ANX-PR/CL/001-01

LEARNING GUIDE

SUBJECT

203000036 - Proffesional Development And Technology Transfer

DEGREE PROGRAMME

20BC - Master Universitario en Biologia Computacional

ACADEMIC YEAR & SEMESTER

2020/21 - Semester 2

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1. Description

1.1. Subject details

Name of the subject	203000036 - Proffesional Development And Technology Transfer
No of credits	3 ECTS
Type	Optional
Academic year ot the programme	First year
Semester of tuition	Semester 2
Tuition period	February-June
Tuition languages	English
Degree programme	20BC - Master Universitario en Biologia Computacional
Centre	20 - E.T.S. de Ingenieria Agronomica, Alimentaria y de Biosistemas
Academic year	2020-21

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Antonio Molina Fernandez (Subject coordinator)	Lab234 del CBGP	antonio.molina@upm.es	M - 12:00 - 14:00 Th - 12:00 - 14:00
Javier Bajo Perez	Dep IA ETSII	javier.bajo@upm.es	M - 12:00 - 14:00 W - 12:00 - 14:00

* The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty member in charge.

3. Prior knowledge recommended to take the subject

3.1. Recommended (passed) subjects

The subject - recommended (passed), are not defined.

3.2. Other recommended learning outcomes

- No son necesarios conocimientos previos

4. Skills and learning outcomes *

4.1. Skills to be learned

CE06 - Identificar las necesidades bioinformáticas de los centros de investigación y las empresas del sector de la biotecnología y la biomedicina.

CG06 - Que los estudiantes posean las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo para adaptarse a la rápida evolución prevista en el área de la Biología Computacional.

CT02 - Capacidad para aplicar el método científico para la resolución de problemas de forma efectiva y creativa.

CT03 - Tener compromiso bioético y profesional y respeto por la sostenibilidad ambiental.

4.2. Learning outcomes

RA54 - Adquirir conocimientos sobre el análisis y publicación de Big Data y la ética asociada

RA55 - Adquirir habilidades profesionales de comunicación escrita y oral

RA53 - Adquirir conocimiento sobre la inversión en I+D+i, incluyendo aspectos relacionados con solicitud y gestión de proyectos

* The Learning Guides should reflect the Skills and Learning Outcomes in the same way as indicated in the Degree Verification Memory. For this reason, they have not been translated into English and appear in Spanish.

5. Brief description of the subject and syllabus

5.1. Brief description of the subject

The aim of this subject is to provide to the students knowledge about the Computational Biology/Big Data profesional market and to training the students in the skills required for their professional carrier development.

Among the themes to be studied in this topic are the following:

Professional Career and Career track skills: Preparation of Professional profile and CV, and development of professional skills.

R&D projects: Writing, preparation and application of projects for competitive calls.

Management of R&D projects (type of projects, national and international calls, and consortium projects).

Scientific writing and public presentations of projects and results.

Profesional ethics: Bioethics, analysis and publication of Big Data and personal (genomics data).

5.2. Syllabus

1. Professional Career and Career track skills: Preparation of Professional Profile and CV and development of professional skills.

2. R&D Project: Writing and preparation of grants for application to competitive calls

3. Management of R&D projects

4. Public presentations of projects and innovations

5. Profesional Professional ethics: Bioethics, analysis and publication of Big Data and personal (genomics data).

6. Schedule

6.1. Subject schedule*

Week	Face-to-face classroom activities	Face-to-face laboratory activities	Distant / On-line	Assessment activities
1	**Course Introduction and students presentation** Duration: 02:00			
2			**Topic 1. Professional Career and Career track skills: Preparation of Professional profile and CV, and development of professional skills.** Duration: 02:00	
3			**Topic 1. Professional Career and Career track skills: Preparation of Professional profile and CV, and development of professional skills.** Duration: 02:00	
4	**Topic 1. Professional Development Career and Career Skills: Presentation of Professional profile** Duration: 01:45			**Professional Profile and CV preparation** Continuous assessment Presential Duration: 15:00
5			**Topic 2. R&D projects: Writing, preparation and application of projects for competitive calls** Duration: 02:00	
6			**Topic 2. R&D projects: Writing, preparation and application of projects for competitive calls** Duration: 02:00	
7			**Seminars of Invited Speakers (Professional Carrier): Head of HR on Career track skills and HR selection** Duration: 01:30	**Topic 2. Writing, preparation and application of projects for competitive calls: Cooperative Exercise** Continuous assessment Presential Duration: 30:00
8	**Topic 3. Scientific writing and public presentations of projects and results** Duration: 01:00		**Topic 3. Management of R&D projects (type of projects, national and international calls, and consortium projects)** Duration: 00:45	**Class participation** Continuous assessment Presential Duration: 00:15

9	**Topic 4. Market: R&D Centers and enterprise of the Computational area: Analysisng the market and the needs in Computational Biology** Duration: 02:00			
10	**Topic 4. Market: R&D Centers and enterprise of the Computational area: Analysisng the market and the needs in Computational Biology** Duration: 02:00			
11	**Innovation Hubs on Computational Biology: presentation** Duration: 01:00		**Topic 5. Seminar of innovation: Actua UPM program** Duration: 01:00	**Innovation Hubs on Computational Biology: presentation** Continuous assessment Presential Duration: 00:00
12	**Topic 6. Profesional ethics: Bioethics, analysis and publication of Big Data and personal (genomics data).** Duration: 02:00			
13			**Topic 6. Seminar on personal data regulation and ethics** Duration: 02:00	
14	**Innovation Presentation Project of Students:** Duration: 02:00			
15	**Innovation Presentation Project of Students:** Duration: 02:00			
16	**Innovation Presentation Project of Students** Duration: 01:30			**Innovation Project Presentation** Continuous assessment Presential Duration: 30:00
17				**Evaluación Continua** Final examination Presential Duration: 02:00

Depending on the programme study plan, total values will be calculated according to the ECTS credit unit as 26/27 hours of student face-to-face contact and independent study time.

* The schedule is based on an a priori planning of the subject; it might be modified during the academic year, especially considering the COVID19 evolution.

7. Activities and assessment criteria

7.1. Assessment activities

7.1.1. Continuous assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
4	Professional Profile and CV preparation		Face-to-face	15:00	25%	5 / 10	CE06 CG06
7	Topic 2. Writing, preparation and application of projects for competitive calls: Cooperative Exercise		Face-to-face	30:00	20%	5 / 10	CT02 CG06
8	Class participation		Face-to-face	00:15	10%	4 / 10	CG06
11	Innovation Hubs on Computational Biology: presentation		Face-to-face	00:00	15%	5 / 10	CE06
16	Innovation Project Presentation		Face-to-face	30:00	30%	5 / 10	CE06 CT02 CT03

7.1.2. Final examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
17	Evaluación Continua		Face-to-face	02:00	100%	5 / 10	CG06 CT02 CT03 CE06

7.1.3. Referred (re-sit) examination

Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
Examen		Face-to-face	01:00	100%	5 / 10	CE06 CG06 CT02 CT03

7.2. Assessment criteria

The participation in class will be also considered for evaluation.

8. Teaching resources

8.1. Teaching resources for the subject

Name	Type	Notes
Moodle	Web resource	Presentations in the Subject web page in Moodle