C7: Quantitative Techniques

Lecturer Manual

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Commonwealth of Learning
1055 West Hastings Street
Suite 1200
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CANADA

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Email: [Add e-mail address]
Website: www.[Add website address]

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Course author	Barbara Swart, PhD Professor, Quantitative Management University of South Africa, South Africa
Subject matter experts	Samuel Kwame Amponsah, PhD Kwame Nkrumah University of Science and Technology, Ghana
	Kim Loy Chee, PhD Wawasan Open University, Malaysia
	S.A.D. Senanayake Open University of Sri Lanka, Sri Lanka
Educational designers	Symbiont Ltd. Otaki, New Zealand
Course editor	Symbiont Ltd. Otaki, New Zealand

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About this Lecturer Manual

The Lecturer Manual for the course C7: Quantitative Techniques contains the answers to the teacher-marked activities ONLY in the Course Manual. Some of the answers have supplementary explanations. The Lecturer Manual does not include those activities for which solutions are provided in the Course Manual.

There are ample references and extra resources mentioned in the Course Manual, which the lecturer can use for additional examples and exercises.

Summative assessments may be used as the bases for examinations. An example of an examination is given at the end of this manual.

Course outcomes

Upon completion of C7: Quantitative Techniques the student will be able to:

Outcomes

- **demonstrate** knowledge and understanding of the basic mathematical concepts applied in decision making and management;
- **analyse** data with the aid of statistical tools and basic probability theory;
- **use** electronic spreadsheets as a decision-making tool;
- **explain** the philosophy and methods of modelling;
- **apply** decision-making techniques such as linear programming, time series analysis, forecasting, regression and decision trees; and
- **reflect on** and **compare** risk management models and new theories in business and economics.

Timeframe

How long?

The expected duration of this course is 20 weeks. Since the course consists of 20 units, students will need to master approximately one unit per week. However, units vary in length and degree of difficulty.

You will have to provide some guidance to students. You may, of course, decide to make certain units optional, or leave them out, depending on the needs of your particular group of students.

The formal number of hours for the course is 120 notional hours.

Please remind students that Quantitative Techniques is a challenging course that needs hours of practice and reflection to master.

Assessment schedule

Assessments

Date:	XX/XX/XXXX
Value:	10%
Format:	XXX
Units covered:	1 – 4 (Module 1)
Date:	XX/XX/XXXX
Value:	10%
Format:	XXX
Units covered:	5 – 8 (Module 2)
Date:	XX/XX/XXXX
Value:	10%
Format:	XXX
Units covered:	9 – 12 (Module 3)
Date:	XX/XX/XXXX
Value:	10%
Format:	XXX
Units covered:	13 – 16 (Module 4)
Date:	XX/XX/XXXX
Value:	10%
Format:	XXX
Units covered:	17 – 20 (Module 5)

Final examination

Assignments

There is one final exam that you must complete for this course. This is a written closed-book exam, with the use of a pocket calculator permitted. Access to Excel is not available during the exam.

Assignment 1

Due date:	XX/XX/XXXX
Value:	50%
Format:	XXX
Modules covered:	Modules 1–5