

# SM2702: INTERDISCIPLINARY PRACTICES IN ART, SCIENCE AND THE HUMANITIES

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## Effective Term

Semester A 2022/23

## Part I Course Overview

### Course Title

Interdisciplinary Practices in Art, Science and the Humanities

### Subject Code

SM - School of Creative Media

### Course Number

2702

### Academic Unit

School of Creative Media (SM)

### College/School

School of Creative Media (SM)

### Course Duration

One Semester

### Credit Units

3

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

Nil

### Precursors

Nil

### Equivalent Courses

Nil

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

A broad survey of research and development approaches within the arts, the hard and soft sciences and the humanities. Basic concepts values, conduct, representation, and politics are addressed through such topical concerns the perennial dialogue between biological and socio-cultural models of research. The relation between theories and research methods is discussed in the context of classical and current research and creative activity. Students are asked to research and familiarize themselves with faculty work on campus and consider how they may engage research that is particularly interesting to them. Each topic addressed will also address the specific context of City University' s research as well as the larger Hong Kong and global cultural and scientific contexts. The syllabus will reflect the varying specializations of the instructors and visitors from year to year with a strong framework that keeps the focus on ways to nurture collaborations and dialogue between disciplines.

This course requires either co-teaching of a professor from science department and a professor from Creative Media or the presence of a faculty member with demonstrable experience as an artist and scientist.

### Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Identify and relate major scientific research areas and faculty on campus		x	x	
2	Identify and relate major research in arts and humanities in Hong Kong and internationally		x	x	
3	Articulate the major differences in disciplinary methodologies		x	x	
4	Produce an interdisciplinary project		x	x	x
5	Contribute to class discussion with reference to additional reading materials found		x	x	x

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

#### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

### Teaching and Learning Activities (TLAs)

TLAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Research area specification	Map the research areas in CityU and highlight what is of particular interest to them	1	
2	Lab visit	Visit at least one science laboratory and attend at least one humanities related conference	2, 5	

3	Interdisciplinary area description	Describe one area of interdisciplinary research and development	3, 5	
4	Reading	Read essays that help clarify the issues one may encounter when working across disciplines	4	

**Assessment Tasks / Activities (ATs)**

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)	
1	Weekly writings related to topics covered in class	1	25	
2	Develop midterm project that maps the relationships of topics	2, 5	25	
3	Develop conceptual idea for the final project that requires at least two fields inter-relating to be successful	3	25	
4	Describe stereo-typing in the arts and sciences and the separation of the fields	4	25	

**Continuous Assessment (%)**

100

**Examination (%)**

0

**Additional Information for ATs**

The weightings is subject to change. The latest course information will be announced during the lesson.

**Assessment Rubrics (AR)****Assessment Task**

1. Weekly Writing, Description on Stereo-Typing

**Criterion**

This assessment will grade on rationality, clarity and fluency of argument and comment. The threshold of 'discovery' lies in a student's ability to negotiate a position that is informed, defensible, and standing on personal insight.

**Excellent (A+, A, A-)**

- Rich content, excellent ability to interpret and integrate various resources
- Rigorous organization, coherent structure, systematic composition
- Precision in argument, well defined and reasoned points of view grounded in insightful interpretation of existing literature
- Readiness to respond to peer opinion and other views initiated in class discussion
- Discussion shed light on new dimensions of the issue

**Good (B+, B, B-)**

- Adequate content, sufficient ability to integrate various resources based on demand

- Reasonable organization with balanced structure and composition
- Clear elaboration of ideas that sticks to the point, with clearly differentiated issues, ability to interpret opinions independently
- Sufficient responses to peer comments to sustain a discussion

**Fair (C+, C, C-)**

- Adequate content, fair ability to integrate various resources based on demand
- Fair organization with adequate structure and composition
- Relevant points made to the subject matter in question
- Ability to respond to other statements and engage in class discussion

**Marginal (D)**

- Weak content, limited use of resources
- Poor organization, structure and composition
- Relevant points to the subject matter, marginal ability to interpret opinions
- Ability to respond to other comments in simple terms

**Failure (F)**

- Inadequate content, no/ irrelevant use of resources
- No organization, structure or/and composition
- Irrelevant points to the subject matter, no ability to interpret opinions
- Fail to respond to other comments

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**Assessment Task**

2. Mid-Term/Final Project

**Criterion**

Students should demonstrate ability to utilize primary and secondary sources, build up argument and analysis. The threshold of 'discovery' lied in a student' s self initiatives to conduct additional research and to personalize theories for her/his personal daily experience.

**Excellent (A+, A, A-)**

- Work has strong affective quality and the articulation of personal styles and signature
- Excellent appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
- Work raises questions and instill insights about the process of conception, creative strategization and production
- Innovative exploration by combining knowledge from different disciplines (e.g. mathematics, psychology, physics, anthropology, etc.) to create an inter-disciplinary project
- Efficient adjustment of plans and strategies in response to resources (time, space, equipment, etc) available with constructive adjustment

**Good (B+, B, B-)**

- Strong appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium
- Ability to create project/ work that demonstrate the processes of thinking and creative exploration
- Proper adjustment of plans and strategies in response to resources (time, space, equipment, etc) available and constructive feedback/ suggestions

**Fair (C+, C, C-)**

- Basic appreciation and/or application of the aesthetic and expressive qualities of the medium
- Limited ability to create project/ work that demonstrate the processes of thinking and creative exploration
- Adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

**Marginal (D)**

- Marginal appreciation of the aesthetic and expressive qualities of the medium
- Marginal ability to create project/ work that demonstrate the processes of thinking and creative exploration

- Limited adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

### Failure (F)

- No appreciation of the aesthetics and expressive qualities of the medium
- Fail to create project/ work that demonstrate the processes of thinking and creative exploration
- Minimal adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

### Additional Information for AR

All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

## Part III Other Information

### Keyword Syllabus

art / science collaborations, art / science dialogue, art / science methodologies

### Reading List

#### Compulsory Readings

Title	
1	Snow, C.P.. Two Cultures: A Second Look. London: Cambridge University Press, 1964.
2	Wilson, S. (2001). Information Arts: Intersections of Art, Science, and Technology. Cambridge, MIT Press.
3	Leonardo Online, MIT press: <a href="http://www.leonardo.info/">http://www.leonardo.info/</a>

#### Additional Readings

Title	
1	Brockman, John. The Third Culture: Beyond the Scientific Revolution. New York: Simon and Schuster, 1996.
2	Burnham, Jack. Beyond Modern Sculpture: The Effects of Science and Technology on the Sculpture of This Century. New York: George Braziller, 1968.
3	Clarke, Bruce and Linda Dalrymple Henderson, Eds. From Energy to Information. Representation in Science and Technology, Art, and Literature. Stanford: Writing Science Series, 2000.
4	Darley, A. (2003). From Abstraction to Simulation: Notes on the History of Computer Imaging. Culture, Technology & Creativity in the Late Twentieth Century. P. Hayward. Luton, University of Luton Press
5	Davis, Doug. Art and the Future: A History/Prophecy of the Collaboration between Science, Technology and Art. New York: Praeger, 1973.
6	Holtzman, S. R. (1998). Digital Mosaics: The Aesthetics of Cyberspace. New York, Simon & Schuster.
7	Ione, Amy. Visualizing Innovation: Art, Science, Technology, and Visual Studies. Amsterdam and New York: Rodopi. 2005.
8	Malloy, J., Ed. (2003). Women, Art, and Technology. Cambridge, MIT Press.
9	Nadis, S. (2000). "Science for Art's Sake." Nature 407: 668-670. Online: <a href="http://www.uwm.edu/~horeilly/bioart/joedavis/articlesonjoedavis/joedavisnature.pdf">http://www.uwm.edu/~horeilly/bioart/joedavis/articlesonjoedavis/joedavisnature.pdf</a>
10	Packer, R., Ken Jordan and William Gibson, Ed. (2002). Multimedia: From Wagner to Virtual Reality. New York, W.W. Norton & Company.
11	Punt, M. a. R. P. (2001). The Postdigital Membrane: Imagination, Technology and Desire. Portland, Intellect.
12	Vesna, V. (2001). "Toward a third culture: being in between." Leonardo 34(2): 121-5.
13	Wilson, S. (2001). Information Arts: Intersections of Art, Science, and Technology. Cambridge, MIT Press.