Memo

To: CAPR Committee

From: James Petrillo
   Director, Graduate Multimedia Program

Re: Multimedia Graduate Program - Five Year Review

I am submitting the Multimedia Graduate Program - Five Year Review and the Outside Reviewer Report which was prepared by Professor David Heintz of the California College of Art. I am submitting the outside reviewer’s report after circulating it to Dean Bellone and to the Multimedia Graduate Program faculty. Informal discussions with the faculty yielded a positive response to the report from all concerned. Two written comments were received.

Dean Carl Bellone wrote:
The outside review was very thorough and very positive. I appreciate the time and effort he put into the review. I have no comments to add. I was pleased to see that he recognized the high quality of the program.

Rafael Hernandez wrote:
Since this will be part of an official record, I only request my first name be spelled correctly: no ph, just f (Rafael). Besides that, it was a fun read.

Finally I would like to add my response:
The reviewer gave a surprisingly detailed and well researched account of the program. It very accurately reflects the current state of affairs. Although his report was very positive and encouraging he did not avoid citing problems in the program, it is my opinion that he accurately represented the problems. Those problems are as he pointed out “minor” and “solvable.” The program faculty now looks forward to the challenges of the next five years as an opportunity to achieve even greater success.
California State University, East Bay
Multimedia Graduate Program

5-Year Program Review Report

For
Multimedia
2004 - 2009

Self Study and 5 Year plan approved by faculty on: February 6, 2009

External Reviewer Report received by the program on: March 12, 2009

Program’s Response to External Reviewer’s Report made on: March 13, 2009

Complete 5-Year Program Review Report submitted to CAPR on: March 13, 2009
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Overview of the program

The discipline known at Multimedia or Interactive Arts has evolved considerably since the creation of a multimedia studies program at this university in 1995. The CSU East Bay Multimedia Graduate Program was originally conceived as a collaboration between the four colleges of the university to service all of their needs. Since that time the individual colleges have developed programs more specifically tailored to their individual needs. Two of the colleges have created graduate programs that are related to, but do not overlap with the mission of the Graduate Multimedia Program. The College of Science has its Computer Networks program and its CompCore program, while The College of Education and Allied Studies has its Educational Technology Leadership Program. The Multimedia Graduate Program is distinguished from the others by its curriculum and its outcome goal. The goal of the Multimedia Graduate Program is for collaborative teams of students to research, develop and produce innovative, content rich, interactive media experiences. Multimedia graduate students pursue a range of research and production including, augmented reality, tele-presence, mini robotics, emergent behaviors, and A.I environments as well as more conventional interests such as interactive exhibitions, game design and web technologies. This five year review provides an appropriate opportunity to propose a new vision, a new curriculum and a new administrative organization for the Multimedia Graduate Program. The self study section of this report is a summary of the past five years and a review of the programs accomplishments. The plan section describes the new curriculum and administrative structure being proposed.

The mission of the California State University, East Bay Multimedia Graduate Program is to educate the next generation of highly skilled interactive media producers. The program is structured as an interdisciplinary learning environment to foster imagination and collaboration. It focuses on the creative and technical aspects of using computer technology to create, control, deliver and present new content in a variety of interactive forms. Students work with images, sounds, human computer interactions, narrative, and a variety of human/cultural experiences to enchant and inform.

The program mirrors real world conditions by emphasizing teamwork and production oriented goals. Because multimedia is a rapidly changing field, the program focuses as much on the enduring creative processes as on transient technology. Students in our program learn skills necessary to adapt quickly to new work environments. They also develop a strong theoretical foundation in multimedia arts while they enhance their creative and technical skills. The program provides students with the creative, technical and collaborative skills necessary for successful professional careers.
Part I: Self Study

1.1 Summary of previous review and plan

In 2004, Keith Muscutt, the Associate Dean of the Arts at the University of Santa Cruz reviewed our program and made recommendations. In the introduction to the 2004 Five Year Review I stated: “Although most of the recommendations made by Associate Dean Muscutt can be easily implemented with increased resources, the current grave condition of the CSU budget (my emphasis) makes their imminent implementation seem remote.” Although the new “current grave condition” of the CSU budget is worse than the last “current grave condition,” the program nevertheless has had significant accomplishments in the past five years. I am very pleased to present the outcomes to the reviewer’s recommendations.

Students

Recommendations:

1. First-year students urgently need a physical space where they can congregate and exchange ideas.
2. Seek ways to increase first and second year interactions through shared resources, a more integrated curriculum, or some form of apprenticeship.
3. The second-year creative/research lab is cramped and inadequate. A lab commensurate with the scale and scope of the projects is well deserved.

Outcome:

The new multimedia program facility in the Valley Business and Technology building has solved most of the problems alluded to here. The thesis project students now have a state of the art facility with an excellent infrastructure and sufficient space for creating large interactive environments. Through a shared facility arrangement with the Art Department, the first year Multimedia students have a production lab reserved for them from 2:00 pm till 6:00 am Monday through Thursday and all day and night on Friday Saturday and Sunday. In addition to having exceptional computing power available to the students these Labs are also equipped with the necessary amenities for working late into the night. These include refrigerator, microwave, coffee maker, sink, dishes and flatware, dining tables, chairs and sofas. An environment has now been created that allows for and encourages the crucial informal social interaction through which ideas and expertise are shared between the students. Furthermore the VBT lab is an excellent environment for the program’s monthly lecture series known as the Forum. Here first and second year students have the opportunity to mingle and interact. This process is further encouraged by the tradition of meeting the faculty and the guest lecturer at an informal dinner before each event.
Faculty

Recommendations:

• Investigate how faculty research in similarly technical and dynamic disciplines, such as computer science and engineering, are institutionally supported and move towards applying those procedures and standards.

Outcome:

The existing opportunities for grants in the sciences have always been greater than those in the creative arts disciplines. Never-the-less, the availability and rewarding of university support for faculty research is very evenhanded. Currently we are engaged in a joint project with the College of Science because of a university research grant that was awarded to Multimedia faculty member Janet Green.

Curriculum

Recommendations:

• Consider re-positioning and perhaps even renaming the program. The somewhat outmoded term “multimedia” does not do justice to the range and depth of work that research faculty and graduate students are producing. Perhaps “digital and electronic art” or words to that effect would be preferable. (Ignore this recommendation if there are major bureaucratic impediments that will sap faculty energy.)

• Strengthen instruction and expect greater proficiency in programming language skills. This might be accommodated within existing curriculum planning initiatives which propose a formal three-year curriculum option for students needing better preparation and/or the proposal to increase the curriculum from 52 to 60 units.

Outcome:

The issue of the curriculum and its re-envisioning is addressed at length in the “Plan” section of this document. The new proposal calls for an administrative repositioning of the program within the College of Letters, Arts and Social Sciences. The program is to be jointly administered by the Department of Art and the Department of Music. The curriculum has been revised to insure greater proficiency in interactive scripting skill, to have more effective assessment procedures and formalize a three tier admission strategy that will encourage higher enrollment and ensure the necessary level of skill preparation required to succeed in the thesis project.
Facilities

Recommendations:

- Campus space planners should be invited to meet with faculty administrators in Art and Multimedia, review CPEC guidelines, generate tables that show what guideline-space allocations would be appropriate to the Multimedia program, and how actual allocations compare with guidelines (both absolutely and in comparison with other campus programs). With this information in hand, and if warranted, inequities in space adequacy in the existing building can be rationally addressed, and arguments for new space can be advanced, both for state and donor-funded facilities.

- Consider the feasibility of installing temporary facilities in the courtyard.

- The condition of some public spaces in the A&E building is deplorable. While it is de rigueur for teaching studios to be messy, broken fixtures and missing ceiling tiles in the corridors are bad for morale, recruitment, and fundraising. (The remarkable absence of graffiti indicates that it is not art students who are responsible for the damage.)

Outcome:
With the opening of the Graduate Studio in the VBT building the issue of facilities have been successfully resolved. I believe our facilities are now excellent and the envy of any media arts program in the country. As to the deplorable condition of the public spaces in the A&E building I cannot say that these have in any way been addressed by the university.

Student outreach and Fund development

Recommendations:

- Hire or contract with a skilled web designer to develop and maintain a state-of-the-art web presence.

- Make sure that campus-level fundraising executives are aware of the opportunity to find industry support for this program. Try to ensure that a member of their staff is designated to assessing, setting and achieving fundraising goals. (A campaign to raise a $5M endowment over five years – that would generate annual proceeds of $250K thereafter – is within the realm of possibility.)

Outcome:
Having a quality web presence is essential for recruitment because it is now the first source that students check when wanting to learn about any program. In 2007 the program contracted Loc Nguyen and Katherine Lee, both exceptional web designers (and former students) to design our new web site. The results are excellent and can be viewed at multimedia.csueastbay.edu. However, having a good website is only one part of a successful recruitment strategy. When students know about our program they can easily find out more information by checking the site. The bigger problem for potential students is finding out that we exist. An effective promotional strategy for the
Multimedia Graduate Program needs to be implemented by the university if we expect the program to grow and the quality of the students in the program to improve.

University advancement has been very helpful and committed to the program. A small trust fund supported by Electronic Arts Corporation has already been established but more work will need to be done in the coming years provide the program with a sound funding base.

**Program Administration**

**Recommendations:**

- Develop a one-page summary of basic program resources – faculty course assignments, staff provisions, and support funds. A diagram of how funds flow, and who really controls them, would be helpful (especially to the next outside reviewer!).

- Make sure that contractual arrangements between stakeholders are unambiguous and well documented. This will guard against future misunderstanding, and guarantee the stability of core funding.

- Give the program director more control over core program resources. This will align authority with responsibility, empowering the coordinator to solve problems efficiently as well as be a more effective advocate for budgetary needs.

- Increase technical staff support from half-time to full-time.

**Outcome:**

Faculty course assignments are listed in the faculty section of the Self Study.

When it is approved, the object of the new PLAN in this document is to clarify and formalize the arrangement between all the stakeholders – the Provost, The Dean of CLASS, the Art Department, The Music Department, and the Program Director.

Thus far the Program Director has not sought greater control over the program resources. The current status of administrative authority is adequate to successfully perform the job and should be maintained in the new agreement.

Given the grave condition of the budget it might not be realistic to expect an increase in technical staff support time. Although a full time technical support staff is reasonable and justifiable, a much greater concern is the threat of removing the half time staff member all together. Given the scale of the multimedia program facilities, the loss of the half time technical support staff would seriously jeopardize the ability of the program to function. That outcome must be avoided.
1.2 The Curriculum and Student Learning

The curriculum of the program is divided into two parts. The second year is devoted exclusively to the thesis project and it is the heart of the program. The thesis project is a large scale professional quality team-based production that demonstrates unique and innovative uses of interactive technology for content delivery. This is the core activity of the program and the purpose to which all of the course work must serve. Student teams during the thesis year are provided with twenty-four hour a day access to production suites. The program employs the creative laboratory model where students have designated facilities that provide maximum opportunity for them to “build” their project.

The first year curriculum is devoted to preparing incoming students to succeed in the thesis project. There are several significant challenges that must be met during this time that are different than most other university programs. The Multimedia Graduate Program, because of its interdisciplinary design, regularly admits students from differing cultural and academic backgrounds. In order for them to succeed within the rigorous demands of the thesis project they must have the opportunity to negotiate those differences and find commonalities of interest, temperament and vision. Whatever subjects are taught during the first year, the goal of developing group coherence and integrity is essential. This creates an added demand on the faculty who participate in this program. After years of development, the current faculty has the necessary experience with and a commitment to the program strategy to achieve this goal.

The Program currently requires a 52 quarter-unit minimum; however most students in order to develop the necessary expertise to accomplish their goals in the thesis project take more than the minimum requirements.

See appendix C for the current curriculum as it appears in the 2008 – 2010 Catalogue.

Assessment

The chart on the next two pages presents an overview of the Multimedia Graduate Program’s assessment process. The process begins with 1) an admissions assessment. This is followed by 2) an assessment at the end of the first year to determine a student’s ability to advance to thesis candidacy. Finally thesis students have quarterly reviews culminating in 3) a final thesis defense and public presentation. The program’s proposed assessment rubrics and learning outcomes for the three stages was presented to CAPRA in a special report last academic year and approved in the spring of 2008. We are now compiling entry data and will soon be able to compile data for the first year assessments and the final thesis projects.

The description of the programs learning outcomes and the assessment rubrics for each of the assessment stages can be found in Appendix B.
## I. Program Overview

<table>
<thead>
<tr>
<th>Outcome(s)</th>
<th>Entry</th>
<th>Gateway (MM6860)</th>
<th>Thesis Quarterly</th>
<th>Thesis Culminating</th>
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<tbody>
<tr>
<td>Knowledge of the Field</td>
<td>Technical skills with digital media</td>
<td>Ability to produce a thesis idea individually</td>
<td>Meet the goals outlined in the Executive Summary</td>
<td>Knowledge of the field</td>
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<tr>
<td>History and Theory of Digital Media Production</td>
<td>Ability to visualize creative ideas</td>
<td>Ability to work in a collaborative environment</td>
<td></td>
<td>History and Ideas</td>
</tr>
<tr>
<td>Learning Theory</td>
<td>Motivation and dedication to goals</td>
<td>Ability to produce an acceptable thesis proposal in written and digital media format</td>
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<td>Familiarity with the historical and theoretical developments of Multimedia</td>
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<tr>
<td>Business Practice</td>
<td>Relevant experience and/or education</td>
<td>Ability to create an acceptable production plan for the development of the thesis project</td>
<td></td>
<td>Understanding of Learning Theory in relation to interactive design</td>
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<tr>
<td>Teamwork</td>
<td>Willingness to work within a team based environment</td>
<td>Ability to articulate ideas in a cohesive public presentation</td>
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<td>Comprehension of standard business practices</td>
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<tr>
<td>Content Creation</td>
<td></td>
<td></td>
<td></td>
<td>Ability to collaborate within a team based environment</td>
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<td>Innovation</td>
<td></td>
<td></td>
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<td>Ability to develop meaningful content</td>
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<td>Presentation Skills</td>
<td></td>
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<td>Production of innovative thesis project</td>
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<td>Digital Tool Skills</td>
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<td></td>
<td>Ability to articulate ideas in a cohesive public presentation</td>
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<tr>
<td>Production Principles and Methods.</td>
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<td></td>
<td>Competence with Digital tools</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Understanding Technical Principles for Multimedia Production</td>
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<tr>
<td><strong>Signature Assignment(s)</strong></td>
<td><strong>Portfolio</strong></td>
<td><strong>Individual Thesis Proposal and Presentation</strong></td>
<td><strong>Present Thesis Progress to the Thesis Committee</strong></td>
<td><strong>Completion of Multimedia Thesis Project</strong></td>
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<td></td>
<td><strong>Statement of Purpose</strong></td>
<td><strong>Team Formation</strong></td>
<td><strong>Team Thesis Proposal and Presentation</strong></td>
<td><strong>Completion of Written Thesis Documentation</strong></td>
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<td></td>
<td><strong>Interview</strong></td>
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<td><strong>Successful Public Presentation</strong></td>
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<th><strong>Assessment Method</strong></th>
<th><strong>Scored Rubric</strong></th>
<th><strong>Scored Rubric</strong></th>
<th><strong>Scored Rubric by Individual Thesis Committee Members</strong></th>
<th><strong>Scored Rubric</strong></th>
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<td><strong>Thesis Committee Discussion</strong></td>
<td><strong>Formal Thesis Defense with Thesis Committee</strong></td>
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<td><strong>Executive Summary of Scored Rubrics and Committee Discussion</strong></td>
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<tr>
<th><strong>Evidence Based Decision Process</strong></th>
<th><strong>Accepted</strong></th>
<th><strong>Continue to Thesis Year</strong></th>
<th><strong>Continue to Thesis Year with Modification to the Thesis Proposal</strong></th>
<th><strong>Grant Degree</strong></th>
</tr>
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<tbody>
<tr>
<td></td>
<td><strong>Accepted with Conditions for Additional Coursework</strong></td>
<td></td>
<td><strong>Repeat First Year</strong></td>
<td><strong>No Degree</strong></td>
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<tr>
<td></td>
<td><strong>Not Accepted</strong></td>
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1.3 Students, Advising and Retention

The Graduate Multimedia Program has promoted and has been rewarded with a remarkable diversity in student academic disciplines, ethnicity and cultural background (*see accompanying table). However, the promotion of the program and the recruitment of qualified students have not kept pace with the ever increasing competition from other universities. When we began in 1995 we had the field to ourselves. Now almost every creative arts graduate program in the country has a digital media component. The program and the university must develop a new promotion and recruitment plan in order to ensure its continued success in attracting the best students.

It has always been difficult to recruit with consistency the number of highly qualified students with appropriate skill preparation levels. The program has in the past compensated for this unevenness preparation by requiring under prepared students to take, by advisement, specified sequences of undergraduate media production classes before being admitted to the thesis project. The program is now developing a formal preparation year curriculum in order to recruit students of ability who do not yet have the requisite production experience necessary to succeed at a graduate level. The proposal for this curriculum is articulated in the PLAN section of this document. With the adoption of the new curricular plan there will be three levels of admission to the program: 1) acceptance without conditions; 2) acceptance with the condition that students take additional course work as specified by the admissions committee; 3) an additional year of specified course work for students not ready for graduate level work.

We believe that with an improved student recruitment strategy the enrollments in the Multimedia Graduate program will increase. This is because current and future career opportunities are high for people with strong competencies in interactive multimedia production. At this time every sector of the economy – Business, Education, Government, The Arts, Non Profit Organizations, Religious organizations, etc, all need and use interactive multimedia services. The fields of interactive exhibition design, game design and interactive home entertainment are expected to expand dramatically in the next five years.

*Academic Performance Review Statistics can be found in Appendix A
1.4 Faculty

The Graduate Multimedia Program does not have a resident faculty but relies on the participation and commitment of departments to provide faculty. Because of this situation and the interdisciplinary nature of the program the development of faculty for this program was a slow and arduous process. One of the most difficult things for interdisciplinary programs to accomplish at any university is for discipline based faculty to adequately model the interdisciplinary collaboration the program expects of the students. This often requires faculty to make exceptional commitments of time that go far beyond their traditionally expected roles.

The faculty participating in the Multimedia Graduate Program are:

Regular Faculty
James Petrillo, Professor of Art, Director of the Multimedia Graduate Program
Course responsibility:
MM 6101 Multimedia Seminar and
MM 6860 Introduction to Multimedia Project Development

Philip Hofstetter, Professor of Art, Chair of the Art Department
Course responsibility:
MM 6100 Tech I Principles of Digital Media and
MM 6805 Multimedia Forum

Gwyan Rhabyt, Associate Professor of Art
Course responsibility:
MM 6110 Tech II Multimedia Network and Hardware Development and
MM 6870, 6880, and 6899 Thesis Advising

Janet Green, Assistant Professor of Art
Course responsibility:
MM 6870, 6880, and 6899 Thesis Advising

Rafael Hernandez, Assistant Professor of Music
Course responsibility:
MM 6870, 6880, and 6899 Thesis Advising

Industry Professionals
Ray Mitchell, Lecture, Department of Computer Science
Course responsibility:
MM 6120 Tech II Multimedia Software Development and
MM 6870, 6880, and 6899 Thesis Advising

Teah Graham, Lecturer
Course responsibility:
MM 6102 Application of Learning Theories to Multimedia Design

John MacWillie, Lecturer
Course responsibility:
MM 6103 Business Basics in Multimedia
1.5 Resources
The current Multimedia Graduate Program now enjoys excellent facility housed in the Valley Business and Technology building. This facility is dedicated to 24/7 access for the thesis project students. It is also the location of the Multimedia Forum; a bi-monthly lecture series. The program also shares a lab with the Art Department to service the needs of the first year courses. The level of equipment and services funding available to the program up to this point has been appropriate to maintain the program quality. With regards to the non-staff operations for the upcoming FY 2009/10 the budget once again looks bleak. The state fiscal crisis has negatively affected all programs across the university. The Multimedia Graduate Program has not been spared its share of the pain. The budget for equipment and for S&S has been cut by nineteen percent next year. Good planning during this year can mitigate much of the damage that this reduction will cause but if funding is not restored the following year, serious erosion of the quality of the program and all other programs in the university may occur.

1.6 Unit Requirements

It is the consensus of the faculty that the current unit requirements are satisfactory for successful outcomes.
Part II: The Plan
When the Multimedia Graduate Program originated it was designed to service the new media educational needs of all four colleges in the University. Since that time the College of Science, The College of Business and Economics and The College of Education and Allied Studies have developed their own technology programs that are specific to their needs. Now, because the regular faculty participating in the program are entirely from the Departments of Art and Music we propose that the administration of the Multimedia Graduate Program move from its current location in Academic Programs and Graduate Studies to the more appropriate location in the College of Letters, Arts and Social Sciences. However in this transition it is crucial that the Multimedia Graduate Program maintain its organizational coherence. Therefore, we also propose that it be established as an independent interdisciplinary program managed jointly by faculty from the Departments of Art and Music. In addition the plan calls for a revised curriculum to be fully implemented by Fall 2010.

a. Curriculum

A distinct characteristic of the field of multimedia and interactive arts is its ever-changing landscape. Waves of new technologies are constantly emerging that challenge, alter, replace and impact our cultural environments and social practices. The Multimedia Graduate Program is part of this dynamic process. Its students and faculty are active research collaborator and engaged creator of interactive content. To maintain the programs relevance and its ability to offer a meaningful learning experience for its students, it is crucial that the curriculum is reviewed on a regular basis and changes implemented in a timely way. As a result of the Multimedia faculty’s assessment of student progress and to address the emerging skills that are now needed to be a successful producer of interactive content, a revised curriculum is being proposed. The course change documents are currently being prepared for submission to the University Curriculum Committee.

Following is the revised 52 unit curriculum that will commence in Fall 2010.

First Year

Fall Quarter:
MM 6100 Multimedia Seminar I (4 units)
MM 6110 Interactivity with People and Data (4 units)
MM 6085 Interactivity with Sound and Music 1 (4 units)

Winter Quarter:
MM 6101 Multimedia Seminar II (4 units)
MM 6120 Interactivity using Devices and Networks (4 units)
MM 6086 Interactivity with Sound and Music 2 (4 units)

Spring Quarter:
MM 6860 Thesis Project Proposal Development (4 units)
MM 6130 Hardware Prototyping and Users (4 units)
MM 6102 e-learning Theories and Content Development (4 units)

MM 6805 Forum
*The Forum is a 1 unit bi-monthly lecture series presented by the Multimedia Graduate Program. All students complete 4 units of Forum.

Second Year

Fall Quarter
MM 6870 Project Development I (4 units)

Winter Quarter
MM 6880 Project Development II (4 units)

Spring Quarter
MM 6899 Thesis Project (4 units)

Electives:
All Multimedia Graduate Students are required to take 8 units of electives

* Proposed New Course Descriptions are located in Appendix D

While examining our curriculum needs the Multimedia Graduate Program faculty also assessed what capabilities are required of students to be accepted for full entry into our graduate program. A review of entry standards for outside applicants and for students applying from our undergraduate programs has been undertaken.

In Fall 2009, significant curriculum changes are to be implemented to both of the Art Department’s Electronic Arts programs and in particular the undergraduate ‘Multimedia’ option. It is to be now known as the ‘Web Design’ option and has a greater focus on web technologies with the intention of better preparing undergraduate candidates with the current skill sets demanded of by the marketplace, or for entry into the Multimedia Graduate Program. With the updating of undergraduate subjects to reflect more contemporary practices, the graduate program is also strengthened in the elective subjects that full time students have available to them.

When candidates apply for admission to the Graduate Program, a committee reviews their submissions to assess their potential, their level of readiness and their demonstration of prior abilities. An applicant’s entry level status is then designated as either being - regular, conditional or preparatory. Their status reflects the degree of specific skill set deficiencies or not, that need to be acquired before their successful entry into the program and the subject content that must be covered.
Following admission categories for entrance into the Multimedia Graduate Program

**Regular Program Acceptance**
Students admitted without prerequisites

**Conditional Program Acceptance**
Students admitted with specific prerequisites. They would typically have an advanced ability in at least one sought after skill area for the program and average ability in another.

- Film and Video
- Web Design
- Programming
- Audio Production
- Electronic Media Performance
- Robotics
- Graphic Design

**Preparatory Program Acceptance**
Students are required to take a year of prerequisite courses. They would typically have average ability in only one sought after skill area and minimal evidence of ability in other skill areas. There is no additional resource expense for the preparatory program because these courses are already being offered as part of the regular undergraduate curriculum.

**Fall Quarter:**
- Art 2830 Web Design
- Art 3800 Animation
- Music 3085 Audio: Pro Tools

**Winter Quarter:**
- Art 3870 Web Authoring
- Art 3815 Typography
- Music 3086 Audio: Sequencing

**Spring Quarter:**
- Art 3820 Video Production
- Art 4300 Interactive Authoring
- Art 4070 Currents in New Media

**b. Students**

Over the next five years we plan to expand enrolment in our regular two year program to forty students with further expansion likely from our enrollment of students in our preparatory year. This will establish a good working ratio to our allocated working lab spaces, technology resources and faculty support. This enrollment base includes students continuing their studies from our related undergraduate programs, in state and out of state students, along with a few international students.

Given the curriculum and faculty draw from both the departments of Art and Music the Multimedia Graduate Program sees many opportunities for outreach to new populations of
students within these departments. Students who have honed their skill sets in either department will now have the opportunity to continue their studies at graduate level.

The focus on applied research in the program allows students to acquire skills with new technologies. Since its inception, the Multimedia Graduate Program has emphasized creative and innovative use of multimedia technologies that position our graduates well in a competitive field. Likewise the location of CSU-East Bay, close to the activities of Silicon Valley and within the Bay Area, a home to many significant multimedia endeavors and leading industries, puts our students in a very advantageous position for finding many possibilities for their future career directions.

To elevate the profile of the program to the wider community and also create an awareness of our projects and activities at CSU-East Bay for prospective students, regular open house events are held throughout the year, a dedicated website is maintained with program information, and final year graduate groups participate in on campus complimentary activities such as the Science Festival run by the School of Science. Targeted recruitment of promising undergraduates is also carried out, especially in the Art Department’s Electronic Arts program and the Music Department.

c. Faculty

As an autonomous unit, the Multimedia Graduate Program has no resident faculty but is composed of regular faculty members whose tenure resides in the Departments of Art and Music. A core of five ladder faculty comprises the current Graduate Thesis Review Committee which doubles as the Multimedia Graduate Steering committee. These professors teach the bulk of graduate classes and provide all thesis advising. Beyond this, the program draws on skilled figures from industry for course and guest lecturers.

With the growth anticipated in enrollments, the Multimedia Program will need to expand its faculty by drawing on new hires in the Art and Music Departments. Continued tenure track growth in the digitally focused areas of these departments will be necessary to meet expanding student interest in the program and continue the prominent, flagship role of the program in the university and the multimedia industry.

In order to adequately meet the needs of the new curriculum and provide a proper balance of students to instructors within the Multimedia Graduate Program, the Department of Music will actively pursue a tenure-track position in audio production and composition. This new position would greatly add to the program by introducing another full time music faculty who has expertise not only with using hardware and software for the production of sound and music, as well as with live performers and synthesized sources for conventional recorded media, and the composition of interactive musical works. This knowledge of tradition, in the recording arts, and innovation, interactive media, will provide students with necessary resources for both practical and experimental learning. For example, where a student may need better audio for a promotional video or soundtrack, such a faculty member is fully equipped with the knowledge to lead the student to a quality result. Or, where a student may need a certain number of sounds to fill a performance space in new, unpredictable ways based upon environmental factors, this same faculty would be able to respond without pause by guiding the student through a set of questions in order to determine parameters for
programming interactive sound software and various hardware to respond appropriately. Indeed, with currently only one such faculty in the Multimedia Graduate Program that can provide such skills and with the expected enrollment in both the Music Department and Multimedia Graduate Program, the addition of a tenure-track position like this is essential in order to assure quality of learning.

In parallel to this, the Department of Art, in its most recent Five Year Plan has chosen to pursue a tenure-track position in web design with significant skill in art studio. This new position is needed as part of the Department’s new Web Design option, which is itself a response to significant student requests and enrollment increases in this area. Beyond that, the department plans to establish a Game Design/Animation option, which would depend on receiving a new hire in this dramatically growing field. Both these new tenure track faculty would be able to contribute part of their teaching load to the Multimedia Graduate Program and contribute valuable and needed skills to substantially strengthen the program’s offerings.

In 2009, the program faces a transition from its long-time Director, Professor James Petrillo, who is stepping down from his role after many years of service, to be replaced by Professor Gwyan Rhabyt, a Fulbright-winning scholar who has taught courses and acted as a thesis advisor in the program for the last six years. Professor Petrillo will remain on faculty and provide advice and support during this change of guard, which is supported in full by the entire program’s faculty.

Over the past twelve years, the Multimedia Graduate Program has operated with great effectiveness and efficiency as a focused and autonomous unit with its own dedicated budget. This has allowed it to optimize its use of the available talents in associated departments and deliver impressive results of student achievement. The flexible relationship with several departments has allowed nimble response to changing student needs and interests through selection of the most appropriate of a range of faculty. As the program moves its administrative home from APGS to CLASS, maintaining this independence is crucial to continuing the program’s widely recognized success.

**d. Resources**

The nature of multimedia is that it is always in a state of transition. While there is an evolving repertoire of practices for multimedia artists, they must always rely on advanced technological tools to craft new experiences. As of now, the program relies on the use of some resources from the Art Department and Music Department for general classroom learning, but the majority of the Multimedia Graduate Programs resources are highly specialized and crucial for the success of student thesis projects – the culmination of applied research within the curriculum. These research projects are developed in a specialized facility in the Valley Business and Technology Building.

Defined funding of resources is absolutely necessary for the program to continue to perform its innovative work with teaching and technology. Independent status allows for quick acquisition of technology that is critical for projects that are time-sensitive and based on the availability of hardware, software, and manpower in order to see them through to fruition. To not continue with “program” status would mean a serious deterioration of the ability for
Multimedia Graduate Program faculty to offer students teaching and learning with contemporary hardware and software.

In addition the faculty in the program work as a team with overlapping responsibilities in thesis advising, coordination of curricular coherence in the first year of study and planning the most appropriate and cost effective decisions for hardware and software resources. Therefore, in addition to the proposal that the Multimedia Graduate Program be established as an independent interdisciplinary program in CLASS, and that it be managed jointly by faculty from the Departments of Art and Music, we also recommend that a baseline annual budget allocation for the program be established by the Dean in consultation with the Provost that is in keeping with the allocations that have previously been determined by APSG.

More specifically, the Multimedia Graduate Program would greatly benefit over the next five years an increase in support in the form of:

**Full-time staff support both technical and administrative**

With two technically complex labs, regular classes and multiple thesis projects that need to be serviced, and because the nature of multimedia is about creatively utilizing new technologies, an increase in appointment time for tech support staff from half time to full time is needed. Currently the Multimedia Graduate Program has a full-time Administrative Support Coordinator. In many ways this is the most important position in the program. The ASC is responsible for preparing purchasing orders and for preparing and keeping track of budget expenditures for the director. The ASC is also the first recruitment contact for potential student and sees them through the admissions and registration process. In addition the ASC prepares lecturer appointment forms, student fee reimbursements, initial class schedules and the maintenance of student records and submission of graduation documents. It is crucial that that this position be maintained at its current level with its highly trained staff person.

**Elevation of spending on hardware and software.**

We can’t anticipate the needs of the future fully because technology changes rapidly and unpredictably, as history has shown. So, in order to remain a relevant, contemporary program it is essential that ample resources be devoted to the acquisition and maintenance of requested hardware and software. Additionally, with the expected rise in enrollment, such a dedication of resources will ensure that our high quality of learning is at a minimum maintained, if not refined and made better.

**Increased travel funding for faculty exhibitions.**

Faculty exhibitions at professional conferences are essential for the maintaining of profile amongst Multimedia Graduate Programs in the U.S. By supporting funding for faculty to present their own multimedia works at such exhibitions, the Multimedia Graduate Program will ensure that others are aware of it as a viable place to either further their study of multimedia or send their own students to study. Put simply, exhibitions by faculty are a key recruiting tool.

**Increased funding for guest lecturers.**

Being situated in the heart of the world’s technology industry, the San Francisco Bay Area, it is paramount that resources be devoted to bringing in industry leaders in the form of special guest lecturers so that students can always be in touch with those who make multimedia in the business sector.
Resources for special student exhibitions.
Exhibitions of student works are necessary in order to display to the university community, potential students, and the public at large the importance of the work being done in the Multimedia Graduate Program. The beauty of a program like this is that its research can be seen, heard, and felt viscerally as an experience. This means that presented student research at exhibitions is not a one-way experience with the outside world looking in. Instead, guests at exhibitions are active participants and the brand of education that the University offers is burnished clearly as people descend upon the campus to take in the great applied research Multimedia Graduate students engage in.

In addition to maintaining and upgrading the base equipment in the multimedia graduate program the new curriculum will require additional hardware and software acquisition. These include the following:

**Hardware**
- HD video cameras
- MIDI controllers (keyboards and mixers)
- iCubeX sensor system
- Wii and other HID
- Lemur multitouch controllers
- Arduino boards
- Kyma/Capybara
- Webcam and video computer vision via native software solution
- Sophisticated internet capable devices such as iPhone/iPod touch or smartphone and other wireless OSC-capable devices
- A student configurable server
- A variety of simple physical computing sensors and actuators
- A variety of low cost commercial electronic input and output devices
- Ad hoc sensors, actuators, and other physical computing

**Software**
- Ableton Live
- Pure Data and Max/MSP
- Reaktor
- Various VSTs
- Processing
- Wiring - similar to Processing
- Flash and Actionscript 3.0
- JunXion
- Osculator
- Nodal and/or Tiction
- An open source CMS, such as EZPublish or WordPress
- A networking language like Tcl or Twisted
- A standard multimedia creative application suite
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## Academic Program Review SFR Table - Tabulate

### California State University, East Bay

**SFR BY COURSE LEVEL: TERM FULL-TIME EQUIVALENT STUDENTS / ALL FACULTY AND LECTURERS**

**Summer 2006 through Fall 2008**

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Source: CSU Academic Planning Data Base (APDB); Section Master File(BKPD SMF) and Faculty Master File(BKPD FMF)

TOTAL FTES will differ slightly between ERSS and APDB. ERSS FTES is the official figure for CSU System reporting.

TERM FTES: Student Credit Units/15; FTE: Instructional Faculty FTE only. Administrative and Other support fractions excluded.

Student Faculty Ratio(SFR) = TERM FTES / TERM FTE

FTES generated is assigned to the department of record for the course subject area.

Document: Cal State East Bay Fact Book

Planning and Institutional Research (12FE09)
### Multimedia Graduate Program

**CAPR Review 2004 - 2009**

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Appendix B: Learning Outcomes and Assessment Rubrics

**Knowledge of the field:**
Students will be familiar with trends and practices in multimedia production.
Indicator: Passing grade of B or above in MM 6805 Multimedia Forum

**History and Ideas:**
Students will be familiar with historical and theoretical developments that have lead to the current state of multimedia practice.
Indicator: Passing grade of B or above MM 6101 Multimedia Seminar.

**Learning Theory:**
Students will understand the basics of learning theories as they apply to multimedia and interactive design.
Indicator: Passing grad of B or above in MM 6102 Applications of Learning Theories to Multimedia Design.

**Business practice:**
Students will understand basic business practices and be able to develop a business plan.
Indicator: Passing grade of B or above in MM 6103 Business Basics for Multimedia.

**Teamwork:**
Students will develop the ability to effectively contribute and collaborate in goal-oriented group projects.
Indicators: Passing grade of B or above in MM 6101 Multimedia Seminar, MM 6860 Introduction to Project Development and successful completion of the Graduate Thesis Project.

**Content creation:**
Students will be able to create a content-based interactive digital experience that is lucid and informative.
Indicators: Passing grade of B or above in MM 6101 Multimedia Seminar, MM 6860 Introduction to Project Development and successful completion of the Graduate Thesis Project.

**Innovation:**
Students will produce a thesis project that explores some as yet unrealized potential of interactive multimedia.
Indicator: Passing grade of B or above in MM 6860 Introduction to Project Development and successful completion of the Graduate Thesis Project.
Presentation:
Students will be able to clearly articulate their ideas both aurally and in writing.
Indicators: Passing grade of B or above in MM 6101 Multimedia Seminar, MM 6860 Introduction to Project Development and successful completion of the Graduate Thesis Project.

Digital tools:
Students will become competent in the use of an appropriate range of multimedia production software. They will be able to demonstrate a variety of production skills in imaging, interactive authoring, and network distribution.

Technical Principles for Multimedia Production:
Students will understand the nature of digital systems including input/output devices, displays, telecommunication environments and embedded systems.
# Method for Collecting and Evaluating Student Progress

## 1. Entry Assessment:

**MULTIMEDIA GRADUATE PROGRAM APPLICANT ASSESSMENT RATING FORM**

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2. Gateway to thesis project

Course: MM6860 – Project Development

Learning Objectives

- Understand the meaning of a research project in relation to the cumulative process of knowledge construction and discovery search.
- Explore the possibilities of multimedia within collaborative, educational, online, business, art, theater, and gaming.
- Develop an understanding of content rich project development specifically in relation to interesting, engaging, and cultural aspects.
- Produce an individual written project proposal with 5 descriptive categories: research question, the project abstract, project explanation, content description and audience.
- Design a multimedia presentation that effectively describes the written proposal by engaging the viewer (committee) with compelling graphics, text, video, 3d, audio, and/or animation.
- Determine team members for final thesis development for 2nd year project teams.
- Work within a team based environment to revise, refine, and develop new concepts for final thesis project.
- Identify team member roles, skills, strengths, and weaknesses in relation to overall project development.
- Produce a team based written proposal that incorporates a realizability component that includes a research plan, a production plan, and a budget plan.
- Work within a team based environment to create a 5 – 10 minute multimedia presentation that will describe the target of discovery for the thesis project.
- Pass onto candidacy!

Summary of Learning Outcomes

At the end of this course, students will be able to work in a team based environment to define a graduate level research project. Students will be able to provide a written thesis documentation that is formatted based on University guidelines. Students will be able to identify the different roles in a multimedia team project and create a production plan based on roles and responsibilities. Students will be able to create an effective multimedia presentation of research topics and perform an in person presentation of the thesis question and their chosen thesis project.
Method for Evaluating and Collecting Student Progress for MM 6860

Assignment 1: Individual Presentations

Students must receive 11 or more points to be advanced to thesis proposal
(11 points = B, 12 points = B+, 13 points = A-, 14 points = A)

Imaging & Sound
(1 point) Images and/or sound were ineffective and had only limited relevance to the proposal.
(2 points) Images and/or sound were appropriate for the proposal but lacked dramatic impact.
(3 points) Images and/or sound enhanced and improved the audience response to the proposal.

Presentation
(1 point) The presentation was inadequate, uninformative and lacked specifics.
(2 points) The presentation was sufficiently lucid.
(3 points) The presentation was very detailed and very engaging.

Interactivity
(1 point) The presentation lacked interactivity.
(2 points) The presentation possessed basic interactivity.
(3 points) The presentation effectively and creatively exploited the use of interactive elements.

Narrative
(1 point) The proposal was experienced as vague and uninformative
(2 points) The proposal was clear and adequately stated.
(3 points) The proposal was dynamic, informative and comprehensive.

Innovation
(1 point) The proposal lacked any significant innovation challenge anywhere on the continuum from content to technique.
(2 points) The proposal demonstrated a possible innovative challenge.
(3 points) The proposal demonstrated exciting new possibilities for multimedia development.
Assignment 2: Group Presentations

Teams must achieve a score of 16 points of higher to be advanced to candidacy. Teams must achieve a score of at least a 2 on the project description to be advanced to candidacy. (16 points = B, 17 points = B+, 18 points = A-, 19 points = A)

The Project
(1 point) The proposal was weak, un-innovative and not likely to result in a successful project.
(2 points) The proposal has merit but needs improvement in key areas.
(3 points) The proposal was excellent in all areas and has a high probability of success.

The Proposal Presentation
(1 point) The presentation was inadequate, uninformative and lacked specifics.
(2 points) The presentation was sufficiently detailed.
(3 points) The presentation was very detailed and very engaging.

The Content
(1 point) The proposal lacks cultural engagement on the level of meaningful content.
(2 points) The proposal does address the value of meaningful content.
(3 points) The proposal is content rich.

Innovation Explanation
(1 point) The proposal lacked any significant innovation challenge anywhere on the continuum from content to technology.
(2 points) The proposal demonstrated possible innovative challenges.
(3 points) The proposal demonstrated exciting new possibilities for multimedia development.

Audience
(1 point) It is unclear who this project is for or why it needs to be done.
(2 points) The project has a clear goal with understandable intentions.
(3 points) The nature of the project is such that it will have broad appeal beyond its defined limited audience.

Realizability
(1 point) Scope of the project is too large and/or the technical requirements are not achievable.
(2 points) The project is doable.
(3 points) The project is very challenging and difficult but achievable.

Team Ability
(1 point) The strengths and weaknesses of team member skills are not appropriate for the project.
(2 points) The abilities of the team members are adequate for the project.
(3 points) The skill sets of the team members are very well suited to the project.
3. Thesis project

The second year is exclusively devoted to the student research project which is expected to be an innovative expression of multimedia potential.

Assessment Strategy

The assessment of student progress on their thesis development is done in a 3 stage process.

Stage 1:
Evaluations as outlined above are collected from each member of the thesis committee at the end of MM 6860. These evaluations are then put into an executive summary and distributed to the faculty and students.

Stage 2:
Quarterly evaluations are collected from each member of the thesis committee during the second year. These evaluations are then put into an executive summary and distributed to the faculty and students. The executive summary highlights student progress in relation to overall success and an overall need for improvement.

Stage 3:
The final stage of assessment is a formal thesis defense in front of the thesis committee and any additional advisors that participate in the project from other departments. In addition, at the beginning of their project students are given the following completion criteria for the thesis project.
In addition all thesis project students are provided the following evaluation guidelines at the beginning of their thesis project. It is a slightly modified (for the needs of the Graduate Multimedia Program) version of the results of a study conducted in 2003/04 and published by Barbara E. Lovitts in the November/December issue of Academe: The Bulletin of the American Association of University Professors. The original article is titled, How to Grade a Dissertation.

Criteria for evaluating a multimedia thesis project

Outstanding

- Original, significant, ambitious, brilliant, clear, clever, coherent, compelling concise, creative, elegant, engaging exciting, interesting, insightful, persuasive, sophisticated, surprising and thoughtful
- Well produced, and well organized
- Synthetic and interdisciplinary
- Connects components in a seamless way
- Exhibits mature, independent thinking
- Addresses important problems and asks new questions
- Is thoroughly researched and displays a deep understanding of the material and techniques
- Exhibits command and authority over the subject
- Uses or develops new tools, methods and approaches
- Results are significant
- Pushes the discipline’s boundaries and opens new areas for research

Very Good

- Is solid
- Well produced and organized
- Has some original ideas, insights and observation but is less original significant ambitious and exciting than the outstanding category
- Has a good question or problem that tends to be small or traditional
- Shows understanding and mastery of the subject
- Demonstrates technical competence
- Uses appropriate methods and techniques
- Misses opportunities to completely explore interesting new connections
- Makes a modest contribution to the field but does not open it up
Acceptable

- Workmanlike
- Demonstrates technical competence
- Is not very original or significant
- Is not interesting, exciting or surprising
- Displays little creativity
- Is narrow in scope
- Has a question or problem that is not exciting – often highly derivative
- Displays a narrow understanding of the field
- Research is basic and uncritical
- Uses standard techniques
- Does not adequately explore the possibilities and misses connections
- Has predictable results that are not exciting
- Makes a small contribution

Unacceptable

- Poorly produced
- Has sloppy presentation
- Project has significant breakdowns and unresolved technical difficulties
- Does not understand basic concepts, process or conventions of the discipline
- Lacks thoroughness
- Looks at a question or problem that is trivial, weak unoriginal or already resolved
- Has a weak, inconsistent and unconvincing justification
- Relies on inappropriate methods
- Includes results that are obvious, already known, or misinterpreted
- Does not make a contribution
Thesis project students also receive the following:

Completion Criteria Statement for the Graduate Multimedia Program Thesis

I. All teams must meet with the graduate committee two weeks before the public presentation. At that time they must have their completed project, a two minute, disk based, representation of their project (see item III) and their completed written document. Also, they must satisfy any additional requests the committee makes with regard to their thesis.

II. All teams must make a public presentation. This year on June 14.

III. All teams must produce, on a CD or a DVD, a two minute, high quality, web accessible representation of their project for the department web site. This does not need to be thorough in the sense of rendering every detail of the project and its history; however it must elegantly and effectively communicate what the project is. It will also be used during the public presentations as an introduction to your project. **You will not be eligible for your degree until this is completed to the satisfaction of the committee and placed on the department website.**

IV. Teams must produce a printed document and a PDF file that is thorough and conforms to the expected outline for a university thesis document. The document should include:

- The research question
- The project abstract
- The project explanation
- The content description
- The development innovations
- The development history
- All of the technical specifications of the project
- The budget
- Timelines
- An appendix: an organized account of all other material related to the development of the project.

Please note: All source material used in your thesis must be properly attributed otherwise you have violated university plagiarism rules. Use the Turabian standard for your model.

V. A sign off sheet that conforms to university regulations must begin the document. It will require all the committee members’ names. You will not receive your degree until all committee members have signed.
Students will have until the end of Spring Quarter to complete all requirements. If the thesis documents are not signed off by that date, it is possible they may not be signed off until late September. If this happens, your graduation date will be in December.

Example of the Quarterly Evaluation Scoring:

(8 points = B, 9 points = B+, 10 points = A-, 11 points = A)

Research progress
(1 point) The research goals were not met.
(2 points) The research goals were met.
(3 points) The research goals were surpassed.

Conceptual development
(1 point) The vision and strategy of the project was diminished
(2 points) The vision and strategy of the project was maintained
(3 points) The vision and strategy of the project was improved

Production
(1 point) Production goals were not met
(2 points) Production goals were met
(3 points) Production goals were exceeded

Teamwork
(1 point) Team did not develop an effective working cohesiveness
(2 points) Team did develop an effective working cohesiveness
(3 points) Team was exceptionally cooperative and productive
Appendix C: Current Curriculum

The current curriculum as it appears in the 2008 – 2010 Catalogue.

Technical Preparation Courses (12 units)

MM 6100 Tech I: Principles of Digital Multimedia
Creation, capture, conversion, storage, transport and display of digital multimedia information. Physical basis of perception and digital representations. Multimedia input/output devices and processing architectures. Historical and conceptual basis of multimedia. Hands on experience using multimedia development tools. Course is limited to Graduate Multimedia majors.

MM 6120 Tech II: Multimedia Network and Hardware Development
Theory and practice of data networking. Analysis, design and construction of electronic multimedia components including the use of sensors, effectors and controllers. Prerequisite MM 6100.

MM 6130 Tech III: Multimedia Software Development
Introduction to scripting and programming for multimedia production. Prerequisite MM 6120.

Project Preparation Courses (12 Units)

MM 6101 Multimedia Seminar
Seminar on the conceptual strategies for multimedia development. Course will also examine key historical events in the emergence of multimedia forms and the role of multimedia in the creation of culture. Particular emphasis placed on small group working dynamics. Course is limited to Graduate Multimedia majors.

MM 6102 Application of Learning Theories to Multimedia Design
Learning theories in creating effective educational multimedia for CD and World Wide Web. Trends in cognitive, social, psychological, developmental, and humanistic theories for multimedia content development. Prerequisite: MM 6101 and familiarity with at least one development methodology (e.g., computer software development, theater or video scripting, educational materials development).

MM 6103 Business Basics in Multimedia
Basic business skills for the new economy. Includes options for employment, various uses of multimedia in industry and how to create a multimedia business. Business plan creation, marketing, cash flow analysis and presentation skills are emphasized.
Project Courses (16 units)

*MM 6860 Introduction to Project Development*
Small development projects to evaluate the potential of individual students to succeed as members of a thesis team. Establishment of research project teams and the development of thesis proposals. Prerequisites MM 6100, 6101, 6120 and classified or conditionally classified standing in Multimedia M.A.

*MM 6870 Multimedia Development I*
Collaborative interdisciplinary teams begin to develop multimedia projects. Design and creation of interactive audio, video, graphic and narrative content. Prerequisite: MM 6860 and advancement to candidacy.

*MM 6880 Multimedia Development II*
Continuation of multimedia projects begun by teams established in Multimedia Development I. Projects prepared for completion in MM 6899. Prerequisite: MM 6870. Consult the quarterly class schedule for materials/facilities fee.

*MM 6899 Project*
Completion of an original professional quality digital interactive multimedia project and a comprehensive written thesis document. Both the project and the thesis document are submitted to the program committee which specifies the format. Weekly supervision by a faculty thesis advisor and quarterly reviews by a thesis committee. Oral presentation of multimedia project is required.

Multimedia Forum (4 units)

*MM 6805 Forum (1unit)*
Lectures and presentations by professional and students working in a wide variety of multimedia related disciplines. Forums are open to the general public.

Electives (8 units minimum)

Selection of electives is made by advisement. Students have a wide range of possible upper division undergraduate and graduate courses to choose from. The selection of electives is intended to tailor the curriculum to students' individual needs.
Appendix D: Proposed New Multimedia Curriculum

Interactive Sound and Music I (MM 6085)

Description

Interactive Sound and Music I (ISM I) explores the rudiments of hardware and software connectivity between different devices and programs for expressive purposes. Beginning with analog synthesis and control voltage and continuing with MIDI and some Open Sound Control, students engage in creative work with physical and virtual objects that, under strict parameters for experimentation, help to create new sounds and musical experiences. Additionally, archetypal interactions and logical operation, and programmatic control structures are all taught within the context of contemporary interactive music software.

Learning Outcomes

After completion, students who take ISM I will be able to do the following:

- Explain in great detail the concepts of sample rate and bit depth and how they meaningfully relate to live sound manipulation
- Explain the potential ramifications of the performances specifications of various computer components (CPU, RAM, hard disk, etc.) on interactive sound and music
- Use MIDI and ReWire to connect and control two or more different software and hardware applications
- Explain a simple, dynamic experience through the use of pseudo code, logical operators, and programmatic control structures

Interactive Sound and Music II (MM 6086)

Description

A continuation of ISM I, Interactive Sound and Music II (ISM II) begins with a detailed study of Open Sound Control (OSC) and XML in order to create new sounds and music controlled over computer networks. A greater focus is placed on the identification and use of consumer electronics and other devices hacked through software in order to create new sounds and musical experiences. Disparate pieces of software are ‘connected’ together using OSC or XML in large, team-based projects that result in a musical experience or performance of a finite length. Additionally, software native rudimentary algorithmic composition will be taught as a means to create new sounds and musical experiences.

Learning Outcomes

After completion, students who take ISM II will be able to do the following:
- Explain in great detail OSC, XML, and various contexts where either control protocol is appropriate for use
- Use preprogrammed software scripts and files in conjunction with interactive music software in order to quickly create a new multimedia experience
- Explain a brief, but complex dynamic experience utilizing disparate software applications, a computer network, and at least one hardware device and through the use of diagramming, pseudo code, specific functional objects related to software that would be used to execute the experience

Interactivity with People and Data (MM 6110)

Description

Interactivity with People and Data provides two cornerstones of multimedia deployment: user-focused design and visualization of data. Through an in-depth team-based project, students develop a comprehensive understanding of the theory and practice of the user-centered design process. On a parallel track, students learn to apply design and aesthetic principles to abstract data using real-time software. Finally, the results are combined and presented in a networked context using a content management system.

Learning Outcomes

After completion, students who take IPD I will be able to do the following:

- Explain in detail all the steps in the user centered-design process
- Observe, analyze and survey an interactive location/situation prior to a design phase
- Design and fabricate both prototypes and cultural probes for advanced observation and analysis
- Write a detailed and sophisticated project report documenting a fully implemented user-centered design cycle
- Create a multimedia presentation using graphics, video, animation, text, and live narrative to explain and showcase this design project
- Write code to transform data sets into meaningful visual imagery showing competence using both statistical graphics and thematic cartography
- Install, use, and customize a content management system to provide an collaborative content development environment
- Configure a standard LAMP server to optimize CMS operation
Interactivity using Devices and Networks (MM 6120)

Description

A continuation from IPD, Interactivity using Devices and Networks focuses on exploring strategies, methods and technologies for solving artistic and design problems in innovative multimedia. This begins with a systematic exploration of hardware and networking options for interactive physical computing, including common sensors and actuators, local wired and wireless technologies, and microprocessor control, continues with hands-on exercises in data collection, networked data transmission, and device and server configuration, and is followed by an extended team-based project in which local user-focused design is extended to meaningful fully networked solutions.

Learning Outcomes

After completion, students who take IDN will be able to do the following:

- Pass information and visuals across and between networks and applications using SMS, UDP, TCP/IP, and sockets
- Explain and utilize common simple sensors and actuators
- Explain and utilize key complex sensors, such as GPS, range-finders, and biometrics
- Configure handheld, desktop, and server computers to optimally interconnect and pass information using appropriate protocols and ports
- Program a microcontroller to integrate real time sensor data and respond by controlling appropriate actuators to modify sensor input
- Program a commercial internet device to collect real time complex sensor data, send it to a web-based server application and pass a response back
- Envision, plan, design, program, and implement a custom multimedia application based on non-keyboard inputs using commercial hardware and innovative software in a networked environment.
- Research competitive and complementary hardware and software solutions
- Identify, obtain and adapt software components to build appropriate data analysis, modification, and response applications
- Create a multimedia presentation using graphics, video, animation, text, and live narrative to explain and document this process

Prerequisites

Interactivity with People and Data, Interactive Sound and Music I, Multimedia Seminar I, (co-enrollment in Interactive Sound and Music II required)
Hardware Prototyping and Users (MM 6130)

Description

Hardware Prototyping and Users combines understanding how to analyze and solve hardware problems from a systematic engineering perspective with an introduction to human factors studies. A major focus is placed on the identification and use of consumer electronics and other devices hacked through hardware in order to create new means of input and output for multimedia experiences with a secondary focus on the analysis of these electronics and devices using human-computer interaction models and theories.

Learning Outcomes

After completion, students who take HPU will be able to do the following:

- Describe the function of standard electric and electronic components
- Explain in detail the methods and common models of HCI
- Perform an HCI-based analysis of an off-the-shelf consumer multimedia device interaction
- Analyze and modify the electronics of the device to optimize one aspect of its HCI performance
- Rigorously document this process in an engineering log book.

Prerequisites

Interactivity using Devices and Networks, Interactive Sound and Music II, Multimedia Seminar II,
(co-enrollment in E-learning Theories and Content Development required)

Multimedia Seminar I (MM 6100)

Description

A seminar on the historical and conceptual basis of digital multimedia and the technologies that make it possible. A survey of media types — text, image, sound, moving image, interactivity, and narrative — that combine to form multimedia structures and processes. Readings in contemporary multimedia research, expression, and social-cultural trends. Small group assignments to research, produce, and report on multimedia technology and methods. Course is limited to graduate multimedia majors.

Learning Outcomes

- Work in small groups to research and produce compelling multimedia reports
- Awareness of the technologies, concepts, best practices, and principal production techniques of interactive multimedia
- Awareness of the commercial development of multimedia and its social deployment
- Awareness of contemporary, state-of-the-art expression of multimedia in the culture
- Competence in oral presentation of research using multimedia

**Multimedia Seminar II (MM 6101)**

**Description**

A seminar on the conceptual strategies for multimedia development. Course will examine the key ideas that inform multimedia content development; the important technology innovators that have made the field possible; and the significant forms of cultural/artistic expression that have emerged as a result of interactive digital technologies. Particular emphasis placed on small group working dynamics. Prerequisite: MM 6100. Course is limited to Graduate Multimedia majors.

**Learning outcomes**

- Conduct research on digital media history and the effects of digital mediated culture
- Distill large amounts of research into coherent short presentations
- Successfully collaborate with others on research and production
- Produce technically competent digital media presentations
- Produce clearly organized bibliographic citations of on-line research

**e-Learning Theories and Content Development (MM 6102)**

**Description**

Learning theories in creating effective multimedia. Trends in cognitive, social, psychological, developmental and humanistic theories for multimedia content development.

**Learning Outcomes**

After completion, students who take MM 6102 will be able to:

- Determine relevant learning strategies in relation to cognitive, behavioral and constructivist learning theories.
- Understand the different roles of e-learning development within a team based project development environment: content specialist, instructional designer, instructional programmer, e-learning producer.
- Critique learning interface designs for overall ease of use and memorable learning experiences.
Multimedia Graduate Program

- Demonstrate the ability to use a Content Management System for delivery of multimedia content.
- Explore the possibilities of e-learning delivery methods in relation to durability, flexibility and affordability.
- Design usable interfaces in relation to layout (using a grid), proximity of elements, balance (adequate whitespace), color, navigation, graphics and rich media.
- Determine appropriate learning activities for specific learning theories
- Produce an effective e-learning module for delivery.
- Identify success through different assessment techniques
- Work within a team based environment to develop solid communication skills, importance of reliability

Introduction to Project Development (MM 6860)

Description

Small development projects designed to evaluate the potential of individual students to succeed as members of a thesis team. The establishment of research project teams and the development of thesis proposals. Prerequisites MM 6100, 6101, 6120, 6110, 6120, 6085, 6086 and classified or conditionally classified standing in Multimedia M.A.

Learning Outcomes

- Understand the meaning of a research project in relation to the cumulative process of knowledge construction and discovery search.
- Ability to individually produce a written and digital media presentation of a graduate multimedia thesis idea with 5 descriptive categories: research question, the project abstract, project explanation, content description and audience.
- Demonstrate ability to work in a collaborative environment and determine team members for final thesis development for 2nd year project teams.
- Work within a team based environment to revise, refine, and develop new concepts for final thesis project.
- Identify team member roles, skills, strengths, and weaknesses in relation to overall project development.
- Produce a collaborative presentation of thesis proposal in written form and design a 10 minute multimedia presentation that effectively describes the written proposal by engaging the viewer (the graduate thesis committee) with compelling graphics, text, video, 3d, audio, and/or animation.
- Produce a team based proposal that incorporates realizability component that includes a research plan, a production plan, and a budget plan.
- Pass onto candidacy!
MM 6870 Multimedia Development I

Collaborative interdisciplinary teams begin to develop multimedia projects. Design and creation of interactive audio, video, graphic and narrative content. Prerequisite: MM 6860 and advancement to candidacy.

MM 6880 Multimedia Development II

Continuation of multimedia projects begun by teams established in Multimedia Development I. Projects prepared for completion in MM 6899. Prerequisite: MM 6870. Consult the quarterly class schedule for materials/facilities fee.

MM 6899 Project

Completion of an original professional quality digital interactive multimedia project and a comprehensive written thesis document. Both the project and the thesis document are submitted to the program committee which specifies the format. Weekly supervision by a faculty thesis advisor and quarterly reviews by a thesis committee. Oral presentation of multimedia project is required.

Learning outcomes

- Knowledge of the field
- History and Ideas
- Familiarity with the historical and theoretical developments of Multimedia
- Understanding of Learning Theory in relation to interactive design
- Comprehension of the evolution of the business of digital media production
- Ability to collaborate within a team based environment
- Ability to develop meaningful content
- Production of innovative thesis project
- Ability to articulate ideas in a cohesive public presentation
- Competence with Digital tools
- Understanding Technical Principles for Multimedia Production

MM 6805 Forum (1 unit) (Must be taken four times)

Lectures and presentations by professional and students working in a wide variety of multimedia related disciplines. Forums are open to the general public.
Electives (8 units minimum)

Selection of electives is made by advisement. Students have a wide range of possible upper division undergraduate and graduate courses to choose from. The selection of electives is intended to tailor the curriculum to students’ individual needs.
EXTERNAL REVIEW

CSUEB GRADUATE MULTIMEDIA PROGRAM

Feb. and Mar. 2009

Prepared by David Heintz, Professor of Fine Art, California College of the Arts, former Chair Film/Video/Performance, and former Director, Core Program

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IX. REFERENCES TO PREVIOUS REPORTS, RECOMMENDATIONS AND "RUBRIC" GUIDELINES.
I. SUMMARY

The Graduate MultiMedia Program at CSUEB, groundbreaking and innovative at its inception in 1995, continues to be favorably competitive with the broad majority of comparable programs in California and the nation. The few digital media programs that operate at a more advanced level, which may or may not be attached to educational programs, are tightly allied with well-established corporate, scientific or computer science research departments and are obviously funded at orders of magnitude beyond grad MM at CSUEB. The Media Art and Technology Graduate Program at UCSB, for example, includes engineering in its "trans-disciplinary" structure, relies on collaborations with high level theoretical scientific researchers, and is obviously funded at a very high level. The Media Lab at MIT, founded in 1980, is linked with a formidable research program and offers a PhD. While its MS program has double the number of students, its apparent broader scope and more advanced profile are only incremental. The CSUEB program remains equivalent or superior to the many digital media programs being developed throughout the UC system. While UCSC is about to open a new Media facility in 2009, there is no evidence its educational mission or potential will surpass those of this program.

There is no question that Grad MM at CSUEB continues to fulfill its mission and renew its vision, and remains positioned to excel in the ever-volatile digital future.

Two significant recommendations cited in the previous report - a better second year lab and the addition of new faculty - have been achieved, with stunningly successful results. At least one recommendation has not been achieved, the expansion of the Technical Manager position to full-time. Three significant variables loom in the immediate future: an administrative shift within the Program, a different administrative "umbrella" for Grad MM within the University structure, and the obvious budgetary stresses being felt throughout the state and the national economy.

The strengths of the Program are based in a small but dynamic team of faculty who share a passion for a dual educational mission: an interdisciplinary, broad but integrated instructional MA curriculum, and a vision for the emerging possibilities of digital media to create a wide range of new communication experiences for a wide variety of audiences.

The Program is clearly a showcase for the University at large, and a continuing benchmark for Media education nationally.

Two additional concerns loom: the autonomy of the Program, particularly in the purchase and implementation of technology and the level of tech staffing (beyond the Tech Mgr. position); and the desired recruitment of a larger applicant pool, with the objective of raising the level of intellectual preparedness, ambition and cultural outlook of the students in the Program.
II. OVERVIEW, PROCESS

Your reviewer knows James Petrillo from times in the 1980s and 90s when they were both on the faculty of CCA, California College of the Arts (formerly CCAC), including a short period in which they both taught in the required media fundamentals course, which included lectures and production labs; and he knows Gwyn Rhybat from his time as a graduate student at CCA, from his MFA thesis show, and the years he was employed in Academic Computing at CCA, including his rise to Head of that area. Beyond that the reviewer has very little knowledge of the Multimedia Graduate Program at CSUEB, except the fact that it was one of the first such programs in the country, and that it has a good reputation.

Your reviewer refers to the program as "CSUEB Grad MM," "Grad MM" or simply as "MM."

Prior to the campus visits, sixteen recent MA graduates were contacted by email with a request to comment on the program, ten of whom replied to 23 questions with thorough, thoughtful answers. Their opinions are mixed in with those of eighteen current CSUEB/MM graduate students. They provided a lot of valuable data. Campus visits included a preliminary visit in the fall of 08, which included an overview provided by Prof. James Petrillo and a brief talk with Prof. Phil Hofstetter, and four visits in Feb. 09, which included meetings with: James Petrillo, director, Tong Yan, Facilities Manager (or Tech Manager), Raquel Arica, Program Coordinator, Dr. Carl Bellone, Gradate Dean, Phil Hofstetter, Chair of undergrad Fine Arts and instructor in undergrad media, Prof. Janet Green, faculty in undergrad graphic design and grad MM, Prof. Gwyn Rhybat, undergrad and grad faculty in MM, and Prof. Rafael Hernandez, faculty in undergrad music composition, electronic music, and graduate MM. The visits also included brief but probing interviews with graduate students, representing all three levels of the Grad MM Program (probationary-preparatory, first year and second / thesis year), and visits to two classes taught by Prof. Rhybat (one undergrad and one grad). The reviewer was supplied with extensive written and published documentation, and on-line access to recent examples of student work.
III. PERCEIVED GOALS OF THE REPORT

Most academic programs conduct periodic internal and external reviews, for accreditation reviews, for internal decision-making processes and to aid ongoing "quality control" and other administrative decisions.

Perceived goals of this report include:

a. To conduct an overview evaluation of the academic mission of the Program and its fulfillment of that mission.

b. At a time when the Program is facing a change in leadership, to describe and evaluate the internal structure of cooperative and consensual administration and management, and to evaluate the possible new leadership structure.

c. To evaluate proposed curricular revisions.

d. At a time when the state and the university are facing serious budget shortfalls, to evaluate the costs of the Program and their importance to the university and the larger community.

e. In a field defined by rapidly changing technologies at widely varying and changing costs, and by rapidly shifting functions and cultural interfaces, to evaluate the technological and cultural focus of the Program, and, if possible, its flexibility in the face of considerable volatility.
IV. WHAT IS MULTIMEDIA?

In the past, the term has defined, if loosely, a broad range of technology-based communication media. These might have involved stand-up personal presentations, accompanied by photographic slides, films or filmstrips, recorded sound, visual graphics on paper or board, or video via monitor. The term excluded communications that relied on a single media source (with or without a live personality), to include the use of two or more media, usually engaging the viewer / audience with visual and audio technologies.

Since the introduction of the personal computer, widespread access to the internet, the use of digital recording media (CDs, DVDs and other portable data storage devices), digital / video projectors, computer games, and the more widespread use of consumer and specialized electronic devices (sensors, motors, microprocessors, and robotic components), and wireless technologies, "Multimedia" has shifted dramatically its technological definitions. It has maintained its role as a communication tool-set, although several important functions and applications expand and enhance the conventional definition: interactivity, custom fabrications, virtual reality, and the application of custom programming (including gaming and game theory) to specific, often unique communication and experiential "environments" in which viewer / audience feedback and participation take on a dynamic new role.

The Internet is an archetypal example, in that it has shifted data storage and retrieval from a linear approach (in at least two senses: the linear nature of print, and the linear process of searching texts) to the interactive, random-access structure of the web and similar systems, which allow non-linear demand (meaning intuitive, branching and random access) on vastly broadened and instantly accessible databases.

As a parenthetical example, PowerPoint-type programs have come to represent a form of "Multimedia" while simultaneously seen, in the reviewer's opinion, as relatively inflexible, limited in its interactivity, nearly obsolete and often destructive in its inherent "shaping" of content.

So now Multimedia (and other related terms like "electronic arts," "rich media," and, i.e., on the program's website, "Interactive and Telematic Arts") implies the use of computers, programming and presentation devices as interfaces between conventional content in forms like text, photography, 2- and 3D graphics, video and sound, and (less often) a passive audience or (more likely) active participants. While conventional, "one-way" communication is still one possible outcome, viewer feedback and options for interactivity create an entirely new landscape for a whole spectrum of communications. Terms like "hypermedia" and "wiki" define general and specific kinds of viewer engagement, and emerging "meta-programming" formats like "max-msp," "flash," and "action script" allow the construction of stunningly broad, flexible and interactive functions (significant in their functional interactivity with each other).
The Grad MM Program at CSUEB was originally intended to be broadly interdisciplinary, shared by four colleges, including Letters, Arts and Social Science, Business, Science and Education. But it quickly evolved into more specialized grad programs with varying outcomes (not addressed here). Such a broad-based interdisciplinary approach is conceptually appealing but difficult to implement and maintain. Business and Science have tightly focused and high-level needs that are not always served by collaboration and interdisciplinary. In contrast, the breadth and flexibility of a technologically advanced, Arts-based Multimedia Program can, almost by definition, reach far beyond the arts to address issues pertinent to business, science, education and other fields outside the arts. It is important for such a program, given its limited size, to be as broad and interdisciplinary as possible, and the CSUEB MM Grad Program seems extremely well positioned in this regard. The widely varied documentary and instructional nature of many projects bears this out.
V. CURRICULUM AND PROGRAM STRUCTURE

A significant impression emerged over the course of many interviews. It is unusual for graduate students to understand and appreciate the curricular structure and embedded goals of the program. Some had compared the curriculum to other programs and chose CSUEB Grad MM specifically because they saw an ideal balance between history / theory, hands-on technological applications and the interdisciplinary, open-ended, project-based approach to research and production.

On a different tack, it was both daunting and refreshing to visit Prof. Gwyan Rhybat's first year technology class. Provided with a copy of an exam to be done later in the class (less than half way into the winter quarter schedule) your reviewer, even with a fairly advanced technical orientation, could not understand, let alone answer a single question. At the beginning of class instruction, which would go into the intricacies of "max-msp" programming, Prof. Rhybat made an impassioned exhortation to the students, who were (outside of class, independently, and in teams) preparing their thesis proposal presentations. These presentations and the projects they described would be the basis for their admission to the second year, and the "contract" for their thesis year's work. To paraphrase: "Your proposals and your projects must be more than flashy interactive experiences. They must deliver content. They must have 'real world' relevance. They must use some cutting edge technology, but it must be in the service of engagement and communication. You must convince us (the faculty) why we should support your project, and your project must convince your audience why they should care. Your passion must be expressed through your project ... or why bother?"

The curriculum has three clearly defined, and intricately interwoven components: 1. History and theory of communication media (and education theory), including cultural impacts and ethics; 2. Technological instruction, in-depth yet surprisingly broad, in software applications and programming, electronics and fabrication, research and adaptation; and 3. the Team-oriented Thesis Projects, through which teams of two to four merge their technical knowledge, their applied interests and their combined skills. It is a sign of the program's solid theoretical base to hear students readily refer to McLuhan, Bateson, Weiner, Kuhn, Steiner and others, their present day supporters and critics and their contemporary relevance. The topics and speakers represented by the required Forum presentations only adds to this intellectual matrix.

PROPOSED CURRICULAR CHANGES

In the CAPR review, several changes in the Grad MM curriculum are outlined. One involves the first year courses currently titled in generics: "Tech I," "Tech II," and "Tech III." The proposal redefines the content of these three technology classes in much more specific terms, two structured around different approaches to Interactivity: ".. with people and data," ".. using devices and networks," and the third,
"Hardware prototyping." The other change is the addition of two courses on Electronic Sound and Music.

These changes, in the context of the very tight and comprehensive existing curriculum, seem to focus technological instruction in categories that are conceptually discrete, without limiting the inclusion of new and emerging technologies. For the rest of the curriculum the adage, "If it's not broken, don't fix it." is not only apt, but should be a guiding principle.

PROPOSED CHANGE IN DIRECTORSHIP

Professor James Petrillo, the founding Director of the Graduate Multi-Media Program, will soon step down from the Director position and return to a standard teaching assignment. It is abundantly clear that great effort and subtlety has gone into his assembling of the faculty and staff team that represents the heart of the program. With the exception of a couple notable but solvable problems, the team has a clear view of the mission and their individual roles in it. By consensus, Professor Rhybat is positioned to assume the Director position. All are confident in their established working relationship, in Prof. Rhybat's vision, and in Prof. Petrillo's continued input to the Program. The faculty team in particular has a clear, shared vision of the educational mission, and seems to share consensual roles in management and development.

NEW FACULTY POSITION

There is some discussion, given the size, direction and administrative structure of the program, of the need for a new full-time, dedicated faculty position. It is clear that this is unlikely during a period of reduced budgets. But it does seem like it will be essential within the next two to four years.

FACILITIES ENROLLMENT AND STAFF

While the facilities in such a program need continuous expansion and upgrades, the technology core is stable and sufficient for the current curriculum and number of students, and for a modest increase in enrollment, which is an agreed goal. Technical staffing is always an issue in such programs and there are challenges to be met. There are issues of the benefits and problems involved in the program's interactions with the campus IT administrators. These issues are described in greater detail in section VII. CHALLENGES.
VI. STUDENT FEEDBACK

Students' evaluations of the program may be biased as a result of their status in the Program, and may be slanted by a variety of self-selecting factors. With this in mind, this reviewer made specific efforts to seek out a variety of opinions, including negative and critical ones, in direct interviews and in the formulation of email questions. While some negative views are cited, several distinct examples of student feedback are notable. The email questions included, "Whether your views are positive or negative, can you cite examples of other students who held views opposite or contradictory to yours?" Among the email answers (from recent alums), all were positive, most overwhelmingly so. When citing examples of specific negative views held by other alums, there were always clear and believable explanations (not rationalizations) for the criticism: (to paraphrase five) 1. Students more likely to complain were likely to be those who were less prepared, less able to adapt to the level of instruction, less dedicated, less hard-working. 2. Some complaints (in a specific year) would be about facilities and funding, much of which has been corrected in the intervening years, mainly by the new second year lab. 3. Some, in fact many, students had trouble adapting to the teamwork, group project format of the thesis year, but the more successful teams (while admitting the problems) said that the team approach was important, even "vital" preparation for the "real world." 4. Some students were overwhelmed by the amount of technical knowledge required, of programming in particular, but again, the students who were most pleased with the demanding curriculum admitted it was an important challenge to "step up" and to try to absorb as much as possible without expectations about what would prove to be most useful later. 5. One student noted her own resistance to learning certain challenging applications, yet readily admitted that that knowledge has opened doors for her and expanded her professional work.

One of the more recent admission strategies adopted by the MM administrators (director and faculty in consensus) is to require some students who lack appropriate tech skills to spend an entire year at CSUEB, taking undergrad courses in digital technologies and related areas. Some fewer number are asked to make up a few courses. Four students in this "preparatory" year were interviewed. It was striking to hear that they all felt, rather than resentment or discouragement, energized, challenged and confident that they would be better prepared for the first year of the grad level curriculum. Some were pleased that this opportunity was offered to them, as they knew they felt less than fully prepared.

Interviews and discussions with first and second year students were much more complex and varied, as they reflected individuals' struggles with the technology learning curve (more in the first year) and the actual production problems facing different teams (including team dynamics and the role of advisors) on their thesis projects. None of the few problems or complaints raised seems out of the norm for comparable programs.
VII. INTERDISCIPLINARITY, INTERACTIVITY AND DIVERSITY

The Program appears to have been founded on the belief that a rapidly changing and flexible communication tool-set is best explored by groups of students from different undergrad disciplines, age levels, geographical and cultural orientations. While allowing and often encouraging CSUEB undergrads to apply to the Program, and while most students come from the U.S. west coast, there is a striking variety of academic backgrounds and ethnic diversity represented in the student population. Students questioned by email and interviewed in person had done undergraduate study, and/or held employment: in film production and community organizing, as logistics marketer, as educational IT administrator and instructor, as video editor and web designer, at a global advertising agency in Viet Nam, as environmental planner, as semiconductor engineering program manager, as a non-profit administrator. Among twelve students in the first year class, Kenya, Turkey, Pakistan and Taiwan were represented.

A digression: A first year African American male had a degree in political economics, was employed by the World Affairs Council, and had direct knowledge of three other grad MM programs around the country. He expressed the view that other programs he had researched were always “in a hole,” either from lack of funding, inability to stay current with “real world” technology or from too narrow an academic vision.

A mission goal of the Program has been to use the varied backgrounds of the students, working in team /project format, to create a dynamic interactive learning environment. The success of this goal was in evidence in interviews with some first year and most of the second year students. Many volunteered descriptions of how they had expanded their knowledge and helped to create more advanced work through the use of individual expertise, in collaboration and interaction with the expertise of others on the team. Several made reference to situations in which delegated research, programming, and design work accomplished three results: self-directed acquisition of specific new knowledge, the sharing of the (mostly non-technical) knowledge through direct, interactive application, and an overall positive impact on the project results.

It is worth noting that the concepts and practices involved in these two rather nebulous principles - interdisciplinarity and interactivity - pervade the day-to-day work in the program in highly effective practices. The principle of teaching and learning through interactive media is embedded in the historical and theoretical courses; and the interactivity in the team projects multiplies the learning outcomes for the students. The selection of students (at least in part) for the breadth of their collective backgrounds and preparations feeds into and enriches content creation, sensitivity to audience engagement and often expands the interdisciplinary model of learning presented to the audience through the projects.
VIII. SHORT AND LONG TERM CHALLENGES

TECHNOLOGY STAFF

One individual has the largest share of technology management for the Grad MM program, the TM or Technology Manager. He is a unique personality, as is common among "techies." Being an ex-marine adds an unexpected layer of confidence to his impressive, extensive technological knowledge. He both enjoys and distances himself from "teaching opportunities" by an unclear sense of discretion. He obviously enjoys the many challenges of working in a flexible, creative environment, the unique challenges of the technological tasks, and the considerable but limited power he has to design systems, allocate funds and determine specific hard- and software purchases. He sees problems in his role as defined; the faculty seems to see problems in his performance. While these different perceptions do not always agree, the problems themselves seem to be seen by all as manageable.

Your reviewer has experience with staffing issues in and around educational technologies, in the pre-digital age of photography, film and video production, in the early years of educational computer labs, and in contemporary digital video and multi-media environments. Relying on experience and perceptions, his impression is that the problematic issues here are both common and solvable.

To be fair, most individuals who competently manage such complex and evolving labs and networks, are underpaid and underappreciated by all but a few of their colleagues. They have chosen the academic environment because of its intellectual depth, complexity and unique challenges, its generally flexible working environment, and the personal interaction; but they could quite often make much higher salaries working in the professional tech world. They are almost always in a multi-dimensional squeeze between conflicting sets of pressures: budgets and needs, student and faculty demands, multiple supervisors, simultaneous emergencies, slack times, deferred maintenance and planning procedures.

The TM in question feels several specific institutional inefficiencies place unnecessary demands on him and result in a poor use of his time, and/or of campus resources. None of this is very unusual in comparable situations. He feels he is often in conflict with campus IT administrators, specifically relative to campus-wide technology purchases, network bandwidth allocation and usage, and a general sense of priorities. He feels that his time is not well spent as a half-time employee in two separate but overlapping programs (Grad MM and undergrad Fine Art Media, the largest Fine Art major) and working in two separate administrative structures and roles. More specifically he feels he would benefit greatly (either in the continued split assignment or as a full-time tech in Grad MM) from student tech or instructional assistants; he feels he spends too much time doing routine work that could be done by less skilled assistants; this has at least three perceived results: he feels frustrated and poorly utilized, he neglects more pressing issues, the students are less well served. He feels
strongly, again not at all uncommon, that the University administration, and some of the IT administrators to whom he must answer, do not understand the specific and unique technical needs of the Grad MM program, and that he and the program are often limited by administrative decisions that lack the "tailored" approach the program deserves. Personality clashes, power struggles and territoriality are common in such situations and all occur here, at least occasionally.

The faculty and students have a variety of observations. Some are completely independent of the TM's perceptions, some agree and some disagree, and some raise other issues that need to be addressed. Only a few students had opinions. Some felt he was inconsistent in his assistance to individuals and teams, based on his personal or technical interest in the specific problem or project. When he admits to not being interested in teaching (in esthetic, theoretical or more trivial problem-solving situations) it is because, "I'm too honest ... and too impatient." Once again this is common in such situations. Some of these nebulous differences are solvable with minor staffing adjustments (like student assistants), better communication with faculty, more clear directives, etc. Some are simply endemic and are best addressed with a sense of humor and patience ... on everyone's part. The reviewer cannot assess the feasibility of work study or part time student assistants for the TM, but feels this option should be explored.

Some faculty had more pointed criticisms. On occasion the TM is slow to respond to specific faculty requests for hardware, fabrications, modifications, installations of software, etc., based on an apparent lack of shared priorities. Faculty have occasionally been forced to take the TM aside and make insistent requests for specific tasks to be done, in situations where that should not be necessary. And once again, this is not uncommon. It is very difficult to establish and maintain consistent communication and a shared sense of priority in these highly complex, ever-shifting, unpredictable and often frustrating situations. It's the nature of expensive, emerging, unique and often over-used technologies.

Recommendations, remedies:

The director and some faculty are aware of these tech staffing issues, and all believe them to be minor but significant, and solvable. The director, in acknowledgement of a rare oversight, admits that the TM has been allowed to stray a bit from optimal performance, and he (the Director) takes responsibility for stepping in and correcting the situation, as much as possible, before the leadership transition occurs.

At the same time there are questions about the TM's performance, there seems to be a consensus that he should be elevated to a full-time position in Grad MM. It's not clear, but is likely that this move would solve some of the problems cited. It is not clear how the more technical aspects of his services to undergrad Media would be provided. It is also not clear how effective the current TM would be at managing a staff of student assistants, if that becomes an option.
Some calm and quiet discussions, where all are heard and all issues are on the table, some clarification of roles and job responsibilities, handled with mutual respect and clarity of shared mission, can go a long way to creating a more effective set of working relationships. Such discussions would be naturally triggered by the coming change in directorship, and by looming budget cuts, even if there were no problems to be resolved. All (with the possible exception of the TM, who may not be aware of some of the complaints) are convinced these various problems are either: a. easily solvable within the program; or b. will require negotiation with University and/or IT administrators, and may be more difficult to resolve.

AUTONOMY

There seem to be either a small or significant number of "disconnects" between the needed and valued autonomy of the MM program, and the degree to which University-wide IT administrators impose unnecessary restrictions on the program's functionality. This may turn out to be a can of worms, as highly technical opinions, territoriality and funding priorities are involved. There is also the issue of the Program moving into the purview of the CLASS Administration, and the impact of that shift on the Program's autonomy, relative to budget, hiring and other possible areas. Almost everyone with an informed position, seemed to think that this move will not be problematic. Perhaps the new administrative structure will help to resolve some of the staffing and IT issues.

LEADERSHIP

Even without any prior knowledge of the program, it would be abundantly clear to any reviewer that this program was created through, and has evolved because of the vision, patient nurturing and thoughtful management of Prof. James Petrillo. The near-term occasion of his stepping down from the administrative role he has held since the program's inception would be cause for concern under any circumstances. While there is a shared sense of mission, a strong model of consensual decision making, and a solid team spirit, the skills of the director will always be critical to the ongoing success of the program. There is little question that Prof. Gwyan Rhybat is the ideal candidate to assume the Program's leadership. He shares the vision of the educational mission and has a passion for both the intricacies of the technologies and for the communicative power of the media. He has the support of his co-faculty and the respect of the students.

It is troubling to note that, among the faculty, Prof. Rhybat has a slightly more negative view of the Technology Manager's performance.

In addition to his roles at the university as faculty and technology visionary, he is also a husband and father, an active producer of Art in several media, and is serving currently as the President of the New Media Caucus of the College Art Association.
(providing valuable external visibility for CSUEB). He is unquestionably an energetic and impassioned teacher, highly gifted in communicating the complex interfaces between emerging technologies, individual creativity and meaningful content. He navigates a demanding teaching schedule and a long commute to be at the University two or three days a week. There is a serious question as to whether his status as artist, instructor, colleague, researcher, innovator and advocate for new media is fully acknowledged within the University administration. In the best of situations, he would face a steep learning curve for the first twelve to eighteen months of assuming the directorship. There are serious concerns, in the mind of your reviewer, as to whether he on a fast track to burnout.

Recommendations, remedies:

It is essential that Prof. Rhybat is satisfied with the remuneration and release time he receives to assume the Director position. This reviewer strongly recommends that he be allowed additional release time, beyond the standard norm, for the first year in the new position, to allow for the extra work in simply learning the job and taking the reins. It is also essential that the faculty and staff have clearly in mind the shared responsibility of making his transition into the new set of responsibilities as comfortable as possible.

It becomes a priority for the outgoing Director, with the help and input from the faculty, to make sure that whatever adjustments are made in the Tech Manager's job description, the Tech Manager is clearly tasked with cooperating to the letter with Prof. Rhybat. While all seem to believe that the TM "issue" is solvable, it is critically important that all, the TM in particular, share the collaborative vision for the program, and participate in whatever discussions are needed for resolution. While replacing the TM at a time of leadership change and budget restrictions would be extremely difficult, to have the new Director faced with residual tensions around the TM's performance could be a recipe for serious setbacks.

CURRICULUM

Your reviewer has designed and implemented undergrad curricula in a Film / Video / Photography Department serving 40 majors, and a Foundation ("Core") Studio curriculum, involving five to seven courses (in different iterations), in up to 50 total sections per term, serving up to 180 students per term.

In your reviewer's opinion the Grad MM curriculum at CSUEB, with the changes proposed for the coming academic year, is an absolute gem. It has been consciously designed and guided to evolve in response to multiple, often conflicting objectives, to achieve an optimal balance among: up-to-date technical instruction on near-state-of-the-art technology; historical, theoretical, ethical and educational lectures and research; challenging and developing individual creativity and communication expertise through team-driven projects; a generous selection of electives; and a
healthy dose, via "The Forum," of influence from visiting artists, theoreticians, technology experts and educators. It is no wonder that Prof. Petrillo is in demand around the country as a consultant on modeling media technology education.

The current curriculum offers a tight yet flexible, comprehensive, broad and deep structure for media education. In some very real sense it represents a "meta-model" for emerging, interactive, technology based communication and education ... in no small way a contribution to a new understanding of human cognition in the digital age.

Recommendations, remedies:

Nothing beyond the regular review and adjustment that is part of the program's mission.

ADDITIONAL FACULTY

A parenthetical note: None of the faculty engaged in Grad MM are full-time in the Program; all have teaching assignments in undergrad Media or in other Departments. While this allows great diversity and flexibility in a small faculty, the need for one additional full-time presence, when a budget would allow it, is a recognized priority.

TECHNOLOGY FUNDING

Everyone, from Graduate Dean Bellone to the TM and Program Coordinator Arica, seems to understand that the university faces budget cuts for the next year or longer. Dean Bellone makes a point of stating that he has deducted the standard 19% cut to the grad MM budget, and cited the resulting total, in an attempt to protect the program from any further cuts down the administrative chain of command.

Several parenthetical assumptions and disclaimers must be made. Educational funding in general and funding for rapidly changing technology have been regressing for several years, across states, in private and public institutions. The institutions that have managed to retire and upgrade computing systems, beyond the absolute essentials, are rare. And every department and program believes their own needs to be equal or more important that those of other areas. Academic computing, almost by definition, must be prioritized over educational applications; yet, during such tight times, scrutiny should be applied across the board, not only to the functionality required, but also to the durability and cost-effectiveness of all technology purchases.

Your reviewer is astounded at the level of technology investment, and ongoing upgrades that have been accomplished at his home institution, even in the face of severe budget cuts and tuition increases. It is evident that students, both in their application processes and their decisions to stay with or leave an institution, are
heavily influenced by technology access; they have often had opportunities to compare institutions that we faculty and administrators sometimes lack.

The grad MM program has managed, in the last year and a half, to add to its facility the new second year lab in the Valley Business and Technology Building. The faculty and TM have struggled and succeeded to use their funding highly efficiently and seem to be running a very cost effective use of hardware and software. They have attempted, apparently with great effort, to plan technology expenses over the next year or more that make the absolute maximum use of strained funding. Some students, faculty and the TM share the (possibly myopic and admittedly self-serving) belief that the MM program makes a more efficient use of limited funds than some other programs on the campus.

One guiding principle should influence administrative decisions regarding the tech funding of the MM program. It was stated most clearly in an interview with one of the regular grad faculty. To paraphrase: "In most other departments, technology is in the service of content delivery. Technology in our Program in large part IS the content."

Recommendations, remedies:

Given the high profile and reputation of the CSUEB Graduate MultiMedia Program, there should be clear consensus that ongoing technology funding for the program should be at a priority at least equivalent to other privileged programs.

The Grad MM Program has in the past benefited from some independent fund-raising and donations. The ability to rely, even to a small degree, on this support and the autonomy and flexibility that it allows, is of enormous value. To no one's surprise, this support has shrunk over the last two years. One would hope that the Program and the University Development / Advancement Office will strive to make the most of outside funding and donations, especially in the event the economy begins to expand.

RECRUITMENT

The recruitment of more applicants to the Grad MM Program looms as the most significant issue for which there is no immediate or obvious solution. A larger applicant pool would presumably raise the level of preparedness of the incoming classes. The Program has a solid and strong reputation among students and media professionals who are aware of it, but the wider public profile does not seem to reflect the passions of the participants or the educational potential of its unique and manifest mission.

The CSUEB Graduate MultiMedia website, designed by a recent alum, presenting views of recent student projects, is handsome and impressive, but is not quite up to the level of visual engagement of comparable endeavors, whether educational, artistic or professional.
A variety of Google searches reveals that it's hard to discover the Program without prior knowledge of the CSUEB name or location. Many sites that purport to index multimedia schools and programs do not list or link to CSUEB. In random searches, for multimedia graduate schools for example, the CSUEB Program does not come up with any regularity, even with more specific and location based criteria. Why is this? The reputation of this Program, one of the first in the country, is not reflected in its web profile.

It is revealing that a local proprietary school that has a huge profile in static, TV and web promotion (the obvious product of a huge advertising budget) actually has a poor reputation as a professional school. It is possible that an investment is required, perhaps in a more dedicated and sophisticated site, but more importantly in promotion, on-line and in conventional media, of the program and the site, through school search sites, or through other web visibility publicists.

Recommendations, remedies:

This is not an area of your reviewer's, or admittedly of the MM faculty's expertise. Most interviewed seemed at a loss, at the same time they express confidence in the excellence of the program, to explain the relatively small applicant pool.

A variety of options seem obvious; some are pursued, others not. More visits by the faculty to well-known undergrad schools with a media emphasis: this requires university travel funding at the very least, and puts demands on faculty that may feel rewarding only for a limited period of time. Some enlistment of alums as "ambassadors" to college recruitment events, while potentially helpful, requires either institutional funding or a high level of institutional loyalty and commitment. Some kind of "viral" web attack, via "YouTube" for example, executed as an undergrad media project, might prove fruitful.

Without knowledge of whether this exists or has been tried: are there national competitions of multi-media work? Such a venture would of course require an investment of time, energy and money, and might take two to three years to produce results. It would also take a major commitment to a web presence allowing registration, fee collection and display. Ideally such a project, like the current CSUEB MM website, could be the paid project of one or more recent alums. It would also interact well with the CSUEB undergrad media department, which is shifting to a web emphasis. Recent examples like "The Webbies," and older ones like the Ann Arbor Film Festival have generated broad interest in these creative genres, and have brought attention to their sponsors. The worst impact such a project could have would be to place more demands on faculty and administrators' time, without any meaningful university support.
IX. REFERENCES TO PREVIOUS REPORTS, RECOMMENDATIONS AND "RUBRIC" GUIDELINES.

A. RESPONSE TO THE "OUTSIDE REVIEWER REPORT 2004"

P. 3 and 4: STUDENTS: Recommendations:

First year students access to physical space: ACCOMPLISHED by exclusive access to "First Year Lab"

Seek ways to increase first and second year interactions: UNABLE TO ASSESS. This recommendation may not be served by the second year lab being in a separate building.

Second year lab cramped and inadequate: VAST IMPROVEMENT by the creation of the new second year lab in the new Valley Business and Technology Building.

P. 4 and 5: FACULTY: (not a report recommendation)

COMMENT: The addition of Raphael Hernandez, tenure-track hire in Music Composition and Electronic Music, to the regular faculty of Grad MM, is clearly a huge boost to the breadth and depth of instruction offered. The expansion of the curriculum in this direction is a function of this inclusion. Prof. Hernandez was highly praised by several students for his expertise in electronic media well beyond the spheres of music composition and electronic music, and for his availability outside of regular class and lab times.

P. 5: FACULTY: Recommendation: Investigate faculty research at other institutions. COMMENT: No opportunity to evaluate.

P. 6 and 7: CURRICULUM: Recommendations:

Consider re-positioning and re-naming the program: COMMENT: In the intervening 5 years the term "multimedia" seems to be coming back into popular usage and does not have the "outmoded" implication it once did. The use of "Interactive and Telematic Media" on the website adds an updated, more descriptive tone.

Strengthen instruction in programming and related etc. Increase program from 52 to 60 units. Consider 3 year option: COMMENTS: It appears the instruction has been dramatically strengthened in programming. The proposed curricular changes illustrate the more specific instructional frames. A preparatory year, required of some but not all entrants, makes the 3 year program a triggered option. It is not clear how the new Sound requirements will affect the menu of electives. There is no perceived need and no plan to increase units to 60.
P. 7 and 8: FACILITIES: Recommendations:

*Evaluate new space and facility guidelines, etc.*: COMMENT: The creation of the new Third Year Lab in the VBT bldg. more than answers the implications, directive and goals of this recommendation.

*Temporary facilities in the courtyard*: COMMENT: No longer relevant or necessary.

*Condition of the interior A and E building*: COMMENT: Still deplorable.

P. 8 and 9: STUDENT OUTREACH, DEVELOPMENT: Recommendations:

*Web designer, new website*: COMMENT: Achieved, satisfactorily, for the time being.

*Campus level fundraising etc.*: COMMENT: No indication of any progress in this area (without a chance to observe or research directly; hearsay only.) Still recommended. See below, University Funding.

P. 10 and 11: PROGRAM ADMINISTRATION: Recommendations:

*Develop summary of funding and allocation*: COMMENT: No indication this has been done, but this reviewer did not share the perception of the previous, that the funding structure is opaque. Director, TM and faculty seem to understand how it works. Dean Bellone may have clarified this process.

*Document and stabilize core funding*: COMMENT: Same as above.

*Give the Director more control over program resources*: COMMENT: While there was no evidence that the Director has gained more control over resources, it appears he has sufficient control and understanding to conduct effective planning. HOWEVER, in the coming shift from (more or less) autonomous administration, to the "subsumption" within CLASS may threaten some of the program's traditional autonomy. See additional below: UNIVERSITY FUNDING

*Increase TM from half to full time*: COMMENT: Has not been achieved. Still recommended.

B. RESPONSES TO THE SELF STUDY AND 5 YEAR PLAN, 2004 - 2009 (which responds to and lists outcomes from the same recommendations cited above.)

In general, this reviewer concurs entirely with the "OUTCOMES" commentary in the Self Study, with the following additions:
UNIVERSITY FUNDING: The reviewer was not aware, "University advancement has been very helpful and committed to the program. A small trust fund supported by Electronic Arts Corporation has been established, etc. ... but more work will need to be done ... to provide .. a sound funding base."

TECH MANAGER, Half-time, full-time, zero time. The reviewer was not aware of any perceived threat to do away with the TM position. It has been a consistent request and recommendation for over five years that the TM position be expanded from half- to full-time in the Grad MM program. To reiterate the Director's "Outcome" comments (p.7), the loss of the half-time Tech Manager position would be devastating to the program's ability to function.

C. FOLLOWING THE "RUBRIC" GUIDELINES

Please accept this non-charted, narrative response to the "Rubric" guidelines. Much of this information would be dreadfully repetitive if the full 5 page Chart were used.

Part 1. Relative to the last 5-year plan and the self-study:

The program is moving in a direction consistent with the suggestions in the review and the plan, and if anything, is ahead of the curve re: CSU programs and most UC programs. Score 4

The addition of Rafael Hernandez to the faculty team is a good response to recommendations in the review. Medium to long-term creation of a new full-time position remains a priority. This is coherent with similar moves in other schools' programs to embrace electronic music and sound technologies. Score 3

The outcomes assessments, the educational content and the curricular structure are all very thorough, realistic, rigorous and forward looking. Score 4

Your reviewer did not have access to national statistics re: student-faculty ratios. Relative to reputable art colleges, universities and other state colleges in California the SFRs seem typical or better. The students volunteer compliments on faculty availability and individual instruction. Score 4

The program's requirements seem very much in step with the few CSU, UC and private colleges on which data was readily available, and more rigorous and complex than many other fine art graduate media programs. Score 4

The achievements of faculty in such programs vary widely in type and method of evaluation: writing, speaking, producing art, professional practices, consulting, and others. This faculty team certainly, on average and cumulatively, seem on or ahead of the curve. Score 3
To this reviewer the achievements of the students are mixed. Any evaluation must be based on available second year projects, mostly through video documentation, and the responses of a random group of alums (though possibly self-selecting with a positive bias) who comment on their post MA professional practice. By the latter measure, achievements seem ideal for any professional Masters program. Based on documentation of work, and viewing work in progress, it is this reviewers opinion that the best work is at a level consistent with most comparable, and some higher-profile programs; but that the weakest work may reflect on the applicant pool and the inability of the program to attract enough applicants to raise the level of incoming aptitudes and ambitions. From a different angle, the least strong work appears to be equal to, possibly better than the average (weaker work) in comparable schools; admittedly this is highly speculative and not an ideal frame for comparisons. Some second year projects seem colloquial, not clearly conceptualized, or too engaged with form to the neglect of content. Some greater number of second year projects are absolutely cutting edge, reflecting some of the most interesting technological experiments and prototyping, with important content and stunningly engaging interactive experiences. Score 2.5 to 3.5

Part 2. The Academic Plan

The proposed curricular changes are needed, well conceived and structured, very much coherent with or ahead of similar programs. The linkages with the other curricular components is clear; the new Technology sequence meshes very well with the history/theory, and project components; the new Sound and Electronic Music components fill a gap and round out the curriculum in a way consistent with comparable programs. Score 4

It was not possible for this reviewer to assess national or regional trends for student growth. The program seeks to attract a broader applicant pool. The weak economy seems to be pushing college enrollment up generally, but one cannot predict a trend. A more aggressive recruitment strategy is called for, but remains undefined. Score 3

The reviewer does not have data on the national or regional trends for the professional field, but education, science, and digital technologies are likely to be some of the last fields impacted by the economic recession. It is likely that the coming classes of MAs will have a better-than-average chance, not only to find challenging and satisfying employment, and some are certain to invent new fields and new approaches to existing fields. Score 4

A comparable school commits itself to replacing digital technology in a three year rotation. Some strive for better, many settle for less. Present technology can always be strung along for an additional year, with small but noticeable impact on instruction. Deferred maintenance, after a certain point, i.e. more than two years, begins to multiply its negative impact. The Autonomy issue becomes more significant. There is a distinct possibility that if the program received its requested, its standard,
or even its standard / reduced budget, and was liberated from (some) University IT oversight and restrictions (particularly relative to big-ticket items and the allocations of bandwidth) the program could benefit, possibly greatly, from its own efficiencies. Score 2 to 3 depending on budget circumstances.

Overall evaluation of the plan. Score 4

Part 3. Curriculum

In the reviewer's opinion, the curricular structure is close to an ideal model. The requirements, facilities and faculty are appropriate to the ambitious learning outcomes. The breadth (particularly history, theory and ethics) and depth (technologies, programming, prototyping, interactivity) create a powerful yet subtle, interwoven system. The interdisciplinary approach to technology, the team approach to the hands-on thesis projects, and the nature of the interactive interfaces, seem to add up to the exact right mix for the direction of the field. Score 4+

Part 4. Resources

There are only two faculty whose teaching or teaching-administrative loads are entirely in Media, grad or undergrad: Prof. Petrillo and Prof. Rhybat; both teach undergrad Media classes. Three other faculty who act as Graduate Advisors in the Grad MM program, Prof. Hofstetter, Prof. Green and Prof. Hernandez are all tenured or tenure-track. Their role in the grad MM program is vital, and their mixed assignments allows great flexibility in curricular assignments and in maintaining for them full-time loads. Profs. Green and Hofstetter teach in undergrad Fine Arts, Prof. Hernandez in Music. It appears there are other, mostly part time and/or adjunct faculty who teach in undergrad Fine Art and in the Grad MM program. The positive factor of breadth and versatility is somewhat compromised by the administrative complexity and by the divided attention required of most faculty. There is a consensus that a new full-time, tenure track position in MultiMedia (possibly split between grad and undergrad) will be needed in the near to medium-term future. It is understood that this will involve a search for a very specific mix of talents, and that budgetary restraints push this at least a year or more into the future. Your reviewer would Score the present number of full-time / tenured / tenure-track faculty at 3, likely soon to drop to 2.

It was not possible to study similar programs with which to compare full-time faculty-to-student ratios or numbers of full-time faculty to the size of the program. Score estimate 3.

The space facilities are adequate to superior for the number of students and program profile. One disadvantage is the physical distance (only a building away) between first year and second year labs. The equipment and technology facilities are adequate to better for the time being. The reviewer can only assume that equipment and other technology purchases are being planned in light of an expected budget cut, and that
an adequate facility will be in place for the next year or two, even under these restrictions. As emphasized elsewhere in this report, ongoing budget limitations for upgrades, improvements and expansion will, within two years, begin to have a dire impact on the Program's ability to meet its basic educational needs. To repeat from page 13: "In most other departments, technology is in the service of content delivery. Technology in our Program in large part IS the content." Score 3 to 4 depending on funding.

The space and facilities are favorably comparable to the more advanced such programs, within CA colleges and universities for example. For the present score 4.

Part 5. Site Visit

The reviewer did not visit or have an opportunity to evaluate the Library.

Extensive interviews with a broad variety of students covered a wide range of topics and allowed for ample follow-up and discussion. The students are, with very few exceptions (and with most exceptions explained) very enthusiastic about all aspects of the program and are fully satisfied with the program. See page 7. Score 4

In addition to meeting with the Technology Manager and the Program Manager, the reviewer met with the five faculty most directly engaged in the Grad MM program, some more than once. Plainly evident in all these interviews were the sense of teamwork, the shared sense of mission, a strong enthusiasm for teaching and for the potential of MultiMedia in the culture, and excitement about the student teams and their projects, with the stipulation that there is a desire for a bigger applicant pool, from which to select a slightly higher percentage of top quality entrants. Score 4

Email exchanges with ten recent alums also provided data. Each replied to 23 questions, including a challenge to represent opinions opposite to their own. The responses were overwhelmingly positive. See page 7. Score 4

In the interview with Raquel Arica, the Program Coordinator, it was striking to observe her in-depth understanding of how the program functions, particularly the graduate application process. She is quite clearly a valued member of the team and enjoys her interaction with students and faculty. Score 4

The interview with the Technology Manager provided many insights into the program and the campus IT structure; though the nature of the frictions between him and the faculty and the more frustrating aspects of his job are hard to define or evaluate. See pages 9 and 10. Score 2
Part 5, Synthesis

It appears that this program undergoes a variety of probing internal and external reviews, and that it documents, questions and tests its ability to meet its mission in frequent and thorough examinations. The results are generally positive to very positive on all counts. The problems and recommendations are clearly outlined in section VIII. CHALLENGES, pages 9 through 14. The length and detail of this section should not be taken as a measure of the depth or seriousness of the challenges, merely an attempt to fully document from multiple points of view when possible. There is general consensus among the faculty and in the mind of the reviewer that the overall quality of the program vastly outweighs the problems, all of which are solvable, many of them with relative ease.

As outlined in CHALLENGES, the areas of interaction with the University that may be problematic and offer opportunities for improvements are: the new administration of the program from within CLASS and its possible impact on the program’s autonomy; redefining the Tech Manager’s role and the possible increase to full-time in grad MM; the change in Directorship; budgeting in a time of retrenchment; and the next step toward adding another full-time faculty. There are clear opportunities for a modest expansion of the program and a marginal increase in applicant quality, with very little new expenditure. The solid reputation of a high-quality Program seems unlikely to be threatened by any of the challenges.