CPIT-330 Syllabus

Catalog Description

CPIT-330 IT Issues and Management
Credit: 3 (Theory: 3, Lab: 0, Practical: 1)
Prerequisite: CPIT-220 , CPIT-250
Classification: Department Required

The objective of this course is to study the concepts and application of Agile and Scrum techniques to manage software development projects. Topics include an introduction to agile project management, fundamentals of scrum for dealing with uncertainty and risk, identifying the roles and their responsibilities, managing releases, tools for tracking and monitoring a project, planning an agile project, establishing the business reasons for the project, clarifying the business vision, identifying features for development in an iteration, fostering self-management within the development team, creating the optimal working environment, transitioning to self-management, running iterations, managing change, reviewing the iteration through a sprint review, closing the project using a sprint retrospective, applying agile throughout your organization, dealing with the legacy organization, and scaling for large projects.

Class Schedule

Meet 50 minutes 3 times/week or 80 minutes 2 times/week

Lab/Tutorial 90 minutes 1 times/week

Textbook

Mike Cohn, , "Agile Estimating and Planning", Pearson Education;(2005-11-01)

ISBN-13 9780132703109 **ISBN-10** 0132703106

Grade Distribution

Week	Assessment	Grade %
4	Homework Assignments 1	10
6	Homework Assignments 2	10
9	Homework Assignments 3	10
10	Exam 1	30
12	Homework Assignments 4	10
17	Exam	30

Last Articulated

December 18, 2017

Relationship to Student Outcomes

a	b	c	d	e	f	g	h	i	j	k	l	m	n
x		x											x

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. Describe the purpose of planning and why we plan. (n)
2. Describe why traditional planning fails (n)
3. Describe agile planning. (n)
4. **Formulate the user stories for an application. (c)**
5. Estimate the size of user stories with story points. (c)
6. Estimate size of user stories with ideal time. (c)
7. **Estimate size using the best techniques (estimate: As a team, in one order of magnitude, use good sequences, use Zero) and methods (Expert opinion, Analogy, Disaggregation) for deriving an estimate. (n)**
8. Classify user stories and themes in ordre to prioritize them by considering the four factors: financial value, financial cost, new knowledge and risk. (n)
9. **Classify and prioritize features using financial approaches. (a)**
10. Classify the desirability of features using the two approaches: Kano analysis and relative weighting. (a)
11. Create the release plan . (n)
12. **Create the iteration plan. (n)**
13. Deduce the iteration length by considering factors (length of the release, amount of uncertainty, overhead of iterating, how long priorities can remain unchanged, willingness to go without outside feedback and how soon a feeling of urgency is established). (n)
14. Deduce the team's velocity using one of the methods: historical values, runing test iterations or forecasting velocity. (a)
15. **Evaluate the progress of work in the project against your release and iteration plans and communicate information about plans. (n)**

Coordinator(s)

Dr. Mounira Taileb, Associate Professor

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Topics Coverage Durations

Topics	Weeks
The Purpose of Planning	1
Taditional failures	1
Agile approach	1
Havannah user stories	1
Story points	1
Ideal days	1
Estimation techniques	1
Four factors for prioritizing themes.	1
Financial prioritization	1
Prioritizing desirability	1
Release planning	1
Iteration planning	1
Iteration length	1
Estimating velocity	1
Tracking and communicating progress	1