

PRESCRIPTION: 652 SYSTEMS DEVELOPMENT PROJECT

This prescription replaces prescription 252 Systems Development Project.

ELECTIVE PRESCRIPTION

LEVEL 6
CREDIT 20
VERSION 1
INTRODUCED 2007

AIM Students will analyse and develop a simple work group

application to improve productivity in a multi-user

environment, using a systems development methodology.

PREREQUISITES Recommended 550 Business Computing or equivalent

knowledge and skills. 650 Applied Computing also covers

useful underpinning skills.

ASSESSMENT WEIGHTINGS

Learning outcomes	Assessment weighting %
1. Students will explain database concepts, and principles of data modelling, process modelling and systems development project management, and apply them in designing a simple workgroup-based business application to meet user requirements in a multi-user environment.	50
2. Students will demonstrate an understanding of a systems development project life cycle by developing and implementing the workgroup-based business application in line with its design.	50
TOTAL	100

All learning outcomes must be evidenced; a 10% aggregate variance is allowed.

ASSESSMENT NOTES

- 1. Assessment materials should reflect relevant and current legislation, standards, regulations and acknowledged good industry/business practices.
- 2. The term 'workgroup' is defined as a single LAN-based business unit.
- 3. Any methodologies used should be current.
- 4. The project plan is dynamic and students are expected to provide evidence that the plan is being followed and continuously reviewed.
- 5. Each stage of the project should be evidenced by documentation consistent with industry requirements.
- 6. Throughout all phases of the project, students will be expected to demonstrate a high level of problem-solving skills and provide evidence of appropriate communication with stakeholders.
- 7. For learning outcome two, if relevant to the application being developed, students will be expected to demonstrate familiarity with the use of information technologies to facilitate business processes.

LEARNING OUTCOME ONE

Students will explain database concepts, and principles of data modelling, process modelling and systems development project management, and apply them in designing a simple workgroup-based business application to meet user requirements in a multi-user environment.

Key elements

- a) Problem definition and project scope.
- b) Project plan:
 - tasks
 - deliverables
 - resource requirements
 - risk identification and planning.
- c) User requirements, including functional requirements in business language, and conceptual data and process modelling.
- d) Database concepts.
- e) Logical and physical database design.
- f) Data management issues, including but not limited to:
 - security
 - concurrency
 - validity.
- g) Interface design:
 - basic screen flows
 - overall user interface design.

LEARNING OUTCOME TWO

Students will demonstrate an understanding of a systems development project life cycle by developing and implementing the workgroup-based business application in line with its design.

Key elements

- a) Project team establishment.
- b) System integration testing.
- c) Development and testing of application components.
- d) Application implementation:
 - testing
 - quality assurance
 - user training
 - on-going maintenance.
- e) Post-implementation review.