Universidad de Alcalá

GUÍA DOCENTE

Content Subject Methodology

Máster Universitario en Enseñanza del Inglés como Lengua Extranjera Universidad de Alcalá

Curso Académico 2019/20

2º cuatrimestre

GUÍA DOCENTE

Nombre de la asignatura:	**Content Subject Methodology**
Código:	**200407**
Departamento:	**Filología Moderna**
Área de Conocimiento:	**Filología inglesa**
Carácter:	**Optativa**
Créditos ECTS:	**4**
Cuatrimestre:	**2º**
Profesorado:	**Dora M. Lopezlira**
Correo electrónico:	**dlo_@hotmail.com**
Idioma en el que se imparte:	**Inglés**

1. MODULE DESCRIPTION

This online course focuses on teaching science education through inquiry. In the course we will explore how using inquiry-based teaching can improve students' understanding of science. The course provides effective teaching methodologies, strategies and tools that can be used when teaching life science concepts. Through the readings, videos, assignments, and other interactive experiences, learners in this course will have opportunities to develop content knowledge about inquiry in science education and the processes of science.

2. AIMS

Generic competences:

As a result of participating in this course learners will:

- Explore how to bring the scientific processes into the classroom as a teaching and learning tool.
- Understand the essential elements of scientific inquiry.

Specific competences:

On completion of the course participants will be expected to be able to:

- Comment on current topics related to science teaching in the classroom.
- Design a science lesson plan using a scientific inquiry approach to the topic taught.

3. MODULE CONTENTS

Units	Credits
- What is Science?	• 0,75 credits
- Processes of science and teaching science to English language learners	• 0,75 credits
- Teaching science through inquiry	• 1 credit
- Designing inquiry science lessons	• 0,75 credits
- Connecting science with other subjects	• 0,75 credits

Class timetable

The course will take approximately 100 virtual hours to complete, which will include reading and viewing the material online, and completing a wide assortment of interactive exercises and assignments, although there will be a couple of face to face sessions to introduce the topic. You have **13** weeks to complete this course, from **February 19th** to **May 15th.** Although you can divide up your study time any way that is best for your schedule, you must keep in mind the due dates of your assignments.

4. TEACHING AND LEARNING METHODS

4.1. Student workload (100 hours)

Forum discussions	10
Independent Study	20
Reading	20
Producing the final assignment	44
Face-to-face teaching sessions	6

4.2. Learning activities

Since this is mainly an online course, learners are expected to submit all the assignments via e-mail. Assignments in this course include:

- **Science autobiography** **Due date: March 13th**

This is your initial writing assignment. It is your story. You are being asked to reflect upon your school science experiences from your earliest memory to the present. What was science like for you? Did you like it? Hate it? Never thought much about it? Based on your own personal experiences with science in school...how would you define science?

- **Reading article** **Due date: April 3rd**

For this assignment, several journal readings will be posted on line. You are to choose one and write an essay discussing the article.

- **Self Critique** **Due date: April 17th**

This is a self-reflection in the form of a diary of what happens in your science classroom (for a period of 3 weeks), observations on what you and your students do, notes if any inquiry learning is or not taking place. **(If you don't have a science classroom you will be expected to find one to make these observations).**

- **Video Questions** **Due date: May 1st**

For this assignment, you will have to watch a series of videos and questions will be posted for you to write an opinion about.

- **Inquiry lesson** **Due date: May 15th**

This will be the culminating event of the class. You need to develop a standards-based inquiry lesson for your science classroom.

5. ASSESSMENT

The assessment of the programme will be based on a combination of participation in the face to face sessions, written assignments and inquiry lesson.

- Participation: 20%
- Written assignments: 40%
- Inquiry lesson: 40%

Should a student, for some reason, need to opt for final assessment, s/he will have to ask for permission in writing to the director of the programme of study. If permission is granted, the written assignments and the inquiry lesson will constitute the totality of the mark (100%).

Students' work will be valued against the following criteria:

- Reasoning behind opinions expressed, adaptations made to materials, etc.
- Understanding of science inquiry teaching and its particular characteristics
- Ability to relate theoretical concepts to the practice of teaching
- Ability to generate own ideas starting from the material presented in the course
- Originality: if any part of the comments on the forum or the assignments is copied or plagiarized, the assignment is immediately failed. No re-writing will be possible.

6. BIBLIOGRAPHY

They are only listed in case you want to learn more about the subject, but will not play a part in the grading. Required readings will be posted on line.

Bell, R. L. (2008) *Teaching the Nature of Science through Process Skills*. Boston: Pearson Education Inc.

Buhrow Brad and Upczak Garcia Anne (2006) *Ladybugs, Tornadoes and Swirling Galaxies, English Language Learners Discover their World through Inquiry.* Maine: Stenhouse Publishers.

Carin, A. A., Bass, J. E., and Contant, T. L. (2005) *Methods for Teaching Science as Inquiry*.9th ed. New Jersey: Pearson Education Inc.

Carin, A. A. and Bass, J. E. (2001) *Activities for Teaching Science as Inquiry*. 5th ed. New Jersey: Pearson Education Inc.

Hassard, Jack. (2005) *The Art of Teaching Science: Inquiry and Innovation in Middle School and High School.* Oxford University Press.

MacDonell, Colleen. (2007) *Project-Based Inquiry Units for Young Children: First Steps to Research for Grades Pre-K-2.* Linworth Publishing, Inc.

Wolfe, P. (2001) *Brain Matters: Translating Research into Classroom Practice.* Virginia: Association for Supervision and Curriculum Development.