

Syllabus

Course description

Course title:	Technical and Scientific Communication
Course year:	1
Semester:	1
Course code:	54014 – Master in Musicology
Scientific sector:	INF/01
Lecturer:	Dott. Andrea Molinari
Module:	-
Lecturer other module:	-
Credits:	6
Total lecturing hours:	30
Total Hours of availability for students and tutoring:	18
Office hours:	from Monday to Friday on request
Attendance:	according to the regulation
Teaching language:	English
Propaedeutic course:	none
Course description:	This course introduces the principles and mechanics of technical and scientific writing for persons studying or working in different technological or scientific contexts. Students will learn specific communications skills associated with reporting technical and scientific information and will create different levels of communication assets like pitches, presentations and scientific papers
Specific educational objectives:	For modern workers and researchers, knowledge transfer is crucial. This course is a basic course designed specifically to improve written and oral communication competence and skills of students in scientific and technical contexts.
List of topics covered:	<ul style="list-style-type: none"> • The importance of presentation • How to present a technical / scientific idea • How to create and present a Pitch • How to prepare and present technical and scientific work or paper • What could happen with wrong presentations • Speech preparation and presentation • Technical and Scientific presentation: how it works • Occasions for communicating Technical & Scientific Work • Characteristics of Scientific Writing • Characteristics of Technical Writing • Technical & Scientific Writing constraints • Writing Styles and different contexts • Stylistic principles in writing • Recommendation about Technical & Scientific Work • Structure of a scientific document: Introduction, Methods, Results, Discussion • Details about different sections of a scientific paper

	<ul style="list-style-type: none"> • Structure of a scientific document • Writing a literature review • Discussion, conclusions and citations style • Technical and scientific evaluation process
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:	<p>Applying knowledge and understanding</p> <ul style="list-style-type: none"> - Be able to understand and write documentation for technical, scientific reporting <p>Making Judgements</p> <ul style="list-style-type: none"> - Be able to improve planning capabilities - Be able to independently select a topic for paper writing and oral presentation <p>Communication skills</p> <ul style="list-style-type: none"> - Be able to structure and prepare technical and scientific documentation in different contexts - Communicate technical and scientific work results orally in front of an audience <p>Ability to Learn</p> <ul style="list-style-type: none"> - Be able to extend knowledge for what constitutes a research topic or technical work in different contexts <p>Be able to search for the current state of the art and bycomparing to their own work, derive conclusions for the future work alternatives</p>
Assessment:	<p>Written and oral:</p> <ul style="list-style-type: none"> - Written exam based on a scientific or technical article written by the student on a topic chosen from the field of computer science. - Oral presentation by the student during the exercise session scheduled. The allocated time is from 15 to 30 minutes including feedback by the students in the class for the presenter.
Evaluation criteria and criteria for awarding marks:	<p>An assessment score out of 100 points is given. The evaluation criteria is as follows:</p> <ul style="list-style-type: none"> - 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. <p>Specifically the following elements will be assessed:</p> <ul style="list-style-type: none"> • 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

	<p>Oral presentation on the chosen topic in computer science (15 to 30 minutes presentation including feedback). The evaluation is based on how well the presentation slides are designed (15 points) and whether the oral communication skills are gained by the student (25 points)</p>
Required readings:	<ul style="list-style-type: none"> - 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 <p>All other material will be produced in house.</p>
Supplementary readings:	<ul style="list-style-type: none"> • 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. <p>S. William, E.B. White, The elements of style, 4th ed., 10th printing, Boston, Allyn and Bacon, 2004</p>