School of Art and Design
Project / Assignment Form
PA2

Module Title:

Virtual Worlds - Computer Imaging - 3D Modelling

Academic Yr	*Level*	*Programmes on which offered*
10-11	M	MA Creative Technology MA Communication Design MA Product
Credits	*Duration*	
15 Credits	11 Weeks	

Staff

Module Co-ordinator	*Teaching Staff*	*Support Staff*
Mathias Fuchs	Mick Lockwood	Mick Lockwood

Verification *(external verification requires confirmation in writing [email OK] – please indicate who holds this)*

Verifier	*Name*	*Confirmation held by*	*Date*
Internal 1	Mathias Fuchs		
Internal 2	Paul Sermon		
External			

Module Details

Rationale:

The technological and social advancement of virtual reality (VR) research and technologies has begun to mature and emerge in mainstream culture. In particular, various 3D real-time strategies are being used to enhance distributed gaming, business, television and scientific visualisation and no longer require expensive platforms. This module introduces students to the fundimentals

of 3D content creation, establishing the therory and practical skills needed to create objects, enviroments, and annimations required to populate the virtual world. **Aims of Module**

- To develop capabilities in 3D animation and associated techniques
- To develop capabilities in digital interactivity
- To introduce digital output techniques including video streaming
- To extend presentation and communication skills using 3D computer technologies

Module Learning outcomes:

To provide a broader understanding interfaces and interaction design
To extend the student's knowledge of VR technologies.
To develop students skills in the use of 3D modelling tools for creating interactive environments
To develop capabilities in digital interactivity
To extend presentation and communication skills using 3D computer technologies

Demonstrate awareness of VR developments and an understanding of potential implications for creative development.

Transferable/Key Skills and other attributes:

Communication

Problem Solving

Information Technology

Managing Learning

Risk Assessment:

Date completed		*Special Instructions*
Feb 2006	Paul Sermon	None

Module Assessment Criteria:

1) Creativity
2) Critical judgement and analytical ability
3) Knowledge and understanding of subject matter
4) Technical skills
5) Visual communication
6) Written communication
7) Enquiry and use of sources
8)
9)

Teaching Details

Module Programme *(content, dates, activities, interim deadlines, lecture programme, reviews etc.):*	
Week 01 - 9th Feb 11	Module Launch Overview of 3D Studio Max interface. Use of 3D Studio Max Basic Modelling Exercise
Week 02 - 16th Feb 11	Modelling in 3D Studio Max – Part 1 An introduction to Box Modelling, Tips and Tricks The Gifts / Box Modelling Exercises
Week 03 - 23rd Feb 11	Modelling in 3D Studio Max – Part 2 An introduction to Spline Modelling, Tips and Tricks. Primitive Shapes, Spines, Lathing, Lofting, Extrusion, Boolean Operations. Architectural Visualisation Exercises.
Week 04 - 2nd March 11	Seminars
Week 05 - 9th March 11	Modelling in 3D Studio Max – Part 4 Advanced to Box Modelling / Dealing with complex organic form Rendering And Lighting / Basic UVW / Texturing
Week 06 - 16th March 11	Advanced Texture Mapping / Splitting Meshes / Painting Textures
Week 07 - 23rd March 11	Animation Part 1 / Workshop/ Modelling Workshop / Bouncing Ball / Cameras/Simple Objects
Week 08 - 30th March 11	Tutorials
Week 09 - 6th April 11	Animation Part 2 / Modelling Workshop/ Character Rigging and animation CS / Rendering and Lighting MR
Week 10 - 13th April 11	Tutorials
Week 11 - 11th May 11	Advanced Rendering and Lighting / Revision / General Workshop

Assignment Details (project outline, essay questions etc.):

Module Overview

The ability to represent and recreate physical form in digital space is an extremely powerful tool available to the designer / creative. When constructing a virtual environment detailed high quality 3D content has to be developed. This process of development can be challenging, engaging software with steep learning curve. As well as dealing with the technology and deployment skill, design philosophy has to be considered as part of the process. This module aims to give students a concrete foundation and understanding of this process, developing real depth skill and practical ability.

Within this module you are required to design, develop and create a detailed original 3D Environment or Model.

Your first task is to decide upon a suitable theme. It is down to you as a creative to define the concept. You may choose to produce a Virtual World, Architectural Visualisation, a Product, Vehicle or Character. It is down to you as individuals to recognise your level of artistic and creative skill and relate that to your choice. Help and guidance will be offered by your lecturer in doing so.

There are 2 deliverables for this Module:

Deliverable 1: *[50% of module mark]* 6th April 2011

You will firstly produce some 2D flat development work. This will take the form of a reference file. You will collect reference imagery before developing your concept, putting pen to paper, annotating and sketching ideas. As mentioned before this module is more then technology, it requires the implementation of design process and cycle. Further guidance and example will be given by your lecturer.

As part of the of the first deliverable you will write a short statement of intent, anywhere up to but not exceed 2000 words. Describe your concept, the intended outcome, inspiration, your design process and technical method you intend to employ.

Worksampling:

As part of the schools work sampling policy you are required to scan in at least 5 pages from your development folder before you submit it. These images should be at least 150 DPI and saved in a jpeg format. All work sampling will be submitted with your final submission on a separate disk.

Deliverable 2: *[50% of module mark]* **13th May 2011**

The final deliverable will be a finished archived 3DMax file of your model or scene.
Please provide more then one 3Dmax file demonstrating development.
The 3D content will be developed and managed to a processional standard. The geometry of your model with be optimised and considered, the model or scene will be textured using UVW methods, it will be lit and composed, you will produce at least 5 high quality still renders 'images' and 3 very short **compressed** animations. Further guidance and example will be given by your lecturer.

This content will be burnt onto a CD and all files will be placed in appropriate folders. Please also include any digital development work this may include Photoshop and Illustrator texture development. The CD sleeve should have a table of content printed upon it.

Worksampling:
Please take the scans from the first deliverable along with the renders from the second, place in appropriate folders and burn onto CD. This will make up the work-sampling disk which should be submitted on a separate disk with your final hand-in.

BEWARE

Every year students loose work because of corrupt files and failing hard drives and Flash-Pens. Be sure to backup your work in more then one place. My hard-drive has failed is simply no excuse.

Assessable Work

Deliverables	*Weight*	*Deadline*	*Hand in Location*	*Specific Asesss Criteria*
Statement of intent. 2D flat development work. Reference file	**50%**	**6th April 2011**	Class	1,2,3,4,5,6
Verbal Feedback will be available via Tutorial 30th March 2011				
3D Max Files 5 High Quality Renders 3 Compressed Animations. Written Feedback will be available 3rd June 2011 Via Blackboard…	**50%**	**13th May 2011**	HT026 12.00	1,2,4,5,

ACADEMIC GOOD CONDUCT

The University makes awards to students that properly reflect your achievement. Unless instructed otherwise, you are expected to work on your own and to ensure that material you submit for assessment does not contain the work of others, except for properly referenced sources where appropriate. The University takes a very serious view of any attempt to gain unfair advantage from the work of others. The use of unfair means in any assessment is likely to result in severe penalties. Gaining unfair advantage can take many forms such as:

a) Plagiarism

Plagiarism involves taking the work of another person or source and using it as if it were your own, for example written work, ideas, musical compositions, computer programs, laboratory or survey results, diagrams, graphs, drawings and designs.

b) Collusion

Collusion involves working with others on tasks that should be carried out on an individual basis. Collusion should not be confused with collaborative work which is sometimes used as a means of learning. It will be clearly stated when collaborative work is permitted in an assessment. Unless advised otherwise, any work which you submit for assessment must be produced by you on an individual basis.

c) Falsifying experimental or other investigative results

This could involve a range of things that make it appear that information has been collected by scientific investigation, the compilation of questionnaire results, etc. whereas in reality it has been made up or altered to provide a more favourable result.

d) Taking unauthorised material (including electronic devices) into an examination

This involves deliberately taking in materials or electronic device of any sort, not specifically permitted, that could be used to gain advantage, whether you use it or not.

e) Contracting another to write a piece of assessed work

This involves any means whereby a person does work on behalf of another. It includes assessments done for someone else in full or in part by a fellow student, a friend or family member. It includes sitting an examination for someone else. It also covers obtaining material from Internet 'cheat sites' or other sources of work. Penalties for this type of unfair means are likely to apply both to a student who does work on behalf of another and one who has work done for him/her.

Particular care should be taken with regard to poor referencing. If you use work which has been produced by other people within an assignment you will need to ensure that you acknowledge or reference the source of the work. Marks may be deducted for poor referencing. If poor referencing is extensive throughout a piece of work it could appear that you are trying to claim credit for the work and you may be deemed to have committed plagiarism.

For further details on the University's policy of Academic Good Conduct, please refer to www.academic.salford.ac.uk/aqa/sections/28_conduct_assessed_work.pdf