Didactics of Technology

Master in Bilingual Education

TEACHING GUIDE

1. COMPETENCES AND LEARNING OUTCOMES

1.1. Competences

Basic competences
CB6 To possess and understand knowledge that provides the basis and opportunity to be original in the development and application of ideas, often within a research context.
CB7 That students know how to apply the knowledge acquired and the capacity for problem solving in new and lesser-known environments within the broadest (or multi-disciplinary context) in relation to their area of study.
CB8 That students are capable of integrating knowledge and facing the complexity of opinion forming starting from information that, being incomplete or limited, includes reflections on the social and ethical responsibilities that are linked to the application of opinions and judgements.
CB9 That students know how to communicate their conclusions, and the knowledge and reasoning that supports them to a specialist and non-specialist public in a clear and unambiguous manner.
CB10 That students possess the learning ability that allows them to continue studying in a way that will be largely self-directed or autonomous.

General competences
CG2 To know about the specific problems of foreign language teaching in both linguistic and cultural terms in a bilingual environment.
CG3 To apply the knowledge acquired in decision making in relation to the different factors involved in the teaching and learning of foreign languages.
CG5 To be capable of transmitting social and cultural values in accordance with the current multilingual and multicultural reality.
CG7 To acquire basic theoretical knowledge designed as the foundation of an informed teaching practice in an environment of bilingual education.
CG8 To know the legislation and regulations with reference to the ordination and organisation of bilingual centres.

Specific competencies
CE1 To design integrated syllabuses combined with linguistic content within their area of knowledge to create English/Spanish bilingual teaching programmes.
CE2 To create and adapt didactic materials for English/Spanish bilingual education, modifying the linguistic level with awareness of different rhythms of learning, and adapting authentic materials to transform them into didactic material.
CE3 To know about the instruments for planning and evaluation necessary in the teaching/learning of English/Spanish.
CE4 To develop and apply didactic methodologies adapted to the diversity of students in an

English/Spanish bilingual environment.

CE6 To incorporate new strategies, teaching materials, and information technology to activities in the English/Spanish bilingual classroom.

CE8 To be capable of using specialist terminology in English and Spanish in the field of second language acquisition.

CE10 To be capable of communicating with fluency at C1 level of the European Common Framework.

CE13 To know and to know how to apply the advantages of the communicative approach and learning by tasks method for linguistic interaction in English and Spanish

CE24 To know the elements of the syllabuses, methodology, and objectives of Technology in a bilingual environment

CE25 To be able to adapt the contents to the diversity of students in Technology

CE26 To be able to use the appropriate didactic techniques in Technology

1.2. Learning outcomes:

At the end of the subject, the student must:

- Know how to apply the knowledge acquired and the capacity for problem solving in new environments within their area of study, the teaching/learning of a foreign language
- Be capable of communicating reasonably on themes related to their area of study
- Be capable of acquiring new knowledge in an autonomous manner in their field of study, the teaching and learning of a foreign language
- Be capable of transmitting social and cultural values that attend to the multilingual and multicultural European reality
- Know how to base their teaching practice in an informed manner according to the knowledge acquired
- Know the legislation and regulations related to the management of bilingual centres
- Know how to design integrated syllabuses in the area of teaching/learning a foreign language
- Be capable of creating and adapting didactic materials for bilingual education taking into account the different levels of linguistic competence and the different rhythms of learning
- Be capable of creating and adapting methodologies to the diversity of students in a bilingual environment
- Be capable incorporating new strategies, materials and technology to activities in the bilingual Spanish/classroom
- Practice and acquire the skills necessary to reach C1 level in English language
- Know and know how to apply the advantages of a communicative focus and learning by tasks for linguistic interaction in English and Spanish
- Know the curricular elements, methodology, and objectives in the area of Technology in an environmental classroom; that they know how to adapt the content to the diversity of the students; that they are capable of using the most suitable didactic techniques in the classroom for their area.

2. CONTENTS

2.1. Previous requirements
None

2.2. Description of contents

- Didactics of Technology
- Project Based Learning.
- The teaching of technology and working areas.
- Teamwork
- Resources and tools. ICT as a specific tool in Technology.
- Technology and society.
- Learning evaluation and assessment in technology.

2.3. Detailed content:

Module 1: Approach to Technology Learning Area
This module is based in the knowledge of the Spanish education law, paying special attention to those decrees to develop the curricular contents
- Unit 1: Technology in Spanish Compulsory Secondary Stage
- Unit 2: Technology in Baccalaureate and Vocational Training

Module 2: Pillars of bilingual Technology Teaching
This module shows the amin methodologies applied in a bilingual technology classroom.
- Unit 3: CLIL Approach to Technology
- Unit 4: The Project Method and Project Based Learning

Module 3: Learning Pedagogical Resources
This module describes some innovative learning methodologies focused to the teaching of Technology
- Unit 5: Innovative Learning
- Unit 6: Learning through Teamwork

Module 4: The resources to teach Technology
In this module the main resources in a technology department are described and represented, to allow the students to understand what materials and equipment is needed in the technology classes, workshop and computers room.
- Unit 7: Technology working areas
- Unit 8: ICT specific tools in Technology

Module 5: Hardware Technologies
In this module, some of the most important teacher skills and knowledge in the area of hardware is developed.
- Unit 9: Electricity and Electronic workshop resources
- Unit 10: Robotics and 3D printing

Module 6: Software Technologies
In this module, the use of ICT is described to future teachers to know about free software solutions as well as Web developments.
- Unit 11: The use of software in Technology: Free Software, operating systems and programming
- Unit 12: The Web and development of web resources

2.4 Training activities

Blended modality

Training activities	Hours	Percentage of attendance
AF1. Teaching sessions	51,4	34,3%
AF2. Individual and group learning activities outside the teaching sessions	53,6	30%
AF3. Tutorials	15	10%
AF4. Complementary training activities	15	10%
AF7. Evaluation Activities	15	0%

Online modality:

Training activities	Hours	Percentage of attendance
AF1. Teaching sessions	51,4	0%
AF2. Individual and group learning activities outside the teaching sessions	53,6	0%
AF3. Tutorials	15	0%
AF4. Complementary training activities	15	0%
AF7. Evaluation Activities	15	0%

2.5 Teaching methodologies

An active didactic methodology in which the student is the protagonist of their own learning process, and the teacher an expert in the field. The teacher will possess the knowledge of the materials and resources necessary to help the student in the learning process and to optimise their learning strategies. Through interaction and mutual co-operation the student will achieve the competencies that they can then incorporate within their professional profile.

The teaching methodology will combine real-life and online teaching in the semi-present mode and online teaching in the online mode. This is therefore a mixed methodology that will be supported by the use of ICT as well as collaborative work (forums, chats, video-conferences) in accordance with the teacher's tools (agenda, announcements, files of materials, and links). For this purpose, the Virtual Campus will be used with the Blackboard Ultra platform. This interactive methodology requires the systematic and continuous active participation of the students and teachers.

3. EVALUATION SYSTEM:

3.1 Grading

The grading system (R.D. 1125/2003, of 5th September) will be as follows:
  0 - 4.9 Fail (SS)
  5.0 - 6.9 Pass (AP)
  7.0 - 8.9 Good (NT)
  9.0 - 10 Excellent (SB)
The mention of "honors" may be obtained at the proposal of the professor of the subject after completing a tutored work. The teacher must write a report evaluating the contributions of the work.

3.2 Assessment

Ordinary or Extraordinary Calls

Blended and online Modalities

Assessment	Percentage
Participation in work groups and discussion	15%
Guided activities	25%
Final exam	60%

3.3 Restrictions

Minimum grade
In order to average the above weightings, it is necessary to obtain at least a grade of 5 in the final exam.

Attendance

Students who, without justification, fail to attend more than 75% of the face-to-face classes may be deprived of the right to take the exam in the regular exam.

Writing standards

Special attention will be paid in the papers, practices and written projects, as well as in the exams, to both the presentation and the content, taking care of the grammatical and spelling aspects. Failure to meet the minimum acceptable standards may result in points being deducted in such work.

3.4 Warning about plagiarism

The Universidad Antonio de Nebrija will not tolerate plagiarism or copying under any circumstances. It will be considered plagiarism the reproduction of paragraphs from texts other than the student's audit (Internet, books, articles, papers of colleagues...), when the original source is not cited. The use of quotations cannot be indiscriminate. Plagiarism is a crime.

If this type of practice is detected, it will be considered a Serious Misconduct and the sanction foreseen in the Student Regulations may be applied.

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5. PROFESSOR

You can consult the e-mail addresses of the professors and the academic and professional profile of the teaching staff at https://www.nebrija.com/programas-postgrado/master/ensenanza-bilingue-profesores/#masInfo#profesores