COURSE: DEGREE IN GEOLOGY

BOE: NÚM 193, de fecha 10 de AGOSTO de 2010

CURSO DE IMPLANTACIÓN: 2009/2010

2. INFORMATION ABOUT THE COURSE

2.2. Main subjects which make up the main areas of the course.
(Provide UNESCO codes and mention subjects. For example, History,Engineering, Law, Applied Linguistics, Molecular Biology, etc.)

2506 Geology
2506.01 Regional Geology
2506.03 Geology Applied to Engineering
2506.04 Environmental Geology
2506.05 Hydrogeology
2506.06 Geological Campaigns
2506.07 Geomorphology
2506.10 Mineral Deposits
2506.11 Mineralogy
2506.13 Igneous and Metamorphic Petrology
2506.14 Sedimentary Petrology
2506.15 Photogeology
2506.16 Teledetection (Geology)
2506.17 Mecanics of rocks
2506.18 Sedimentology
2506.19 Stratigraphy
2506.20 Structural Geology
2506.21 Vulcanology

3. COURSE LEVEL

3.1.2. Adaptation of the course to the appropriate formative level.
(List the guidelines which appear in the syllabus)

In accordance with the royal decree 1393 of 2007 which regulates the Structure of University Teaching, the syllabus for the Degree in Geology at the University of Huelva consists of 240 credits, and it contains all of the theory and practical work which student have to carry out: basic aspects of the branch of knowledge (60 credits), compulsory subjects (132 credits) or optional subjects (36 credits), seminarios, prácticas externas, trabajos dirigidos, trabajo de fin de Grado (12 créditos) or other training. The different subjects to be studied in each academic year is shown in the diagram below.

Academic year	Basic Subjects	Compulsory subjects	Optional subjects	Degree work	Credits
1st	60	0	0	0	60
2nd		60	0	0	60
3rd	0	60	0	0	60
4th	0	12	36	12	60

4. INFORMATION ON CONTENT AND RESULTS OBTAINED

4.2.2. Results of learning: knowledge, skills and competence obtained at the end of the course and its objectives.
• Students will show that they possess and understand knowledge in an area of study based on high school knowledge, and usually find themselves at a level which is base don advanced textbooks, and also includes some aspects which involve knowledge related to the Forefront of their field of study. • Students will know how to apply their knowledge to a set job in a profesional manner, and possess the required skills which are put to the test through constructive discussion and the solving of problems in their field of study. • Students will possess the capacity to collect and interpret relevant data (usually within their field of study) in order to give their opinión regarding matters of social, scientific or moral importance. • Students will be able top ut forward information, ideas, and problems with their solutions both to a specialized public and to a non-specialized public. • Students will have developed the learning skills necessary to be able to do further studies with a high emphasis on self-study.

5. INFORMATION ON THE PURPOSE OF THE COURSE

5.2. Aims of the course (including skills profile, as far as possible) and profesional qualification (where appropriate):
- To instil students doing a degree in Geology with an interest in the subject, which will enable them appreciate its uses in different contexts, and get them involved in the motivating, satisfying intelectual experience of learning and studying. - To provide students with a solid, stable basis of geological knowledge and practical skills. - To help students to develop the ability to apply their theoretical and practical knowledge in order to solve problems related to Geology. - To get students to develop a range of cognitive and practical abilities, and basic and coordinated skills related to Geology. - To provide students with the necessary knowledge and skills for them to be able to work independently in the world of Geology.
5.2.1. A summary of the aims and general skills included in the syllabus.

The general aim of the subjects taught in the degree of Geology is to provide students with the university training which consists of the basic knowledge pertaining to the branch of study in question.

The following is an outline of the general skills to be acquired by a future gradúate in Geology at the University of Huelva:

1. Capacity for analysis and synthesis.
2. Capacity for self study.
3. Capacity for written and oral comunication.
4. Knowledge of a foreign language (English preferred).
5. Basic knowledge of computer science (Word processing, spreadsheets, graphic design, etc.).
6. Capacity to deal with problems.
7. Capacity for organization and planning.
8. Capacity for the distribution of information.
9. Capacity for putting knowledge to practical use.
10. Capacity to adapt to changing situations.
11. Capacity for making decisions.
12. Capacity to do group work.
13. Capacity to do disciplined teamwork .
14. Capacity to make rational criticism of oneself and others.
15. Moral commitment.
16. Motivation for quality control.
17. Initiative and enterprising spirit.

5.2.2. Indicate whether, according to national law, this course grants competence to work professionally, or gives a person a profesional category, and whether it provides Access to a controlled profession.

The profession of the geologist, like all standardized professions in Spain which have had to follow a university course of study for a duration of a mínimum of four academic years, is included in subsection VIII of The Royal Decree 1837/2008, of the 8th November. In this regard, geologists are recognised as top level professionals.

The gradúate profile consists of students who are qualified to be professionals in the various branches of the field of Geology. They are expected to apply knowledge and skills of the basic aspects of this branch of science, in addition to competences and capacities related to its profesional development.

Career opportunities would depend on companies and freelancing of the profession, such as Public Administration Offices, High School Education, University Studies and research. With regard to the practice of this profession, whether through freelancing or in company framework, five branches of specialization can be distinguished: Basic Geology, Mineral and Energy Resources, Environmental Geology, Hydrogeology and Geology applied to Civil Engineering (Geological or Geotechnical Engineering).

Specific Responsibilities
Generally speaking, the specific responsibilities of a future graduate from the University of Huelva could include the following:

1. To possess a basic knowledge of mathematics, physics, chemistry and biology, and be able to apply them to the knowledge of the Earth, and an understanding of geological processes.

2. To be able to identify and classify the characteristics of different geological materials and processes (minerals, rocks, fossils, reliefs, structures, etc.) using geological, geophysical and geochemical methods, etc.

3. To be able to analyse the distribution and structure of various types of geological materials and processes (minerals, rocks, fossils, reliefs, structures, etc.) on various scales in time and in space.

4. To be familiar with present day environmental processes, analize related risks, in addition to the need to exploit, butb at the same time, preserve the Earth's resources.

5. To be familiar with and be able to use Geological theory, models, concepts and principles.

6. To integrate different types of data and observations in order to prove geological hypotheses.

7. To be able to collect, store and analize data using appropriate field and laboratory techniques.

8. To carry out field and laboratory work in an organized, responsable and safe manner.

9. To be able to prepare, process, interpret and present data using appropriate qualitative and quantitaive techniques, in addition to suitable computer programmes.

10. To evaluate problems related to simple selection, accuracy, precisión and uncertainty during simple collection, and register and analysis of both field and laboratory data.

11. To make use of knowledge to deal with both common and unknown geological problems.

12. To know and evaluate the characteristics of the different geophysical and geochemical methods related to knowledge about the earth.

13. To possess a general vision of geology from a global and regional standpoint.

14. To prepare underground models from superficial and geophysical data.

15. To plan, organise, develop and present Project work.

16. To make correct use of geological terms, nomenclature, agreements and units.

17. To explore and evaluate natural resources.

18. To describe, analize, evaluate and plan the physical environment and the geological heritage.

19. To diagnose and provide solutions to environmental problems related to the Sciences of the earth.

20. To be able to use geological concepts in the basic fields of geology.

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6. EXTRA INFORMATION

6.1. Please add any important information which has not been included above. (e.g. whether the degree requires periods of study, practical work or research in another institution/company/research centre or country, or any relevant matters not mentioned above. With regard to joint degrees resulting from national or international agreements, please include any necessary information in order to facilitate a correct understanding of the programme, describing the European framework on which it has been modelled (e.g. Erasmus Mundus, Atlantis, etc.); please explain briefly whether doublé or multiple certificates will be issued, and from which institutions, whether there is an academic or scientific committee, whether there will be a national or international exam, describe what it is made up of, and explain its role, etc.)

Foreign languages.
An effort will be made to require students obtaining a degree in Geology to possess the European level B1 or an equivalent in a foreign language for general use in professions related to courses in this career.

External practical work.
There is an optional subject during the second term of the 4th year which

requires the student to do practical work related to his/her studies, and to the profesional work of a geologist, in a company or institution.The necessary agreement for the collaboration is managed locally by the Orientation and Information, Practical Work, Employment and Self-employment Service (SOIPEA). This is a department of the body responsable for students at the University of Huelva. Before the enrolment period, an offer will be made publicly for students to apply for external practical work. However, this is taken care of by rules established by the University in agreement with the company or institution.

Project work at the end of the course.
This is an obligatory subject at the end of the second term of the 4th year. This consists of a theoretical or experimental piece of work supervised by a teacher of the department, who is chosen for this purpose. This Project work can also be carried out in the prívate company, and also in other publico r prívate institutions, with the consent of the university. For this Project, the student is required to make a plan whcih should include a brief introduction on precedents, aims of the Project, results, and a critical argument with the pertinent conclusions. Before the enrolment period, a note will be made public with the places available for the end of course Project, in addition to the specific requirements for each one. Information will be given regarding aims, methodology of the Project and the supervisor. Students will request, in order of preference, the subjects of the Project to be written. If two or more students have the same choices, preference will be given to the student obtaining the highest average mark in the credits given, and the total of obligatory credits obtained. Under no circumstances should the Project be a bibliography.
The defense of the Project will be carried out before a Tribunal approved by the Faculty Department. The Tribunal will evaluate the oral presentation of the Project as well as the written work, and will also take the supervisor's report into account. In order to be able to present the final Project, thje student is required to have satisfied requirements in all of the subjects pertaining to the first three years of the degree course. The final Project may also be carried out in the first term. However, a student cannot register for more tan 30 credits in a term.

Transfer.
The course in Geology takes part in European Exchange programmes for students (ERASMUS and SOCRATES), which permits students to spend time in universities in the European Union.There is also a program of national transfer between Spanish universities where courses in Geology exist. Grants and financial aid are available for students taking part in these transfers.

One of the aims of these transfer programs is for students to be able to benefit from social and cultural experiences, and improve their curriculum with regard to obtaining employment, etc. Moreover, participation by students in these programmes improves thier possibilities of communication, cooperation, adaptation and the understanding of other cultures.

Joint degree of Environmental Sciences and Geology.
The University of Huelva offers the possibility of doing a joint degree in Geology and Environmental Sciences, which consists of profesional opportunities of the degree in both subjects.

The syllabuses of the degrees in Geology and Environmental Sciences contain 132 credits in total, and the first year is equally divided between the two degrees. This enables students who so desire to obtain both degrees. Students

will be required to obtain a mínimum of 348 credits, spread over 6 academic years.