

Goi Eskola Politeknikoa Escuela Polité

GENERAL INFORMATION Subject : Sub					ERCEPTION	[MRE102] P				
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covery (except the PBL). If a control point is not passed (less than 5), the retake is mandatory and the final grade	h. h. h. h.	manera <u>тн</u> 12 22 14 27 10	usiones de l NCH 12 h. 20 h. 20 h. 10 h. or individual	S ando sus conc CH doing 2 h. 14 h. 7 h. ANISMS and/or oral tests ng tests	RNING RESULT a robótica comunication sual material, etc. on stigations carried our examinations and/or s, of concepts and eams n teams MAKE-UP MECH Individual written a coding/programmi	Abilities SECONDARY LEA SECONDARY LEA A percepción para una aplicació rds, reports, presentations, audiovi ages/case studies/experimental inve ations, presenting defences, taking te classroom, in participatory classe subjects ng problems individually and/or in t /or laboratories, individually and/or in t /or laboratories, individually and/or w ercises, case studies, 10% exercises, case studies, 20% ion practical work, rojects, end of degree ges and problems is or individual 70%	TIVITIES TOTIVITIES Ind writing of rec xperience/challe /or in teams ts, giving presen the teacher in t ociated with the ercises and solv n workshops an SYSTEM completion of ex- ises, simulation projects, challen ad defence of ex- cal work, simula- tical work, term is s thesis, challen n and/or oral tea- ming tests	Knowledge or Col CA211 [!] Disc gumentada EARNING AC Development a projects/work e individually and Conducting tes conducting tes con		



Course: 2024 / 2025 - Course planning

work is not passed (less than 5), the retake is mandatory and the final grade will be a maximum of 5. In the activities carried out it is necessary to obtain a minimum mark of 4 to calculate the average mark of the learning result. Otherwise, the note of the learning result will be that of the suspended activity. The system will calculate the final grade with the RA, applying the percentages defined in IKOF.

CH - Class hours: 23 h. NCH - Non-class hours: 62 h. TH - Total hours: 85 h.

RA212 [!] Implementa un sistema de percepción para para evaluar y asumir la responsabilidad social implícit	navegaci ta en la pr	ón autónoma de un robot opuesta	móvil col	laborando de	manera activa	
LEARNING ACTIVITIES			СН	NCH	тн	
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams	s, audiovis nental inve	sual material, etc. on stigations carried out		10 h.	10 h.	-
Conducting tests, giving presentations, presenting defence checkpoints	es, taking	examinations and/or doing	2 h.	12 h.	14 h.	
Presentation by the teacher in the classroom, in participat procedures associated with the subjects	14 h.		14 h.			
Carrying out exercises and solving problems individually a	and/or in te	ams	12 h.	7 h.	19 h.	
Practical work in workshops and/or laboratories, individua	lly and/or i	n teams	4 h.	4 h.	8 h.	
EVALUATION SYSTEM	EVALUATION SYSTEM W MAKE-UP MECHANIS					
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	10%	Individual written and/or oral tests or individual coding/programming tests				-
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	20%					
Individual written and/or oral tests or individual coding/programming tests	70%					
Comments: All activities (control points, individual and greetc.) must have a minimum grade of 5 and an opportunity for recovery (except the PBL). If a control point is not passed (I a 5), ​​the retake is mandatory and the final will be the grade obtained in the retake. If an individual or g work is not passed (less than 5), the retake is mandatory arfinal grade will be a maximum of 5. In the activities carried on necessary to obtain a minimum mark of 4 to calculate the a mark of the learning result. Otherwise, the note of the learning will be that of the suspended activity. The system will calcul final grade with the RA, applying the percentages defined in						
CH - Class hours: 32 h. NCH - Non-class hours: 33 h. TH - Total hours: 65 h.						

CONTENTS

1. 3D triangulation scanners

2. Two-view geometry

3. Geometry of multiple views

4. Resolution of the Robot-World Hand-Eye calibration problem

Learning resources

LEARNING RESOURCES AND BIBLIOGRAPHY

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Specific Master Software Lecture notes

computer vision. Cambridge university press, 2004. Faugeras, Olivier. Three-dimensional computer vision: a geometric viewpoint. MIT press, 1993.