



The University of Southern Queensland

Course specification

The current and official versions of the course specifications are available on the web at <http://www.usq.edu.au/coursespecification/current>.
Please consult the web for updates that may occur during the year.

Description: Assessment of Future Specialist Technology

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
ENG	8011	86002	1, 2009	EXT	1.00	Toowoomba

Academic group:	FOENS
Academic org:	FOENSV
Student contribution band:	2
ASCED code:	039999

STAFFING

Examiner: David Ross
Moderator: David Thorpe

RATIONALE

The uptake and application of technological advances is often surprising, differing widely from the expectations and intentions of the inventor. An attempt is made to extrapolate from current information to gain insight into future technological resources, markets, products and consumer expectations.

SYNOPSIS

An overview is made of products and markets: Food and subsistence, travel, entertainment and spectator sport, health and healing, participation sport, conflict, functions of government, information and enforcement. Changes that shape our surroundings are traced back to their original invention - eg. the invention of the lift underpinned the possibility of the high rise building. Routes to innovation are considered, including product convergence, cross fertilisation - as with the effect of computing power on biotechnology, inventing by analogy - as with the 'spin' transistor. The nature of product stagnation is reviewed - as with the vacuum cleaner - and means whereby novelty can be introduced (eg. Dyson). Fashion in innovation is observed - the tendency for leapfrogging sequences of advances in a narrow field. Advantageous deficiency is mentioned - the deliberate introduction of defects to induce sales of replacements.

OBJECTIVES

The course objectives define the student learning outcomes for a course. The assessment item(s) that may be used to assess student achievement of an objective are shown in parenthesis. On completion of this course, students should be able to:

1. review the evolution of a number of present technologies; (Assignment 1)
2. express an 'informed guess' of future developments; (Assignment 1 and Assignment 2)
3. incorporate predicted futures in development decisions; (Assignment 2)
4. weight up the risk and reward of committing resources to innovation in particular product streams. (Assignment 3)

TOPICS

Description	Weighting (%)
1. The historical process of innovation	20.00
2. Market-led and inspiration-led advances	10.00
3. Cross-enabling technologies	20.00
4. Probable futures	20.00
5. Risks and rewards of novelty	20.00
6. Design for future markets	10.00

TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

Students must have Internet access.
(Students must have Internet access.)

html/pdf files available over web.

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.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Assessments	20.00
Private Study	135.00
Tutorials or Workshops	10.00

ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
ASSIGNMENT 1	200.00	20.00	30 Mar 2009
ASSIGNMENT 2	400.00	40.00	27 Apr 2009
ASSIGNMENT 3	400.00	40.00	25 May 2009

IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:
There are no attendance requirements for this course. However, 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 satisfactorily complete an assessment item a student must achieve at least 50% of the marks or a grade of at least C-. Students do not have to satisfactorily complete each assessment item to be awarded a passing grade in this course. Refer to Statement 4 below for the requirements to receive a passing grade in this course. Furthermore, at least 20% of the total marks for the course is allocated to explicit assessment of good communication skills.
- 3 Penalties for late submission of required work:
If students submit assignments after the due date without extenuating circumstances then a penalty of 5% of the assigned mark may apply for each working day late up to a maximum of ten working days at which time a mark of zero can be recorded for that assignment.
- 4 Requirements for student to be awarded a passing grade in the course:
To be assured of receiving a passing grade in a course a student must obtain at least 50% of the total weighted marks for the course.
- 5 Method used to combine assessment results to attain final grade:
The final grades for students will be assigned on the basis of the weighted aggregate of the marks (or grades) obtained for each of the summative assessment items in the course.
- 6 Examination information:
There is no examination in this course.
- 7 Examination period when Deferred/Supplementary examinations will be held:
Not applicable.
- 8 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 the URL <http://www.usq.edu.au/corporateservices/calendar/part5.htm> or in the current USQ Handbook.

ASSESSMENT NOTES

- 1 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.
- 2 Students must retain a copy of each item submitted for assessment. This must be produced within five days if required by the Examiner.
- 3 In accordance with University's Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.
- 4 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.
- 5 The Faculty will NOT accept submission of assignments by facsimile.

- 6 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.
- 7 In the event that a due date for an assignment falls on a local public holiday in their area, such as a Show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the Examiner's convenience.

OTHER REQUIREMENTS

- 1 Students will require access to e-mail and internet access to USQConnect for this course.
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