



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: 2D and 3D Modelling

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
MEA	2005	87264	1, 2009	ONC	1.00	Toowoomba

Academic group:	FOART
Academic org:	FOA005
Student contribution band:	1
ASCED code:	100703

STAFFING

Examiner: Stuart Thorp

RATIONALE

This course will introduce students to the world of designing, building and editing objects in a 3D environment.

SYNOPSIS

Students will develop an understanding of the terminology and techniques used in creating objects and characters within a 3D animated world. Topics include the use of polygonal, NURBS modelling, skeleton construction, inverse kinematics and rigging.

OBJECTIVES

On completion of this course students should be able to demonstrate:

1. object placement in a 2 & 3D environment;
2. a practical understanding in building polygonal surfaces;
3. an understanding of NURBS and Subdivision modelling tools and techniques;
4. a practical understanding of constructing joint nodes on build a skeleton chain and rigging;
5. skinning smooth deformations around joints and the influence on vertices;
6. communication skills appropriate to the profession by submitting a portfolio of exercises.

TOPICS

	Description	Weighting (%)
1.	Polygonal Modelling	20.00
2.	NURBS Modelling	20.00
3.	Subdivision Modelling	20.00
4.	Skeleton construction and Inverse kinematics	20.00

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).

For this course, students are required to purchase an External 7200 rpm Hard Drive with Firewire. This hardware will be necessary for use over the duration of the three years of the degree course.

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.

A current reference list will be supplied by the Lecturer

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Directed Study	50.00
Lectures	13.00
Private Study	76.00
Tutorials	26.00

ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date	Objectives assessed	Graduate skill	Level assessed
PROJ 1: PORTFOLIO OF EXERCISES	100.00	30.00	03 Apr 2009 (see note 1)	1, 2		
PROJ 2: PORTFOLIO OF EXERCISES	100.00	30.00	08 May 2009 (see note 2)	1, 3, 4		
PROJ 3: PORTFOLIO OF EXERCISES	100.00	40.00	12 Jun 2009 (see note 3)	All	U4	2

NOTES

- Students will be advised of the assessment due dates during the first week of classes for this course. This assessment item is aligned with Objectives 1 and 2.
- This assessment item is aligned with Objectives 1, 3 and 4.
- This assessment item is aligned with Objectives 1-6.

GRADUATE QUALITIES AND SKILLS

Elements of the following Graduate Skills are associated with the successful completion of this course.

Graduate skill assessed	Level assessed
Written & Oral Communication (Skill U4)	Intermediate (Level 2)

IMPORTANT ASSESSMENT INFORMATION

- Attendance requirements:**
It is the student's 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. For this course, normal class attendance consists of one 4 hour combined lecture/tutorial per week.
- Requirements for students to complete each assessment item satisfactorily:**
To successfully complete an individual assessment item, a student must achieve at least 50% of the marks or a grade of at least C-. This statement must be read in conjunction with Statement 4 below.
- Penalties for late submission of required work:**
If students submit assignments after the due date without extenuating circumstances and without prior approval, then a penalty of a maximum of 5% of the assigned mark may apply for each working day late, up to a maximum of 10 working days, at which time a mark of zero can be recorded for that assignment.
- 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.
- 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.
- Examination information:**
There is no exam for this course.
- Examination period when Deferred/Supplementary examinations will be held:**
Given the details under (6) above, there are no deferred exams for this course. However, if any deferred/makeup work is granted, it would have to be submitted by a date set by the examiner.
- 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>

ASSESSMENT NOTES

- (a) The due date for an assignment is the date by which a student must lodge the assignment at the USQ. (b) All Faculty of Arts assignments must be lodged in the Faculty Assessment Centre on the Ground Floor of Q Block no later than 12 noon on the due date. (c) 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. (d). Students must retain a copy of each item submitted for assessment. This must be despatched to USQ within 24 hours if requested by the Examiner. (e) 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 such as documented ill-health. (f) Students who have undertaken all of the required assessments in the course but who have failed to meet some of the specified objectives of the course within the normally prescribed time may be awarded the temporary grade: IM (Incomplete-Makeup). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non-directed personal study. (g) Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or sit for an examination at the scheduled time, may apply to defer an assessment in the course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded: IDS (Incomplete - Deferred Examination; IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).

- 10 If assignments in the course require the use of surveys, interviews, etc., students should be aware of the University and Faculty of Arts ethical requirements/guidelines. (The course syllabus distributed to students in the first week of teaching provides this information.)

OTHER REQUIREMENTS

- 1 Students are strongly advised to attend a minimum of 80% of the tutorial classes in order to receive the necessary hardware and software training to meet the objectives 1, 2 and 4. Also, attendance is necessary to facilitate the development of the student's projects and objective 3.
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