”</i>);</li> <li>➤ 2 synchronous interactive meetings with students (e.g. question time, office hours, review of individual assignments, etc.).</li> </ul> <p><b>SELF-LEARNING</b></p> <p>Teaching materials are provided for each module: thematic in-depth studies, lecturer's articles, open access readings, web resources, reference bibliography, etc.</p>
<p><b>Recommended examination texts</b></p>	<p><b>Teaching materials proposed by the lecturer, Prof. Paola Nencioni, on the platform</b></p> <p><b>Suggested bibliography:</b></p> <ul style="list-style-type: none"> <li>➤ M. Faggioli (ed.), <i>Fare didattica nella classe multimediale Insegnare e apprendere nella classe multimediale</i>, Giunti scuola, 2013.</li> <li>➤ C. Di Bari, A. Mariani (eds.), <i>Media Education 0-6. Le tecnologie digitali nella prima infanzia tra critica e creatività</i>, Edizioni Anicia, 2018</li> </ul>
<p><b>In itinere assessment methods</b></p>	<p>Access to the final examination is subject to the completion of the following <b>2 e-activities</b>:</p> <ul style="list-style-type: none"> <li>➤ <b>Etivity 1 (module 1) - Problem solving</b> - 'How to deal with the risks of using the Internet'. Students should follow the instructions on the online platform and submit the required paper.</li> <li>➤ <b>Etivity 2 (module 2) - Design of a learning unit using digital and/or transmedia technologies</b> (UdA). Students must follow the instructions on the online platform and submit the required work.</li> </ul>
<p><b>Procedure for the final examination</b></p>	<p>The assessment of learning will take place through an oral interview on the course contents and on the paper(s) presented. The grade (min 18, max 30 with possible honours) is determined by the level of performance for each of the following dimensions of the oral interview: mastery of contents, appropriateness of definitions and theoretical references, clarity of argument, command of specialist language.</p>

Language of instruction	Italian
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