

Course: CEE 323

ENGINEERING ECONOMICS AND MANAGEMENT

GENERAL INFORMATION

2nd semester

Credits: 3CU-4,5UC

Lectures: M 12:00-14:00; R 10:30-11:30

INSTRUCTOR(S)

PEDRO DÍAZ

Profesor Titular de Universidad. Departamento de Administración de Empresas.

COURSE OBJECTIVE

At the end of this subject the student will be able:

- To rigorously formalize the decisions inherent to his technical work
- To justify and to defend the elections he propose
- To include in his analytical framework economic concepts as inflation, taxation, depreciation, financial planning, economic optimization ...
- To analyze and discuss the selections made by others.
- To understand the economic consequences derived from his personal decisions about savings, investment, retiring...

TEXTBOOK

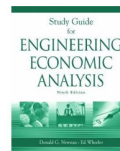
Engineering Economic Análisis (Ed. 9ª)

Edward W. Wheeler & Donald G. Newman

ISBN: 978-0195171495

Publisher: Oxford University Press

Published March 2004



REFERENCES

Blank L. T "Engineering Economy " 6th Ed Mc Graw Hill 2004

Thuesen "Engineering Economy" 1993 Prentice Hall 1993

Sullivan " Engineering Economy " 13 th Pearson 2005

GRADING

Work and attitude in class:	10%
Homework:	20%
Partial exams:	40%
Final Exam:	30%

COURSE SYLLABUS

WEEK	Topic		
1	1. The decisions of the engineer and the economy		Problem Set 1

2	2. The economic variables in technical selections	1 st Exam	Problem Set 2
3	3. Temporary equivalence of capitals		Problem Set 3
	4. Financial Mathematics		
4	5. Present Worth Models (PV)	2 nd exam.	Problem Set 4
	6. Annual Cash Flow Models		
5	7. Rate of Return Analysis		Problem Set 5
6	8 Incremental analysis		Problem Set 6
7	9 Other analysis Techniques		Problem Set 7
8	10 The uncertainty in the election	3 rd Exam	Problem Set 8
9	11 Depreciation		Problem Set 9
	12 Fiscal Effects		
10	13 Replacement Analysis		Problem Set 10
	14. Effects of the inflation		
11	15. Selection of the suitable rate of discount	4 th Exam	Problem Set 11
12	16. CB Analysis in the public sector		Problem Set 12
13	17. Rationing limited financial resources between projects		Problem Set 13
14	18. The Accounting information as a source for engineering decisions		Problem Set 14
15	19. The models of project evaluation in the very long run		Problem Set 15