The University of Southern Queensland

Course Specification

Description: Technology Education

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-Nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU</td>
<td>1471</td>
<td>14755</td>
<td>2, 2002</td>
<td>ONC</td>
<td>1.00</td>
<td>TWMBA</td>
</tr>
</tbody>
</table>

Academic Group: FOEDU
Academic Org: FOE002
HECS Band: 1
ASCED Code: 070100

STAFFING
Examiner: Peter Albion
Moderator: Petrea Redmond

RATIONALE
The Key Learning Area of Technology involves the engagement of students at all levels of education in the processes of designing and developing products that meet human needs. These processes involve the investigation and exploration of possibilities; the proposal and refinement of innovative solutions; the creation of artifacts, processes, systems, services and environments; and the evaluation of both products and processes in terms of appropriate problem resolution. Beginning educators need an understanding of ways in which the Technology KLA may provide for student learning within a range of specific contexts as well as perform a significant role as a curriculum integration device. The process strand of Technology Processes will be explored within the context strands of Information, Materials, and Systems throughout the duration of this course.

SYNOPSIS
Students will develop an understanding of the definition of Technology as one of the eight Key Learning Areas as specified through the Australian national curriculum documents. An emphasis will be placed on a clarification of the vocabulary used in discussion of the Technology KLA and the distinction between this and other topical issues in education such as learning technology, information technology and educational technology. Topics will include a historical perspective of the development of the KLA; an introduction to available statement, profile and syllabus documentation; and a consideration of current Technology Education implementation issues and future possibilities within the various educational sectors. The course will define the four strands of the KLA within an Outcomes Based Education framework and provide students with opportunities to identify student learning experiences within the context of each. Issues relating to technological appropriateness, the availability of learning contexts, and technology management will be addressed so that students may work towards their own definition of technological literacy.
OBJECTIVES

On successful completion of this unit students will be able to:

- Discuss curriculum documents and implementation issues relating to the Technology KLA.
- Demonstrate an understanding of the vocabulary of the Technology KLA and differentiate between this terminology and current discussion surrounding other technological contexts.
- Identify and describe the four strands of the Technology KLA.
- Define the Technology KLA within an outcomes-based education framework.
- Demonstrate familiarity with current technology education implementation issues within the primary and secondary schooling sectors.
- Identify ways in which the technology process may be applied to observed classroom learning experiences.
- Plan for outcomes using Technology KLA as an integrating device.
- Discuss issues relating to technological appropriateness, the availability of learning contexts within differing school environments, and aspects of technology management.
- Define the concept of technological literacy.

TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Definitions of the Technology KLA - an historical perspective; national and international comparisons; difference between the KLAs and other references to technological issues</td>
<td>10.00</td>
</tr>
<tr>
<td>2. Curriculum documents; the concept of outcomes-based education; available syllabus documents; the process and context strands; common KLA components; principles of effective teaching and learning</td>
<td>30.00</td>
</tr>
<tr>
<td>3. Curriculum integration</td>
<td>20.00</td>
</tr>
<tr>
<td>4. Technology education implementation issues; specific learning contexts within primary and secondary schooling using the Technology KLA as a learning modeling the technology process</td>
<td>25.00</td>
</tr>
<tr>
<td>5. Identification of the technology process; definitions of technological literacy; technological appropriateness; identification of technology education learning experiences</td>
<td>15.00</td>
</tr>
</tbody>
</table>

TEXT and MATERIALS required 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.

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.

LEGO, Lego Dacta, Construction Kits and Teacher/Pupil Support Literature.


Shallcross, P. *Quality Through Progression in Design and Technology*, Nat'l Assoc of Advisers & Inspectors in Design Tec, UK.

**STUDENT WORKLOAD REQUIREMENTS**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>20</td>
</tr>
<tr>
<td>Directed Study</td>
<td>70</td>
</tr>
<tr>
<td>Lectures</td>
<td>28</td>
</tr>
<tr>
<td>Private Study</td>
<td>28</td>
</tr>
<tr>
<td>Tutorial</td>
<td>14</td>
</tr>
</tbody>
</table>

**ASSESSMENT DETAILS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks Out of</th>
<th>Wtg(%)</th>
<th>Required</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>50.00</td>
<td>50.00</td>
<td>Y</td>
<td>20 Sep 2002</td>
</tr>
<tr>
<td>ASSIGNMENT 2</td>
<td>50.00</td>
<td>50.00</td>
<td>Y</td>
<td>01 Nov 2002</td>
</tr>
</tbody>
</table>

**OTHER REQUIREMENTS**

1. Definitions of the Technology KLA a historical perspective national and international comparisons difference between the KLA and other references to technological issues
2. When there is more than one marker for a single item of assessment, the distribution patterns and means for the different markers will be compared and marks adjusted if necessary.
3. Marking criteria are provided in course material as mark sheets/guides or as part of assignment specifications
4. Summative assessment items will be given a numerical score.
5. Course grades will be calculated by aggregating the weighted result or numerical score for each summative assessment item.
6. All assessment items must be submitted. Assessment must be passed overall.
7. If assignments are submitted after the due date without an approved extension of time, a penalty of 5% of the mark awarded by the examiner for the assessment item may apply for each working day late.