MAT8190

Mathematics/Statistics Complementary Studies B

Faculty of Sciences

Introductory Book

Semester 2, 2007

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The University of Southern Queensland
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Contents

Course specifications:
MAT8190
Mathematics/Statistics Complementary Studies B

Number	Class	Term	Mode	Description	Units
MAT8190	66243	S2, 2007	ONC	Mathematics/Statistics Complementary Studies B	1.00

Academic group:	FOSCI
Academic org:	FOS003
HECS band:	2
ASCED code:	010199

Staffing

Examiner: Tony Roberts

Moderator: Dmitry Strunin

Pre-requisites

Pre-requisites:

Rationale

This course exists to satisfy the need for some flexibility in Honours and Masters programs in Mathematics and Statistics to cater for the widely varying interests and chosen specializations of students.

Synopsis

This course provides the opportunity for a student to pursue an area of study that will complement the other studies in the student's program. Typically the course will consist of specialised investigations extending knowledge and skills in a certain area. The studies could involve, for example, directed readings, extension of a project (where appropriate), or some other approved activity which would complement the student's studies in the program.

Objectives

On completion of this course students will be able to:

- demonstrate knowledge and skills in the complementary study area.

Topics

Description	Weight
1. Possible study areas: The content of the course may be chosen in one of the following areas; other choices may be available. Suitable level 3 courses enhanced by advanced work may also be chosen. The content of the course may vary from student to student. What is Mathematics? (Ron Addie) Mathematical methods of asymptotic approximation (Tony Roberts) Quantum Computing (Tony Roberts) Water waves (Tony Roberts) Games theory (Tony Roberts) Introduction to Hydrodynamic Stability (Sergey Suslov) Mathematical Biology (Sergey Suslov) Mathematics: the role of attitudes and beliefs (Patricia Cretchley) Computer Algebra: friend or foe? (Patricia Cretchley) Mathematics Assessment: Current Issues and Trends (Patricia Cretchley) Is Mathematics Education a Research Domain? (Patricia Cretchley) Bridging the Gaps: primary to secondary, and beyond. (Patricia Cretchley Towards Gender Equity in Mathematics Education (Patricia Cretchley) Teaching Geometry in an age of technology: perspectives for the 21st century (Patricia Cretchley) Mathematics then - and now! (Patricia Cretchley) Sampling and survey design (Ashley Plank) Bayesian statistics (Paul Fahey/Peter Dunn) Generalised linear models (Peter Dunn) Introduction to Banach space theory (Oleksiy Yevdokimov) Fundamental constructs in Mathematics Education (Oleksiy Yevdokimov) Number theory in historical perspective (Oleksiy Yevdokimov)	100%

2. Procedure: Assessment for the course will also vary according to the nature of the study undertaken by each student. By the end of the third week of semester, the supervisor will provide to the examiner, for approval by the Associate Dean: an outline of the study; the objectives of the study; the format, timing and weighting of the assessment items for the study; a statement about attendance requirements; requirements for students to complete each assessment item satisfactorily; penalties for late submission of required work; requirements for student to be awarded a passing grade in the course; the method used to combine assessment results to attain final grade; any other requirements deemed necessary by the Examiner.	0%

Text and material to be purchased or accessed

Books can be ordered by fax or telephone. For costs and further details use the 'Book Search' facility at `http://bookshop.usq.edu.au` by entering the author or title of the text.

- Texts to be advised by the student's supervisor.

Reference materials

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

- Course web site: `http://www.sci.usq.edu.au/courses/mat8190`

Student workload requirements

ONC study

Activity	**Hours**
Consultation	15
Private study	150

Assessment details

Description	**Marks**	**Weight**	**Due date**
Approved assessment program	100	100%	TBA

Important assessment information

1. Attendance requirements: The complementary study area chosen will be assigned after consultation with the examiner and the appropriate Program Coordinator. Students may be directed to a certain complementary study, or they may be asked to nominate an appropriate study. It is the student's responsibility to find a staff member willing to supervise their study. It is the students' responsibility to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

2. Requirements for students to complete each assessment item satisfactorily: To be advised when the student's Complementary Studies is determined.

3. Penalties for late submission of required work: To be advised when the student's Complementary Studies is determined.

4. Requirements for student to be awarded a passing grade in the course: To be advised when the student's Complementary Studies is determined.

5. Method used to combine assessment results to attain final grade: To be advised when the student's Complementary Studies is determined.

6. University Regulations: Students should read USQ Regulations 5.1 Definitions, 5.6 Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at `http://www.usq.edu.au/corporateservices/calendar/part5.htm` or in the current USQ Handbook.

Assessment notes

7. The supervisor will advise the student and the examiner of the details of the study and the assessment program in writing by the end of week 3 of the semester as described in Topics above.

Course overview

This course provides the opportunity for a student to pursue an area of study that will complement the other studies in the student's program. Typically the course will consist of specialised investigations extending knowledge and skills in a certain area. The studies could involve, for example, directed readings, extension of a project (where appropriate), or some other approved activity which would complement the student's studies in the program.

Course queries

All matters related to the administration of the course must be directed to the examiner: Tony Roberts, `mailto:aroberts@usq.edu.au`, Fax: (07) 4631 5550

Study topics

In addition to the following topics, students may study a suitable level 3 course enhanced by some advanced work, or some topic of particular interest to themselves for which details are negotiated with a supervisor.

Potential study topics

What is Mathematics?

Supervisor: Ron Addie

Description: This course surveys mathematics as a whole and uses several examples to illustrate a number of different areas in the survey. The specific examples will vary from year to year. These examples will be treated at a lay level. Students will undertake more detailed work on a subset of the examples considered in the assignments. At the top level, mathematics is divided into three areas: Pure Mathematics, Applied Mathematics, and Probability and Statistics. Examples are considered in each area.

Prerequisites: possess a knowledge of mathematics up to the level encompassed by Algebra and Calculus 1 and 2, Discrete Mathematics, and Data Analysis.

Main text: TBA

Mathematics: the role of attitudes and beliefs

Supervisor: Patricia Cretchley

Description: Investigations into affective factors like emotions, attitudes and beliefs, and their relationship with development and achievement, have been neglected in education literature, generally. Yet there are strong reasons why for Mathematics in particular, they should be a major focus of research interest. Given the opportunity, people often espouse strong views on their school Mathematics learning experiences, and declare themselves to be either "good" or "bad" at Mathematics.Why is it that Mathematics, perhaps more than than any other subject, arouses strong emotional reaction in students, positive or negative? Is it the "right or wrong" nature of traditional types of exercises that encourages students to classify their mathematical ability on some very polarised scale, or are they simplifying a far more complex range of attitudes and beliefs? What

is the range of deeper more entrenched attitudes and beliefs they have about themselves as learners, and about the nature of mathematics and how it should be learned? And are these views likely to affect the way they do, learn, or teach Mathematics in the future? It is commonly felt that a student's emotions, attitudes and beliefs are not only a result of past learning experiences, but that they will inevitably play a role also in the way he responds to new learning environments, and sensitive educators achieve healthy and productive learning experiences by seeking ways to balance the strong cognitive demands they want to make on students with sufficient affective reward so that the learning experience is both healthy and productive. This course looks at studies on beliefs about mathematics and the learning thereof, among both teachers and learners, and speculates on the role played by those attitudes. The Mandler-McCleod model of the affective domain is adopted: a hierarchy of emotions, attitudes and beliefs. A wide range of affective factors that may have influence learning is identified in the literature (for example, confidence, self-efficacy, motivation), existing instruments for assessing their levels are described, and the currently diverse and fragmented literature on affect is surveyed critically, with the aim of proposing methods and instruments for measuring levels of affective factors that will enable meaningful comparisons across a range of investigations.

Prerequisites: TBA

Main text: TBA

Computer Algebra: friend or foe?

Supervisor: Patricia Cretchley

Description: Computer Algebra Systems are raising even bigger concerns amongst educators than did hand-held calculators, which influenced perspectives on mental arithmetic and hand calculation and changed mathematics curricula and classroom practice. While to some educators, increasingly easy access to computer algebra presents new opportunities and stimulating challenges, others feel that this sounds the death knoll for algebraic manipulation and fear the consequences. This course considers current views and trends and views, raises questions of equity and access, and explores the likely major impact of computer algebra systems on mathematical practice, curricula, pedagogy, and assessment. The current range of such systems, from hand-held calculators to powerful scientific software, is surveyed critically. Current literature, and leading education specialists' contributions to the recent Twelfth ICMI study on The Future of the Teaching and Learning of Algebra, form the basis for the course.

Prerequisites: TBA

Main text: TBA

Mathematics Assessment: Current Issues and Trends

Supervisor: Patricia Cretchley

Description: The teaching and learning of Mathematics is changing dramatically in many parts of the world, and so too are views on Mathematics assessment. This course stimulates debate on Mathematics assessment by examining past and current practice at all levels, and examining them against currently popular theories and frameworks for learning, social constructivism in particular. Recent concerns about issues of inflexibility, time-constraints and stresses associated with traditional style examinations are discussed, and pedagogical approaches and equity issues are debated in relation to current moves towards more flexibility in the choice of assessment tasks, project work, group assignments, unsupervised take-home and on-line examinations. The controversial issue of benchmarking, both nationally and internationally, is also considered. Current literature, findings associated with the TIMS studies, and reports in two ICMI (International Council for Mathematics Instruction) studies on assessment in Mathematics, provide the backbone of this course.

Prerequisites: TBA

Main text: TBA

Is Mathematics Education a Research Domain?

Supervisor: Patricia Cretchley

Description: This course looks at the styles of reporting and investigations used in the body of literature on Mathematics Education, and stimulates debate on their suitability and value, these questions being potentially the most damaging source of tension between professional Mathematicians and Education specialists. Questions on whether the field is indeed a research domain, and appropriate methodologies, if so, are debated. The 1997 International Council for Mathematics Instruction Study on the search for identity in Mathematics Education, and current literature literature in related fields in the social sciences and humanities, form the basis for this course, alongside the views of publicly sceptical and even scornful Mathematicians, for example, the influential Lyn Steen, Past-President of the American Mathematics Society. The debate takes cognisance of current pressures on academics and teachers to publish their work, and focuses on positive ways in which Mathematicians can help guide and develop

the growing new body of literature, given that in many countries, teaching and the training of pre-service teachers is now largely in the hands of educators who have often been exposed to qualitative methods and reports and in-depth case-studies, rather than scientific studies which are often beyond their control, in their search to understand how people think and learn.

Prerequisites: TBA

Main text: TBA

Bridging the Gaps: primary to secondary, and beyond

Supervisor: Patricia Cretchley

Description: Increased emphasis on problem-solving skills and constructivist approaches in the teaching and learning of mathematics, rather than routine practice of the traditionally expected range of techniques and processes, and broadening access to tertiary education, have resulted in the need for teachers at many levels to manage groups of students with diverse backgrounds and a wide range of mathematical skills and experiences. This course looks at possible mismatch of curriculum and pedagogy at different levels, the tension this may build in both teacher and learner, especially in transition from primary to secondary levels, and secondary to tertiary. It considers ways to identify and address difficulties of transfer of mathematical skills, that students and teachers report at different levels, and appropriate management of misconceptions and under preparedness. Through these issues, the course aims to stimulate debate on current trends in curriculum and pedagogy, and on skillful teacher-guidance of both individual learners and classroom groups. Current curricula and reports in the literature form a basis for the study and discussion.

Prerequisites: TBA

Main text: TBA

Towards Gender Equity in Mathematics Education

Supervisor: Patricia Cretchley

Description: Although there are many reports to the contrary, and the gender debate rages, many girls enjoy mathematics at school, perform well on a wide range of styles of assessment, and report a strong sense of pleasure and satisfaction in their achievements. Yet professional and academic fields of mathematics,

and curriculum developments, are generally dominated by men. This course examines contemporary research and perspectives on gender equity issues, and contributions in the ICMI 1996 study "Towards Gender Equity in Mathematics Education", in particular, and reviews that literature in the light of current reports on the neglect of boys' education and the dearth of male teacher role models at the primary school level, in some parts of the world. In particular, a significant finding from the huge data-set arising from a TIMS study is raised for critical discussion: that a student's achievement in recent TIMS mathematics tests at primary school level was positively related to his or her having a male mathematics teacher. The course aims at identifying appropriate ways to encourage males and females into the study of mathematics at all levels, and strategies for encouraging students with a strong potential into the teaching profession, and raises debate on gender issues in a wide range of areas of influence: from education policy, to school and classroom management, to curriculum and course design.

Prerequisites: TBA

Main text: TBA

Teaching Geometry in an age of technology: perspectives for the 21st century

Supervisor: Patricia Cretchley

Description: Changing views on what degree of rigour and formal proof is appropriate at different levels in the learning of mathematics, and the advent of user-friendly, visually appealing, and persuasive technology tools for exploring concepts in geometry, have contributed to new trends in curricula, and classroom approaches. This course examines curriculum trends in relation to the needs of current professions, examines the role of computer software in the teaching of geometry at all levels, and critically surveys the range of software tools (Logo, Geometer's Sketchpad, Cabri, for example) to identify strengths and weaknesses. The influence of new trends, and technology in particular, on student-teacher relationships, classroom patterns, students' views of what constitutes a "proof", and appropriate stages for introducing rigour, are discussed. Computer access and equity issues at all levels are also raised for debate, and discussion in the course is stimulated by the ICMI, 1998, Study: "Perspectives on the Teaching of Geometry for the 21st Century".

Prerequisites: TBA

Main text: TBA

Mathematics then, and now!

Supervisor: Patricia Cretchley

Description: This course traces the history and development of Mathematics, considers the impact of recent developments, in particular, the influence of technology, and outlines the nature of the work being done in those areas currently experiencing the most activity. Debate is raised on the likely effects of professional divisions between researchers in Pure and Applied Mathematics, on the responsibilities that professional mathematicians have, as guardians of education policy, and on the influence that both attitudes and developments in the field can have on both practice and policy in mathematics education. Current literature, leading texts on the history of mathematics, and the ICMI (International Council for Mathematics Instruction) Study, 2000, on the role of History in Mathematics Education, form the basis for the course.

Prerequisites: TBA

Main text: TBA

Generalised Linear Models

Supervisor: Peter Dunn

Description: This course presents a detailed study of the background theory of generalized linear models (glms), combined with extensive practical analysis of data. Particular models such as Poisson, binomial and gamma glms will be introduced, together with diagnostic analysis, advanced topics and using the program R for analysis.

Prerequisites: Knowledge and experience in regression models, distribution theory and statistical inference.

Main text: TBA

Bayesian methods

Supervisor: Paul Fahey

Description: This course covers: how we conceptualise probability (the Frequentist/Bayesian debate); the Bayesian framework; defining prior distributions; updating prior distributions with data to obtain posterior distributions; hierarchical models; model checking and sensitivity analysis; regression models; maximum likelihood methods; simulation methods (including Markov Chain Monte Carlo).

Prerequisites: STA3301 Statistical Models (and all of it's pre-requisites)

Main text: Either Gelman A, 2003. Bayesian Data Analysis (2nd ed). Chapman & Hall/CRC. Boca Raton. Or Gill J, 2002. Bayesian Methods: A Social and Behavioural Sciences Approach. Chapman & Hall/CRC. Boca Raton.

Sampling and survey design

Supervisor: Ashley Plank

Description: Sampling methods; survey design; questionnaire design; issues of non-response; analysis of survey data.

Prerequisites: Knowledge and experience in basic statistics and programming skills (such as R and Matlab).

Main text: TBA

Mathematical methods of asymptotic approximation

Supervisor: Tony Roberts

Description: The aim of this course is a wider understanding of approximations, both simple and complex. Content is topics from: asymptotic series; asymptotic expansion of integrals; summation of convergent and divergent series; global analysis; boundary layer theory; WKB theory; catastrophe theory; renormalisation.

Prerequisites: PDEs

Main text: Bender & Orszag, "Advanced mathematical methods for engineers and scientists", McGrawHill, 1978.

Quantum Computing

Supervisor: Tony Roberts

Description: Quantum computing will be the most important development in computing in the 21st century. Synopsis: This course introduces current significant developments in quantum computing. Predictions of the weird nature of the quantum world are obtained via Feynman's arrow explanation of quantum electrodynamics. Quantum computers are built from reversible logic gates such as the square-root-of-not gate. Current research into the physical realisations of these logic gates is evaluated. New algorithmic principles are introduced to take advantage of the massive parallelism made possible by quantum computers.

Prerequisites: enthusiasm

Main text: TBA

Water waves

Supervisor: Tony Roberts

Description: The aim of this course is to describe the main methods by which a wave motion can be analysed mathematically to extract interesting dynamics. Contents: linear wave dynamics; dispersion relations; group velocity; water wave properties; nonlinear Stokes waves; seiches; ray theory.

Prerequisites: PDEs, Vector Calculus and Fluid Dynamics

Main text: TBA

Games theory

Supervisor: Tony Roberts

Description: Zero-sum games: the game matrix, pure strategies, mixed strategies, symmetry, dominance, multiplicity, iteration. Nash equilibrium and applications to economics. Mixed strategy Nash equilibrium. Other topics.

Prerequisites: Some linear programming

Main text: J. D. Williams, The compleat strategyst; M. J. Osborne, An introduction to game theory, Oxford University Press, 2002; M. J. Osborne and A. Rubinstein, A course in games theory, MIT Press, 1994.

Parallel network programming for numerical problems

Supervisor: Tony Roberts

Description: Numerical Partial Differential Equations: finite difference operators and their stability, Laplace's equation, heat flow problems, the Poisson equation, boundary conditions, parabolic and hyperbolic systems, iterative methods, applications. Advanced Numerical Methods: multigrid methods for PDE's, finite element methods, weighted residuals. Parallel programming: network topologies, C-Linda extensions and Tuplescope, domain decomposition, load balancing, tree codes, profiling with ParaGraph, message passing, robust programming, performance limitations. Algorithms from: matrix arithmetic, solving tridiagonal equations, Gauss-Jordan elimination, summation, recurrence relations, adaptive integration, multigrid Poisson solver, golden section optimisation, genetic algorithms, stochastic optimisation, the Mandelbrot set and other fractals, Monte Carlo simulation, sorting, binary searches, wavelets, or graphics.

Prerequisites: High performance numerical computing, Harmony of PDEs

Main text: TBA

Introduction to Hydrodynamic Stability

Supervisor: Sergey Suslov

Description: Various fluid flows surround us in everyday life. It is amazing how different they can be even if the conditions in which they occur seem to be very similar. You fill a pot with water and put it on a cook-top to boil. Water stays still for a while, but all of a sudden it starts moving, some rising, some sinking. You are hosing the garden and the water jet is almost perfectly round near the nozzle. Why does it break a few centimetres away from it? You are bored painting a fence: so tedious. Why doesn't the paint flow smoothly all along the paling if poured on it from top? All these examples are illustrations of phenomena known as hydrodynamic instabilities. Modern mathematics can predict and explain them. In this course you will be able to learn how.

Prerequisites: You should be fluent with the material of at least the following courses: "Mathematical Modelling for Dynamics", "Vector Calculus and Mathematical Modelling of Fluid Flows", "Partial Differential Equations". Working knowledge of LaTeX and of programming languages ("Fortran" or "C") or "Matlab" (or similar) as well as symbolic software ("Maple", "Mathematica", "Reduce" or similar) can be of help.

Main text: Introduction to Hydrodynamic Stability by P.G. Drazin, CUP 2002

Mathematical Biology

Supervisor: Sergey Suslov

Description: Traditionally biology belongs to the so-called descriptive sciences where majority of studies are based on phenomenological descriptions. However in recent years classical mathematical concepts made their sure way in this area providing a wide variety of techniques for quantitative predictions of various biological trends and phenomena. The success of mathematicians in the field of biology became so significant that a new science, mathematical biology, has emerged. Using such tools as differential and difference equations, stability methods, fractals, theory of oscillators mathematical biologists have developed accurate quantitative models for predicting spicies population evolution (predator-prey models), socio-biological dynamics (marital interaction models), cell divisions (tumor growth models), bio-chemical processes (inter-cell chemical exchange models) and many others. These and other examples of applying mathematical concepts to realistic life situations will be considered in the course. Specific topics will be chosen by students from a range suggested by the lecturer.

Prerequisites: Mathematical Modelling for Dynamics, working knowledge of LaTeX. Access to Matlab or similar, Maple or Mathematica or similar is desirable.

Main text: Mathematical Biology I: Introduction. J.D. Murray, 3d edition, Springer 2002.

Introduction to Banach space theory

Supervisor: Oleksiy Yevdokimov

Description: The aim of this course is to describe the basic structures of Banach spaces. Contents: basic definitions and examples; basic principles with applications; weak topologies and applications; operators on Banach spaces; bases in Banach spaces; sequences, series and a little geometry in Banach spaces.

Prerequisites: "Algebra and Calculus" course, knowledge of basic structures of Abstract Algebra

Main text: T. J. Morrison, Functional analysis: An introduction to Banach space theory, J. Wiley, 2001; A. N. Kolmogorov and S. V. Fomin, Elements of the theory of functions and functional analysis, Mineola: Dover, 1999.

Fundamental constructs in Mathematics Education

Supervisor: Oleksiy Yevdokimov

Description: This course presents a wide range of constructs in mathematics education and how they link together. It introduces views about how people learn — from Plato to Dewey, as well as constructivism, activity theory and French didactiques.

Prerequisites: MAC1901 Mathematics for Teachers

Main text: J. Mason and S. Johnston–Wilder, Editors, Fundamental constructs in Mathematics Education, London: RoutledgeFalmer, 2004; H. Freudenthal, Didactical phenomenology of mathematical structures, Reidel, Dordrecht, 1983.

Number theory in historical perspective

Supervisor: Oleksiy Yevdokimov

Description: The aim of this course is to describe the evolutional development of number theory throughout the centuries. Basic elements of both, algebraic and analytic, number theories will be considered. Special attention will be given to Kummer's works in number theory.

Prerequisites: You should be fluent with the material of "Algebra and Calculus" course

Main text: D. J. Newman, Analytic number theory, Springer, 1998; L. E. Dickson, History of the theory of numbers, AMS Chelsea Publishers, 1992.

Feedback Form: MAT8190

Student feedback is important to staff to allow them to improve their teaching and presentation of their course, and to monitor teaching standards in the University. We ask you therefore to fill in this questionnaire, make thoughtful comments on the back page, and return to USQ as detailed in the Course Evaluation section in this book.

Course Number: MAT8190 **Course Name: Mathematics/Statistics Complementary Studies B**

Mode: EXT **Semester/Term: 2**

For each statement you are asked to indicate the extent to which you agree with it in relation to this course by inserting the appropriate number in the space provided. Except for the last Question 15, use the following scale in your responses:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not applicable
5	4	3	2	1	0

I The teaching materials:

1. made clear the objectives for each module [ ] 1
2. explained concepts clearly [ ] 2
3. presented the subject matter in a way which helped me understand it [ ] 3
4. demonstrated the relevance of the course to the whole program [ ] 4
5. arrived prior to the end of the first week of semester [ ] 5
6. provided activities, quizzes and other methods of revision and testing for me to assess my progress [ ] 6

II Student support

7. The staff teaching this course responded promptly to queries and requests for assistance [ ] 7
8. The staff teaching this course gave adequate feedback on assignments and other prescribed work [ ] 8
9. The Regional Liaison Officers (RLOs) were supportive and helpful [ ] 9
10. Outreach Services were supportive and helpful [ ] 10

III The Course

11. The course covered what the course's description said it would [ ] 11
12. The criteria used to assess student work were clear [ ] 12
13. Assessment tasks allowed me to demonstrate what I had learnt [ ] 13
14. The materials I needed to allow me to do well in the course were all available [ ] 14
15. All things considered, how would you rate your overall satisfaction with this course?

Excellent	Very Good	Good	Satisfactory	Not Quite Satisfactory	Poor	Very Poor
7	6	5	4	3	2	1

After the examination period the questionnaires will be returned to the lecturer so that he/she may read your comments. Please write your comments to preserve your anonymity. *If more than one staff member is involved in this course, please ensure that you make it clear which one you are referring to when writing your comments.*

- What did you find were the most helpful/effective aspects of this *course*?

- What did you find were the least helpful/effective aspects of this *course*?

- What improvements would you suggest to the *course* itself?

- What improvements would you suggest to the Teaching Materials for the *course*?

- Please feel free to make any other comments, particularly in relation to your ratings, on this questionnaire.

Please insert the completed questionnaire in an envelope, seal and address envelope as follows:

The Course Evaluation Co-ordinator
Information Technology Services
University of Southern Queensland
Toowoomba 4350

The envelope may be posted directly to the above address *or* attached to the outside of your last assignment and then posted to DEC.