
Course Title: Art and Technology

Course Number: ART260

Course Prerequisites: None

Credit Hours: 3

General Studies Credits: 0

I. Course Description:

Technology and artistic practice have always been closely linked together, from cave paintings to computers. The course will provide an overview of their intersections and overlaps throughout history, with an emphasis on XX century and on new technological developments and their integration in art research and production. It will unveil some art trends of more modern technological innovations such as the internet, cyborgs, virtual reality and genetic engineering.

Students will be introduced to contemporary and historical directions and methodologies through seminar lectures, research presentations, and a final project.

II. Course Goal

Critically analyze new artistic techniques and forms as they have been inspired by innovative technologies of the 20th century and early 21st century, and apply those contemporary forms of expression to the creation of original, technologically driven art creations.

III. Program Objectives (Core, General Education, Degree):

The outcomes of this course are aligned and developed to support the following Program Objectives. Program Objectives may be supported by multiple courses.

1. General Education

Objective 1: Students employ a diverse set of thinking approaches in appropriate situational contexts to produce successful outcomes.

2. Digital Media

Objective 2: Create examples of dynamic, kinetic and generative design work incorporating elements such as audio, video, animation, robotics, sculpture, mobiles and process-based art.

IV. Performance Objectives:

Upon successful completion of this course, the student will have demonstrated competency in the following objectives:

1. Develop a basic understanding of the arts and technology integration
2. Explore aesthetic ideas and visual structures through the analysis of technologically driven art work.
3. Identify the historical precedents, philosophies, artists, and output as a result of art inspired by technological innovations of XX and XXI century
4. Write a comparative analysis of the differences between technologically driven art and traditional art
5. Create a multimedia work inspired by modern technological innovations such as the internet, robotics, virtual reality and genetic engineering, among others.
6. Present and critique students' projects
7. Explore visions for the future collaborations between art and technology

V. Standardized Assessments:

1. Week 2: Discussion and Reading; Week 3: Discussion; Week 5: Discussion
2. Week 3,4,5: Student Presentations of the assigned artist; Week 8: midterm research paper

3. Week 2: Research and summarize historical connection
4. Week 2 Assignment: comparisons
5. Week 14: Final Project
6. Week 8: Midterm Presentation; Week 15: final project presentations and critique
7. Week 13: Assignment – possible visions for the future developments

VI. Performance Evaluation:

Successful completion of this course requires students to obtain an overall cumulative grade of 60% or higher. Rating of the student's success in completing the stated objectives of this course will be based on the following percentiles:

1. Discussions = 10%
2. Final Project = 40%
3. Midterm = 15%
4. Presentations = 20%
5. Readings = 15%

VII. Teaching Strategies:

The University of Advancing Technology actively utilizes the Year-Round Balanced Learning (YRBL) model for addressing different learning styles. The YRBL model consists of five delivery methods that include modified lecture, tutorial teaching, group recollection, student teachback and discovery learning. Students will engage in both synchronous learning activities in regular class periods and asynchronous (possibly online) activities. Group activities and team building are strongly encouraged within the synchronous and asynchronous environments.

The University of Advancing Technology holds non-exclusive rights to student projects to publish for promotional purposes only. By attending the school, students give implicit permission for the school to use their work in catalogs, brochures, etc. Students retain original rights to their projects and may market them as they see fit.

VIII. Instructional Materials and References:

1. Textbook: "Art + Science Now", Stephen Wilson
2. Recommended book:
"Information Arts", Stephen Wilson

IX. Credit Award Rationale:

Course Credit Award: 3 Credits

Class Hours (In Class, Asynchronous):

- Term: 45 Hours
 - 30 hours synchronous (in class)
 - 15 hours asynchronous
- Week: 3 Hours
 - 2 hours synchronous (in class)
 - 1 hour asynchronous

Outside of Class (Reading, Research, Homework, Assignments, Projects, etc):

- Term: 90 Hours
- Week: 6 Hours

X. Course Outline:

ART AND TECHNOLOGY

Week 1

- Weekly Overview: introduction to the course; discussion and lecture about the relationship between art, sciences and technology**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Course Overview	In Class, 1/2 hour	Modified Lecture Discovery Learning	Knowledge, Comprehension			
Lecture: Introduction to art and technology and precursors	In Class, 1 Hour	Modified Lecture Discovery Learning	Knowledge, Comprehension		ART260-01 ART260-03	
Introductions: instructor and students	Asynchronous 1 hour	Discovery Learning	Knowledge			
Screening of DVD: Char Davis	In Class 1/2hour	Discovery Learning	Knowledge, Comprehension			
Discussion: Osmose Screening - DVD	Asynchronous 1 hour	Discovery Learning	Comprehension			

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading 2 online articles; on two cultures and the third culture	2 hours	NA	Knowledge, Comprehension		ART260-03	
Research one example of the collaboration and summarize in an essay format	4 hours	NA	Analysis, Knowledge		ART260-01 ART260-02	

Week 2

- Weekly Overview: history of arts, sciences and technology relationship - EAT**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Discussion on assigned readings: origins of arts and technology relationship	In Class, 1 Hour	Modified Lecture, Discovery Learning	Knowledge, Comprehension Analysis		ART260-01	
PPT Lecture: EAT	In Class, 1 Hour	Modified Lecture, Discovery Learning			ART260-03	
Discussion: review the presented artpiece and comment	Asynchronous, 1-2 Hour	Discovery Learning	Comprehension, Analysis		ART260-02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: interview with Billy Kluver and Hippocratic Oath article	2 hours	NA	Comprehension, Knowledge		ART260-03	
Assignment: comparisons of one traditional artwork and one reflecting the collaborations betw. Art and technology	2 hours	NA	Analysis, Evaluation		ART260-01 ART260-03 ART260-04	
Research: historical connection – one early example from history of the collaboration	2 hours	NA	Comprehension, Analysis		ART260-03	

Week 3

- **Weekly Overview: human body and medicine, and art**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
PPT Lecture: body and medicine	In Class, 1 Hour	Modified Lecture, Discovery Learning	Knowledge, Comprehension		ART260-01	
Discuss assigned readings	In Class,	Discovery	Knowledge,		ART260-01	

	1/2hour	Learning	Analysis	
Student presentation of the assigned artist (medicine and art)	In Class, 1/2 Hour	Discovery Learning	Knowledge	ART260-02
Discussion: analyze ethical issues with arts and medicine relationships	Asynchronous, 1-2 Hour	Discovery Learning	Analysis	ART260-02

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: article by Carol Gigliotti and 'genetic technologies and animals' article	3hrs		Comprehension, Analysis		ART260-01	
Discussion: discuss presented artwork	1hr		Analysis		ART260-02	
Research one artist from the provided list that deals with biotech and genetic engineering and summarize in an essay format	2hrs		Comprehension, Analysis		ART260-02	

Week 4

- **Weekly Overview: biotech and CAE**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Student presentation of the assigned artist	In Class, 1/2 Hour	Modified Lecture, Discovery Learning	Knowledge, Comprehension		ART260-02	
PPT Lecture: cyborgs, agents and transhumanists	In Class, 1 1/2 Hours	Modified Lecture, Discovery Learning	Knowledge, Comprehension		ART260-01	
Discussion: ethical issues	Asynchronous, 1-2 Hour	Teach Back	Analysis and Synthesis		ART260-01	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Assignment: summarize article	2 hr		Synthesis		ART260-01	
Discussion: analyze posted work	1 hr		Analysis Evaluation		ART260-02	
Presentations: research the assigned artist dealing with natural phenomena	3 hrs		Knowledge, Comprehension Analysis		ART260-02	

Week 5

- **Weekly Overview: physics and natural phenomena**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Students' presentations of the assigned artist	In Class, 1 Hour	Discovery Learning, Teach Back	Knowledge, Analysis		ART260-02	
PPT Lecture: physics and art	In Class, 1 Hour	Discovery Learning, Modified Lecture	Knowledge, Comprehension		ART260-01	
Screening of artists	In Class, 1hr	Discovery Learning,	Knowledge, Comprehension		ART260-02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: assigned reading from the textbook	2hrs		Comprehension, Knowledge		ART260-01	
Research your assigned artist	3hrs		Comprehension, Knowledge		ART260-02	
Discussion: is it art? Discuss presented work	1hr		Analysis		ART260-02	

Week 6

- *Weekly Overview: math and art*

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
PPT: Lecture – math and art Screening of artists dealing with math	In Class, 2 Hours	Modified Lecture, Discovery Learning	Comprehension, Knowledge		ART260-01	
Presentations: assigned artists	In Class, 1 Hour	Discovery Learning	Knowledge and Analysis		ART260-02	
Discussion: relationship between art and math	Asynchronous, 1-2 Hour	Teach Back	Synthesis		ART260-01	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: assigned	2hrs		Comprehension, Knowledge		ART260-01	
Presentations: Research of the assigned artist	2 hrs		Comprehension, Knowledge		ART260-02	
Assignment: choose one artist to discuss in an essay format	2hrs		Comprehension, Analysis		ART260-02	

Week 7

- *Weekly Overview: fractal art*

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Visit to the Phoenix Museum: Field Trip	In Class, 1 Hour	Discovery Learning	Comprehension, Knowledge, Analysis		ART260-01	
Students' Presentations: assigned artist	In Class, 1 Hour	Teach Back	Analysis		ART260-02	
Discuss the value of fractals as an art form	Asynchronous, 1-2 Hour	Teach Back	Synthesis		ART260-02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Work on midterm research paper	5hrs		Analysis, Knowledge, Synthesis		ART260-01	
Assignment: summarize the field trip	1hr		Analysis		ART260-02	

Week 8

- **Weekly Overview: midterm presentations**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Midterm Presentations	In Class, 2 Hours	Discovery Learning	Knowledge		ART260-06	
Peer Review	Asynchronous, 1-2 Hour	Teach Back	Synthesis and Evaluation		ART260-06	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Research the assigned artist (databases and information and art)	3hrs		Comprehension, Knowledge,		ART260-02	
Read chapter about information from the textbook:	3hrs		Comprehension, Knowledge,		ART260-01	

Week 9

- **Weekly Overview: information and databases**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Screening of artwork	In Class, 1 Hour	Discovery Learning	Comprehension, Knowledge,		ART260-02	
Lecture and discussion	In Class, 1 Hour	Discovery Learning, Modified Lecture	Comprehension, Knowledge,		ART260-01	
Student presentations of the assigned artist	In Class, 1-2 Hour	Teach Back	Analysis, Knowledge		ART260-02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: assigned online articles	2hrs		Comprehension, Knowledge,		ART260-01	
Research the assigned artist	3hrs		Comprehension, Knowledge,		ART260-02	
Discussion: the role of internet in art	1hr		Evaluation		ART260-02	

Week 10

- **Weekly Overview: internet art (net.art)**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
PPT Lecture: internet art	In Class, 1 Hour	Modified Lecture, Discovery Learning	Comprehension, Knowledge		ART260-01	
Student presentations of the assigned artist	In Class, 1 Hour	Teach Back	Application, Comprehension, Knowledge		ART260-02	
Screening of artists' net.art works	In Class, 1hr	Discovery Learning	Application		ART260-02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course	Program
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			Objective	Objective
Reading: chapter on robotics from the textbook, Walter Benjamin's article	2hrs		Comprehension, Knowledge	ART260-01 ART260-03
Presentations: Research the assigned artist	1hr		Comprehension, Knowledge	ART260-02
Screening: provided links	1hr		Comprehension, Knowledge, Evaluation	ART260-02

Week 11

- *Weekly Overview: robotics and kinetic art (AI)*

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Discussion of the readings	In Class, 1 Hour	Discovery Learning	Comprehension, Knowledge, Analysis		ART260-01	
PPT Lecture: robotics and kinetic art	In Class, 1 Hour	Discovery Learning, Modified Lecture	Comprehension, Knowledge,		ART260-01	
Discussion	Asynchronous, 1-2 Hour(s)	Teach Back	Application		ART260-01	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Discussion: is it art?	2hrs		Analysis		ART260-02	
Reading from the textbook	2hrs		Comprehension, Knowledge,			
Research the assigned artist	2hrs		Comprehension, Knowledge,		ART260-02	

Week 12

- **Weekly Overview: telecommunication and art: time and space**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
PPT Lecture: time and space	In Class, 1 Hour	Modified Lecture, Discovery Learning	Comprehension, Knowledge, Application		ART260-01	
Student Presentations: assigned artist	In Class, 1 Hour	Discovery Learning	Comprehension, Knowledge		ART260-02	
Screening from the list of provided links of artists	Asynchronous, 1Hour	Teach Back	Application		ART260-02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: textbook	2hrs		Comprehension, Knowledge,		ART260-01	
Research artists that use alternative interfaces such as VR	2hrs		Comprehension, Knowledge, Analysis		ART260-02	
Work on Final Project	2hrs		Synthesis		ART260-05	

Week 13

- **Weekly Overview: alternative interfaces**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Lecture and discussion about the chapter from the book	In Class, 1 Hour	Modified Lecture, Discovery Learning	Comprehension, Knowledge,		ART260-7	
Presentations of students'	In Class,	Teach Back,	Analysis,		ART260-02	

assigned artists	1 Hour	Discovery Learning	Knowledge		
Discussion: alternative interfaces question for discussion	Asynchronous, 1-2 Hour	Teach Back	Analysis		ART260-7

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Assignment: vision for the future collaborations between art and technology	2hrs		Analysis		ART260-7	
Work on final project	4hrs		Synthesis		ART260-5	

Week 14

- ***Weekly Overview: vision for the future***

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
PPT: Lecture:	In Class, 1 Hour	Modified Lecture, Discovery Learning	Comprehension, Knowledge		ART260-7	
screening	In Class, 1 Hour	Discovery Learning, Tutorial	Comprehension, Knowledge, Application		ART260-02 ART260-7	
Sharing final project in progress	Asynchronous, 1hr	Discovery Learning	Synthesis		ART260-6	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Work on the Final Project	6hrs		Knowledge, Application		ART260-5	

Week 15

- **Weekly Overview: Presentations of the Final Projects and Critique**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Presentations of final projects and critique	In Class, 2 Hours	Discovery Learning	Evaluation		ART260-6	
Peer Review	Asynchronous, 1-2 Hour	Teach Back	Analysis and Evaluation		ART260-6	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Feedback on the course	3hrs		Evaluation		ART260-6	
Feedback on the final projects	3hrs		Evaluation			

XI. Date of Last Review of Syllabus:

9/27/11

The nature of course delivery necessitates some flex in the outline of the course due to holidays, project work, etc. Courses can potentially vary from the stated outline but will cover all of the material listed in the outline of the course.