MAKERERE UNIVERSITY
MAKERERE UNIVERSITY BUSINESS SCHOOL
FACULTY OF COMPUTING AND INFORMATICS
DEPARTMENT OF INFORMATION SYSTEMS

PROGRAMME: **BBC AND BOIM**
COURSE: **Information Technology Project Management**
COURSE CODE: **BUC3217**
COURSE LEVEL: 3
SEMESTER: Two
ACADEMIC YEAR: 2024/2025
CREDIT UNITS: 4
CONTACT HOURS: 60
FACILITATORS: Dr. Samali V. Mlay, Mr. Bonface Abima, Ms. Catherine Nyesiga, Ms. Zuhra Nantege

Group	BBC Gp A	BBC Gp B	BOIM
Venue	Block 5 Rm 2	ADB Lab 4	Block 3 Rm 2
Time	Wed 3:00 - 5:00pm, Fri 3:00 – 5:00pm	Wed 3:00 – 5:00pm, Fri 5.30- 7.30pm	Mon 1:00 – 3:00pm, Wed 3:00 – 5:00pm

INFORMATION TECHNOLOGY PROJECT MANAGEMENT

Course Description

IT Project Management forms an integral part of any IS/IT department today and as such proper understanding of all the theories and philosophies regarding IT project management is essential. Project management forms the heartbeat of any IS/IT department and as such controls all activities in the systems development life cycle. Knowledge in project management is essential for all IS/IT professionals in order to conduct their duties in a professional and productive way.

This course introduces general concepts embodied in the Project Management Institute's PMBOK, while exploring specialized techniques for IT project scope management, IT project time management, IT project cost management, and IT project quality management among others.

The success of many organizations depends on their ability to harness the power of information technology, but many information systems implemented by organizations either fail completely or do not live up to their potential. Organisations are recognising that it is many of the "behind the scenes" activities that result in a successful information system and are investing in project managers and their education. Project managers need

many skills above and beyond the technical skills required to implement information systems. Management of time, scope and cost are vital, as are the “soft” skills of managing the team and communicating with the stakeholders.

Course Objective

The main objective of this course is to develop the students' understanding of the issues involved in managing IT projects. The course imparts practical knowledge of the skills and techniques used to manage information systems projects.

The purpose of this course is to orient learners in the components of IT projects, how to manage those IT project components, and how to form and lead a project team. Project Management tools and techniques will be introduced, discussed, and applied.

The specific objections of the course are;

1. To introduce students to the project management discipline and the life cycle.
2. To explain to the learners, the project management life cycle and the project management process groups: Initiating, Planning, Executing, Monitoring, controlling, and Closing;
3. To introduce learners to the theoretical Project Management knowledge areas such as IT Project Scope, Time, Cost, Quality, Risk management.
4. To apply IT Project management tools and techniques through practical sessions.

Learning Outcomes

Students who complete the course will be able to demonstrate:

1. Competence sufficient to identify current and emerging information technologies that may have strategic value for enterprise; assess where those technologies have value; and manage the implementation of those technologies in the enterprise.
2. Advanced knowledge of the following project management process groups: Initiating, Planning, Executing, Monitoring, controlling, and Closing; knowledge of agile software development practices, and planning and governance of large projects and programs.
3. Proficiency in basic project management tools and software techniques, including software architecture, project time management, risk analysis, cost estimation and budgeting, and quality control; proficiency in planning and developing a comprehensive project plan and software development life cycle.
4. Competence sufficient to oversee the architecture, design, and implementation of software systems.

Detailed Course Content:

No.	Topic	Lesson Details	Week	Facilitator
1	Introduction to IT Project Management	• Key Concepts: Projects, programs, portfolios, and operations. Difference between Project and Operation activities • The purpose of Projects • The Project management office • The role of the project manager Stakeholders & organizational structure of projects. • Project management knowledge areas? • Nature of IT Projects: Features & characteristics of IT Projects, types of IT projects • Why do IT Projects fail? • Success factors for IT projects	Week 1&2	Dr. Samali V. Mlay
2	Project Life cycle	• Project Management Process Stages: Initiation, Planning, Execution, Monitoring and Controlling and Closing • Types of life cycle models for IT projects: Predictive (Waterfall) life cycle, iterative life cycle, Agile life cycle, incremental life cycle (Refer to SAAD)	Week 2	Dr. Samali V. Mlay
3	Project Initiation and Planning	• Determining the Business case/project selection • The project charter • Stakeholder Identification & analysis • Defining project scope, scope verification & scope control	Week 3	Catherine Nyesiga

		• Work breakdown structure (WBS), and milestones		
4	Project Cost Management	• Importance of project cost management • PCM principles, concepts, and terms • Types of cost estimates and methods for preparing them • Cost budgeting for IT projects. • Benefits of earned value management and project portfolio management to assist in cost control • Project management software for project cost management	Week 4	Catherine Nyesiga
5	Project Time Management.	• The importance of project schedules • Activity definition & sequencing • Activity resource estimating • Activity duration estimating • Schedule development & control • Building and analyzing network diagrams: Ghant charts, Critical path Analysis	Week 5	Catherine Nyesiga
6	Project Quality Management	• Project Quality • Quality planning • Quality Assurance and control • Project Quality costs • Organisational influences • Maturity Models	Week 6	Zuhra Nantege
7	Project Risk Management	• Risk management: Key processes in IT Project risk management • Identifying IT Project risks • Tools & Techniques for IT project risk management	Week 7	Zuhra Nantege

		• Best practices for IT Project risk management		
8	Project implementation and evaluation	• Project implementation: Key activities involved, success factors. • Closing projects: Key activities involved, outputs of project closures (Closure checklist, lessons learned document and final reports) • Project evaluation: Key activities involved, tools for evaluation, outputs	Week 8	Zuhra Nantege
9	Practical component: MS Excel	MS Excel • Recap of MS Excel • Create a Gantt chart to present project data, schedule project tasks, and track project progress using MS Excel.	Week 9	Bonface Abima
10	Practical component: MS Project	***Introduction to Microsoft Project*** • Overview of the MS Project interface • Setting up a new project (start dates, calendars, properties) • Familiarization with Gantt Chart, Ribbon, and Tables Pane ***Task Management*** • Creating and organizing tasks • Building Work Breakdown Structures (WBS) with subtasks • Adding task durations and setting start dates ***Dependencies and Scheduling*** • Linking tasks and defining relationships (Finish-to-Start, Start-to-Start, etc.) • Adjusting dependencies and managing constraints • Identifying the critical path ***Resource Management*** • Adding resources (work, material, and cost types)	Week 10, 11,12, 13	Bonface Abima

		• Assigning resources to tasks • Managing resource allocation and resolving overallocations ***Tracking and Progress Monitoring*** • Updating task progress and tracking % completion • Using the Tracking Gantt view for comparisons • Setting and reviewing project baselines ***Reporting and Change Management*** • Generating project reports (task, resource, and project overviews) • Managing changes: Task Notes, baselines, and updates • Monitoring the impact of changes on the schedule ***Finalizing and Archiving Projects*** • Marking tasks and projects as complete • Saving project templates for reuse • Archiving and presenting project outcomes		
	Personal Revision	Learners will be allowed time to revise and consult the facilitators for a wrap up of all the topics taught.	Week 14, 15	Learners
	Total Hours		**60**	

Additional Reading

You are required to conduct personal research and reading on the following IT Project facilitating functions;

1. Project Human Resource Management
2. Project Communication Management
3. Project Procurement Management

Methods of Delivery

- Lectures (face to face and online)
- Tutorials
- Class Presentations

Methods of Assessment

- Coursework (Take home, Presentations + Tests) Continuous assessments
- Examination

NB: Continuous assessment involves the completion and submission of assignments worth **30%** of the available marks. The examination will carry **70%** of the available marks. The pass mark for this course is **50%**

Reading List

1. Brown, James T. (2014). *The Handbook of Program Management: How to Facilitate Project Success with Optimal Program Management,* 2nd Ed. The McGraw-Hill Companies, ISBN 978-0071837859
2. Gray, Clifford F. & Larson, Erik W. (2012) *Project Management, the Managerial Process,* McGraw-Hill International Edition.
3. PMBOK fifth Edition (2013)
4. Project Management Institute, (2013). *The Standard for Program Management,* 3rd Ed., Project Management Institute, ISBN 978-1935589686
5. Saladis, Frank & Kerzner, Harold. Bringing the PMBOK Guide to Life: A Companion for the Practicing Project Manager
6. Schwalbe, Kathy, (2015). *Information Technology Project Management, 8th Ed,* Course Technology, ISBN 978-1285452340
7. Subramanian, Satish, P. (2015). *Transforming Business with Program Management: Integrating Strategy, People, Process, Technology, Structure, and Measurement*. Auerbach Publications, ISBN 978-1466590991