



# Course Syllabus ENCE 422 Project Cost Accounting & Economics

# COURSE DESCRIPTION

**ENCE 422. Project Cost Accounting & Economics** (3) This course: reviews the fundamentals of accounting; examines project cost accounting principles as they apply to project management; project cost accounting; reading financial statements; cash management; cash flow analysis; depreciation and taxes; and impact on profitability; examines the principles of activity based costing; net present value analysis; introduces the framework for project performance measurement, cost performance indices, and earned value analysis.

### LECTURES

Thursday 5-7:30pm in Room 1121, room 0119 Chemistry Building (CHM)

#### INSTRUCTOR

Dr. Qingbin Cui ( cui@umd.edu ), 1157 Martin Hall, TEL. 301-405-8104

#### **INSTRUCTOR OFFICE HOURS**

Thursday 10-11am in 1157 Martin Hall or by appointment

### TEACHING ASSISTANT AND OFFICE HOURS

Deepak Sharma, <u>dksharma77@yahoo.com</u>, Engineering Laboratory Building 0122 Lawrence Lu <u>lyj0415@gmail.com</u>

### TEXTBOOKS

Engineering Economic Analysis,10th edition; Newnan, Eschenbach, & Lavelle; Oxford University Press, ISBN 978-0-19-533541-5. (required)

Construction Accounting and Financial Management, 2<sup>nd</sup> edition, Steven J. Peterson, Prentice Hall ISBN 978-0-13-501711-1. (optional)

Southport Minerals Inc (case can be purchased at HBS publishing <a href="http://cb.hbsp.harvard.edu/cb/access/4441746">http://cb.hbsp.harvard.edu/cb/access/4441746</a> )

### COURSE OBJECTIVE

Effective project managers have complete command of their project costs; understand and use several different project performance measurement concepts; and, prepare and utilize various forms of economic analysis. Students will understand these concepts and how to read and analyze financial statements; how to read and prepare project cost reports; how to summarize project data and turn it into management information; how to do simple cash flow analysis; how to prepare cost performance indices and predict project financial performance at 20% completion; and how to utilize activity based cost principles.

#### GRADING

Grade will be comprised of the following components: Midterm Exam- 20%; final exam 30%; Homework 40%, pop quiz and class participation 10%.

Late submission will not be accepted without the express consent of the Instructor. If you believe that your exam/homework has been graded incorrectly, you should return the complete exam/homework to me with a note clearly explaining why you deserve a higher score. Any request for regarding an exam/homework must be submitted within one week after the examination/homework is returned.

#### **COURSE EVALUATION**

I welcome your feedback on the course, either to me in person or on the course evaluation which will be administered near the end of the semester.

#### HONOR CODE

"The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit http://www.studenthonorcouncil.umd.edu/whatis.html."

#### COOPERATIVE WORK

I fully recognize the potential value of students working or studying together, and I do not have any objection to this kind of cooperation. However, you should work according to the following guidelines.

When an assignment is done individually, you may consult any people you wish during the thinking and planning phases of the assignment. At the point you begin to write, your work is expected to be your own. Academic dishonesty in this class includes copying on homework; however, working together is OK (in fact, I encourage working together). If there are any take-home exams, discussing the material with anyone, inside or outside of the class, is considered academic dishonesty.





ENCE 422 Project Cost Accounting & Economics

## CLASS SCHEDULE

| Date | Class # - Topics                    | Text            |
|------|-------------------------------------|-----------------|
| 1/28 | 1. Time Value of Money              | CH 3 (NEL)      |
| 2/4  | 2. Interest Formulas                | CH 4 (NEL)      |
| 2/11 | 3. Present Worth Analysis           | CH 2, 5 (NEL)   |
| 2/18 | 4. Rate of Return Analysis          | CH 7 (NEL)      |
| 2/25 | 5. Other Analysis Techniques        | CH 6, 9 (NEL)   |
| 3/4  | 6 MARR and Uncertainty              | CH 10,15, (NEL) |
| 3/11 | 7. Exam                             |                 |
| 3/18 | 8. Spring Break                     |                 |
| 3/25 | 9. Accounting System I              | CH2, 3(SJP)     |
| 4/1  | 10. Accounting System II            | CH2, 3 (SJP)    |
| 4/8  | 11. Accounting Process              | Handout         |
| 4/15 | 12. Financial Statement Analysis    | CH6 (SJP)       |
| 4/22 | 13. Project Evaluation Case Study   | HBS Case Study  |
| 4/29 | 14. Job Cost Accounting             | CH5, 8 (SJP)    |
| 5/6  | 15. Job Cost Accounting             | Ch4, 7 (SJP)    |
| 5/18 | Final Exam (Tuesday, May 18, 4-6pm) |                 |

Note: \* The syllabus is a plan and is very likely to change. \*

**NEL** -----Engineering Economic Analysis,10th edition; Newnan, Eschenbach, & Lavelle; Oxford University Press, ISBN 978-0-19-533541-5.

**SJP** ----- Construction Accounting and Financial Management, 2<sup>nd</sup> edition, Steven J. Peterson, Prentice Hall ISBN 978-0-13-501711-1.