



TECHNOLOGIES FOR SCIENTIFIC COMMUNICATION

Enrollment year	2016/2017
Academic year	2017/2018
Regulations	DM270
Academic discipline	FIS/08 (DIDACTICS AND HISTORY OF PHYSICS)
Department	DEPARTMENT OF PHYSICS
Course	
Curriculum	Didattica e storia della fisica
Year of study	2°
Period	1st semester (02/10/2017 - 19/01/2018)
ECTS	6
Lesson hours	48 lesson hours
Language	Italian
Activity type	ORAL TEST
Teacher	FALOMO BERNARDUZZI LIDIA (titolare) - 6 ECTS
Prerequisites	A basic knowledge of how to create and manage online multimedia content will be of use to students, especially when undertaking the final project required for the exam. However, all the content necessary will be provided during the course, and any additional content will be tailored to the needs of attending students
Learning outcomes	The aim of the course is to introduce students to the profound implications that the new digital technologies have had on information access and communication.
Course contents	Particular emphasis is given to web- and mobile-based applications and activities that are important for doing and communicating science, as well as for teaching and learning in a more participatory and collaborative way. The main features of raster and vector digital images and digital video will be described, and photo and video editing services (based on cloud computing) will be used. Particular attention will be

	given to blogs, virtual communities, and wikis. Several types of augmented reality and scientific digital storytelling will be presented. Cloud computing services will be used for collaborative construction and online sharing of presentations, as well as for producing mental and conceptual maps. Several examples of applications and tools in science education, in research and in scientific communication will be analysed. During the course students will be able to ask for more in-depth analysis and/or offer insights on topics of interest to them, which will be discussed in class.
Teaching methods	The course is based on lectures and seminars. Students may also present their insights, which will be discussed in class. To help create a learning community, students are also urged to write posts and comments on the course blog and to personalize it graphically. The most interesting posts will be discussed in the classroom.
Reccomended or required readings	Reference bibliography and webliography will be provided and discussed during the lessons and posted on the course blog.
Assessment methods	The end-of-course exam consists of a project and an oral test. Project specifications will be discussed and decided in detail with attending students, and these will be posted on the course blog. After presenting his project in the oral test, the student will be required to demonstrate that he has assimilated and reworked the topics covered during the course. The evaluation will take into account any optional presentations of insights during lessons and through blog posts.
Further information	
Sustainable development goals - Agenda 2030	\$lbl_legenda_sviluppo_sostenibile