Liverpool John Moores University

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Title:	PROBLEM SOLVING, TEAMWORK, PROJECT ANALYSIS AND PREPERATION
Status:	Definitive
Code:	**5513TECYPC** (120604)
Version Start Date:	01-08-2016

Owning School/Faculty:	Electronics and Electrical Engineering
Teaching School/Faculty:	YPC International College (Kolej Antarabangsa YPC)

Team	Leader
Paul Otterson	Y

Academic Level:	FHEQ5	**Credit Value:**	24	**Total Delivered Hours:**	72
Total Learning Hours:	240	**Private Study:**	168		

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24
Tutorial	48

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Course work : team report (problem definition and feasibility study)	10	
Test	AS2	Coursework : class test (project management tools)	10	
Portfolio	AS3	Coursework : group report and presentation (implementation plan)	15	
Portfolio	AS4	Coursework : group report and presentation covering case study, and report on problem solving effectiveness	25	

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS5	Coursework : individual Final Year Project specification	40	

Aims

To apply problem solving techniques and project management skills to technical problems

To integrate a variety of elements of the e-Business Management programme in action learning activities designed to tackle a relevant real or simulated complex problem.

To develop key skills such as working in groups, problem-solving, project management, oral and written communication skills within the context of tackling a relevant problem.

To formulate a final Year Project in respect of topic selection, outline objectives, supervisor selection and project specification production

Learning Outcomes

After completing the module the student should be able to:

1 Define and analyse a major technical/quality problem using techniques such as Kepner-Tregoe, QFD and benchmarking
2 Use project management tools such as CPA and Resource Management to plan and map an implementation programme for a technical change
3 Produce a reasoned analysis and recommendations for the solution of a major case-study based business problem, through acting as a member of a consulting team
4 Critically appraise the effectiveness of their problem solving activity in terms of product and process (including making judgements as to peer contribution), and develop a plan for further improvement.
5 Contribute to their final year project by the generation of a structured project Terms of Reference.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

team report	1				
class test	2				
group report and presentation	2	4			
group report and presentation	2	3	4		
individual Project spec	1	2	3	4	5

Outline Syllabus

1. Problem Solving Cycle and the Development Process
2. Quality Tools E.g. 7 Old and 7 New Quality Tools, Kepner-Tregoe, Questionnaires
3. Benchmarking and Performance Measurement
4. Project Management: Flow charting, Gannt Charts,CPA,Resource Management.
Includes the use of project management software
5. Continuous Improvement: auditing, post development review

Introduction to teamworking: teamwork simulation
Team roles (Belbin classification) including identification of team role preferences
and observation of one another whilst operating within a team
Team formation process
Company & Market information sourcing
Major case study comprising business problem of many facets
Production of Project Specification for final year project, covering research into
sponsoring organization & topic area, objectives formulation, creation of a time plan,
using the techniques and understanding derived above in the earlier group work

Learning Activities

Lectures, case studies, role play, simulation, practical tutorials using appropriate software.
This module is based on action learning: in the first part students learn through working in self-managed teams to tackle a real or simulated problem with many dimensions and relevant to a variety of topics within the E-Business Technology and Management programme. There is a small amount of lecture and tutorial work to provide the necessary theoretical underpinning and guidance, and opportunity for group discussion and reflection. In the second part, through lectures, discussion and individual tutorials, students select and specify their own final year project.

Notes

This module teaches problem solving techniques and project management skills and applies them to the resolution and implementation of technical and business problems, finally applying learning to the construction of a viable final year project.