

Syllabus

Course Description

Course Title	Didactics of Mathematics, Science and Computer Science
Course Code	82044
Course Title Additional	
Scientific-Disciplinary Sector	PHYS-06/B
Language	Italian
Degree Course	University course for initial training of secondary school teachers in the Italian language - 60CP
Other Degree Courses (Loaned)	Training course 30 CP - Italian section
Lecturers	Prof. Federico Corni, Federico.Corni@unibz.it https://www.unibz.it/en/faculties/education/academic-staff/person/800
Teaching Assistant	
Semester	Second semester
Course Year/s	1
CP	2
Teaching Hours	12
Lab Hours	0
Individual Study Hours	38
Planned Office Hours	0
Contents Summary	The course consists of lectures and exercises on the most important transversal topics for the mathematical, scientific and computer science disciplines in an integrated teaching perspective.
Course Topics	Cross-disciplinary concepts, dynamic modelling, principles of systems thinking with reference to mathematical, scientific and computer science disciplines.
Keywords	Scientific method Systems thinking Conceptual organisers

	Embodied mind
Recommended Prerequisites	
Propaedeutic Courses	
Teaching Format	Lectures and examples
Mandatory Attendance	In accordance with the regulation
Specific Educational Objectives and Learning Outcomes	<p>The aim of the course is to introduce students to the disciplines in an integrated manner, ensuring an adequate mastery of general scientific methods and content.</p> <p>Disciplinary skills: Knowledge and understanding of course content Ability to apply transversal concepts, modelling and systems thinking to concrete cases relevant to teaching</p> <p>Transversal/soft skills: Autonomy in the application of course content, communication and teaching skills in the mathematical, scientific and computer science disciplines.</p>
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	Final written test.
Evaluation Criteria	Awarding a single final grade.
Required Readings	Teaching materials will be offered during the lessons.
Supplementary Readings	
Further Information	
Sustainable Development Goals (SDGs)	Quality education, Gender equality, Affordable and clean energy, Industry, innovation and infrastructure, Peace, justice and strong institutions, Sustainable cities and communities, Responsible consumption and production, Climate action, Reduced inequalities