

295900 - TCAEM - Technology and Sciences in Ancient Times: Egypt and Mesopotamia

Coordinating unit: 295 - EEBE - Barcelona East School of Engineering

Teaching unit: 713 - EQ - Department of Chemical Engineering

Academic year: 2018

Degree: BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
BACHELOR'S DEGREE IN MATERIALS ENGINEERING (Syllabus 2010). (Teaching unit Optional)
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Teaching unit Optional)
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Optional)

ECTS credits: 6 Teaching languages: Spanish

Teaching staff

Coordinator: FRANCISCO JAVIER GIMENEZ IZQUIERDO

Others: FRANCISCO JAVIER GIMENEZ IZQUIERDO

Teaching methodology

The teacher will develop theoretical explanations as well as practical examples. In addition, the teacher will guide different works for homework. Active learning as well as Cooperative learning will be extensively used.

Learning objectives of the subject

At the end of the course, the student should be able to:

- Describe the evolution of the ancient mediterranean civilizations at the Bronze Age
- Identify funerary monuments depending on the place and the time
- Identify the materials used in the antiquity in pigments, glass objects and jewels.
- Describe the commercial routes in the ancient Mediterranean
- Identify the metals used in the Bronze Age and their application

Study load

Total learning time: 150h	Hours large group:	60h	40.00%
	Hours medium group:	0h	0.00%
	Hours small group:	0h	0.00%
	Self study:	90h	60.00%

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Content

<p>1) INTRODUCTION</p>	<p>Learning time: 15h Theory classes: 6h Self study : 9h</p>
<p>Description:</p> <ul style="list-style-type: none"> 1.1 Myth, science and technology: the mythical discourse and the logical discourse 1.2 The Mediterranean Neolithization 1.3 The Urban Revolution in Mesopotamia 1.4 The Bronze Age 	
<p>2) ANCIENT EGYPTIAN CIVILIZATION</p>	<p>Learning time: 25h Theory classes: 10h Self study : 15h</p>
<p>Description:</p> <ul style="list-style-type: none"> 2.1 Egyptology: from Cleopatra VII until XXI century 2.2 Geography and Symbology 2.3 Ancient Egyptian writing 2.4 History of the Ancient Egypt 	
<p>3) TECHNOLOGY OF THE FUNERARY PRACTICES</p>	<p>Learning time: 25h Theory classes: 10h Self study : 15h</p>
<p>Description:</p> <ul style="list-style-type: none"> 3.1 The Great Pyramid at Giza 3.2 The Valley of the Kings (VoK) 3.3 Mummification and paleopathology 	
<p>4) ANCIENT DECORATIVE ARTS</p>	<p>Learning time: 25h Theory classes: 10h Self study : 15h</p>
<p>Description:</p> <ul style="list-style-type: none"> 4.1 The industry of Ancient pigments and colors 4.2 The 'Egyptian Blue' 4.3 Glass 	

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5) ANCIENT MEDITERRANEAN METALLURGY	Learning time: 25h Theory classes: 10h Self study : 15h
Description: 5.1 Copper 5.2 Arsenical copper 5.3 Bronze 5.4 Lead Isotope Analysis (LIA)	
6) TRADE ROUTES AND PRODUCTS EXCHANGE	Learning time: 25h Theory classes: 10h Self study : 15h
Description: 6.1 Oriental Mediterranean trade route: glass, Egyptian blue and copper 6.2 Oriental trade route: lapis and tin 6.3 African trade route: obsidian	
7) TROY AND THE END OF THE BRONZE AGE	Learning time: 10h Theory classes: 4h Self study : 6h
Description: 7.1 The Sea Peoples 7.2 The Trojan War 7.3 The start of the Iron Age	

Regulations for carrying out activities

Written exams with books.

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Bibliography

Basic:

Shaw, Ian. Historia del Antiguo Egipto. Madrid: La Esfera de los Libros, [2016]. ISBN 9788490606674.

Nicholson, Paul T.; Shaw, Ian. Ancient egyptian materials and technology. Cambridge: Cambridge University Press, cop. 2000. ISBN 0521452570.

Others resources:

Booklet in ATENEA

Articles from scientific journals

Books chapters

Photographies