

Goi Eskola Politeknikoa Escuela Politécnica

				ALCULUS I				
				FORMATION				
Studies	ENGINEERING	PHYSICS APPLIED TO			Mathematics			
	INDUSTRY			,				
Semester	1	Course 1		Mention / Field of				
Character	BASIC TRAININ	G		specialisation				
	2022	Modality Face	-to-face	Language	ENGLISH			
Credits	6	Hours/week 0		Total hours	90 class hours hours	+ 60 non-c	lass hours	s = <u>150 tot</u>
_			PROFE	SEODE				
	ALONSO, MIKEL		FROFE	330K3				
AGUIRRE	ALONSO, MIKEL	PEOLIPED	DDEVI		<u>c</u> e			
	Subj		FREVI		GE Know	lodgo		
(N	-	s subjects required)		()	No previous kno	-	uired)	
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ARNING RESU	II TS			RESUETS		кс ѕк	AB	ECTS
		ems that may arise in en	gineering,	demonstrating the ab	bility to apply	x		5,4
owledge of: diff	erential and integ	ral calculus; numerical m	ethods; ar	nd optimization				0.00
		ry projects specific to the nan rights and fundament				x		0,32
pact of the prop	osed solutions or	n the SDGs - to acquire a	nd/or appl	y basic, advanced an	d /or			
ant-garde, dem h a high degree		lity to work in multidiscipl	inary team	is and/or undertake fu	urther studies			
0 0	,	leas and the arguments t	hat suppo	rt them in an orderly,	clear and	x		0,28
		ng, based on quality info	rmation, se	elf-made or obtained	from different			
urces, using inc	clusive and non-di	scriminatory language						
							Tatal	6
		AL 1111					Total:	•
RGF190 [!] Co lefinidos, un pi			ar de forn		objetivos y la p		n previam	nente
RGF190 [!] Co lefinidos, un pi	onocer y aplicar i	SECONDA las fases para desarroll	ar de forn	na guiada, con los o	objetivos y la p		n previam	nente
RGF190 [!] Co lefinidos, un pi	onocer y aplicar royecto de comp	SECONDA las fases para desarroll	ar de forn	na guiada, con los o	objetivos y la p		n previam niería. Re	nente
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RGF190 [!] Co lefinidos, un pro obre los con LEARNING AC Carrying out/re interdisciplinary EVALUATION Presentation ar computer pract laboratory prac project, master CH - Class hour CH - Non-clas H - Total hours RGF191 [!] Co alorando la pa lazos.	CTIVITIES solving projects/c y contexts, real ar SYSTEM and defence of exe ical work, simulat tical work, simulat tical work, term p 's thesis, challeng rs: 0 h. s hours: 4 h. s: 4 h. contribuir en la es inticipación de to CTIVITIES solving projects/c y contexts, real ar	SECONDA las fases para desarroll blejidad técnica acorde d hallenges/cases, etc. to p id/or simulated, individua rcises, case studies, ion practical work, rojects, end of degree jes and problems trategia de funcionamie das las personas y resj hallenges/cases, etc. to p	ar de form con los co provide sol lly and/or i w 100%	na guiada, con los o onocimientos de for lutions to problems in in teams <u>MAKE-UP MECH</u> quipo priorizando lo zándose de las tarea	bjetivos y la pr mación básica CH ANISMS (No mech No mech so objetivos co as individuales CH	de la inge NCH 4 h. hanisms) munes, for , así como	n previam niería. Re 1 4 4 4	ente flexiona H h.

Mondragon Unibertsitatea Goi Eskola Politeknikoa

Course: 2023 / 2024 - Course planning

uela Politécnica serior					
Self-assessment	25%		(No mech	anisms)	
Co-assessment	25%				
Observation (technical capacity, attitude and participation)	50%				
CH - Class hours: 0 h.					
ICH - Non-class hours: 4 h.					
H - Total hours: 4 h.					
RGF193 [!] Redacta una memoria de proyecto clara y acilitadas, y haciendo un uso correcto, inclusivo y no o	concisa u discrimina	utilizando las fuentes de atorio del lenguaje.	e informació	on y estructur	a de memoria
LEARNING ACTIVITIES			СН	NCH	тн
Carrying out/resolving projects/challenges/cases, etc. to p interdisciplinary contexts, real and/or simulated, individual			1	3 h.	3 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANI	SMS		
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	100%		(No mech	anisms)	
:H - Class hours: 0 h. ICH - Non-class hours: 3 h.					
RGF194 [!] Realiza una presentación oral y defensa de	el proyect	to clara y concisa, haci	endo uso co	prrecto, inclus	sivo y no
RGF194 [!] Realiza una presentación oral y defensa de	el proyect	to clara y concisa, haci	endo uso co	prrecto, inclus	sivo y no
RGF194 [!] Realiza una presentación oral y defensa de iscriminatorio del lenguaje. LEARNING ACTIVITIES			СН	NCH	тн
RGF194 [!] Realiza una presentación oral y defensa de iscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence			СН		
RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM			сн ng SMS	NCH 4 h.	тн
RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints	es, taking	examinations and/or doir	<u>сн</u> ng	NCH 4 h.	тн
Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual	es, taking	examinations and/or doir	сн ng SMS	NCH 4 h.	тн
RGF194 [!] Realiza una presentación oral y defensa de discriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. CH - Non-class hours: 4 h.	es, taking	examinations and/or doir	сн ng SMS	NCH 4 h.	тн
RGF194 [!] Realiza una presentación oral y defensa de discriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. ICH - Non-class hours: 4 h.	es, taking	examinations and/or doir	сн ng SMS	NCH 4 h.	тн
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RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. ICH - Non-class hours: 4 h. 'H - Total hours: 4 h.	es, taking <u>W</u> 100%	examinations and/or doir	сн ng SMS (No mech	NCH 4 h. anisms)	<i>TH</i> 4 h.
RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. ICH - Non-class hours: 4 h. H - Total hours: 4 h. RGF101 [!] Utiliza el cálculo diferencial para resolver [es, taking <u>W</u> 100%	examinations and/or doir	CH ng SMS (No mech	NCH 4 h. anisms)	TH 4 h.
RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. ICH - Non-class hours: 4 h. H - Total hours: 4 h. RGF101 [!] Utiliza el cálculo diferencial para resolver (LEARNING ACTIVITIES Development and writing of records, reports, presentations	es, taking <u>W</u> 100% brobleman s, audiovis	examinations and/or doir MAKE-UP MECHANIS s de optimización, cálco sual material, etc. on	сн ng SMS (No mech	NCH 4 h. anisms)	<i>TH</i> 4 h.
RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. ICH - Non-class hours: 4 h. 'H - Total hours: 4 h.	es, taking <u>w</u> 100% broblema s, audiovis nental inve	examinations and/or doir <u>MAKE-UP MECHANI</u> s de optimización, cálco sual material, etc. on estigations carried out	CH ng SMS (No mech ulo aproxim CH 2 h.	NCH 4 h. anisms) ado y propag	TH 4 h. 9 1 4 h. 1
RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. ICH - Non-class hours: 4 h. 'H - Total hours: 4 h. 'H - Total hours: 4 h. 'ELEARNING ACTIVITIES Development and writing of records, reports, presentations projects/work experience/challenges/case studies/experimindividually and/or in teams Conducting tests, giving presentations, presenting defence checkpoints	es, taking <u>w</u> 100% broblema s, audiovis iental inve es, taking	examinations and/or doir <u>MAKE-UP MECHANI</u> s de optimización, cálco sual material, etc. on estigations carried out	CH ng SMS (No mech ulo aproxim CH 2 h.	NCH 4 h. anisms) ado y propag NCH 6,5 h.	TH 4 h. 9 1 4 h. 1 1 1 2 1 1 1 2 1<
RGF194 [!] Realiza una presentación oral y defensa de liscriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. ICH - Non-class hours: 4 h. 'H - Total hours: 4 h. RGF101 [!] Utiliza el cálculo diferencial para resolver projects/work experience/challenges/case studies/experimindividually and/or in teams Conducting tests, giving presentations, presenting defence checkpoints	es, taking w 100% broblema s, audiovis iental inve es, taking is	examinations and/or doir <u>MAKE-UP MECHANIS</u> S de optimización, cálc sual material, etc. on estigations carried out examinations and/or doir	CH ng SMS (No mech ulo aproxim CH 2 h. ng 4 h.	NCH 4 h. anisms) ado y propag	TH 4 h. 9 1 4 h. 5 h.
RGF194 [!] Realiza una presentación oral y defensa de discriminatorio del lenguaje. LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests CH - Class hours: 0 h. NCH - Non-class hours: 4 h. CH - Total hours: 4 h. RGF101 [!] Utiliza el cálculo diferencial para resolver projects/work experience/challenges/case studies/experimindividually and/or in teams Conducting tests, giving presentations, presenting defence checkpoints	es, taking w 100% broblema s, audiovis iental inve es, taking bry classe	examinations and/or doir <u>MAKE-UP MECHANIS</u> S de optimización, cálc sual material, etc. on estigations carried out examinations and/or doir s, of concepts and	CH ng SMS (No mech ulo aproxim CH 2 h.	NCH 4 h. anisms) ado y propag NCH 6,5 h.	TH 4 h. 9 1 4 h. 1 1 1 2 1 1 1 2 1<

EVALUATION SYSTEM

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MAKE-UP MECHANISMS

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Course: 2023 / 2024 - Course planning

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	30%	(No mechanisms)
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	10%	
Individual written and/or oral tests or individual coding/programming tests	60%	
CH - Class hours: 44 h. NCH - Non-class hours: 23,5 h. TH - Total hours: 67,5 h.		

RGF102 [!] Utiliza el cálculo integral para resolver problemas físicos y geométricos

LEARNING ACTIVITIES	СН	NCH	тн		
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams		-	2 h.	6,5 h.	8,5 h.
Conducting tests, giving presentations, presenting defend checkpoints	ces, taking	examinations and/or doing	4 h.		4 h.
Computer simulation exercises, individually and/or in teal	ms			5 h.	5 h.
Presentation by the teacher in the classroom, in participa procedures associated with the subjects	tory classe	es, of concepts and	30 h.		30 h.
Carrying out exercises and solving problems individually	and/or in te	eams	10 h.	10 h.	20 h.
EVALUATION SYSTEM	w	MAKE-UP MECHANISN	IS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	30%		(No mecha	anisms)	
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	10%				
Individual written and/or oral tests or individual coding/programming tests	60%				
CH - Class hours: 46 h. NCH - Non-class hours: 21,5 h. TH - Total hours: 67,5 h.					

CONTENTS

- 1. Fundamental functions and operations
- 2. Limits and continuity of real valued functions
- 3. Differentiation and applications
- 4. Integration and applications

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

https://labur.eus/WdkTC

Bibliography

Subject notes Moodle Platform

[GFA001] CALCULUS I