

UCA International Office for post-soviet countries affairs, AUHR

Course III: 7th – 16th July

Title: **Physico-chemical methods in chemical processes**

Coordinator: Dr. María Dolores Galindo Riaño, Dean, Faculty of Sciences, Cádiz.

Summary: This course has two modules. The module “Problems of modern chemistry” is designed to provide a critical overview of the current situation, innovation and future perspective of the modern chemistry. The most important topics are: 1) Current situation of Chemistry. Development and future perspective; 2) Nanochemistry, carbon nanomaterials and nanomaterials for environmental catalysis. The module “Advanced analysis techniques” is designed to provide a critical overview of the theory and practice of the most important advanced techniques in chemical analysis. The most important topics are: 1) A review of principal techniques in chemical analysis; 2) The techniques: Chromatography, Spectroscopy and Voltammetric techniques; 3) Sampling and pretreatment techniques in analysis.

Link: https://celama.uca.es/auhr/cursos/copy_of_celamaactividad.2013-05-23.0586383020

Course IV-V: First edition: 7th – 11th July, Second Edition: 21st – 25th July

Title: **Research methods in integrated cell biology**

Coordinators: Dr. María del Carmen Castro, Dr. María Isabel Murillo, Monica García, Faculty of Medicine

Summary: This course is an overview of relevant experimental techniques used by researchers in the Cell Biology, Physiology and Biomedicine fields, from cell culture to animal models. The way we take advantage of these techniques for particular research projects in our university will be discussed. Finally, we will also focus on the concept of intellectual property and how to protect new scientific inventions by patents. Theoretical lectures will be complemented by three laboratory practical courses.

Link: https://celama.uca.es/auhr/cursos/copy_of_celamaactividad.2013-07-23.9116263252
https://celama.uca.es/auhr/cursos/copy2_of_celamaactividad.2013-07-23.9116263252

Course VI: 14th – 18th July

Title: **Network security**

Coordinator: Dr. Carlos Rioja del Río, Associate Director, School of Engineering

Summary: During the DRP see continuity concept of business plan, in which a business of any kind need to be online all the time, 24/7. Within this BCP will focus on security measures and a good disaster recovery plan. practical application exercises within this plan they will be different companies. Also study the possible communication problems and implementation that may arise in real life by using these plans.

Link: https://celama.uca.es/auhr/cursos/copy2_of_celamaactividad.2013-06-10.6378840037

Course VII: 21th – 25th July

Title: **Renewable energies. Technical application and environmental solutions**

Coordinator: Dr. José María Quiroga, Dean, Faculty of Marine and Environmental Sciences

Summary: The energy problem of nowadays provokes an effect on the future. Since we have to move towards a expansion from exhaustible energy and fossil sources to renewable and non-fossil sources, as a result, among other causes, there is increase of price on fuel, and to avoid problems that may arise, proactive policies are needed to enhance the use of renewable energy. Thus, besides the logical environmental benefit, these measures would end the energy instability caused by the high dependence on fossil fuels, owned by politically and economically unstable countries, so the risk of shortages always exists. The purpose of this course is to provide students with basic knowledge of renewable energy and introduce them to different types of energy that exist in the market, analyze their possible use, feasibility of implementation or repayment ratios.

Link: https://celama.uca.es/auhr/cursos/copy_of_celamaactividad.2013-06-20.5488709632

Cours VIII: 21st – 25 th July

Title: **Engineering and Canvas Model**

Coordinator: Dr. Carlos Rioja del Río, Associate Director, School of Engineering

Summary: In the course of engineering and canvas model, we will see the development of modeling is fundamental to any area of engineering. The course will have a theoretical and practical character that students will be able to develop their own exercises and examples through the canvas model. We also study how to reduce costs in software engineering projects by the Japanese philosophy of lean manufacturing.

Link: https://celama.uca.es/auhr/cursos/copy_of_celamaactividad.2013-06-10.6378840037

Course IX: 14th – 22^d July

Title: **Nanotechnology and New Trends In Applications of Nanomaterials**

Coordinator: Dr. María Dolores Galindo Riaño, Dean, Faculty of Sciences, Cádiz.

Link: https://celama.uca.es/auhr/cursos/copy_of_celamaactividad.2013-06-25.4781721834/CELMAAActividad_view

Course X: 21th July – 1st August

Title: **Practical course on histotechnology and microscopy methods**

Coordinator: Prof. JM López-Cepero, Laboratory of Cell Biology, Developmental Biology and Histology. Faculty of Medicine. University of Cadiz. Spain.

Summary:The course is oriented to introduce concepts and methodological strategies for preparation of biological samples as well as to develop technical skills in fixation, embedding, microtomy, staining, microphotography and image analysis.

Link: https://celama.uca.es/auhr/cursos/copy3_of_celamaactividad.2013-07-23.9116263252/CELMAAActividad_view