

**GRIFFITH UNIVERSITY, GOLD COAST**  
**Faculty of Information and Communication Technology**

**School of Information Technology**

Course Code : 1007INT    Course Name : Multimedia 2B

**Course Outline**

**1.0 Course Identification**

**Year/Semester(s):**        2001 Semester 2

**Course Level:**            2<sup>nd</sup> year

**Program Status:**            *Bachelor of Multimedia  
core*

**Credit Value:**            20CP

**Prerequisite(s):**          *Multimedia 2A.*

**Teaching Team:**          Geraldine Torrissi-Steele                      Room No: 1.55

**2.0 Objectives**

**2.1**        *Purpose of the course*

This course introduces students to fundamental principles of digital video production, editing and delivery. Adobe Premiere 5.0 for Windows is used as the principle digital video editing tool.

**2.2**        *Expected outcomes of the course.*

Upon successful completion of this course, students should be able to:

- Understand and use industry terminology associated with digital video production, editing and developing
- Understand the difference between digital and analogue video editing
- Describe a basic digital video editing system
- Create and Edit digital videos using Adobe Premiere 5.0 for Windows
- Understand the concept of image and audio compression especially in terms of its relationship to data rates, image and audio quality, file size, image size.
- Understand the concept and importance of bandwidth in terms of digital video delivery
- Know the capabilities of delivery systems such as CD ROM and web in terms of delivering digital video
- Make appropriate decisions about digital video compression alternatives in order to meet the needs of specified delivery platforms

- Know the characteristics and principle application scenarios of common CODECs for both images and audio
- Describe the applications of digital video in multimedia systems
- Describe mechanisms of digital video delivery

### **3.0 Brief Description**

This course starts by studying the process and principles of digital video production. Adobe Premiere 5.0 for Windows is used as the primary digital video editing tool. Relevant existing and upcoming International Standards such as JPEG, MPEG 2 and MPEG 4 will be explored and their support for interaction discussed.

## 4.0 Content\*\*

\*\*This schedule is subject to change.

| week | lecture   | tutorial  | Assess |
|------|---|---|--------|
| 1    | <p>Introduction to the course.<br/>An Introduction to Digital Video.<br/>Introduction to Adobe Premiere.</p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>• Understand the difference between digital and analogue signals</li> <li>• Be familiar with types of analogue video signals</li> <li>• State the advantages/disadvantages of digital video over analog</li> <li>• Have a basic understanding of the equipment set up required to convert analogue to digital video</li> </ul> <p>Become familiar with the basics of Digital video production</p>   | <p>Premiere Basics –Premiere Quick Start Guide</p> <p><b>Adobe Premiere Classroom in a Book</b><br/><i>Tour of Adobe Premiere</i></p> <p><u>Objectives:</u><br/>In premiere be able to:</p> <ul style="list-style-type: none"> <li>• Start a new project</li> <li>• Specify settings for a project</li> <li>• Set Save/Auto Save/Undo</li> <li>• Open Archive projects</li> <li>• Locate missing files</li> <li>• Import video, stills and audio clips</li> <li>• Use Bins to organise clips</li> <li>• Use Libraries to organise clips</li> <li>• Distinguish between libraries and Bins.</li> </ul> <p>Customise project, Bin and library windows</p> |        |
| 2    | <p>Non-Linear Editing, The creative process, Applications of video – e-video</p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>• Distinguish between linear and non-linear editing</li> <li>• Be familiar with the steps required for both linear and non-linear video editing</li> <li>• State advantages of Digital video editing systems</li> <li>• Be aware of an approach to evaluating digital video systems.</li> <li>• Understand Timecodes</li> <li>• Become familiar with the creative process underlying digital video production</li> </ul> <p>Be aware of applications of digital video on the web for various purposes</p> | <p><b>Lesson 1 Adobe Premiere Classroom in a Book</b></p> <p><b>Lesson 3 Adobe Premiere Classroom in a Book</b></p> <p><u>Objectives:</u><br/>In premiere:</p> <ul style="list-style-type: none"> <li>• Review and practise working with the premiere workspace</li> <li>• Assemble clips in the timeline</li> <li>• Preview the video</li> <li>• Set In and Out points</li> <li>• Perform a ripple edit and a rolling edit</li> </ul> <p>Make a QuickTime movie</p>  |        |
| 3    | <p>The Digital Picture<br/>Basics, Data Rates</p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>• Understand principles such as pixels, color depth, frames, frame rates, data rates and bandwidth as they apply to digital images.</li> <li>• Be able to calculate data rates, file size for digital video files</li> </ul> <p>Understand the implications of bandwidth for delivery of digital media</p>   | <p><b>Lesson 4 Adobe Premiere Classroom in a Book pp96</b></p> <p><u>Objectives:</u><br/>In premiere:<br/>Place, preview, adjust and trim transitions.</p>  |        |
| 4    | <p>Compression Concepts</p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>• Understand the need for compression in delivery of digital media</li> <li>• Relate the limitations of human vision to digital picture compression approaches</li> <li>• Distinguish between lossy and lossless compression</li> <li>• Define the compression ratio and apply it to calculations of file sizes</li> <li>• Distinguish between symmetric</li> </ul>  | <p><b>Compression experimentation.</b><br/>Report Research</p>  |        |

|   |   |  |   |
|---|---|--|---|
|   | <ul style="list-style-type: none"> <li>and asymmetric codecs</li> <li>Distinguish between spatial and temporal compression and between intraframe and interframe</li> <li>Be familiar with intraframe and interframe compression techniques</li> </ul> <p>Be familiar with characteristics of common codecs for video compression</p>   |  |   |
| 5 | <p>Digital Audio</p> <p><u>Objectives</u></p> <ul style="list-style-type: none"> <li>Understand the basics of the physics of sound waves</li> <li>Define terms such as frequency, amplitude, period, and wavelength and relate them to the subjective perception of sound.</li> <li>Describe concepts in converting analogue audio to digital</li> <li>Understand importance of Nyquist effect</li> <li>Identify the main sources of error in analogue to digital conversions</li> <li>Be able to calculate audio file sizes</li> </ul> | <p><b>Lesson 5 &amp; Lesson 6 Adobe Premiere Classroom in a Book</b></p> <p><u>Objectives:</u></p> <p>In premiere:</p> <ul style="list-style-type: none"> <li>Place audio clips</li> <li>Adjust fades and volume</li> <li>Unlink audio and video clips</li> <li>Synchronise audio and video</li> <li>Make 3 &amp; 4 point edits</li> <li>Target video and audio tracks</li> <li>Create a split edit</li> </ul> <p>Close a gap with ripple delete</p>   |   |
| 6 | <p>Shooting video and shooting Digital video for delivery on the Web</p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>Become familiar with key terminologies and approaches in shooting video footage</li> <li>Understands the demands of web video delivery</li> <li>Distinguish between burst and streaming technologies</li> </ul> <p>Identify key considerations for shooting video which will be used for web delivery.</p>  | <p><b>Lesson 7 &amp; Lesson 8 Adobe Premiere Classroom in a Book</b></p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>Remove frames using extract and lift</li> <li>Paste a clip using the paste command</li> <li>Using the slip and slide tools to adjust edits</li> <li>Editing in the trim view</li> <li>Changing a clips rate</li> <li>Create titles by</li> <li>Entering and changing text attributes</li> <li>Kerning text</li> <li>Adding shadows</li> <li>Create graphics</li> <li>Create and preview rolling type</li> <li>Add titles</li> <li>Superimpose titles over clip</li> </ul> <p>Edit titles</p> |   |
| 7 | <p>Guest lecture – shooting video</p>   | <p><b>Lesson 9 Adobe Premiere Classroom in a Book</b></p> <p><u>Objectives</u></p> <ul style="list-style-type: none"> <li>Create a split screen</li> <li>Apply transparency and key types</li> <li>Create a story board</li> <li>Use the shy and exclude track options</li> <li>Use the fade tools</li> </ul>  | <p>Compression Report Due Friday of this week</p> |
| 8 | <p><b>Special Effects – Guest lecture TBA</b></p>   | <p><b>Lesson 10 pp290- Adobe Premiere Classroom in a Book</b></p> <p><u>Objectives</u></p> <ul style="list-style-type: none"> <li>Set and change a motion path</li> <li>Adjust motion timeline</li> <li>Create travelling matte</li> <li>Load a saved path</li> </ul>  |   |

|                           |   |  |               |
|---------------------------|---|--|---------------|
| 9                         | Streaming Video and MPEG standards<br><u>Objectives:</u><br>Understand the basic principles of MPEG standards 1,2, and 4. | <b>Lesson 11 pp316</b><br><b>Adobe Premiere Classroom in a Book</b><br><u>Objectives</u> <ul style="list-style-type: none"> <li>• Apply video and audio filters</li> <li>• Change filter settings</li> <li>• Use multiple filters and change order</li> <li>• Change filters over time</li> <li>• Apply filter to part of an image</li> <li>• Use the image pan filter.</li> </ul> |               |
| 10                        | Real Networks/ Guest Lecture  | <b>Lesson 12 pp346</b><br><b>Adobe Premiere Classroom in a Book</b><br><u>Objectives</u> <ul style="list-style-type: none"> <li>• Create subclips</li> <li>• Use subclips in a project</li> <li>• Create virtual clips</li> <li>• Nest virtual clips</li> <li>• Compile virtual clips into a clip.</li> </ul>  |               |
| <b>MID SEMESTER BREAK</b> |   |  |               |
| 11                        | Class presentations   | Project time.  |               |
| 12                        | Class presentations   | Project time.  |               |
| 13                        | SMIL  | Project time.  | Final project |
| 14                        | Course Evaluation and debrief   | Project time.  |               |

## 5.0 Organisation and Teaching Methods

- This course is composed of two hour lectures, and three hour combined tutorial / laboratories leading to a total of five contact hours per week.

## 6.0 Assessment

### 6.1

| Description               | Weighting % | <i>due</i>         |
|---------------------------|-------------|--------------------|
| <i>Weekly assignments</i> | 5           | <i>Week 13</i>     |
| <i>compression report</i> | 20          | <i>Week 8</i>      |
| <i>Project</i>            | 50          | <i>Week 13</i>     |
| <i>Final exam</i>         | 25          | <i>Exam period</i> |

Assessment criteria should be given for each item (following the assessment list):

### 6.2 Assessment Rationale

The weekly assignment will evaluate students' understanding of the lectures and tutorials provided. The written report will assess students' understanding of compression.. The project will evaluate students' understanding and application of design concepts and production ideas. The final exam permits each student to demonstrate his/her mastery of the course's theoretical component.

## 7.0 Texts and Supporting Materials

## 7.1 Specified Text

*Adobe Premiere 6.0 Classroom in a Book (Windows)- The official training workbook developed by the staff of Adobe - Adobe Press*

**OTHER MATERIALS: A set of headphones for use in the lab (standard 2.5 mm connector) – a very cheap set worth a couple of dollars from stores like ‘Crazy Clarke’s’ will be sufficient.**

## 8.0 Administration

8.1 To be eligible to pass the course, students are required to complete all forms of assessment and must demonstrate a reasonable degree of competence in the required course objectives as examined in each form of assessment.

8.2 Non-submission of a piece of assessment will incur a fail grade for course

8.3 Students may work together in researching their assignments but final submission must reflect the work and original contribution of each individual student.

Any dishonest assignments will be dealt with under the rules applying in “The Process of Assessment, Grading and Dissemination of Results” and Statute 8.2 - Student Good Order as defined in the University Calendar.

Dishonest assignment includes:

- \* deliberate copying or attempting to copy the work of other students;
- \* use of or attempting to use information prohibited from use in that form of assessment;
- \* submitting the work or another as your own; or
- \* plagiarism (ie taking and using as your own the thoughts and writings of another with the intent to claim the work as your own).

8.4 Full and detailed acknowledgment (eg notation, and/or bibliography) must be provided if contributions are drawn from the literature in preparation or reports and assignments.

8.5 All submissions for assessment must be word processed.

8.6 Student must be able to produce a copy of all work submitted if so requested.

8.7 Computer disks submitted with assignments must only contain files relating to that assignment. Disks containing irrelevant files will NOT be assessed. Files must be named as advised by the Head of School. Assignments with incorrectly named files will not be assessed. Files must have accurate date and time labels attached to them.

8.8 Assignment MUST be submitted by the due date and time. Extensions may be granted in exceptional circumstances by “Application for Extension” and MUST be made BEFORE the due date. Extension Application Forms are available from the Administration Office of the Faculty. Before an extension will be granted, a review of the work completed to date MUST be undertaken with the Course Convenor.

8.9 Assignments submitted after the due date/time, without an authorised extension, will be penalised as follows:

|                                |                             |
|--------------------------------|-----------------------------|
| One day (or part thereof) late | - 10% of marks are deducted |
| Two days late                  | - 20% of marks are deducted |
| Three days late                | - 30% of marks are deducted |
| Four days late                 | - is considered a fail      |

- 8.10 Assignments submitted without clear student name, course, tutorial group number and tutor identification will not be assessed.
- 8.11 Students are expected to spend time outside supervised tutorial periods developing skills and knowledge.