COURSE GUIDE: 2014-15

COURSE DETAILS			
Name :	**Scientific and Technical Communication**		
Code :	70784254	Plan :	Masters in Mediterranean Greenhouse Horticulture
Academic year :	2014-15	Level :	Official Masters Degree
Course :	1	Type :	Optional
Semester :	Second		

TIME DISTRIBUTION IN ACCORDANCE WITH REGULATION			
ECTS :	3	In-class hours:	22.5
		Not in-class hours:	52.5
		Total time (in hours):	75.0
USE OF VIRTUAL PLATFORM:		Semi-presential (b-learning)	

LECTURER DETAILS			
Name	**Thompson, Rodney**		
Department	Agronomy		
Building	Escuela Politécnica Superior		
Office	2.37		
Phone	+34 950 214192	E-mail	rodney@ual.es
Personal webpage	http://www.ual.es/GruposInv/nitrogeno/thompson_personal.shtml		

Name	**Guzmán Palomino, José Miguel**		
Department	Agronomy		
Building	Edificio Científico Técnico II - B 1		
Office	2.20		
Phone	+34 950 015054	E-mail	mguzman@ual.es
Personal webpage	Web of Guzmán Palomino, José Miguel		

Name	**Jiménez Becker, Silvia**		
Department	Agronomy		
Building	Escuela Politécnica Superior		
Office	2.13		
Phone	+34 950 015952	E-mail	sbecker@ual.es
Personal webpage	Web of Jiménez Becker, Silvia		

Name	**Janssen, Dirk**		
Department	IFAPA La Mojonera		
Building			
Office			
Phone		E-mail	dirk.janssen@juntadeandalucia.es
Personal webpage	Web of Janssen, Dirk		
Name	**Padilla Ruiz, Francisco Manuel**		
Department	Agronomy		
Building	Escuela Politécnica Superior		
Office	2.13		
Phone	+34 950 214101	E-mail	f.padilla@ual.es@ual.es
Personal webpage	http://www.ual.es/GruposInv/nitrogeno/padilla_personal.shtml		

ACTIVITIES ORGANIZATION		
Planned activities for learning and workload distribution per activity (in hours)		
I. STUDENT'S ACTIVITIES (In-class / Online)	• Seminars	
	• Teaching group	18.5
	• Work group / small group	4.0
	Total In-class/Online time :	22.5
II. STUDENT'S AUTONOMOUS ACTIVITIES (not in-class)	•	52.5
	Total not in-class time :	52.5
TOTAL WORKING HOURS		75.0

ELEMENTS OF INTEREST FOR COURSE LEARNING
Justification of contents
The subject "Scientific and technical communication" teaches various aspects of the transmission of scientific information to scientific audiences and also to non-scientific audiences such as farmers, technical advisers, policy makers, and administrators. Students are taught how to prepare scientific and technical documents, posters, abstracts and to make oral presentations. The subject also teaches how to locate and manage scientific information, and how to prepare research proposals.
Other courses related
This subject is related to all other subjects of the Masters.

Minimum knowledge required to deal with the Course
Students should have a good level of English (e.g. B2), and be able to use a personal computer

COMPETENCIES
General competencies
General objectives of the University of Almería - Knowledge of a second language - Basic knowledge of the profession - Skill in the use of ICT - Capacity and self-criticism - Ability to learn to work independently
Other general objectives - To understand and acquire knowledge - Application of knowledge - Ability to make judgments - Ability to communicate
Specific competencies developed
- Knowledge of the basics of scientific and technical communication, both written and oral; -Knowledge and the capacity to use of the most relevant data bases to locate scientific and technical information. - Capacity to identify the most relevant scientific journals for a possible article. - Knowledge of procedures associated with applying for a research project
LEARNING OJECTIVES/OUTCOMES
- Know the different forms of scientific communication - Be aware of the requirement to adapt science communication to different audiences - Know the general characteristics of effective science communication - Know the most important tools to locate scientific information - Understand the basics of preparing scientific papers, abstracts and communications for congresses - Understand the basics of effective oral presentations - Understand the basics of preparing effective posters - Understand the basics of preparing applications for research projects

CONTENTS			
Module	**Thematic Unit I. Introduction to scientific communication**		
Content	**Theme 1. Considerations of scientific communication.** Functions, features and forms of scientific communication		
Learning system and methodology			
System	*Learning procedures and activities*	*Observations*	*Hours In-class/ Online*
Teaching group	Class		2.0
Description of autonomous workload			
Content	**Theme 2. Locating scientific information** The main databases in the agricultural sciences; use of the databases		
Learning system and methodology			
System	*Learning procedures and activities*	*Observations*	*Hours In-class/ Online*
Teaching group	Class		2.0
Work group	Location, consultation and processing of information		2.0
Description of autonomous workload			
Content	**Theme 3. Divulgation and Extension** Transmission of scientific information to farmers and field technicians		
Learning system and methodology			
System	*Learning procedures and activities*	*Observations*	*Hours In-class/ Online*
Teaching group	Class		2.0
Description of autonomous workload			
Module	**Thematic Unit 2. Written communication**		
Content	**Theme 4. Preparation of a scientific paper to be published in journals indexed in the JCR** Explanation of the JCR; selection of the journal; planning and preparation of a paper; submission and review process of papers published in the JCR		
Learning system and methodology			
System	*Learning procedures*	*Observations*	*Hours*

	and activities		*In-class/ Online*
Teaching group	Class		3.0
Work group	Location, consultation and processing of information		2.0
Description of autonomous workload			
Students complete a questionnaire			
Content	**Theme 5. Preparation of other scientific articles** Preparation of abstracts and short communications for congresses		
Learning system and methodology			
System	*Learning procedures and activities*	*Observations*	*Hours In-class/ Online*
Teaching group	Class		2.0
Description of autonomous workload			
Each students prepares an abstract			
Content	**Theme 6. Preparation of Posters**		
Learning system and methodology			
System	*Learning procedures and activities*	*Observations*	*Hours In-class/ Online*
Teaching group	Class		1.0
	Other	Presentation of posters prepared by students	2.0
Description of autonomous workload			
Each students prepares a poster			
Module	**Thematic Unit 3. Oral communication**		
Content	**Theme 7. Preparation of oral presentations**		
Learning system and methodology			
System	*Learning procedures and activities*	*Observations*	*Hours In-class/ Online*
Teaching group	Class		1.0
	Other	Oral presentations of students	2.0
Description of autonomous workload			
Each student prepares and presents an oral presentation.			
Module	**Thematic Unit 4. Applications for funding**		

Content	Theme 8. Preparation of a proposal for a research project		
Learning system and methodology			
System	*Learning procedures and activities*	*Observations*	*Hours In-class/ Online*
Teaching group	Class		1.5
Description of autonomous workload			

EVALUATION SYSTEM

Assessment criteria

- Attendance and participation in class
- Answers to a questionnaire
- Quality of poster prepared by each student
- Quality of oral presentation prepared and presented by each student
- Quality of the Abstract prepared by each student

Marking system

	Activity	*(Number of hours)*	*Percentage*
I. STUDENT 'S ACTIVITIES (In-class/Online)	• Teaching group		35%
II. STUDENT'S AUTONOMOUS ACTIVITIES (Autonomous work)	• Individual work		65%

Assessment instruments

- Tests, exercises, problems.
- Observations of professors
- Final assessment of reports, papers, projects, etc..
- Final tests (written or oral).

Monitoring mechanisms

- Attendance and participation in classroom activities
- Submission of learning activities
- Submission of learning activities in the virtual classroom
- Attendance at tutorials

BIBLIOGRAPHY

Recommended bibliography

How to write and publish a scientific paper. *(Day, R., Gastel, B.)*

Scientific papers and presentations *(Davis, M)*

Bibliography existing in the library of the University of Almeria

http://almirez.ual.es/search/x?SEARCH=70534211

WEB ADRESSES

DIRECCIONES WEB

- http://www.writing.engr.psu.edu/
Writing Guidelines for Engineering and Science Students

- http://io.uwinnipeg.ca/~clark/research/comm/comm.html
Scientific Communication

- http://www.cimms.ou.edu/~schultz/communication.html
Good Scientific Communication Skills

- http://www.sicb.org/newsletters/fa97nl/sicb/poster.html
Mortal Sins in Poster Presentations or How to Give the Poster No One Remembers

- http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.0030102
Ten Simple Rules for a Good Poster Presentation

- http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.0030077
Ten Simple Rules for Making Good Oral Presentations