



IDENTIFYING DATA

Final Year Dissertation

Subject	Final Year Dissertation			
Code	V02M098V01302			
Study programme	(*)Máster Universitario en Bioloxía Mariña			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	12	Mandatory	2nd	1st
Teaching language	Spanish Galician			
Department				
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General description	The Work of End of *Máster is a fundamental activity in the training of the students of the title, since it includes all the process of approach, development and defence of a professional project. This involves the staged of all the competitions pursued by the student his evaluation by diverse the groups of interest (educational, court, tutors, and entrepreneurs).			

Competencias

Code	
A1	(*)Posuír e comprender coñecementos que acheguen unha base ou oportunidade de ser orixinais no desenvolvemento e/ou aplicación de ideas, adoito nun contexto de investigación.
A2	(*)Que os estudantes saiban aplicar os coñecementos adquiridos e a súa capacidade de resolución de problemas en contornos novos ou pouco coñecidos dentro de contextos máis amplos (ou multidisciplinares) relacionados coa súa área de estudo.
A3	(*)Que os estudantes sexan capaces de integrar coñecementos e se enfrontar á complexidade de formular xuízos a partir dunha información que, sendo incompleta ou limitada, inclúa reflexións sobre as responsabilidades sociais e éticas vinculadas á aplicación dos seus coñecementos e xuízos.
A4	(*)Que os estudantes saiban comunicar as súas conclusións, e os coñecementos e razóns últimas que as sustentan, a públicos especializados e non especializados dun xeito claro e sen ambigüidades.
A5	(*)Que os estudantes posúan as habilidades de aprendizaxe que lles permitan continuar estudando dun xeito que terá que ser, en grande medida, autodirixido e autónomo.
B1	Utilización de criterios y métodos científicos en el planteamiento y resolución de problemas aplicando los conocimientos adquiridos
B2	Búsqueda, análisis e integración de información a partir de diferentes fuentes y capacidad para su interpretación y evaluación
B3	Aprendizaje de diversas técnicas y métodos analíticos tanto en el medio natural como en el laboratorio
B4	Desarrollo de habilidades en el manejo y tratamiento de herramientas, matemáticas, estadísticas e informáticas
B5	Desarrollo de la habilidad de elaboración, presentación y defensa de trabajos e informes técnicos
B6	Desarrollo de la curiosidad científica, de la iniciativa y la creatividad
B7	Entendimiento de la proyección social de la ciencia
C1	Conocimiento físico-químico del medio oceánico y costero
C2	Conocimiento de la diversidad de organismos marinos y sus estrategias adaptativas
C3	Conocimiento y comprensión de las interacciones de los organismos marinos y los ecosistemas marinos y costeros
C4	Conocimiento y búsqueda del potencial interés económico y biotecnológico de los organismos marinos
C5	Conocimiento de los principios de explotación y sostenibilidad del medio marino y planificación y supervisión de su gestión
C6	Conocimiento, identificación y evaluación de la calidad ambiental del medio marino y de la legislación vigente. Dirección de consultorías ambientales
C7	Catalogación, evaluación, conservación, restauración y gestión de áreas marinas y litorales protegidos. Elaboración, asesoramiento legal y ejecución de planes de ordenación del litoral

- C8 Conocimiento y manejo de la metodología de investigación, de las técnicas muestreo e instrumentales y de análisis de datos aplicados al medio marino
- C9 Conocimientos de instituciones, organismos y legislación relacionados con el medio marino y sus recursos empresariales y económicos
- C10 Inspección y asesoramiento técnico en la evaluación, explotación y gestión de pesquerías, extracción de recursos e instalaciones de acuicultura
- C11 Estudios de dinámica poblacional, mejora genética y selección de stocks en pesquerías, acuicultura y programas de repoblación
- C12 Control de calidad y seguridad de alimentos y de productos de transformación y biotecnológicos de origen marino
- C13 Divulgación de conocimientos de la biología y el medio marinos: programas de formación y docencia; planificación y dirección de acuarios, museos, centros de interpretación ambiental, parques naturales y espacios naturales protegidos
- C14 Elaboración, discusión, interpretación, asesoramiento y peritaje de informes científico-técnicos, éticos, legales y socioeconómicos relacionados con el ámbito marino y pesquero
- C15 Gestión de actividades de ocio y turismo en el medio marino y litoral
- D1 Desarrollo de las capacidades comprensivas, de análisis y síntesis
- D2 Desarrollo de la capacidad de razonamiento crítico y autocrítico
- D3 Desarrollo de las capacidades de trabajo en equipo, enriquecidas por la pluridisciplinariedad
- D4 Desarrollo de la capacidad para actualizar el conocimiento de forma autónoma
- D5 Desarrollo de las habilidades de comunicación y discusión de planteamientos y resultados
- D6 Desarrollo de las capacidades de reflexión sobre responsabilidades sociales y éticas
- D7 Desarrollo de habilidades para la divulgación de ideas en contextos tanto académicos como no especializados
- D8 Desarrollo de la habilidad para hablar bien en público

Learning outcomes

Expected results from this subject	Training and Learning Results
Capacity of synthesis and skills in the communication and critical discussion of ideas. Quality of the works or scientific reports. Acquisition of knowledges and methodologies advanced in a field of application or of biological investigation. Autonomy in the preparation of new hypothesis, in the interpretation of results. Reflection on the limits of the technical employees, of the possible artefacts and of the need of standardisation of the technicians.	A1 A2 A3 A4 A5 B1 B2 B3 B4 B5 B6 B7 C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 D1 D2 D3 D4 D5 D6 D7 D8

Contents

Topic

The Work of End of Máster is a fundamental activity in the training of the students, since it includes all the processes of approach, development and defence to a professional project. Its content include the planning of tasks to resolve a work or project, the realisation of said tasks and finally the concretion of the results in an explanatory memory of the problem posed, the procedure followed for his study or preparation, the interpretation of the results or of the design implemented and finally the results shown in the final report.

All the contents that contemplate the educations of the title, related with the management and exploitation of the marine environment and its resources.

Planning

	Class hours	Hours outside the classroom	Total hours
Project based learning	149.5	149.5	299
Presentation	1	0	1

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

Methodologies

	Description
Project based learning	The methodology of the work of End of Master will change in function of the project posed i.e. more professional or more academic-scientific. Although conceptually they are similar, the methodology and the form to structure the information, can vary significantly between students, centres and interest and the supervisors. The methodology will be preferably the one of the Scientific Method, without prejudice that it can consist in a technical work, but yet will be methodologically rigorous in design, execution and presentation. The tasks to realise by the student will vary in function of the project realised and will reflect in the memory of the Work of End of Máster, that has to collect evidence of justification, methodology, results, discussion and comparison with other projects with similar results.

Personalized assistance

Methodologies	Description
Project based learning	Each student will have at least an Internal Tutor of the Máster to direct the Report off Máster's End, that will have academic responsibilities (selection of centres, academic orientation, treatment of data, etc.) and which can be co-directed by a External Tutor, upon agreement subscribed before the initiation of the works, whenever the work is realised out of the university centres. The ultimate orientation of the formal presentation of the memory of the Master will be responsibility of the internal tutor that necessarily will be Doctor, without prejudice of an equivalent maximum implication of the external tutor, if applicable. The student will be able to resort to the orientation of his tutor of the PAT and of the educational staff of the title, to resolve specific elements of the development of his TFM, p.ej. Preparation of mathematical models.

Assessment

	Description	Qualification	Training and Learning Results
Project based learning	The interuniversity academic court will consider the qualification awarded to the student by the Tutor-s of the TFM, according to the available reports, the evaluation sheet of the student and the degree of professional training or scientific excellence reached by the student according to the evaluation by peers developed by his supervisors.	50	A1 B1 C1 D1 A2 B2 C2 D2 A3 B3 C3 D3 A4 B4 C4 D4 A5 B5 C5 D5 B6 C6 D6 B7 C7 D7 C8 D8 C9 C10 C11 C12 C13 C14 C15

Presentation	The interuniversity academic court will value the quality of the contents of the memory *TFM and his organisation and written presentation, the clarity in the exhibition and the capacity of defence upon questions raised by the interuniversitary court.	50	A1 A2 A3 A4 A5	B1 B2 B3 B4 B5	C1 C2 C3 C4 C5	D1 D2 D3 D4 D5
				B6 B7	C6 C7 C8 C9 C10 C11 C12 C13 C14 C15	D6 D7 D8

Other comments on the Evaluation

The Work End of *Máster will be necessarily the last matter *cursada in this degree, not being able to defend before the *superación of the rest of matters, and will give place to the application of the title by the student. They will be able to present and defend simultaneously the *PE and the *TFM, in the announcements of February or of July, both equivalent to effects qualifiers, or will be able to effect the presentation and defence of the *PE in the announcement of February and the *TFM in the one of July, but no to the reverse.

Sources of information

Basic Bibliography

Complementary Bibliography

Recommendations

Other comments

The TFM is the conclusion of the formative activities and rofesionalizantion awarded by the master, and his concretion and evaluation is a right and a duty of each student. Its preparation can be generated after data or processes developed originally by the student in the centre of destination of the external practices, in companies or insititutions, although they are not synonymous at all, as the PE include the learning of a series of competences very distinct to the ones pursued and evaluated in the TFM. If by reasons of confidentiality there were not possible to ellaborate a TFM report from results obtained during the external practices, the title will ensure the preparation of the memory TFM in a thematic affine to the máster, for example, in a Research Department from the SUG universities involved.

Contingency plan

Description

=== EXCEPTIONAL PLANNING ===

Given the uncertain and unpredictable evolution of the health alert caused by COVID-19, the University of Vigo establishes an extraordinary planning that will be activated when the administrations and the institution itself determine it, considering safety, health and responsibility criteria both in distance and blended learning. These already planned measures guarantee, at the required time, the development of teaching in a more agile and effective way, as it is known in advance (or well in advance) by the students and teachers through the standardized tool.

=== ADAPTATION OF THE METHODOLOGIES ===

Elaboration:

In the case of non-presence, the student has the possibility of changing the proposed TFM, adapting it to a situation of non-presence.

Depending on the date on which this non-presence is determined, those works that had an experimental basis and whose practical development had not yet been carried out or was not yet sufficient to complete the proposed objectives should make use of this possibility. In these cases, it is recommended that the work be oriented towards a more bibliographic field or a type of theoretical project with possible applicability in the field of marine biology.

In the case of works that, although having an experimental approach, are already completed or very advanced, it is recommended to maintain the initial project, completing it, if necessary, with a more bibliographic content.

The rules and instructions already established in the teaching guide for the preparation of the report and the presentation of the TFM before a panel are maintained.

Tutorials:

During the suspension of activities, tutoring is even more necessary and precise, and tutors can use virtual classrooms, e-mail and any other means that may help them to contact each other from a distance.

Presentation and evaluation:

If the presentation and defence of the TFM is in non-attendance mode, the process will be carried out using video conferencing through the virtual classrooms with the appropriate measures to ensure the reliability and objectivity of the test. In any case, the evaluation percentages already established in the teaching guide of the subject will be maintained.
