

CHUKA UNIVERSITY
DEPARTMENT OF COMPUTER SCIENCE & ICT
COSC 436: Software Project Management
Prerequisite: COSC 332

1.0 Course Purpose

To enable students to learn technicalities of managing software projects; Students will differentiate between project management in other disciplines and in software development.

2.0 Learning Outcomes

On successful completion of this course, the student should be able to:

- (i) Demonstrate knowledge of the concepts of software processes and why software processes should be organized.
- (ii) Describe software project management and important project management activities
- (iii) Describe the fundamentals of software costing and project scheduling.
- (iv) Discuss the processes and procedures involved in software change.
- (v) Manage a software project from inception to its completion.

3.0 Course Description

human factors in software management. Software project team organisations. Software metrics. Software planning and scheduling. Software cost estimation. Configuration management. Maintenance management, quality management, risk management, human resource management, procurement management, integration management.

4.0 Teaching Methods

- 3 lecture hours per week
- 1 practical hour per week

5.0 Course Outline

Week	Topic
1	Introduction <ul style="list-style-type: none">– What is a project?– What is a software project?– What is project management? Software project planning and scheduling <ul style="list-style-type: none">- Software pricing- Plan-driven development- Project scheduling- Agile planning- Software cost estimation techniques
2,3	Software Project Management <ul style="list-style-type: none">- Risk management- Managing people

	- Teamwork
4,5	Software quality management <ul style="list-style-type: none"> - Software quality - Software standards - Reviews and inspections - Software measurements and metrics
6	CAT 1
7, 8	Configuration management <ul style="list-style-type: none"> - Change management - Version management - System building - Release management
9, 10	Integration management <ul style="list-style-type: none"> – Integration processes – Project charter development – Project plan development, execution, – Change control – CAT 2
11,12	Procurement management <ul style="list-style-type: none"> – Planning procurements – Conducting procurements – Administering procurements – Closing procurements
13,14	Human resource management <ul style="list-style-type: none"> – Organization and project planning – The project team – The project environment
15	Revision

6.0 Evaluation

- Continuous Assessment Tests - 30%
- Ordinary Examination at end of Semester 70%

7.0 References

- Ian Sommerville (2011), *Software Engineering*, 9th Ed. Addison Wesley
- Pressman R. (2010), *Software Engineering: A Practitioner's Approach*, 7th ed. McGraw Hill
- James Cadle and Donald Yeates, *Project Management for Information Systems*, 5th Edition,
- Prentice Hall, (2008). ISBN-10: 0132068583, ISBN-13: 978-0132068581
- Schwalbe, K. *Information Technology Project Management*, Prentice Hall, New York, NY, (2013). ISBN-10: 1133526853, ISBN-13: 978-1133526858.
- Meredith, J. R. and Mantel, S. J. *Project Management: A Managerial Approach*. Wiley. (2009). ISBN-10: 0470226218, ISBN-13: 978-0470226216.
- PMBOK Guide