# ANX-PR/CL/001-01

# LEARNING GUIDE

## SUBJECT

**105000134 - English For Professional And Academic Communication**

## DEGREE PROGRAMME

10ML - Grado En Matematicas E Informática

## ACADEMIC YEAR & SEMESTER

2022/23 - Semester 2

# Index

## Learning guide

# 1. Description

## 1.1. Subject details

| | |
|---|---|
| **Name of the subject** | 105000134 - English For Professional And Academic Communication |
| **No of credits** | 6 ECTS |
| **Type** | Compulsory |
| **Academic year ot the programme** | Fourth year |
| **Semester of tuition** | Semester 7 Semester 8 |
| **Tuition period** | February-June |
| **Tuition languages** | English |
| **Degree programme** | 10ML - Grado en Matematicas e Informática |
| **Centre** | 10 - Escuela Tecnica Superior De Ingenieros Informaticos |
| **Academic year** | 2022-23 |

# 2. Faculty

## 2.1. Faculty members with subject teaching role

| Name and surname | Office/Room | Email | Tutoring hours * |
|---|---|---|---|
| Hanane Benali Taouis | 6004 | hanane.benali@upm.es | Tu - 11:00 - 15:00<br>Th - 13:00 - 15:00<br>Appointments to be booked by email in advance. Thank you. |
| Ruth Botran Del Rio | 6004 | r.brio@upm.es | M - 16:00 - 17:00<br>M - 19:00 - 21:00<br>Tu - 17:00 - 20:00<br>Appointments to be booked by email in |

| | | | |
|---|---|---|---|
| | | | advance. Thank you. |
| Jelena Bobkina | 6004 | jelena.bobkina@upm.es | Tu - 17:00 - 18:00<br>Th - 10:00 - 15:00<br>Appointments to be booked by email in advance. Thank you. |
| Elena Montiel Ponsoda (Subject coordinator) | 6004 | elena.montiel@upm.es | Tu - 12:00 - 15:00<br>Th - 12:00 - 15:00<br>Appointments to be booked by email in advance. Thank you. |

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

## 3. Prior knowledge required to take the subject

### 3.1. Prerequisite (passed) subjects

-

-

-

### 3.2. Other required learning outcomes

The subject - other required learning outcomes, are not defined.

# 4. Prior knowledge recommended to take the subject

## 4.1. Recommended (passed) subjects

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

## 4.2. Other recommended learning outcomes

- From all language certificates acknowledging B2 level, we strongly recommend against APTIS.

- B2 certification is required (SAI), according to the terms established by the Universidad Politécnica de Madrid

# 5. Skills and learning outcomes *

## 5.1. Skills to be learned

CE43 - Capacidad para trabajar de forma efectiva como individuo, organizando y planificando su propio trabajo, de forma independiente o como miembro de un equipo.

CE44 - Ser capaz de aclarar la relevancia y utilidad de la teoría y las habilidades aprendidas en el contexto académico sobre los acontecimientos del mundo real.

CG02 - Capacidad para el aprendizaje autónomo y la actualización de conocimientos, y reconocimiento de su necesidad en las áreas de la matemática y la informática.

CG03 - Saber trabajar en situaciones carentes de información y bajo presión, teniendo nuevas ideas, siendo creativo.

CG04 - Capacidad de gestión de la información.

CG05 - Capacidad de abstracción, análisis y síntesis.

CG06 - Capacidad para trabajar dentro de un equipo, organizando, planificando, tomando decisiones, negociando y resolviendo conflictos, relacionándose, y criticando y haciendo autocrítica.

CG08 - Capacidad de comunicarse de forma efectiva con los compañeros, usuarios (potenciales) y el público en general acerca de cuestiones reales y problemas relacionados con la especialización elegida.

CG12 - Capacidad para trabajar en un contexto internacional, comunicándose en lengua inglesa y adaptándose a un nuevo entorno.

### 5.2. Learning outcomes

RA99 - Recopilar y sintetizar coherentemente información de fuentes bibliográficas.

RA100 - Comunicarse de forma eficaz tanto formal como informalmente bien en grupo o de forma individual, mediante el uso de las TIC.

RA101 - Exponer temas profesionales de modo claro, preciso y coherente, teniendo en cuenta el tipo de audiencia

RA98 - Redactar distintos tipos de textos según las convenciones propias de cada tipo textual.

* 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.

## 6. Brief description of the subject and syllabus

### 6.1. Brief description of the subject

The main objective of this course is to make students aware of the importance of effective communication skills in academic or professional settings, with a strong focus on contemporary issues related to computer engineering, and to help them develop those skills to communicate effectively in both settings.

The course will be organized around science and technology related topics, and 2 assignments (written Research Proposal -RP- and Oral Presentation -OP) that they will have to complete to pass the course.

It is expected that students are able to:

1. identify and describe major economic, environmental, and health problems for which a computer engineering

solution could have a major impact on society;

2. identify different types of texts in their area of knowledge, as well as the register and tone typically used in scientific and technical texts;

3. read and summarise relevant materials about contemporary issues for which computer engineering may play a role, be it orally or in writing;

4. write coherent and cohesive texts that have a clear focus on contemporary issues, structuring, paragraphing, punctuation, etc., and that are correct from a grammatical and spelling viewpoint;

5. use correctly references and citations from relevant materials about contemporary issues for which computer engineering may play a role;

6. deliver a written report about an original research idea (RP) that addresses contemporary issues relevant for computer engineering;

7. develop listening comprehension skills in their area of knowledge;

8. use and explain figures and diagrams in a proper manner (OP);

9. deliver a technical and scientific presentation about an original research idea that addresses contemporary issues relevant for computer engineering (OP)

As for the teaching methodology, we will follow a student-centered approach to learning in which the lecturer's role is to motivate students and facilitate their learning and overall comprehension of concepts and tasks. Student learning is assessed through both formal and informal forms of evaluation, including group projects, student and class participation. Teaching and assessment are connected, and student learning is continuously measured during teacher instruction.

Regarding teaching strategies, direct instruction will be combined with inquiry-based learning and event cooperative learning at some stages. Inquiry-based learning will be the predominant teaching method. This method focuses on student investigation and hand-on learning. Students will "learn by doing" as much as possible, both in the case of writing assignments as well as when delivering oral presentations. Students will also learn from constructive feedback on their work and on the work of others, and will also get feedback from their peers.

## 6.2. Syllabus

1. What is Professional and Academic Communication? - Introduction to the course
   1.1. 21st Century Skills in the context of EPAC
   1.2. Description of assignments: Research Proposals and Oral Presentations
2. Part 1 - Formulating a research idea
   2.1. Pentachart (I) - Background and Motivation
   2.2. Pentachart (II) - Innovation and Description
   2.3. Pentachart (III) - Impact and Path Forward
3. Part 2 - Developing a research idea
   3.1. Research Proposal (I): Introduction
   3.2. Research Proposal (II): Organization & Structure
   3.3. Research Proposal (III): Academic Writing
4. Part 3 - Presenting a research idea
   4.1. Effective Oral Presentations (I): Introduction
   4.2. Effective Oral Presentations (II): Organization and Structure
   4.3. Effective Oral Presentations (III): Format and Style
5. Student's Oral Presentations
6. Student's Research Proposals

# 7. Schedule

## 7.1. Subject schedule*

| Week | Classroom activities | Laboratory activities | Distant / On-line | Assessment activities |
|---|---|---|---|---|
| 1 | **Introduction to the course (I)**<br>Duration: 02:00 | | | |
| 2 | **Pentachart (I) - Background and Motivation**<br>Duration: 02:00 | | | |
| 3 | **Pentachart (II) - Innovation and Description**<br>Duration: 02:00 | | | |
| 4 | **Pentachart (III) - Impact and Path Forward**<br>Duration: 02:00 | | | |
| 5 | **Research Proposal (I): Introduction**<br>Duration: 02:00 | | | |
| 6 | **Research Proposal (II): Organization and Structure**<br>Duration: 02:00 | | | |
| 7 | **Research Proposal (III): Academic Writing**<br>Duration: 02:00 | | | |
| 8 | **Effective Oral Presentations (I): Introduction**<br>Duration: 02:00 | | | |
| 9 | **Effective Oral Presentations (II) - Organization and Structure**<br>Duration: 02:00 | | | |
| 10 | **Effective Oral Presentations (III): Format and Style**<br>Duration: 02:00 | | | |
| 11 | **Academic writing - overview**<br>Duration: 02:00 | | | **Written assignments: Research Proposal, 25 hours for preparation and group work (as part of the progressive examination)**<br><br>Continuous assessment<br>Presential<br>Duration: 25:00 |

| | | | | |
|---|---|---|---|---|
| 12 | **Written exam**<br>Duration: 02:00<br><br>**Student's Oral Presentations**<br>Duration: 02:00 | | | **Written exam (as part of the progressive examination)**<br><br>Continuous assessment<br>Presential<br>Duration: 02:00<br><br>**Oral presentations: 15 hours for preparation and 10 minutes for delivery in 3-member groups, and 7 minutes for delivery in 2-member groups (as part of the progressive examination)**<br><br>Continuous assessment<br>Presential<br>Duration: 15:00 |
| 13 | **Student's Oral Presentations**<br>Duration: 02:00 | | | |
| 14 | **Student's Oral Presentations**<br>Duration: 02:00 | | | |
| 15 | **Student's Oral Presentations**<br>Duration: 02:00 | | | **Listening and Reading tasks (as part of the progressive examination)**<br><br>Continuous assessment<br>Presential<br>Duration: 04:00<br><br>**Attendance and active participation in class (as part of the progressive examination and "no recuperable")**<br><br>Continuous assessment<br>Presential<br>Duration: 30:00 |
| 16 | | | | |
| 17 | | | | **Written exam (as part of the global examination)**<br><br>Final examination<br>Presential<br>Duration: 02:00<br><br>**Written assignments: Research Proposal, 25 hours for preparation and group work (as part of the global examination)**<br><br>Final examination<br>Not Presential<br>Duration: 25:00<br><br>**Oral presentation in video format: 7 minutes for delivery in 2-member groups (as part of the global examination)**<br><br>Final examination<br>Presential<br>Duration: 15:00<br><br>**Listening and Reading Tasks Overview** |

| | | | | |
|---|---|---|---|---|
| | | | | Final examination<br>Not Presential<br>Duration: 04:00 |

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.

# 8. Activities and assessment criteria

## 8.1. Assessment activities

### 8.1.1. Assessment

| Week | Description | Modality | Type | Duration | Weight | Minimum grade | Evaluated skills |
|---|---|---|---|---|---|---|---|
| 11 | Written assignments: Research Proposal, 25 hours for preparation and group work (as part of the progressive examination) | | Face-to-face | 25:00 | 20% | 5 / 10 | CG02<br>CG04<br>CE43<br>CE44<br>CG05<br>CG06<br>CG08 |
| 12 | Written exam (as part of the progressive examination) | | Face-to-face | 02:00 | 45% | 5 / 10 | CG05<br>CG04<br>CE44 |
| 12 | Oral presentations: 15 hours for preparation and 10 minutes for delivery in 3-member groups, and 7 minutes for delivery in 2-member groups (as part of the progressive examination) | | Face-to-face | 15:00 | 20% | 5 / 10 | CE44<br>CG05<br>CG06<br>CG03<br>CG08<br>CG12 |
| 15 | Listening and Reading tasks (as part of the progressive examination) | | Face-to-face | 04:00 | 5% | 5 / 10 | CG02<br>CG04<br>CE43<br>CG05 |
| 15 | Attendance and active participation in class (as part of the progressive examination and "no recuperable") | | Face-to-face | 30:00 | 10% | 5 / 10 | CE43<br>CG06<br>CG08<br>CG12 |

### 8.1.2. Global examination

| Week | Description | Modality | Type | Duration | Weight | Minimum grade | Evaluated skills |
|---|---|---|---|---|---|---|---|
| 17 | Written exam (as part of the global examination) | | Face-to-face | 02:00 | 45% | 5 / 10 | CG04<br>CE44<br>CG05 |
| 17 | Written assignments: Research Proposal, 25 hours for preparation and group work (as part of the global examination) | | No Presential | 25:00 | 20% | 5 / 10 | CG02<br>CG04<br>CE43<br>CE44<br>CG05<br>CG06<br>CG08 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Oral presentation in video format: 7 minutes for delivery in 2-member groups (as part of the global examination) | | Face-to-face | 15:00 | 20% | 5 / 10 | CE44<br>CG05<br>CG06<br>CG03<br>CG08<br>CG12 |
| 17 | Listening and Reading Tasks Overview | | No Presential | 04:00 | 5% | 5 / 10 | CG02<br>CG04<br>CE43<br>CG05 |

### 8.1.3. Referred (re-sit) examination

No se ha definido la evaluación extraordinaria.

## 8.2. Assessment criteria

Students will be assessed according to the **progressive assessment option tasks** specified below:

1. Written assignments (Research Proposal) in groups of 2 to 3 students (20%)

2. Oral Presentation in groups of 2 to 3 students (20%) - **same topic as the one chosen for the research proposal**. Overall duration: 7 min. for 2-member groups and 10 min for 3-member groups.

3. Reading and listening comprehension tasks to be submitted according to the deadlines specified in Moodle (5%) - individual task

4. Attendance and active participation in class (10%) - ***PORCENTAJE NO RECUPERABLE EN LA EVALUACIÓN GLOBAL***

5. Written exam (45%) - individual task

Should students fail any of the tasks described above, they will have the option to retake the above-mentioned tasks (with the exception of the ones marked as NO RECUPERABLE) as part of the **global assessment option,** as follows:

1. Written assignments (Research Proposal) in groups of 2 to 3 students (20%)

2. Oral Presentation in groups of 2 to 3 students (20%) - **same topic as the one cho proposal**. **Duration: 7 min. Format: video recording.**

3. Reading and listening comprehension tasks to be submitted according to the deadlines specified in Moodle (5%) - individual task

4. Written exam (45%) - individual task

**IMPORTANT NOTE**: The final score will be the result of averaging out the sum of the marks obtained in the compulsory assignments specified above, only if they are above the minimum score specified in the assessment table.

If a student fails only the exam and passes the assignments (research proposal and oral presentation), he or she will only have to take the exam in the extraordinary call. The marks of the assignments will be kept only during that academic year.

If a student fails one or both of the two assignments but passes the exam, both assignments will need to be re-submitted (but the exam will not need to be retaken). The mark of the exam will be kept only during that academic year.

In the **research proposal assignment**, students will be asked to identify a research gap or problem, and analyze it from a research perspective accounting for the following sections:

a) Motivation and Background (state-of-the-art) for the research

b) Proposed Innovation

c) Description of the Idea/Project

d) Potential Impact and Limitations of the Research

e) Method or Work Plan (path forward) and future lines s

f) List of References - minimum 5 academic references

The extension of the proposal will be announced in class at the introduction of the course. A standard font should be used, preferably 12-point Times New Roman or Arial, with 1,5 line spacing.

The **oral presentation** will be evaluated according to the following criteria (amongst others): appropriateness to the audience; use of attention-getting devices; structure and cohesion; sufficient variation in tone and enthusiasm; the fluent pattern of speech; appropriate use of time connectors and signposts; use of specialized vocabulary and definitions of key terms unfamiliar to the audience; correct use of grammar and complex expressions; appropriate pace; eye contact and adequate use of body language; effective use of visual aids; accurate timing, interaction with the audience; correct pronunciation and intonation.

A **Power Point presentation** will be required to support the oral presentation and will need to be submitted alongside the research proposal (a specific task in Moodle will be created to this effect and timely notified to students).

Scoring rubrics for oral presentations collecting these and other important assessment criteria to be taken into account in the evaluation process will be made available to the students.

2-member group presentations should take 7 min. in total; 3-member group presentations should take 10 min. in total.

**Note that students holding a B1 certificate must present a B2 certificate in "Secretaria" no later than 5 working days before the exam**.

# 9. Teaching resources

## 9.1. Teaching resources for the subject

| Name | Type | Notes |
|---|---|---|
| See Moodle of the course | Web resource | UPDATED INFORMATION AND RESOURCES IN THE MOODLE PLATFORM OF THE COURSE. |
| 21st Century Reading. Creative Thinking and Reading with TEDTalks. | Bibliography | National Geographic Learning / CENGAGE Learnig |
| 21st Century Communication. Listening, Speaking, and Critical Thinking. | Bibliography | National Geographic Learning / CENGAGE Learnig |

# 10. Other information

## 10.1. Other information about the subject

Communication with your tutors will be held by email and/or virtual meetings by appointment, preferably within the time slot of the official office hours (Tuesdays or Thursdays).

The platforms to be used for online sessions, office hours, or any other type of meetings will be Teams and Zoom.

This course strongly contributes to 2030 Agenda for Sustainable Development Goals (SDG) in the following ways:

- Goal number 4. **Quality education**, in the sense of encouraging students lifelong learning using foreign languages;
- Goal number 5. **Gender equality**, by promoting class debates around prominent female researchers, scientists and engineers;
- Goal number 9. **Industry, innovation and infrastructure**, by encouraging students to research on technological advances that may have an impact on society .

- Goal number 6. Clean water and sanitation; Goal number 7. Affordable and clean energy; Goal number 8. Decent work and economic growth; Goal number 11. Sustainable cities and communities; Goal number 12. Responsible consumption and production; Goal number 13. Climate action; by encouranging students to read texts, watch videos and discuss on topics related to the mentioned goals and to think on how Computer engineering may contribute to these objectives.