
Course Title: Algorithmic Art
Course Number: ART 131
Course Prerequisites: none
Credit Hours: 3
General Studies Credits: none

I. Course Description:

Algorithmic (or generative) art is a method of artistic creation that emphasizes the process of creating a work of art, rather than the final product. Instead of a static work of art that never changes, students will be encouraged to make works that dynamically evolve over time based on variations in input parameters.

II. Course Goal

Critically analyze various methods for creating art through algorithmic processes, and apply those concepts to the creation of original, generatively-driven art creations.

II. Student Performance Objectives:

Students will develop the ability to:

- Develop a basic understanding and facility to solve visual problems algorithmically;
- Explore aesthetic ideas and visual structures through algorithmic processing of graphic data;
- Identify the historical precedents, philosophies, artists, and output of the algorithmic art movement";
- Write a comparative analysis of the differences between algorithmically generated art and traditional art;
- Determine the most appropriate algorithmic approach to art, in order to achieve a desired aesthetic result;
- Hypothesize examples of future instances of aesthetically and culturally significant algorithmic art;
- Create a multimedia work in which the differing media elements interact according to an algorithmic rule set; (not necessarily computer generated);
- Create a proposal for a large-scale algorithmic work that involves skills, materials, or resources that are outside of your individual ability to implement.

Students will demonstrate these skills through the production of assigned projects and a substantial paper on a topic of their choosing. These assignments will make use of the ideas presented in class to synthesize new and unique arguments about and representations of the topics.

III. Method of 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:

- 30% Discussions
- 40% Projects
- 15% Assigned readings
- 15% Final Exam

IV. 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.

V. Instructional Materials and References:

There are no required textbooks for this class.

Readings relevant to the topics will be provided by the instructor.

VI. Course Outline:

This syllabus is a reference that spells out the rules of the course. It is supplemented by the course outline, which lists the weekly assignments and the topics we will cover. Please refer to it regularly to prepare for class and to make sure you are on time with assignments.

Since this course can vary greatly with the readings assigned for a particular semester, there is no formal semester plan, beyond starting with general concepts and moving toward specific instances.

Semesters are officially fourteen weeks long, but depending on holidays, emergencies, conferences, and other considerations, it is possible for a given section to only meet for the equivalent of as few as eleven weeks.

The current semester has the following components, in order:

- Introduction: definition of algorithmic/generative art
- Differences between software art and generative/algorithmic art
- Origins
- Early Algorists
- Art-Historical Antecedents:
- Characteristics of algorithmic art: process, indeterminacy, open form, natural processes and enumeration
- Algorithm and Modernity: Aaron, Hebert
- Categories: 1. stills and grids; 2. Animation; 3. Sound; 4. Installations, interactive and conceptual
- Genetic Algorithms: Laurent Mignonneau and Christa Sommerer
- Algorithm and Recreation: Verostko, Mohr, Legrady, Cohen, Musgrave, jodi.org
- Algorithms and Arcitecture: Novak, Tatlin, Merz

VII. Date of Last Review of Syllabus:

10/6/07

This syllabus is a guideline only. UAT and its faculty maintain the right to utilize academic freedom in adapting this course to meet the needs of each individual class.