

RINKER SCHOOL OF CONSTRUCTION MANAGEMENT
UNIVERSITY OF FLORIDA

CONSTRUCTION VALUE MANAGEMENT

COURSE NUMBER: ICM 6440

NUMBER OF CREDIT HOURS: 3

“Value Management is a vigorous, systematic effort to improve the value and optimize the life cycle cost of a facility.”

INSTRUCTORS: Abdol Chini (chini@ufl.edu)

COURSE WEBSITE: <http://lss.at.ufl.edu>

REQUIRED TEXT:

Dell’Isola, A., 1997, Value Engineering: Practical Applications for Design, Construction, Maintenance, and Operations. RS Means, Kingston, MA.

REFERENCES:

1. RS Means Costworks on-line cost data
2. Dell’Isola A, Kirk, S, 2003, Life Cycle Costing for Facilities. Reed Construction Data
3. Younker, DL, 2003, Value Engineering. Marcel Dekker, New York, NY.

COURSE DESCRIPTION:

Classical value management/value engineering principles; practical applications for designers, contractors, suppliers, and other construction functions. Students conduct full-scale VM/VE studies of recent international projects.

PREREQUISITE KNOWLEDGE AND SKILLS:

Graduate standing

PURPOSE OF COURSE:

The student will understand the role of VE in construction. Classical VE principles will be emphasized and practical applications for construction managers, contractors, and other construction functions will be described.

COURSE LEARNING OUTCOMES:

Upon completion of the course students will demonstrate their ability to:

1. *Understand the concepts of Value Engineering with emphasis on Functional Analysis and Life-Cycle Costing.*
2. *Understand the use of VE in the construction industry*

3. *Develop and apply creativity skills*
4. *Apply VE to construction company business and industry technical situations*
5. *Understand and apply VE problem solving techniques as a management tool*

COURSE POLICIES:

ASSIGNMENT POLICY:

Assignments are due at the end of each module and before beginning of the next module. All work turned in for this course is expected to be of professional quality in content and presentation.

EXAM POLICY:

Tests are open-book but are limited in time. Test 1 shall be taken at the completion of module 4 (submission of assignment 4). Likewise, Tests 2 shall be taken at the completion of module 8 (submission of assignment 8).

FINAL PROJECT:

You will be provided drawings, specifications, and design development estimate for a project. You have to develop a value analysis of a specified component of the project using the ASTM 1699 guidelines for value analysis and production of the final report.

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:

Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT:

*Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>. Although joint work on assignments may be acceptable in some cases, duplication of an assignment, both manually or by computer will be considered an act of academic dishonesty and dealt with accordingly. On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."***

GETTING HELP:

For issues with technical difficulties for E-learning in Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

GRADING POLICIES:

Test 1 (Modules 1-4)	24%
Test 2 (Modules 5-8)	24%
8 Assignments @ 4% each	32%
Final Project	20%
Total	100%

GRADING SCALE:

Grades will be computed according to the following scale:

A=93-100; A- =90-92.9; B+ =87-89.9; B=83-86.9; B- =80-82.9; C+ = 77-79.9; C=73-76.9; C- =70-72.9; D+ =67-69.9; D=63-66.9; D- =60-62.9; E<60.

Grade Values for Conversion												
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E, I, NG, S-U, WF
Grade Points	4.0	3.67	3.33	3.00	2.67	2.33	2.00	1.67	1.33	1.00	.67	0.00

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu>.

COURSE SCHEDULE:

<u>MODUE</u>	<u>SUBJECT AND COVERAGE</u>	<u>ASSIGNMENT</u>
1	Introduction Value Engineering concepts and history	Assignment # 1
2	Project scope and budget	Assignment # 2
3	Modeling techniques	Assignment # 3
4	Function analysis and FAST diagrams	Assignment # 4
	Modules 1, 2, 3, and 4	Test #1
5	The VE Job Plan	Assignment # 5
6	Creative problem solving	Assignment # 6
7	Life Cycle Costing	Assignment# 7
8	Decision analysis	Assignment # 8
	Modules 5, 6, 7, and 8	Test #2
9	Case studies and the VE Report	Final project

Disclaimer: This syllabus represents the current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.