

# ENGINEERING COMPUTATION

Fall 2011

## General Information

Course outline: Numerical analysis.

Instructors: Prof. Amparo Gil  
Depto. Matemática Aplicada y Ciencias de la Computación.  
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Prof. Jaime Puig-Pey (R)  
Depto. Matemática Aplicada y Ciencias de la Computación.  
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Lectures: Thursday-Friday, 9:30-11:30,  
Room UC-Cornell.

Computer sessions: Tuesday, 13:00-14:00  
Computer Lab of the Depto. Matemática Aplicada y Ciencias de la Computación.

Office hours: by appointment via e-mail ([amparo.gil@unican.es](mailto:amparo.gil@unican.es)).

Course computer Framework: PC computers (Windows XP); MATLAB, EXCEL

Textbook: *Numerical Methods for Engineers*  
by Chapra & Canale.

Several copies of the textbook are available at the Escuela de Caminos' Library.

Reading: Students are expected to read the chapters listed in the course schedule **prior** to each lecture.

Homework: Homework assignments will be posted regularly (see below):

Exams: There will be two preliminary exams and one final exam.

Course schedule: Detailed course schedule with deadlines for the assignments will be found here.

Material:	Lectures	Docs for the Comput. Sessions	Problem Sets/Homework assignement
	Material for the first part of the course can be found at <a href="#">Prof. Jaime Puig-Pey's web page.</a>	<a href="#">ODEs : Comput 1</a> <a href="#">ODEs : Comput 2</a>	<a href="#">ODEs: prob1</a>
	<a href="#">Lectures ODEs</a>	<a href="#">ODEs: Comput 3</a>	
	<a href="#">Lectures BVPs and EDPs</a>	<a href="#">PDEs : Comput 1</a> <a href="#">Addendum</a>	

Final grade contributions: The final grade will be calculated based on contributions given below

Computer Assignments (CA)	20%
Final grades:	
2 Preliminary exams	40%
Final Exam	20%
Attendance & participation & various	20%