City University of Hong Kong

Information on a Course
offered by School of Creative Media
with effect from Semester A in 2007 / 2008

Part I

Course Title: Visual Thinking and Design

Course Code: SM1007

Course Duration: One semester

No. of Credit Units: 3

Level: 4

Prerequisites: (Course Code and Title)

Precursors: (Course Code and Title)

Equivalent Courses: (Course Code and Title)

Exclusive Courses: (Course Code and Title)

Part II

1. Course Aims:

Images play an important role in our lives as sources of enjoyment, knowledge, and persuasion. This course will encourage students to understand the relevance of visual theory to the practical production of images using new media media. Course material is organized around topics in visual perception. We consider perception as an active and dynamic process whereby human beings make sense of their environment. Basic principles of perception, including figure and ground, order, light, and color are considered in detail. Examples and exercises are mainly drawn from abstract visual art, including both modern painting and experimental animation. This focus on abstraction follows from the basic premise of the course. Since many abstract artists consciously emphasize and interact with their viewers' perceptual processes, this body of work will help students understand the basic elements of visual perception in the arts.

2. Course Intended Learning Outcomes (CILOs)

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

<table>
<thead>
<tr>
<th>No.</th>
<th>CILOs</th>
<th>Weighing (if applicable)</th>
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Form 2B[R], 22.2.06
1. Create animated works using a reduced vocabulary of geometric forms (lines, shapes, colors).

2. Describe the fundamental Gestalt principles of form (figure and ground, gestalt grouping, interaction of color, etc.) and apply them to the production of visual art, and particularly abstract animation.

3. Apply the principles of basic color theory to the creation of abstract animation.

4. Compare and contrast different styles and techniques of typography, and apply them in your work.

5. Compare and contrast different types of perspective in art (isometric, convergent, divergent, etc.) and their use in different cultures.

6. Solve problems pertaining to the design of optical illusions in three dimensions, while working within strict design constraints.

7. Create images by means of programming.

8. Employ the basic principles of procedural design (sequence, selection, repetition) to the production of a digital image.

3. Teaching and Learning Activities (TLAs)
   (designed to facilitate students' achievement of the CILOs)

<table>
<thead>
<tr>
<th>ILO No</th>
<th>TLAs</th>
<th>Hours/weeks (if applicable)</th>
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| CILO 1 to CILO 3 | - Lectures with audio-visual illustrations  
- Analyses of works  
- Creation of animated work using a frame-by-frame technique  
- In-class presentation and critique |                             |
| CILO 4 | - Compare and contrast of different styles of typography  
- Design one's own typography  
- In-class presentation and critique |                             |
| CILO 5 and CILO 6 | - Compare and contrast how different cultures and periods prefer different methods of spatial projection.  
- Work on physical model that causes an optical illusion.  
- Photograph that model in a way that |                             |
highlights this illusion.

CILO 5
- technical workshop on programming
- creation of procedural art work with theoretical text

4. Assessment Tasks/Activities
(designed to assess how well the students achieve the CILOs)

<table>
<thead>
<tr>
<th>ILO No</th>
<th>Type of assessment tasks/activities</th>
<th>Weighting (if applicable)</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>CILO 1-3</td>
<td>Make an abstract animation using hand-drawn geometric forms and a frame-by-frame technique</td>
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<tr>
<td>CILO 4</td>
<td>- Create your own typography&lt;br&gt;- Write a document that documents the creative process and justifies your choices</td>
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<tr>
<td>CILO 3</td>
<td>- Make a physical model that induces an optical illusion&lt;br&gt;- Document this model with photographs that illustrate how the illusion is produced</td>
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<td>CILO 1-5</td>
<td>- Design a poster using the processing programming environment.</td>
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5. Grading of Student Achievement: Refer to Grading o Courses in the Academic Regulations and to the Explanatory Notes.

100% coursework and in-class participation
Grading pattern: Standard (A+AA-…F)

Part III
This course is organized into lecture sessions and workshop sessions. The lectures introduce basic aspects of design theory, while the workshops allow students to apply those principles in practice, and to discover other principles through their own active work. In practice, the distinction between lectures and workshops will not be absolute, so that lectures will also include practical elements, and workshops will include theoretical discussions.

OUTLINE

1. Introduction to Color Theory
2. Interaction of color Workshop
3. Principles of composition and form
   o The concept of gestalt
   o figure/ground,
   o principles of grouping,
   o Balance, contrast, and development
   o Framing
4. Rhythm: the “musicality” of visual art
5. Visual Communication
   o Expression
6. **Perspective and illusion**
   - Convergent perspective
   - Anamorphosis
   - Optical Illusion
   - Perspective in Chinese art and other Asian cultures
   - Divergent and Orthographic perspective
   - Multiple vantage points

7. **Procedural art**
   - Basic principles: Sequence, repetition, and selection
   - Aesthetics of procedural creation: drawing by numbers.
   - Use of translations, rotations, reflections, dilations, and other transformations.
   - Syntax of the Processing environment.

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**Returned by:**

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Date: 20th March, 2006