SUBJECT DESCRIPTION FORM

Subject Title: Workflow Management and Collaborative Systems

Subject Code: COMP5524

Credit Value: 3

Pre-requisite: Nil

Exclusions: Office Information Systems (COMP577),

Workflow Management and Collaborative Systems (COMP580)

<u>Learning Approach</u>:

Workflow management and office automation systems are being introduced in many organizations to automate business process and enhance office productivity. Initially, such technology is mainly employed within a given organization. As Internet becomes more popular nowadays, workflow systems are increasingly being used to interconnect organizations and facilitate collaboration across business enterprises. In this course, collaborative systems will be covered from both technical and business perspectives. Case studies are used to demonstrate how to improve business performance through office automation and workflow applications. Students are expected to complete assignments in groups. Group assignments will include case studies and hands-on exercises using process analysis and XML editing tool. No programming knowledge is required.

42 hours of class activities including - lecture, tutorial, lab, workshop seminar where applicable

Assessment:

Continuous Assessment 45% Test, and Examination 55%

Objectives:

To understand the design and the development of collaborative systems so as to streamline intraorganizational and inter-organizational business processes. It includes the study of business process re-engineering and balanced scorecard framework, process lifecycle, process modelling and analysis, system integration through EAI and XML technology, enterprise portal, document management and imaging system. Industry standard such as WfMC workflow reference model and XML consortiums (e.g. RosettaNet, ebXML) formed in various industry will also be covered.

The Department reserves the right to update the syllabus contents. Please note that the learning approach for the same subject could vary slightly due to different delivery modes.

Learning Outcomes:

After completing this subject, students should be able to:

- 1. better understand workflow management;
- 2. relate workflow systems to interconnect organizations to facilitate collaboration across business enterprises;
- 3. explore office automation and workflow applications that can improve business performance; and
- 4. perform case studies and hands-on exercises using process analysis tools.

Keyword Syllabus:

Process automation and engineering, end-user systems, balanced scorecard, electronic document management system, telephony, video-conferencing, computer support cooperative work (CSCW), groupware, intranet, internet, electronic commerce, business-to-business, interworkflow, WfMC (Workflow Management Coalition), Extensible Markup Language (XML), Document Type Definition (DTD), public key infrastructure (PKI), certificate authority (CA), RosettaNet, ebXML, Microsoft 2003

Indicative reading list and references:

Text book

Rashid N. K., 2004, Business Process Management: A Practical Guide, Meghan-Kiffer Press.

References books

Dave, C. et. al., 1998, Groupware, Workflow and Intranets: Re-engineering the Enterprise with Collaborative Software, Future Strategies.

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Fischer, L. (Editor), 2001, Workflow handbook, Future Strategies.
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Fischer, L. (Editor), 2002, Workflow handbook, Future Strategies.

Fischer, L. (Editor), 2003, Workflow handbook, Future Strategies.

Fischer, L. (Editor), 2004, Workflow handbook, Future Strategies.

Fischer, L. (Editor), 2005, Workflow handbook, Future Strategies.

Journal papers and articles

Hunt R., 2001, *Technology infrastructure for PKI and digital certification*, Computer Communication, pp. 1460 – 1471.

Lococo A. and Yen D.C., 1998, *Groupware: Computer Supported Collaboration*, Telematics and Informatics, 15, pp. 85-101.

Rinde J., 1999, Telephony in the year 2005, Computer Networks, 31, pp. 157 – 168.