CCTAD
Virginia Tech

Digital Arts: CyberArts Studio
(Fall '06-Spring '07)

I. Goal

The goal is to introduce students to:

- The concept of collaboration
- Understanding of contemporary multimedia art and its manifestations across various media
- Parameters and connections between various art disciplines
- Role of the technology and technology literacy
- Research

II. Course Description

This is a project-based class. It is an intensive immersion in different approaches to digital art. Its primary goal is teach multi-disciplinary collaboration. It is a studio class: students work in teams (some as small as pairs, some as large the entire class) to develop a series of projects. There will be four short projects (usually two weeks in duration) in assigned groups. The groupings will expose students to each other so that the final, bigger project can be carried out in self-organized teams.

Projects involve creating and integrating hardware and software. Although working in teams, students will be expected to participate in all aspects of projects. Sensors, displays, and/or effectors will be integrated in a physical embodiment that reflects the intended setting, use and content.

We draw on expertise and practices in art, communications, music, and computer science. In parallel with the projects, there will be readings, discussions, a few lectures, demonstrations of collaborative projects created by faculty to frame and reflect upon the nature of technology-based art. Students are expected to keep up with assigned reading and contribute actively to our discussions.

Because of its cross-disciplinary focus, students coming from different backgrounds will acquire different skills and knowledge. Of course, all should gain an insight into the differences in values, legitimate forms of rhetoric, aesthetics, and problem-solving approaches of art, science, design and engineering. Some specific examples are:
   ❑ Engineering students: holistic problem-solving (as contrasted with hierarchically decomposed problem-solving), public project presentation, a recognition of the aesthetics of engineering

❑ Art students: engineering project processes, hierarchically-decomposed problem-solving, systems thinking
❑ Design students: art processes, critical stance
❑ Music students: engineering project processes, systems thinking
❑ Communication students: hierarchically-decomposed problem-solving, systems thinking
❑ Science students: "satisficing", design review, a sense of aesthetics

All students will need to keep a journal. The format is up to the student. It will not be graded, however it will be required for a final written reflection (take home).

IV. Evaluation

Structurally, the class is part seminar, part lecture, and mostly hands-on project development. Students will be primarily graded on their projects and their participation in its conceptualization, background research, aesthetic and technical exploration, and its implementation/performance. This will be assessed in team meetings with their faculty advisors, presentations made to the class, a final written report based on their journals, participation in the production of the final public show of work, and the works of art produced. The grading beaks down:

ACTIVITY	#		
Sketch problems	4	15%	60%
Final Project	1	25%	25%
Written reflection based on journal	1	15%	15%
			100%

All participants on a project team will receive the same grade. However, all team members will be asked to assess the contribution of team mates and consistently low contributions will result in lowered grades for individuals.

V. Course Admission

At least junior standing with most core classes completed. Admission is contingent upon review of a portfolio of work and/or an interview by faculty to gauge appropriate fit with class, level of enthusiasm, self-direction, and ability to devote sufficient time.

VI. Textbook

The primary text is Steve Wilson's *Information Arts* (MIT Press, 1995 ISBN: 0-262-73158-4) which is available on-line from the library. There will be assigned reading, but the book itself is more a reference than a read.

VII. Building Blocks

Based upon the CCTAD faculty discussion, the class will focus on:

- Familiarizing students with the key concepts associated with the CyberArts
- Developing awareness, understanding, and appreciation of the contemporary multimedia arts
- Drawing parallels between different art and research disciplines
- Fostering collaboration
- Ensure basic technological literacy
- Teaching by example
- Production of an end-semester project and subsequently student showcase
- Generating a foundation for a further pursuit of knowledge in the discipline of student's choice
- Preparing students for a potential involvement in the AMWV project as well as other outreach opportunities

IX. Proposed Curriculum Structure

There is one official class meeting each week. Teams are required to meet at other times of their arranging during the week.

1: 8.22   Faculty introduction
             Steve Harrison/Computer Science
             What is CyberArt?
             The Art of Collaboration

2: 8.29   Multimedia and its components within the scope of CCTAD
             Reactivity vs. Interactivity
             <u>Project 1 Due</u>

3: 9.05   1st faculty collaboration presentation(s)
             Ivica Ico Bukvic/Music
             TBD

4: 9.12   Visual component, its parameters, and artistic impact
             Demo/workshop using particular visual tools/software
             <u>Project 2 Due</u>

5: 9.19   Aural component, its parameters, and artistic impact
             Literature overview
             Demo/workshop using particular aural tools/software

6: 9.26   2nd faculty collaboration presentation(s)
             Simone Paterson/Art & Art History\

7: 10.03   Computer science/research component, its parameters, and artistic impact
Demo/workshop focusing on computer/programming component
<u>Mount work in Window Showcase</u>

8: 10.10   Communications component, its parameters, and artistic impact
Literature overview
Demo/workshop using tools/software relevant to communications
<u>Project 4 Due</u>

9: 10.17   3rd faculty collaboration presentation(s)
Dane Webster/Art & Art History and Yong Cao/Computer Science
TBD

10: 10.24   Final Project Group Formation

11: 10.31   Inspiration sources, evaluation, and self-criticism in aggregate art forms
<u>Remove work from Window Showcase</u>

12: 11.07   Art and advertising, targeting the right audience/venue, PR
Generation of the PR materials for the December showcase

13: 11.14   Student work-in-progress showcases

14   No classes (Thanksgiving)

15: 11.28   <u>Final Project Presentation</u>
Final showcase and selection of the exhibit works

16: 12.05   <u>Final reflections due</u>
Public display of work

X. Logistical Considerations

In order to meet the aforementioned curricular goals, the class should address the following considerations:

- To foster diversity, every team (group of students) should be advised by a different faculty. Advising should take place outside the regularly scheduled class time.
- Should there be more than one team per every faculty member, additional teams may be arbitrarily assigned to the faculty who expresses interest in advising more than one team.

- Voting system for the final selection if at all possible should involve also students, as their response is going to be likely less academic and therefore more compatible with that of a common audience.
- Due to introductory nature of the course, students' initial participation should be fostered through various task-oriented assignments, including studying particular artist and/or art and preparing presentations, as well as in a form of general participation. Although earlier creative endeavors ought to be encouraged through the aforementioned assignments, my suggestion is to discourage students from working on their final projects prior to the week 10. This will encourage greater critical awareness of the work that is to be incorporated in their creative endeavors.