COURSE DESCRIPTION – ACADEMIC YEAR 2017/2018

Course title	**Technical and Scientific Communication**
Course code	72004
Scientific sector	M-FIL/02
Degree	Master in Computer Science (LM-18)
Semester	2
Year	1
Credits	4
Modular	No

Total lecturing hours	24
Total lab hours	--
Total exercise hours	12
Attendance	Minimum 80%. Non-attendant students will have a different final result to produce
Prerequisites	A pass level or higher level English language
Course page	https://ole.unibz.it/

Specific educational objectives	The course is a compulsory course for the Master in Computer Science Programme and belongs to the type "affini o integrative – formazione affine". For IT people, knowledge transfer is crucial, and communication (technical or scientific) is a fundamental skill for any worker today. Many different situations (thesis, job interview, fundraising, public presentation, scientific conference, technical pitch etc.) require the presenter to be able to convey effectively and efficiently the technical/scientific content, whatever the audience, the content and its complexity. Therefore, this course is designed specifically to improve written and oral communication competence and skills of students in scientific and technical contexts.

Lecturer	Andrea Molinari
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Scientific sector of lecturer	ING-INF/05
Teaching language	English
Office hours	By previous appointment via e-mail
Lecturing Assistant (if any)	Stefano Borgo
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Office hours LA	
List of topics	• Technical writing • Speech preparation and presentation • Learning styles • Communication and Group work
Teaching format	Frontal lectures and seminars, exercises in groups, cognitive exercises. Each of the three main methods of scientific communication (writing, speaking, and preparing a presentation) will involve the students discussing each other's work.

Learning outcomes	Applying knowledge and understanding: • Be able to understand and write documentation for technical, scientific reporting. Making judgments • Be able to independently select the documentation required to keep abreast of the frequent technological innovations in the field by using a wide variety of documentary sources: books, web, magazines. Communication skills • Be able to structure and prepare scientific and technical documentation describing project activities. • Be able to present in a fixed time the content of a scientific / technical report in front of an audience also composed of non-specialists. Learning skills • Be able to autonomously extend the knowledge acquired during the study course by reading and understanding scientific and technical documentation Be able to independently keep up to date with developments in the most important areas of Computer Science.

Assessment	Written and oral: • Written exam will be based on a scientific or technical article produced by the student on a topic chosen from the field of computer science. The format will be the one of a conference / workshop short paper, min. 3 pages • Oral presentation by the student in specific timeslots during the course and/or in the final exam session. The allocated time will be 5 minutes for a pitch on the above topic, and 15-20 minutes for the presentation of the above article Non-attending students will have the same tasks and rules, except for the paper to produce that will be longer, min. 6 pages instead of min. 3 pages.
Assessment language	English
Evaluation criteria and criteria for awarding marks	An assessment score out of 100 points is given. The evaluation criteria is as follows: • Written examination (a short paper): The evaluation is based on how much the scientific paper complies with the principles of good scientific and technical writing. The short paper will be sent in advance for adequate evaluation. Specifically the following elements will be assessed: • Quality and structure of the paper: 30 points • Language used in the paper: 10 points • Use of illustrations: 10 points • Correct formatting based on the constraints: 10 points • Oral presentation (pitch and presentation) on the produced paper will be evaluated as follows: • how well the pitch / presentation slides are designed (15 points) • whether the oral communication skills are gained by the student (25 points)

Required readings	• M. Alley, The Craft of Scientific Writing, Third Edition, Springer-Verlag, 1996 (http://writing.eng.vt.edu) • M. Davis, Scientific papers and presentations, San Diego, Acad. Press, 2000 All other material will be produced in house.
Supplementary readings	• Tufte E.R., The Visual Display of Quantitative Information. 2 nd ed., Graphics Press, Cheshire, 2001. • B. Greetham, How to write better essays, 2nd ed., Palgrave Macmillan, 2008 • S.E. Lucas, The Art of Public Speaking, 10 th . Ed., McGrawHill, 2009. • S. William, E.B. White, The elements of style, 4th ed., 10th printing, Boston, Allyn and Bacon, 2004
Software used	--