APIC
ASIA PACIFIC INTERNATIONAL COLLEGE

SBM1103 Project and Program Information & Communication Systems

UOS CODE SBM1103	UOS NAME Project and Program Information & Communication Systems	CREDIT POINTS 6	STATUS Secondary Core

SUMMARY

Information and communication technologies (ICT) play a key role in successful development, staging and ongoing management of projects and programs. Thus, all project and program managers and directors as well as experts participating in projects and programs need to be thoroughly versed in effective utilisation of ICT. Nowadays there are multiple choices of information and communication systems, ranging from fairly simple technologies such as email to more advanced systems offering a multitude of channels of communications as well as decision analysis and optimisation.

The thrust of this unit is to develop competencies in the design of appropriate information technology infrastructures for projects and programs in order to facilitate real time communication and collaboration as well as effective virtual teamwork. More specifically the objectives are:

- To develop an understanding of the role that effective and efficient information and communication management systems will play in management of projects and programs.
- To understand different systems for collaborative and integrated communication systems and current uses of information technology in achieving greater efficiency and lowering costs.
- To develop the ability to formulate information management systems and infrastructure for planning and implementation of projects, covering both decision making and communication functions.

Information and communication management systems that will be studied are as follows:

1. Email, fax, phone and SMS that need no or simple adaptation on any project and program
2. Stand alone project control software, such as scheduling, cost estimating software
3. Web-based project/program information and document sharing and communication tools
4. Web-enabled information evaluation and decision support tools
5. Voice, still pictures and video streaming over the Internet
6. CAD and design software
7. Visualisation and multi-media communication tools
8. Simulation technologies
9. System dynamics and other specific technologies

As seen, the array of technologies available is too wide. Professionals in charge of projects and programs need to select and optimise the most appropriate ICT strategies and ensure that these will work to engender teamwork and collaboration, act as quality tools, maintain information and documentation records, protect against potential unauthorised access and so on. The optimality of the choice and actual design of ICT infrastructure must be systematic and based on the business value rather than sophistication of the relevant technologies. This unit of study will focus on the underpinning principles, framework for analysis of the available options, selection and installation of the relevant systems as well as training and induction of the staff interacting with the system on a frequent basis.

COURSE CONVENOR COURSE TUTOR	Dr Venkatesh Mahadevan
ASSUMED KNOWLEDGE	Recommended SBM1101, SBM 1102 and SBM1201

APPROXIMATE WORKLOAD	**Weekly Lectures & Tutorials**	**Team Work**	**Self Study**	**Readings**
	60 hours	>60 hours	>60 hours	>30 hours

PRE-REQUISITE *(course name)*	None
OBJECTIVES	Upon completion of the course, the student should demonstrate: • a sound knowledge of the available technologies and ICT solutions typically applicable to projects and programs • competency in assessment of information and communication needs and requirements in each phase of projects/programs • competency for data capture and standardization, over project/program life cycle

	• competency in document standardisation, sharing and archiving processes • know how to conduct cost benefit analysis of the ICT systems and selection of an appropriate system for each case project/program • competency in projects re-engineering, benchmarks and testing • competency in risk analysis; management roles and technology interfaces • know how to set up effective computer-based teamwork and collaborative framework, particularly during design and planning processes where computer-based modelling may play a vital role in the project solution optimisation competency in developing staff and team skills in the effective utilisation of ICT systems to achieve order of magnitude performance improvements on projects/programs
TARGET COMPETENCIES (Project and Program Information & Communication Systems)	**Information & communication needs** • Ability to conduct systematic investigation of information, communication and documentation needs on projects and programs with particular emphasis on achievement of quality and attainment of strategic goals • Competency to standardise data and documentation formats, mode of information generation, updating, recording and archiving • Ability to validate if the information needs and requirements of project/program have been correctly determined as well as obtaining agreement on selected format and protocols for data standardisation and reporting through consultation with the client and other stakeholders • Ability to generate potential information and communication technologies (ICT) and paper-based solutions and narrow these down to a shortlist of promising solutions **Acquisition of information & communication systems** • Ability to undertake systematic assessment of shortlisted solutions, including cost-benefit analysis, or other appropriate appraisal techniques to locate the optimum solution • Competency in preparing simplified diagrams and users' specifications for system acquisition • Know how to acquire the selected systems, test and operationalise the same • Ability to define KPIs for on-going evaluation, adjustment and improvement of selected ICT systems **Effective utilisation & on-going improvement** • Know how to develop and widely distribute appropriate protocols for users and institute training and ensure proper induction of new staff • Know how to ensure systems are aligned with all other functions such as scope management, time management, cost and risk management, quality management, progress monitoring and so on. • Know how to facilitate system utilisation via help desk function or through other assistance • Competency in undertaking continuous evaluation, alignment and performance improvement of the ICT systems
TARGET COMPETENCIES (Personal and Socio-cultural)	• Generic: All competencies that are common to all professionals (including cognitive and communication abilities, problem solving and analytical mindset) • Leadership: Ability to direct, motivate & manage individuals & teams. • Commitment: Ability to dedicate to tasks & to project outcomes. • Attitude: Ability to create the right frame of mind that promotes integrity & support for achievement of project goals within a social context. • Self Direction: Ability to manage within and without guidelines & processes, and to work without supervision. • Learning: Ability to commit to continuous improvement in knowledge, skills & attitude, & to creating new knowledge developing skills & approaches. • Cultural Empathy: Ability to respect for & accommodation of individual lifestyle, beliefs & norms. • Creativity & Innovation: Capacity to generate new ideas/approaches & make them happen.
MODES OF DELIVERY	• Lectures and Tutorials two (2) hours per week • Team-based learning and project work two (2) hours per week • Reflective learning, in tandem with team and project learning.
ASSESSMENT	Theoretical Knowledge • Formal written mid semester test – 2 hours • Formal written end-of -semester test - 2 hours • 40% of Total Grade (Individual must achieve 10/20 in each test) Team Project Presentation & Assessment • Team project submissions (formatted as per specification for the same) 45% of Total Grade (Team

	Score – must achieve 22.5/100), • Project submissions comprise 3 assignments; each carrying 15 marks (must submit each assignment in specified deadline) Viva (Individual Oral Assessment) • Individuals must submit their Final Report on or before Week 14 • 15% of Total Grade (Individuals must achieve 10 out of 15 marks to pass the unit of study) • Assessment requirements: Final Individual Report (self reflection and validation of learning outcomes) • Individual student must demonstrate level 2 minimum with respect to target learning outcomes • Individual student must also demonstrate improvements in socio-cultural and personal capabilities progressively over each successive semester.

	PRESCRIBED FOR THE COURSE	***SELECTED REFERENCES***
PRINTED MATERIALS	**Learning material (lecture notes, slides, case study and other material available online).** **Case project** (students' own case project subject to endorsement)	Cross, Christopher (2013). IT Service Management 102: Most Asked Questions: What You Need to Know, In Success Secrets.[Brisbane, Australia] : Emereo Frost, Leonard (2013). ERP: 308 Success Secrets, In Success Secrets.[Brisbane, Australia] : Emereo. Kendrick, Tom (2010). The Project Management Tool Kit : 100 Tips and Techniques for Getting the Job Done Right, New York : AMACOM American Management Association Mangal, Vandana, Karmarkar, & Uday (2012). UCLA Anderson Business and Information Technologies (BIT) Project : A Global Study of Business Practice, Singapore : World Scientific Publishing Company Marshall, Lisa J., Freedman, Lucy D. (2012). Smart Work : The Syntax Guide for Mutual Understanding in the Workplace, Pa : Project Management Institute McGrath, Robert N (2012). Project-driven Technology Strategy: Knowledge Technology, Newtown Square, Pa : Project Management Institute Moon, Connie (2013). SLA 126, In Success Secrets.[Brisbane, Australia] : Emereo. Park, Jung-ran, Spink, Amanda, Howarth, Lynne C (2013). New Directions in Information Organization, In Library and Information Science.Bradford: Emerald Group Publishing Limited Paul E Haris (2013). Project Planning and Control Using Oracle Primavera P6 Versions 8.1, 8.2 & 8.3 Professional Client & Optional Client : Planning and Progressing Project Schedules with and Without Roles and Resources in an Established Database, Victoria, Australia : Eastwood Harris Pty Ltd.. Pilkington, Ann (2013). Communicating Projects: An End-to-end Guide to Planning, Implementing and Evaluating Effective Communication, Farnham, Surrey: Gower. Shankar, Chandru, Bellefroid, & Vincent (2011). Microsoft Dynamics Sure Step 2010: The Smart Guide to the Successful Delivery of Microsoft Dynamics Business Solutions, Birmingham, UK: Packt Publishing.

WEB SITES	No single Web site presents all the necessary knowledge that students need to learn and apply. However, opposite are some useful sites to visit.	Online useful sources of references are: TBA
Software	Not applicable	Students may also wish to use standard software for normal typesetting, graphic design and associated tasks

Weekly Schedule

Week	Program	Activity
Week 1	Introduction to SBM1103 Project and Program Information & Communication Systems Team QA/Work Plan & Case Organisation Selection	Introduction to course aims, objectives, target competencies, learning strategies, resources available, timetable and deliverables, assessment methods and related briefings Briefing on how to conduct each phase and the entire unit of study **Lecture 1**: **Project/Program Information and Communication Systems - An Overview** Break **Lecture 2**: **Web-based Project/Program Management Tools and Systems** Tutorial 1/Guidance on preparation of Team QA/Work Plan/Introduction to Literature Review on Project and Program Information & Communication Systems of Team Case Organisation
Week 2	Assignment 1: Literature Review	**Lecture 3**: **Project/Program Information Systems** **Lecture 4: Project/Program Communication Systems** Break Finalisation of teams and Case Organisation selection and Research and gather relevant Literature on Project and Program Information & Communication Systems of Team Case Organisation Group work on tutorial 2, present tutorial 1 solutions , Activity 1 Literature Review
Week 3	Assignment 1: Literature Review	**Lecture 5**: **Acquisition of Project/Program Information and Communication Systems** **Lecture 6**: **Feasibility Analysis of Project/Program Information and Communication Systems** Break Group work on tutorial 3, present tutorial 2 solutions Review of Progress on Literature Review on Project and Program Information & Communication Systems of Team Case Organisation & Feedback
Week 4	Assignment 1: Literature Review	**Lecture 7: Effective Utilisation of Project/Program Information/Communication Systems** **Lecture 8: Ongoing Improvement of Project/Program Information/Communication Systems** Break Group work on tutorial 4, present tutorial 3 solutions Review of Progress on Literature Review on Project and Program Information & Communication Systems of Team Case Organisation & Feedback/Present Draft Literature Review on Project and Program Information & Communication Systems of Team Case Organisation & Feedback
Week 5	Assignment 1: Literature Review	Tutorial 4, presentations & feedback Present Final Literature Review on Project and Program Information & Communication Systems of Team Case Organisation & Feedback Break Present Final Literature Review on Project and Program Information & Communication Systems of Team Case Organisation & Feedback
Week 6	SBM2101 Test 1	Review of all past lectures and tutorials Revision and sample test questions

Week	Program	Activity
		Break **SBM1103 Mid-Semester Test**
Week 7	Assignment 2: Methodology and Data	Feedback on Mid Semester Test/Review of theoretical concepts related to Project's Information & Communication Systems Conduct self and peer assessment and self reflection Break Guidance on Activity 2 Team Case Project's Information & Communication Systems Methodology/ Initiation Plan Teamwork under supervision on Team Case Project's Information & Communication Systems Methodology/ Initiation Plan
Week 8	Assignment 2: Methodology and Data	Progress Review, Activity 2 Case Project's Information & Communication Systems Methodology/ Initiation Plan Work on Activity 2, Activity 2 Case Project's Information & Communication Systems Methodology/ Initiation Plan Break Present Team's Draft Case Project's Information & Communication Systems Methodology/ Initiation Plan Review of theoretical concepts related to Case Project's Information & Communication Systems /Teamwork under supervision on Case Project's Information & Communication Systems Methodology/ Initiation Plan
Week 9	Assignment 2: Methodology and Data	Present Assignment 2 Case Project's Information & Communication Systems Methodology & Feedback Break Guidance on Activity 3, Case Project's Information & Communication Systems Implementation Plan Review of theoretical concepts related to Case Project's Information & Communication Systems /Teamwork on Activity 3
Week 10	Assignment 3: Field work/Finalisation and Presentation of Team Project Report	Review Progress Activity 3, Case Project's Information & Communication Systems Impl. Plan Work on Activity 3, Team Case Project's Information & Communication Systems Impl. Plan Break Review of theoretical concepts related to Case Project's Information & Communication Systems /Present Case Project's Information & Communication Systems Methodology/Initiation Plan
Week 11	Assignment 3: Field work/Finalisation and Presentation of Team Project Report	Guest Lecture: Project and Program Information & Communication Systems Implementation Plan Review Progress Activity 3, Case Project's Information & Communication Systems Impl. Plan Break Guidance on Activity 3, Case Project's Information & Communication Systems Impl. Plan Review of theoretical concepts related to Case Project's Information & Communication Systems / Teamwork on Activity 3
Week 12	Assignment 3: Field work/Finalisation and Presentation of Team Project Report	Present Case Project's Information & Communication Systems Impl. Plan Break Review of theoretical concepts related to project
Week 13	Preparation for Presentation and Assessment	Review of all theoretical and project studies Revision and sample test questions Break **SBM1103 End-of-Semester Test**
Week 14	Preparation for Presentation and	Final Self and Peer Assessment Self Reflection

Week	Program	Activity
	Assessment	Break Compile Evidence and Prepare Individual FRs Present and Discuss a Sample Final Report
Week 14	Presentation and Assessment	Individual Viva Presentation
Week 15	Presentation and Assessment	Individual Viva Presentation

	Teamwork A structured learning program will be applied; in summary form it will comprise: • An overall process for studying strategic project/program/portfolio management and applying the same to a real life case as advised in the unit's web site; • A program of the learning activities which are part of student's Team Workplan and individual competency acquisition which each student need to conduct flexibly within the unit of study timeline as advised in the unit's web site (detailed schedules are to be developed and submitted as part of the Team Work/QA Plan) • The assignment Brief which is available as a downloadable file. The Learning activities are designed for each team to develop and evaluate a complete manual* for project/program/portfolio management for their case organisation via the following activities: **Start Up** Team QA/Workplan & Case Project Selection — **Activity 1** Literature Review on Information and Communication Systems of Team Case Organisations — **Activity 2** Team Case Organisation's Strategic Information and Communication Systems Methodology — **Activity 3** Final Team Case Organisation's Strategic Information and Communication Systems Impl. Plan Submit Case Study, QA/Workplan — Submit Assignment 1 — Submit Assignment 2 — Submit Assignment 3
COMPETENCY VALIDATION (via evidence and professional interview)	**Final Report & assessment** Each student must plan to progressively acquire, develop and document the relevant unit of study target competencies. The protocols on the web site for this purpose need to be followed carefully to prepare the required evidence of competency acquisition. The evidence for this unit to comprise a final report in two parts to validate individually the following: specific target unit of study competencies regarding governance and administrative design as well as Leadership and Socio-cultural competencies. These will be assessed separately and both need to show the student's development history using the student's L&D plan as the basis.

Refer to the following Schedule of Submissions for submission deadlines*

Start-up Activity	Team QA/Work Plan & Case Project Selection	**Week 2**
Assignment 1	Literature Review & Best I Strategic Information and Communication Systems Practice	**Week 6**
Assignment 2	Current Strategic Information and Communication Systems Practice at Case Organisation	**Week 9**
Assignment 3	Final Strategic Information and Communication Systems Plan for Case Organisation	**Week 13**
Final Project/Report	Individual Self Reflection (Competency Assessment) Reports	**Week 14**

*Penalties apply for late submissions. The College reserves the right to refuse to late submissions.
**You may submit a single Team QA/Work-plan covering all your units and activities in this semester

APIC
ASIA PACIFIC INTERNATIONAL COLLEGE

Academic Integrity and Honesty

Following are details and a link to the APIC academic integrity and honesty policy. All students are encouraged to familiarize themselves with the policy, together with other relevant policies, prior to commencing their studies.

APIC believes that academic integrity is based on honesty in all scholarly endeavours. Students must conduct themselves in their academic studies honestly and ethically and are expected to diligently acknowledge the work of others in all academic activities.

A failure to uphold the College's policies and standards of academic honesty and integrity may result in a finding of academic misconduct which can incur serious penalties including a loss of marks, failure of an assessment, failure of the unit, or expulsion from the College.

Academic misconduct includes cheating, collusion, plagiarism, and other conduct that deliberately or inadvertently claims ownership of an idea or concept without acknowledging the source of the information. This includes any form of activity that negates the academic integrity of the student or another student and his or her work.

Detailed information about relevant terms, penalties, and the processes for investigating allegations of academic misconduct, and for appealing a finding is provided in the college's policy.

The full policy can be found at: http://apicollege.edu.au/policies-and-regulations/178