



Teaching Guide

Identifying Data				2014/15
Subject (*)	Investigación en Ciencias da Saúde II	Code	653862236	
Study programme	Mestrado Universitario en Asistencia e Investigación Sanitaria (plan 2012)			
Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	2nd four-month period	First	Obligatoria	6
Language	Spanish			
Prerequisites				
Department	Ciencias da Saúde Matemáticas			
Coordinador	Jacome Pumar, Maria Amalia	E-mail	maria.amalia.jacome@udc.es	
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Web	http://www.imedir.udc.es/mais/?page_id=197#Materia05			
General description				

Study programme competences

Code	Study programme competences
A1	Capacidade para elixir e aplicar as metodoloxías de investigación mais adecuadas á investigación proposta.
A2	Capacidade para o deseño experimental e o completo desenvolvemento de proxectos de investigación no ámbito sanitario, desde a formulación da hipótese de investigación ata a comunicación dos resultados.
A3	Adquirir un sentido ético da investigación sanitaria.
A4	Obter un substrato teórico suficiente para comprender o entorno clínico de aplicación das técnicas de investigación.
A5	Adquirir o coñecemento da realidade investigadora nun ámbito concreto das ciencias da saúde.
B1	Capacidade para aplicar o método científico na planificación e o desenvolvemento da investigación sanitaria.
B2	Fluidez e propiedade na comunicación científica oral e escrita.
B3	Compromiso pola calidade do desenvolvemento da actividade investigadora.
B4	Capacidade de análise e de síntese.
B5	Habilidade para manexar distintas fontes de información.
B6	Capacidade para traballar de forma colaborativa en equipos multi e interdisciplinar.
B7	Capacidade de establecer unha relación de empatía cos suxeitos implicados no desenvolvemento da actividade investigadora.
C1	Expresarse correctamente, tanto de forma oral coma escrita, nas linguas oficiais da comunidade autónoma.
C2	Dominar a expresión e a comprensión de forma oral e escrita dun idioma estranxeiro.
C3	Utilizar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) necesarias para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida.
C4	Desenvolverse para o exercicio dunha cidadanía aberta, culta, crítica, comprometida, democrática e solidaria, capaz de analizar a realidade, diagnosticar problemas, formular e implantar solucións baseadas no coñecemento e orientadas ao ben común.
C5	Entender a importancia da cultura emprendedora e coñecer os medios ao alcance das persoas emprendedoras.
C6	Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.
C7	Asumir como profesional e cidadán a importancia da aprendizaxe ao longo da vida.
C8	Valorar a importancia que ten a investigación, a innovación e o desenvolvemento tecnolóxico no avance socioeconómico e cultural da sociedade.

Learning outcomes

Subject competencies (Learning outcomes)	Study programme competences



	AR1	BC1	CC1
	AR2	BC2	CC2
	AR3	BC3	CC3
	AR4	BC4	CC4
	AR5	BC5	CC5
		BC6	CC6
		BC7	CC7
			CC8
	AR1	BC1	CC1
	AR2	BC2	CC2
	AR3	BC3	CC3
	AR4	BC4	CC4
	AR5	BC5	CC5
		BC6	CC6
		BC7	CC7
			CC8

Contents	
Topic	Sub-topic
1. Hypothesis testing	Basic concepts. Choice of statistical methods. Normality tests Univariate statistical inference Bivariate statistical inference Statistical inference for more than two variables
2. Regression analysis	Basic concepts Correlation and association between variables. Simple linear regression Multiple linear regression ANCOVA Logistic regression
3. Survival analysis	Introduction to censored data Survival curves and hazard functions Kaplan-Meier estimator Cox regression
4. Evidence Based Practice	Introduction. Research implications. Main Documents typology.
5. Levels of Evidences	Levels of evidence and recommendations degree Evidence tables
6. Clinical Practice Guidelines	Definition. Tipologies Guidelines localization
7. Systematic Reviews	Definition Tipologies Systematic Reviews localization



8. Meta-analysis	<p>Overview.</p> <p>Effect size.</p> <p>Statistical models.</p> <p>Quantification of heterogeneity.</p> <p>Publication bias.</p> <p>Meta-regression.</p>
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Planning			
Methodologies / tests	Ordinary class hours	Student?s personal work hours	Total hours
Document analysis	20	50	70
Online forum	12	30	42
Seminar	4	12	16
Collaborative learning	4	12	16
Supervised projects	2	4	6
Personalized attention	0	0	0

(*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
Methodologies	Description
Document analysis	Learning through online material: recorded keynote speeches, videos, presentations and complementary pdf files.
Online forum	Online monitoring and personalized attention tools: forums and debates.
Seminar	Face to face seminars where students will be able to solve questions and problems.
Collaborative learning	Continuous evaluation through some of the following tools: exams, exercises, involvement with the virtual classroom, etc.
Supervised projects	Final academic work where students must demonstrate their theoretical and methodological knowledge of the contents.

Personalized attention	
Methodologies	Description
Online forum Supervised projects Seminar	Personalized attention is inherent in the methodologies used'

Assessment		
Methodologies	Description	Qualification
Supervised projects	Final academic work where the students should show their theoretical and methodological knowledge of the contents.	50
Collaborative learning	Exams, delivered exercises, involvement with the virtual classroom.	50

Assessment comments

Sources of information	
Basic	Complementary

Recommendations
Subjects that it is recommended to have taken before
Subjects that are recommended to be taken simultaneously



Subjects that continue the syllabus
Preparación dun Proxecto de Investigación II: Desenvolvemento e Comunicación/653862202 Estatística Aplicada a Ciencias da Saúde/653862206 Investigación Clínica I/653862232
Other comments

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.