Description: Multimedia Systems and Communications

Subject: CSC
Cat-nbr: 3410
Class: 66275
Term: 2, 2007
Mode: ONC
Units: 1.00
Campus: Toowoomba

Academic group: FOSCI
Academic org: FOS003
Student contribution band: 2
ASCED code: 029999

STAFFING

REQUISITES
Pre-requisite: CSC1401 or USQIT16

OTHER REQUISITES
Recommended pre-requisite: CSC2402, CIS3001, CSC2406 and CSC3406

RATIONALE
Multimedia offers dynamic presentation of information by combining audio and video with text, hypertext, images, and animation. Distributed multimedia systems have enormous potentials in many applications such as digital library, distance education, entertainment and video-conferencing. This course is designed to cover the techniques of design and implementation of distributed multimedia systems. The knowledge and skills acquired in this course are essential for the development of individual components of a multimedia system.

SYNOPSIS
This course covers the hardware and system software support of distributed multimedia systems. It focuses on multimedia devices and data formats, and multimedia communication systems. The topics include basic concepts of text, hypertext, sound and image, video and animation, data compression, optical storage media, multimedia communication systems, Quality of Service, and practising with Java in Multimedia productions. Students will gain the knowledge and skills in the design and development of components of distributed multimedia systems.

OBJECTIVES
On successful completion of this course students will be able to:

1. have a good understanding of basic multimedia concepts: sound and image, video and animation, data compression, optical storage media (Assignment 2, Exam);
2. be familiar with multimedia operating systems, multimedia database systems and multimedia communication systems (Exam);
3. have knowledge and skills of the development of components of a multimedia system (All assessment items);
4. demonstrate an ability to develop multimedia applications (Assignment 3).

**TOPICS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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</thead>
<tbody>
<tr>
<td>Internet and Java Programming</td>
<td>15.00</td>
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<tr>
<td>Digitising, Compression and Decompression</td>
<td>10.00</td>
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<tr>
<td>Format Standards</td>
<td>5.00</td>
</tr>
<tr>
<td>Hardware</td>
<td>15.00</td>
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<tr>
<td>Telecommunications</td>
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<tr>
<td>Multimedia Application Design</td>
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<tr>
<td>Multimedia Authoring and User Interface</td>
<td>10.00</td>
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<tr>
<td>Hypermedia</td>
<td>10.00</td>
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<td>Distributed Multimedia Systems</td>
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<tr>
<td>Multimedia Design Methodology</td>
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**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 access to a Java Development Kit (JDK) version jdk 1.5.0_01 or later. Option: The latest version of JDK is provided on the Mathematics and Computing DVDROM Set 1 available from the USQ Bookshop.

Although subject to change, at this stage, it is expected students may require access to Semester 2, Department of Mathematics and Computing DVDROM SET, 2007 (available from the USQ Bookshop). This DVD set contains Semester 2 course material, and Windows software relevant to this course. For more information about the DVD sets and their use, please refer to http://www.sci.usq.edu.au/dvdrom and the course web site.


Study Book 2007, *Course CSC3410 Multimedia Systems and Communications*, USQ Distance and e-Learning Centre, Toowoomba.
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

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Directed Study</td>
<td>33.00</td>
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<tr>
<td>Examinations</td>
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<tr>
<td>Laboratory</td>
<td>24.00</td>
</tr>
<tr>
<td>Lectures</td>
<td>26.00</td>
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<tr>
<td>Private Study</td>
<td>85.00</td>
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ASSESSMENT DETAILS

<table>
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<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>100.00</td>
<td>0.00</td>
<td>10 Aug 2007</td>
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<tr>
<td>ASSIGNMENT 2</td>
<td>100.00</td>
<td>21.00</td>
<td>14 Sep 2007</td>
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<td>ASSESSMENT 3</td>
<td>100.00</td>
<td>24.00</td>
<td>26 Oct 2007</td>
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<tr>
<td>2 HOUR RESTRICTED EXAM</td>
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<td>55.00</td>
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NOTES

1. Examination dates will be available during the Semester. Please refer to the examination timetable when published.

IMPORTANT ASSESSMENT INFORMATION

1. Attendance requirements:
   It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and 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 individual assessment item a student must achieve at least 50% of the marks or a grade of at least C-.

3. Penalties for late submission of required work:
   If students submit assignments after the due date without prior approval then a penalty of 10% of the total marks available for the assignment will apply for each working day late.
4 Requirements for student to be awarded a passing grade in the course:
   To be assured of receiving a passing grade a student must achieve at least 50% of the total weighted marks available 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 aggregate of the weighted marks obtained for each of the summative assessment items in the course.

6 Examination information:
   Candidates are allowed access only to specific materials during a Restricted Examination. The only materials that candidates may use in the restricted examination for this course are: writing materials (non-electronic and free from material which could give the student an unfair advantage in the examination); calculators which cannot hold textual information (students must indicate on their examination paper the make and model of any calculator(s) they use during the examination).

7 Examination period when Deferred/Supplementary examinations will be held:
   Any Deferred or Supplementary examinations for this course will be held during the examination period at the end of the semester of the next offering of this course.

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

9 Students must retain a copy of each item submitted for assessment. If requested, students will be required to provide a copy of assignments submitted for assessment purposes. Such copies should be submitted to USQ within 24 hours of receipt of a request being made.

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