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**Suan Sunandha International School of Art (SISA)**

**Suan Sunandha Rajabhat University**

**Thai Qualification Framework for Higher Education (TQF3) : Course Specification**

**Course Title :** CDD3303 3D Modeling and Visualization

**Credit :** 3 (2-2-5)

**Semester :** 1

**Academic Year :** 2020

**Curriculum :** Bachelor of Fine Arts in Creativity and Digital Media (International Program)

**Lecturer :** Mr. Siridej Sirisomboon

Suan Sunandha International School of Art (SISA)

**Section 1. General Information**

1. Code and Course Title : CDD3303 3D Modeling and Visualization

2. Credit : 3 (2-2-5)

3. Curriculum and Course Category:

This course offering, a part of the Bachelor of Fine Arts, Creativity and Digital Media Program, Suan Sunandha International School of Art, Suan Sunandha Rajabhat University

is categorized as Creativity and Digital Media Free Elective Course.

4. Lecturer : Mr. Siridej Sirisomboon

E-mail: Siridej.si@ssru.ac.th

5. Semester / Year Level of Students: Semester 1 / 3rd Year Students

6. Pre-Requisite (if any) : None

7. Co-Requisite (if any) : None

8. Learning Location : Suan Sunandha International School of Art (SISA),

Room: 81/81312, Suan Sunandha Rajabhat University

9. Late Date for Preparing and Revising this Course: -

**Section 2. Aims and Objectives**

1. Objectives of Course

1.1 To understand the Foundry’s 3D Animation Software at an intermediate level.

1.2 To create high detail 3d model.

1.3 To create Character model with control system for animation.

1. Objectives of Developing/Revising Course -

**Section 3. Course Structure**

1. **Course Outline**

Using programs to create animated 3D shapes offering basic knowledge for simple shapes and choosing various textures, colors and the materials for movement in various forms.

1. **Time Length per Semester** (Lecture-Hours / Practice-Hours / Self Study-Hours)

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| --- | --- | --- | --- |
| **Lecture** | **Practice** | **Self-Study** | **Addition** |
| 2 hours per week | 2 hours per week | 5 hours per week | upon student request |

1. **Time Length per Week for Individual Academic Consulting and Guidance**
   1. Lecturer will be available every Friday from 8:00 to 12.00 at

Suan Sunandha International School of Art or an appointment can be made upon request.

* 1. Lecturer can also be reached via e-mail for any short consultations:

Siridej.pr@ssru.ac.th

**Section 4. Developing Students’ Learning Outcomes**

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| --- | --- | --- |
| **Learning Standard/Outcomes** | **Learning Activities** | **Learning Assessment** |
| 1. **Ethics and Morals** | | |
| 1.Honesty  2.Integrity  3.Responsibility  4.Punctuality  5.Tolerance  6.Confidence | * + 1. Rules setting such as attending the class on time and regularly     2. Group discussion     3. Group work     4. Responsible for given tasks and be honest in working and examination | * + 1. Evaluation of on time class attendance     2. Evaluation of on time assigned tasks sending     3. Evaluation of harmony in students group working |
| 1. **Knowledge** | | |
| * + 1. Can apply knowledge in real working time     2. Dare to use creativity that’s profit for film production development     3. Understand in working process rightly in standard     4. Good attitude to profession and work based on moralities and ethics of mass communicators | 1. Explain and conclude ideas through teaching documents and presentation by programs of Microsoft PowerPoint, Microsoft Word and Internet  2. Single and group assignment and discussion  3. Games for case studies understanding and conclusion  4. Quiz in class | 1. Evaluation by behaviors, attention and class participation  2. Evaluation by group working of film production and discussion  3. Evaluation by quiz, midterm examination and final examination |

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| **Learning Standard/Outcomes** | **Learning Activities** | **Learning Assessment** |
| 1. **Cognitive Skills** | | |
| 1. Can apply theoretical section and practical part to film production  2. Can analyze situations in film production | 1. Practice and ideas conclusion by program of Microsoft PowerPoint  2. Assignment of group discussion and report  3. Group analysis based on at present film principles | 1. Evaluation by behaviors, attention and class participation  2. Evaluation by group discussion  3. Evaluation by class practice  4. Evaluation by students’ ideas conclusion, analysis including with in class evaluation |
| 1. **Interpersonal Skills and Responsibilities** | | |
| 1. Relevant interpersonal skill and classmate  2. Skill of creation and maintenance of interpersonal relationship with colleagues and gain and loss people  3. Professional practice with self-responsibility and public responsibility based on moralities and ethics of mass communicators  4. Being leader and follower while working development | 1. Explain and conclude ideas through teaching documents and presentation by programs of Microsoft PowerPoint, Microsoft Word and Internet  2. Group works assignment  3. Group presentation | 1. Evaluation by behaviors, attention and class participation  2. Evaluation by group works  3. Evaluation by in class practice |
| 1. **Numerical Analysis, Communication and Information Technology Skills** | | |
| 1. Effective communication skill which are listening, speaking, reading and writing skills  2. Information technology and new media usage skills to support film production such as information searching via internet and uploading produced film to youtube.com | 1. Communicative technology usage practice such as assignment sending via e-mail and creation of forum for ideas sharing  2. In class discussion or playing of case studies games  3. Report presentation skill by using proper forms, tools and technology | 1. Evaluation by behaviors, attention and class participation  2. Evaluation by group discussion and presentation  3. Evaluation by in class practice |

**Section 5. Lesson Plan and Assessment**

1. **Lesson Plan**

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| --- | --- | --- | --- | --- |
| **Week** | **Topic/Outline** | **Hours** | **Learning Activities and Medias** | **Lecturer** |
| 1 | - Course Orientation  - 3D Character Workflow | 3 | - Group Discussion | Mr. Siridej Sirisomboon |
| 2 | - 3D Character design | 3 | - Group Discussion  - Group Workshop | Mr. Siridej Sirisomboon |
| 3 | - 3D Character modeling 1 (head) | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 4 | - 3D Character modeling 2 (body) | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 5 | - 3D Character modeling 3 (hands) | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 6 | - Introduction to Setup Control System | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 7 | **Midterm Break Week** | | | |
| 8 | **Midterm Examination Week** | | | |
| 9 | - Rigging with Skeleton | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 10 | - Invert Kinematic system | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 11 | - Applying model controller | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 12 | - Keying character animation | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 13- 14 | - Project – Create complete 3D Character with animation | 3 | - Group Workshop | Mr. Siridej Sirisomboon |
| 15 | - Project – Presentation | 3 | - Presentation and Criticism | Mr. Siridej Sirisomboon |
| 16 | **Final Break Week** | | | |
| 17 | **Final Examination Week** | | | |
|  | Total Hours | 39 |  |  |

1. **Learning Assessment Plan**

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| --- | --- | --- | --- |
| **Learning Outcomes** | **Assessment Activities** | **Time Schedule** | **Proportion of Assessment (%)** |
| **1. Ethics and Morals** | | | |
| 1. Honesty  2. Integrity  3. Responsibility  4. Punctuality  5. Tolerance  6. Confidence | Behaviors and Class Practical Participation | Every Week | Class Attendance 10% |

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| **Learning Outcomes** | **Assessment Activities** | **Time Schedule** | **Proportion of Assessment (%)** |
| **2. Knowledge** | | | |
| * + 1. Can apply knowledge in real working time     2. Dare to use creativity that’s profit for film production development     3. Understand in working process rightly in standard     4. Good attitude to profession and work based on moralities and ethics of mass communicators | Midterm and Final Examination Scores | Week 8 and 17 | Midterm Examination  20%  Final Examination 30% |
| **3. Cognitive Skills** | | | |
| 1. Can apply theoretical section and practical part to film production  2. Can analyze situations in  film production | Group Discussion and Analysis | Week 1, 2 and 11 | Group Discussion  15% |
| **4. Interpersonal Skills and Responsibilities** | | | |
| 1. Relevant interpersonal skill and classmate  2. Skill of creation and maintenance of interpersonal relationship with colleagues and gain and loss people  3. Professional practice with self-responsibility and public responsibility based on moralities and ethics of mass communicators  4. Being leader and follower  while working  development | Class Participation | Every Week | Class Participation 10% |
| **5. Numerical Analysis, Communication and Information Technology Skills** | | | |
| 1. Effective communication skill which are listening, speaking, reading and writing skills  2. Information technology  and new media usage skills  to support film production  such as information  searching via internet and  uploading produced film  to youtube.com | Group Presentation | Week 10 and 15 | Group Presentation  15% |

**Section 6. Learning and Teaching Resource**s

Major books and documents

# Todd Palamar.(2015). *Mastering Autodesk Maya 2016: Autodesk Official Press*

. United States.

Important document and information

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Suggested document and information

# *William Vaughan. (2012). Digital Modeling*. United States.

Section 7. Course Evaluation and Improvement

Strategies for Course Evaluation by Students

1.1 Explain to students to understand significance of subject development and students’ roles in subject effectiveness evaluation as gain and loss people of program management

1.2 Support subject effectiveness evaluation by students before and after studying

1.3 Create opinion sharing atmosphere about subject effectiveness between lecturer and students while studying

Strategies for Course Evaluation by Lecturer

2.1 Evaluation majorly based on students’ participation such as students’ behaviours and participation consideration

2.2 Evaluation by lecturer’s point of view such as teaching potential according to set teaching plan evaluation and teaching atmosphere consideration

2.3 Evaluation by students’ scores

2.4 Evaluation of teaching by faculty’s academic section

Teaching Revision

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Feedback for Achievement Standards

4.1 Students’ outcomes, group works’ quality and single assignment the whole semester harmony consideration

4.2Proper teaching management plan evaluation, teaching activities creation, giving assignments, evaluation and score assessment with subject description and program objectives

4.3 Cooperation with the next subject lecturer for previous subject evaluation

Methodology and Planning for Course Review and Improvement

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Section 8. Grading System

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| --- | --- | --- | --- |
| Score (%) | Grade | Meaning | Value |
| 86-100 | A | Exceptional | 4.00 |
| 82-85 | A- | Excellent | 3.75 |
| 78-81 | B+ | Very Good | 3.50 |
| 74-77 | B | Good | 3.00 |
| 70-73 | B- | Fairly Good | 2.75 |
| 66-69 | C+ | Satisfactory | 2.50 |
| 62-65 | C | Quite Satisfactory | 2.00 |
| 58-61 | C- | Low Satisfactory | 1.75 |
| 54-57 | D+ | Poor | 1.50 |
| 50-53 | D | Very Poor | 1.00 |
| 46-49 | D- | Extremely Poor | 0.75 |
| 0-45 | F | Fail | 0.00 |
| - | W | Withdraw | - |