MEBS09

Didactics of Natural, Social and Cultural Sciences

UNIVERSIDAD NEBRIJA

Asignatura: MEBS09 Didactics of Natural, Social and Cultural Sciences
Carácter: Elective
Idioma: English
Créditos: 6
Curso: 1st
Semestre: Second Term
Profesores/Equipo Docente: Celia Ruiz Pérez

1. REQUISITOS PREVIOS

Demonstrate sufficient performance at level B2 in English.

2. BREVE DESCRIPCIÓN DE CONTENIDOS

This course focuses on teaching Natural, Social and Cultural Science at Primary Education. The course offers effective and innovative teaching methodologies, strategies and tools that can be applied to the context of bilingual education.

During the course we will explore the teaching of Natural and Social Sciences in a CLIL context from a constructively point of view. Students in this module will be given opportunities to analyze the Science curriculum, develop their planning skills, and discover new approaches, materials and resources in order to broaden their understanding of Science teaching.

3. RESULTADOS DEL APRENDIZAJE

Competences:

CB2, CB3, CB4, CG7, CE1, CE2, CE3, CE4, CE5, CE6, CE10, CE18, CE19, CE20.

Learning outcomes:

- Be able to integrate the knowledge, facing the complexity of judging facts given incomplete information about social and ethical responsibilities linked to their field of study.
- Be capable of communicating reasonably about the topics related to their field of study.
- Be able to independently acquire new knowledge in their field of study, foreign language teaching and learning.
- Know how to support their teaching practice upon the acquired knowledge.
- Know how to design integrated curricula in the area of English /Spanish teaching and learning.
- Be capable of creating and adapting the most suitable materials for bilingual education taking into account the different levels of linguistic competence and learning paces.
- Know the evaluation instruments needed in the English teaching and learning.
- Know how to develop and apply a methodology adapted to the diversity of the students in a bilingual setting.
- Know how to evaluate the linguistic and cultural contents for English /Spanish bilingual teaching.
- Be able to incorporate new strategies, materials and technologies to activities in the English/Spanish bilingual classroom.
- Practice and acquire the necessary skills to reach the C1 level in English.
- Know the curriculum, the methodology and the objectives of the area of Natural, Social & Cultural Sciences in bilingual settings.
- Know how to adapt the contents to the students´ diversity.
- Know how to use the most suitable didactic techniques for the area of knowledge.

4. ACTIVIDADES FORMATIVAS Y METODOLOGÍA

The teaching methodology combines face and online teaching, so it will be a mixed methodology (blended learning), which relies on the use of ICT (Virtual Campus UNNE on Blackboard platform) to support collaborative work (forums, chat, videoconference meeting) the guidance of Professor (calendar, bulletin board, folder, links) and the delivery of assignments (tasks and tool box to work).

The program combines various elements to develop methodological reflection. This is specified in an interactive methodology that requires the participation of students and teacher in the discussion of issues. Class participation is a key aspect of this course which is based on a *communicative* approach. Participation means being able to ask questions, answer questions when called upon, volunteering answers to questions and actively listening to others.

Previous reading of the texts proposed for discussion and further consideration will allow students to seek information through the resources available and be able to judge it critically for use in further learning and research processes.

The training actions of this Master are specified as follows:

- Teaching sessions
  - In-campus teaching sessions
  - Online teaching sessions
- Learning activities, individual and in groups in the classroom sessions
- Individual learning activities outside the classroom sessions
- Tutorials
- Additional training activities

5. SISTEMA DE EVALUACIÓN

Assessment tools:

1. Attendance and participation in working groups, discussions and workshops.
2. Group and individual activities.
3. Development and delivery of presentation

Evaluation Criteria:

- Ability for teamwork and problem solving.
- Ability to search information through various sources and resources, to judge it critically and use it appropriately for teaching or research purposes.
- Ability to relate the content to teaching practice and other areas of knowledge.
- Active participation in class discussions.
- Ability to argue, defend with relevant data and contrast items proposed.
- Use of typographical, structural and presentation conventions as well as capacity for reflection, analysis and drawing conclusions.

5.1. Ordinary:

5.1.1 Directed Activities (practice, tutorials, exercises & on-line activities, oral & written assignments, etc.)
25%

5.1.2 Participation in online and in–campus classes & other learning activities 15%

5.1.3 Design of a Didactic Unit (Project)
60%

Please note that your final mark is the result of the average of your marks providing you have completed compulsory assignments.

Students are expected to have all lessons and set tasks prepared on the dates indicated. Late work will not be accepted and will not receive a mark.

Plagiarism (illegal and unauthorised copying) is penalised with a zero grade 0 for the entire course.

5.2. Extraordinary:

5.2.1. Repeat design of the didactic unit (project)
60%

5.2.2. The grades obtained in on-line exercises & activities, written assignments and oral presentation are kept
40%

5.3. Restrictions:
In order to make up the final average grade, the student is required to attend an 80% of the sessions specified in the syllabus. Any grade in any activity under 5 is considered a fail.

6. BIBLIOGRAFÍA

GAUCH, H.G., Jr.(2003). *Scientific method in practice*. New York, NY: Cambridge University Press.
GONZÁLEZ, R. (2014) *El Trabajo por Proyectos en el Área de Inglés.* Madrid: Editorial CCS.
HARLEN, W. & QUALTER, A. (2014) *The Teaching of Science in Primary Schools.* New York: Routledge.
JOHSON, D.W. & JOHNSON, R.T. (1994) *Cooperative Learning in the Classroom.* Virginia: Association for Supervision and Curriculum Development.
KRAUSS, J. & BROSS, S. (2013) *Thinking Through Project-Based Learning. Guiding Deeper Inquiry.* California: Corwin.
MARTÍN, X. (2006) *Investigar y Aprender. Cómo Organizar un Proyecto.* Barcelona: Horsori Editorial.
SKAMP, K. (2012) *Teaching Science Constructively.* Melbourne: CENCAGE Learning.

Note: *Bibliography and references will be further detailed in each unit.*

7. BREVE CURRICULUM

Celia Ruiz Pérez

Primary Teacher (Universidad Autónoma de Madrid) and Master in Linguistics Applied to Teaching English as a Foreign Language. Research Project: "Scaffolding Autonomous Learning". Teacher at Comunidad de Madrid Bilingual Programme since 2009. Working under a Constructivist approach following a CLIL methodology at school when teaching Science and Arts. Interested in the innovation in the classroom as a way of promoting and develop Autonomous Learning. I like working through Projects as a way of integrating all the curriculum subjects for the achievement of a Meaningful Learning.

8. LOCALIZACIÓN DEL PROFESOR

Lecturer: Celia Ruiz Pérez
Tutorials: Monday to Friday, from 17:30 – 19:30 via on line
E-mail: cruizper@nebrija.es
Note: *It is always advisable to make **an appointment with the teacher** beforehand to make sure the scheduled time is appropriate for both parts.*

9. CONTENIDO DETALLADO DE LA ASIGNATURA

TÍTULO: Didactics of Natural, Social and Cultural Sciences
CURSO ACADÉMICO: 2016/ 2017
ASIGNATURA: MEBS09
CURSO: 1st SEMESTRE: Second Term CRÉDITOS ECTS: 6

IN CAMPUS SESSIONS

Semana	Sesión	Sesiones de Teoría, Práctica y Evaluación continua	Estudio individual y trabajos prácticos del alumno	Horas Presenciales	Horas/Semana Estudio teórico/práctico y trabajo. Máx. 7 horas semanales como media
	1	**Project Based Learning** - Project Based Learning in action - Scaffolding knowledge: how to prompt learning activities in PBL.	→ Concept and tasks clarification → Review of teaching unit → Tasks. → Further questions	75 m	5 h
	2	**Cooperative Learning** - Cooperative Learning in action - Activities organization: ideas to help in the classroom.	→ Concept and tasks clarification → Review of teaching unit → Tasks. → Further questions	75 m	5 h
	3	**Integrating Subjects** - Learning interests and needs as a way of integrating - Some ideas to be applied in the classroom.	→ Concept and tasks clarification → Review of teaching unit → Activities. → Further questions.	75 m	5 h
	4	**We all Construct Learning Together** - Colaborative activities in the classroom. - Sharing resources, materials, ideas… - Use of TIC in the classroom. - An eclectic classroom.	→ Concept and tasks clarification → Review of teaching unit → Tasks. → Further questions. → Final review of course content.	75 m	5 h
TOTAL					**=** **25 horas**

ON LINE SESSIONS

Semana	Sesión	Sesiones de Teoría, Práctica y Evaluación continua	Estudio individual y trabajos prácticos del alumno	Horas Presenciales	Horas/Semana Estudio teórico/práctico y trabajo. Máx. 7 horas semanales como media
1	1	**UNIT 1: Teaching Science in Primary Schools** 1. The importance of Science Teaching 2. Emphasis change 3. How children learn Science *4.* The Science Curriculum	→ Text review and discussion. → Concept clarification → Examples and tasks → Forum participation	2 h	16 h
2	2	**UNIT 2: Content and Language Integrated Learning** 1. Introduction to CLIL 2. What is CLIL? 3. Advantages of CLIL 4. Challenges in CLIL Education 5. Methodologies and strategies in CLIL. 6. Resources: advantages of TIC in CLIL education. 7. CLIL in the Spanish Context	→ Text review and discussion. → Concept clarification → Examples and tasks → Forum participation	2h	16h
3	3	**UNIT 3: Project Based Learning** 1. Project Based Learning Foundations. 2. What is a "Project"? 3. Classroom Organization 4. Teacher's Role *5.* Working under PBL in real contexts.	→ Text review and discussion. → Concept clarification → Examples and tasks → Forum participation	2 h	16 h
4	4	**UNIT 4: Cooperative Learning** 1. The concept of Cooperative Learning 2. Bringing cooperative structures into our classroom 3. Strategies	→ Text review and discussion. → Concept clarification → Examples and tasks → Forum participation	2 h	16 h
5	5	**UNIT 5: Planning Rich Learning Experiences** 1. School Level interests. 2. Classroom Level interests. 3. How to prompt rich learning activities. 4. Inplementing learning activities in PBL.	→ Text review and discussion. → Concept clarification → Examples and tasks → Forum participation	2 h	16 h
6	6	**UNIT 6: Assessment for Learning** 1. Types of children's assessment: why and how to assess?	→ Text review and discussion. → Concept clarification	2 h	16 h

		2. Relevance of teaching practice assessment: why is it so important? 3. Assessment's Tools	→ Forum participation		
7	7	**UNIT 7: Integrating CLIL areas and Literacy Learning** 1. Reasons for thinking across disciplines 2. Cross curricular approach. 3. CLIL activities and PBL.	→ Text review and discussion. → Concept clarification → Forum participation	2 h	16 h
TOTAL				**=** **126 horas**	