# Universida<sub>de</sub>Vigo

Subject Guide 2023 / 2024

IDENTIFYIN	IG DATA				
	ade en dispositivos móviles				
Subject	(*)Seguridade en				
Jubject	dispositivos				
	móviles				
Code	V05M175V11218		,		
Study	Máster		,		
programme	Universitario en				
programme	Ciberseguridad				
Descriptors	ECTS Credits		Choose	Year	Quadmester
Descriptors	3		Optional	1st	2nd
Teaching	Spanish		Орсіонаі	130	ZIIG
language	Galician				
lariguage	English				
Department					
Coordinator					
Lecturers	Fernández Caramés, Tiago Manue	,1			
Lecturers	López Bravo, Cristina	ii			
	Rivas López, Jose Luis				
E-mail	clbravo@det.uvigo.es				
Web	http://http://moovi.uvigo.gal				
General	This course presents a general vie	ou of according to	المانات المانات المانات	different charac	stariation Daniel on the
	security tools that they include, al and mitigate the vulnerabilities th development and device manager The documentation of this course	at affect mobile doment in business of	evices, using forer		
Code	nd Learning Results				
	esults from this subject				
Expected res	sults from this subject				Training and Learning Results
Contents					
Topic					
	: Threats and vulnerabilities that				
affect mobile	e devices				
	es architectures				
	dels in mobile devices				
	re Applications	Permissions Packages mana Users manager			
		APIs			
Data security	-				
Devices secu	-				
Network sec	·				
	es, exploits and malicious				
applications					
	lysis of mobile operating systems				
Enterprise M	lobile Management Systems (EMM)				
Planning					

	Class hours	Hours outside the classroom	Total hours
Lecturing	9	9	18
Practices through ICT	12	12	24
Objective questions exam	2	14	16
Problem and/or exercise solving	0	5	5
Report of practices, practicum and external practices 0		12	12

<sup>\*</sup>The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
	Description
Lecturing	The professors of the course present the main theoretical contents related to security in mobile
	devices. Through this methodology competencies B14 and C14 get developed.
Practices through ICT	Students will complete guided and supervised practices. Through this methodology the
	competencies C14, D3, D8 and D9 get developed.

Methodologies	Description
Practices through ICT	The professors of the course will provide individual attention to the students during the course, solving their questions. Questions will be answered during the lab sessions or during tutorial sessions. Teachers will establish timetables for this purpose at the beginning of the course. This schedule will be published on the course website. The tutorial sessions could also be agreed with the teacher by appointment.
Lecturing	The professors of the course will provide individual attention to the students during the course, solving their questions. Questions will be answered during the master sessions or during tutorial sessions (also virtually). Teachers will establish timetables for this purpose at the beginning of the course. This schedule will be published on the course website. The tutorial sessions could also be agreed with the teacher by appointment.

	Description	Qualification	Training and Learning Results
Objective questions exam	Short-questions exam on the theoretical and practical contents reviewed throughout the course, both in the lectures and in the laboratory practices. This exam will be done at the end of the term.	40	
Problem and/or exercise solving	Problem-solving tests where students make use of the acquired knowledge, in both theoretical and practical sessions. This test will be carried out throughou the term, with partial deliveries on the dates indicated by teachers.		
Report of practices, practicum and external practices	Students will individually fill questionnaires and/or write practice reports, where the right development and understanding of the practice get probed.	35	

## Other comments on the Evaluation

#### **ORDINARY EXAM**

Following the guidelines of the degree, two evaluation systems will be offered to students attending this course: continuous assessment and global assessment.

Before the end of the fourth week of the course, students must declare if they opt for the continuous assessment or the global assessment. Those who opt for the continuous assessment system may not be listed as "not presented" if they make a delivery or an assessment test after the communication of their decision.

## **Continuous assessment system**

The final grade of the course will be equal to the weighted arithmetic average of the tests previously indicated. To pass the course the final grade must be greater or equal to five.

## Global assessment system

The final grade of the course will be equal to the weighted arithmetic average of the tests previously indicated. In this case, the problem-solving test (troubleshooting) will be done in a single test at the end of the term. To pass the course the final grade must be greater or equal to five.

#### **EXTRAORDINARY EXAM**

The assessment will consist in an objective questions exam, a problem-solving exam and delivering the practice reports of all the practices carried out throughout the course.

## **OTHER COMMENTS**

The obtained grades are only valid for the current academic year.

The use of any material during the tests will have to be explicitly authorized.

Plagiarism is regarded as serious dishonest behavior. If any form of plagiarism is detected in any of the tests or exams, the final grade will be FAIL (0), and the incident will be reported to the corresponding academic authorities for prosecution.

# Sources of information

# **Basic Bibliography**

Dominic Chell, The mobile application hacker's handbook, 1, Jonh Wiley & Sons, 2015

## **Complementary Bibliography**

Joshua Drake, Android hacker's handbook, 1, Jonh Wiley & Sons, 2014

Charles Miller, iOS hacker's handbook, 1, Jonh Wiley & Sons, 2013

Abhishek Dubey, Anmol Misra, Android security: attacks and defenses, 1, CRC Press, 2013

David Thiel, **iOS** application security: the definitive guide for hackers and developers, 1, No Starch Press, 2016
Nikolay Elenkov, Android security internals: an in-depth guide to Android's security architecture, 1, No Starch
Press, 2015

Andrew Hoog, iPhone and iOS forensics: investigation, analysis, and mobile security for Apple iPhone, iPad, and iOS devices, 1, Syngress/Elsevier, 2011

## Recommendations

## Other comments

It is recommended to have Linux OS and Java programming skills. It is also recommended, but not indispensable, to have Android programming skills.