UNIVERSITY
OF MIAMI
FACULTY SENATE

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MEMORANDUM

To: Donna E. Shalala, President

From: Richard L. Williamson
Chair, Faculty Senate

Date: September 21, 2012

Subject: Faculty Senate Legislation #2012-07(B) – Establishment of a Master of Fine Arts in Interactive Media in the School of Communication

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At its September 19, 2012 meeting, the Faculty Senate unanimously approved the proposal to establish a Master of Fine Arts in Interactive Media in the School of Communication. The 45-credit degree is designed to prepare graduates to be innovators and leaders in the field of interaction design with a mission to explore the use of technology, design, and human behavior. to impact, augment, and influence how people communicate. The degree reflects the School of Communication's mission to encourage creativity of expression, experimentation, and both collaborative and independent thinking to prepare students for a lifetime of service and learning.

This legislation is now forwarded to you for your action.

RW/rh

Enclosure: proposal

cc: Thomas LeBlanc, Executive Vice President and Provost
Gregory Shepherd, Dean, School of Communication
Jyotika Ramaprasad, Vice Dean for Graduate Studies and Research, School of Communication
Kim Grinfeder, Associate Professor, Cinema and Interactive Media, School of Communication

CAPSULE: Faculty Senate Legislation #2012-07(B) – Establishment of a Master of Fine Arts in Interactive Media in the School of Communication

PRESIDENT'S RESPONSE

APPROVED: _____ DATE: 9/26/12
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: DEAN SHEPHERD

EFFECTIVE DATE OF LEGISLATION: IMMEDIATELY
(if other than June 1 next following)

NOT APPROVED AND REFERRED TO: _____

REMARKS (IF NOT APPROVED):_____

PROPOSAL FOR THE CREATION OF A MASTER OF FINE ARTS DEGREE IN INTERACTIVE MEDIA IN THE SCHOOL OF COMMUNICATION

Last Updated: September 6th 2012

Table of Contents

Overview

The School of Communication at the University of Miami is proposing a 45-credit Master of Fine Arts (MFA) degree in Interactive Media. The program is designed to prepare a new generation of
innovators and leaders in the field of interaction design with a mission to explore the use of technology, design, and human behavior to impact, augment, and influence how people communicate.

The MFA in Interactive Media will educate students to research, analyze, design, prototype, and implement interactive media that improve the quality of our everyday lives. Students will explore the strategic role that interactive technologies play in communication and how they are shaping today's business, culture, and society. Our goal is a collaborative and multi-disciplinary program where students will work in teams gauging and influencing the impact interactive technologies are having on other areas of communication, such as film, television, journalism, advertising, and health and science communication.

The MFA in Interactive Media is aimed at educating graduates to become innovators, entrepreneurs, and original thinkers intent on making a difference in our society.

Exact Title of Degree

Master of Fine Arts in Interactive Media

Purpose and Goals

In the past 25 years, interactive technologies have changed the way people learn, communicate, and conduct business transactions, but even with this enormous progress, we still must overcome huge hurdles to truly leverage how we use digital media to improve not only the way we do business, but also the quality of our lives. The MFA in Interactive Media is a professionally focused program that explores the creation of interactive media, products, and services so that students will be better equipped with tools and methods to make strategic and creative choices no matter where they find themselves. Our goal is to teach students to link cutting-edge ideas with applied practice for long-term success as creative leaders in the fast moving field of communication.

This program is designed to enhance our students' abilities to:

- Conceptualize communication models based on possibilities offered by emerging technologies.
- Evaluate user experiences by conducting usability testing.
- Understand business models and the metrics driving online business models.
- Research, analyze, prototype and design concepts from concept to launch.
- Translate business goals into elegant and intuitive interactive designs.
- Develop creative solutions to complex design problems posed by emerging technologies.
- Master dynamic communication techniques that give control to the user rather than the computer.
- Embrace and adapt quickly to integrate a variety of disciplines in technology, art, design, science, education, health care and business.
- Learn to work in teams and manage projects.

Possible employment opportunities for students who complete the program are:

- Interaction Designer
- UX/UI Specialist
- Creative Director
- New Media Director
- Mobile Developer
- Instructional designer
- Game Designer
- Social Media Expert
- Digital Media
- Director of Interactive Media
- Multimedia Developer
- Exhibit Technician
- Installation Designer
- Professor
- And a few jobs that don't yet exist

Students will be able to apply their acquired knowledge and practices to a variety of industries including:

- Advertising agencies
- Health care technology
- Science technology
- Public relations
- News and public affairs
- Educational institutions
- Museums
- Non-profits
- Gaming industry
- Corporate web departments
- Software companies
- Technology startups
- Web design agencies
- Mobile industry
- Web based businesses

Fit with the Mission of the University of Miami

The Master of Fine Arts program in Interactive Media directly supports the University of Miami's mission to "educate and nurture students, to create knowledge, and to provide service to our community and beyond" and to "to develop future leaders of our nation and the world." The degree is innovative, interdisciplinary and enhances the University of Miami's vision in translating local and global community needs into quality curricula that meet and exceed international academic standards. The degree is consistent with the University of Miami's Launchpad initiative to support entrepreneurs, innovators and inventors in South Florida and contribute to the economic and social growth of our region. Students may work with the Launchpad[1] to explore a range of experiences both in the classroom and in the field to create inventive solutions to real-word communication problems.

Fit with the Mission of the School of Communication

The Master of Fine Arts program in Interactive Media directly supports the School of Communication's mission to provide "quality undergraduate and graduate programs in communication that emphasize the relationship between theory and practice." The program will

[1] See page 12

combine conceptual, methodological, analytical and technical skills with practical experience. The MFA in Interactive Media relates the School of Communication's mission to encourage creativity of expression, experimentation, and both collaborative and independent thinking to prepare students for a lifetime of service and learning.

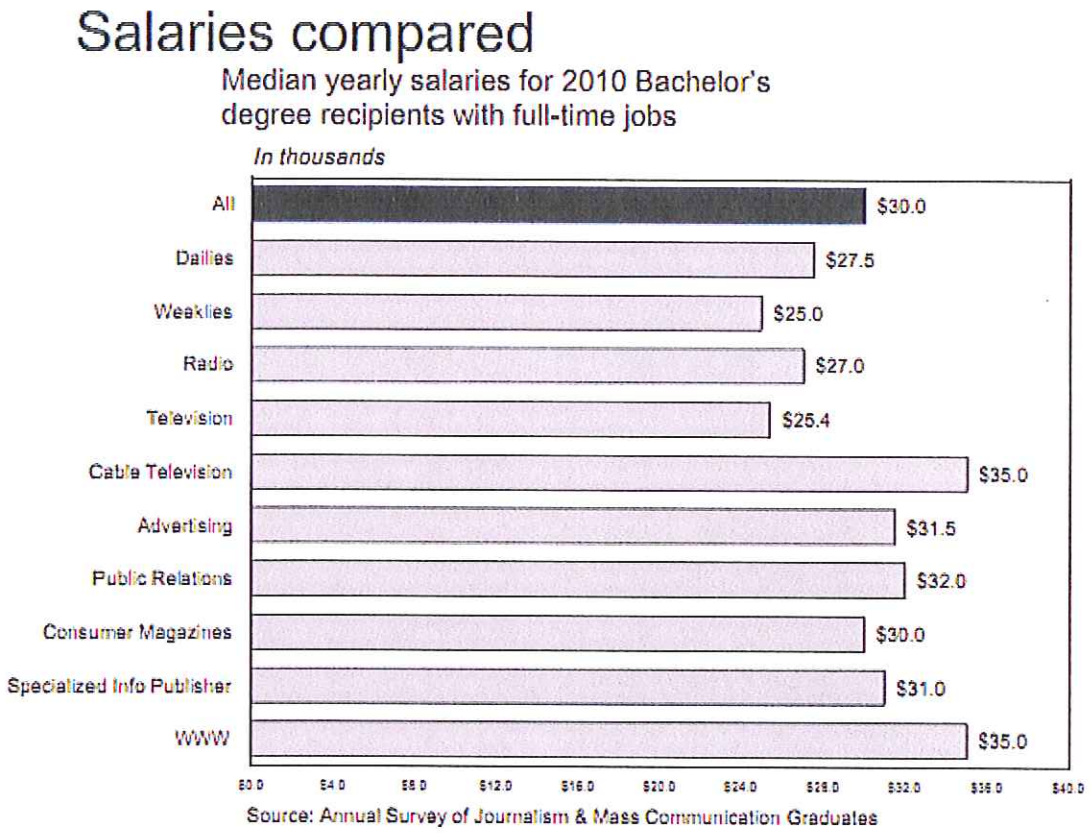
Motivation and Demand

Reflecting changes in the media industry, and the world we live in, the School of Communication has experienced increasing student demand for courses covering interactive media and Internet related topics; the demand for this program is potentially substantive. Almost no graduate programs in South Florida, and for that matter only a few across the United States, offer curricula that connect students with the knowledge and understanding needed to negotiate the dynamic environment of the communication field. The MFA in Interactive Media will attract professionals wishing to upgrade their skills to advance within their current careers or take their careers in a new direction, as well as those seeking a terminal degree to further their education and enter academia. Students also may enter this program directly after their undergraduate study. Prospective students do not need to be experienced web, mobile, or interactive designers, but they should be curious and imaginative, and willing to experiment with interactions on their own. Students with backgrounds in research, writing, and engineering and a fluency in design would also fit well in the program and provide an interesting complement to others.

Students graduating from this program will find themselves working in a variety of fields. Over two billion people are now connected to the Internet and it is changing the way we communicate, shop, inform ourselves, and meet people. According to McKinsey's global SME (small medium enterprise) survey, "2.6 jobs were created in the Internet field for every job destroyed."[2] This statistic demonstrates a significant shift in the types of jobs being created in the modern economy and the role that technology plays in our lives.

[2] The great transformer: The impact of the Internet on economic growth and prosperity Oct. 2011, James Manyika, Charles Roxburgh http://www.mckinsey.com/Insights/MGI/Research/Technology_and_Innovation/The_great_transformer

The 2010 Annual Survey of Journalism and Mass Communication Graduates showed that full-time recent bachelor's degree recipients working in interactive related fields had the highest salaries along with those working in cable television. No data were available for master's degree recipients.



[3]

The Bureau of Labor Statistics projected a 10.1% job growth during the 2008-2010 period:

> More than half of the new jobs will be in professional and related occupations and service occupations. In addition, occupations where a postsecondary degree or award is usually required are expected to account for one-third of total job openings during the projection period. [4]

Further refining the job growth projection, the Bureau of Labor Statistics stated that:

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[3] 2010 Annual Survey of Journalism &Mass Communication Graduates - Lee B. Becker, Tudor Vlad, Whitney Kazragis, Chelsea Toledo, Paris Desnoes
http://www.grady.uga.edu/annualsurveys/Graduate_Survey/Graduate_2010/Grad2010MergedB&Wv1.pdf

[4] Bureau of Labor Statistics Employment Projections, http://www.bls.gov/emp/

> Computer applications software engineers also are expected to grow rapidly from 2008 to 2018. Expanding Internet technologies have spurred demand for these workers, who can develop Internet, intranet, and Web applications.[5]

And while it is true that we will need computer scientists to build computer applications, we will also need interface designers, usability and user experience specialists, front-end developers and others who go beyond how to build applications and understand how people use these applications. This is the need that this program will fulfill.

The Bureau of Labor Statistics also projected that the greatest number of job openings for the 2008-2018 decade will be in "professional and related" fields and these fields are expected to grow faster than any other field with a projected 11.9 million jobs created over the next decade. The following categories fall under the Professional and Related Occupations:

> *Information.* Employment in the information sector is expected to increase by 4 percent, adding 118,100 jobs by 2018. The sector contains fast-growing computer-related industries. The data-processing, hosting, and related services industry, which is expected to grow by 53 percent, includes establishments that provide Web and application hosting and streaming services. Internet publishing and broadcasting is expected to grow rapidly as it gains market share from newspapers and other more traditional media. Software publishing is projected to grow by 30 percent as organizations of all types continue to adopt the newest software products.
>
> *Professional, scientific, and technical services.* Employment in professional, scientific, and technical services is projected to grow by 34 percent, adding about 2.7 million new jobs by 2018. Employment in computer systems design and related services is expected to increase by 45 percent, accounting for nearly one-fourth of all new jobs in this industry sector. Employment growth will be driven by growing demand for the design and integration of sophisticated networks and Internet and intranet sites. Employment in management, scientific, and technical consulting services is anticipated to expand at a staggering 83 percent, making up about 31 percent of job growth in this sector. Demand for these services will be spurred by businesses' continued need for advice on planning and logistics, the implementation of new technologies, and compliance with workplace safety, environmental, and employment regulations.
>
> Employment in arts, design, entertainment, sports, and media occupations is expected to grow by 12 percent from 2008 to 2018, resulting in almost 332,600 new jobs. Growth will be spread broadly across different occupations within the group. Media and communications occupations will add a substantial number of jobs, led by rapid growth among public relations specialists, who will be needed in greater numbers as firms place a greater emphasis on managing their public image. Employment among entertainers and performers and those in sports and related occupations also will increase, partly as a result of increasing demand for coaches and scouts. Furthermore, art and design occupations will

[5] Ibid

> see substantial growth, with demand increasing for graphic and interior designers. As more advertising is conducted over the Internet, a medium that generally includes many graphics, and as businesses and households increasingly seek professional design services, a greater number of these workers will be needed.[6]

While encouraging, the Bureau of Labor Statistics report is somewhat limited in scope and is struggling to keep up with categorizing the many new jobs being created, especially the kind of jobs this program aims to prepare talented, technologically minded and forward-thinking graduates for. The Internet will continue to affect almost all the markets in one way or another. The job market will grow for people who understand how technology is shaping everyday life, know how to leverage new challenges appearing at an ever-accelerating pace, and can translate business needs in an effective manner, whether they work in consulting, non-profits, web services, government, media relations, information technology, education, journalism, or computer science.

[6] Ibid

Internet Sector Outlook

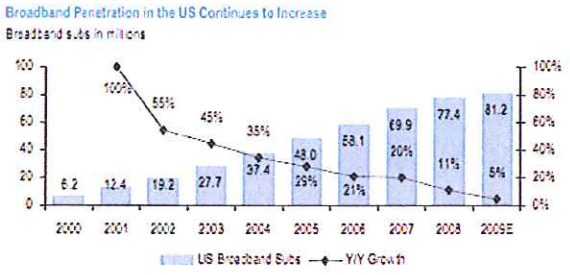
If the next ten years look anything like the past ten years, there is still room for enormous growth. The table below show that while the S&P 500 Index shrunk slightly over the past decade even though growth in the Internet sector has been explosive showing that our economy is shifting.

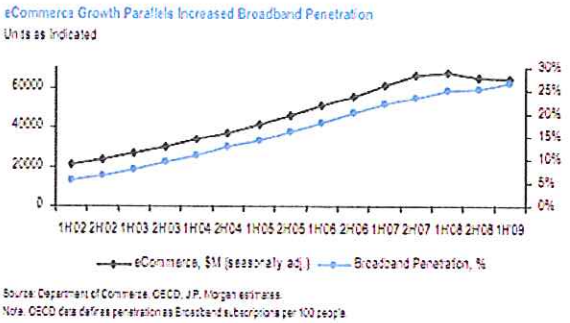
Ten Years of Internet Growth Compared

	2000	2010
S&P 500 Index	1,320 **Dec 29, 2000**	1,258 **Dec 30, 2010**
Wireless Subscribers	97M	293M
Wireless Data Plan Revenue	$0.1B	$46.8B
US Internet Users	124M	240M
US eCommerce	$28B	$166B
Amazon Revenue	~$2B	~$18B
Google Revenue	$0.02B (2 years old)	$21.90B (F'10 net rev)
Facebook	Didn't exist	500M+ Users
YouTube	Founders working for PayPal	Monetizing 100B views per year

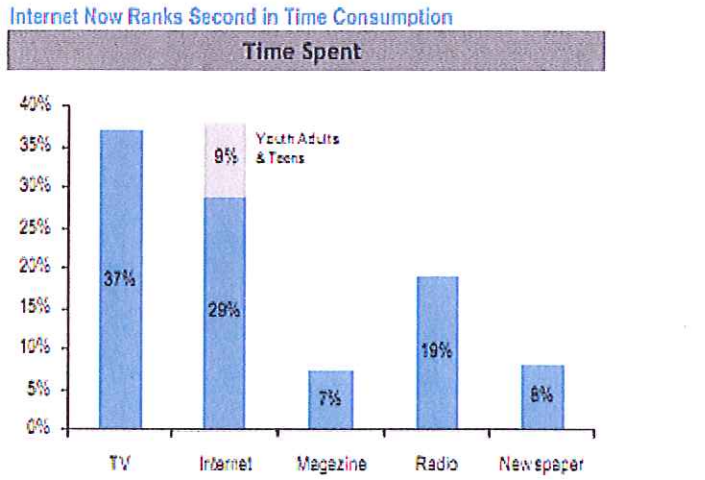
Source: J.P. Morgan.

Broadband penetration has also increased in the United States in the past ten years, and the growth of eCommerce is closely related to broadband penetration evidenced from the fact that both trajectories have closely paralleled each other in the past several years. *Household broadband penetration in 2020 is projected to be 85%.*[7]





Time spent online has also significantly grown. Consumers watched ~240 million YouTube videos a day, spent over 10 billion minutes on Facebook every month, and wrote over a trillion text messages (roughly 12/person daily).[8] Today the Internet is ranked second in time consumption amongst other media.



Source: After TV: Nielsen Media Research Custom Survey 2008 and Samir Arora Glam Media Presentation.

A major cause for the increase in time spent online is the advent of social networking and social gaming. Social networking sites are rapidly becoming the next network platform and while our students are adept users, they often play a small or no role in shaping this platform. Sites like

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[7]Boston Consulting Group, *Projecting U.S. Mail Volumes to 2020,* retrieved from http://about.usps.com/future-postal-service/gcg-narrative.pdf.

[8]J.P. Morgan, *Nothing But Net, 2010 Investment Guide.*

Facebook enable applications and create their own economic system. One of the major sources of revenues for social networks in 2010 was gaming. Social gaming revenues hit $1 billion in 2010 and will most likely grow five-fold to $5 billion by 2015.[9] Social games are a rapidly gaining market share over multi-player online games, such as *World of Warcraft* and the traditional video game market.

Mobile devices are also making significant inroads, especially in developing countries where cellphone ownership is close to 78.8%[10]. More than ever, mobile devices are more than a voice communication platform. According to comScore research, only 37% of U.S. phone users are still solely using the phone for traditional voice purposes.[11] It is clear that, even though the iPhone and Android platforms have only been around for a few years, mobile devices will play an ever-more important role in our lives.

In conclusion, the Internet sector outlook looks bright. Given that online media are in a constant state of flux, starting an MFA in Interactive Media at this time will allow School of Communication graduate students to look for sources of inspiration and explore the challenging notion of what is possible to focus on in the next-generation of products and services.

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[9]Dean Takahashi, *Venture Beat*, retrieved from http://venturebeat.com/2011/04/09/social-games-could-grow-five-fold-to-5b-market-by-2015/.

[10] Key Global Telecom Indicators for the World Telecommunication Service Sector http://www.itu.int/ITU-D/ict/statistics/at_glance/KeyTelecom.html

[11]J.P. Morgan, *Nothing But Net, 2010 Investment Guide.*

Relationship of Program with Other Cognate Fields and University Programs

The MFA in Interactive Media is collaborative, innovative, and interdisciplinary in nature and integrates well with other programs in the School of Communication, as well as those across the University of Miami. The concept and operation of the MFA in Interactive Media presented in this proposal was created with direct input from School of Communication department heads and faculty and we anticipate a high level of collaboration in the curriculum. The program is crafted in a manner that allows several options for electives in cognate areas in the School of Communication, such as Journalism, Advertising and Public Relations. In addition, several of the introductory courses in the MFA will be highly desirable to students in other cognates and will provide a way for them to integrate interactive courses into their curriculum.

Beyond the School of Communication, we have established links with the LaunchPad and anticipate that a fair number of our students will choose to work with the LaunchPad for their capstone project. The University of Miami LaunchPad provides an excellent support structure outside the MFA program for students to meet venture capitalists, along with coaches and community leaders, enabling our students the opportunity to create real-world experiences and ventures.

Relationship with Undergraduate Programs

Most educational fields are heavily affected by advances in the Internet. Thus several undergraduate programs at the University of Miami will find common ground with the Interactive Media degree. Courses in the Interactive Media program will appeal to students in several of the undergraduate disciplines wishing to complement their education with a background in Interactive Media. Courses like interaction design and usability will attract several students from Communication, Music, Engineering, and Arts and Sciences, particularly those students who may be reluctant to pursue a traditional computer science degree due to its heavy mathematical emphasis. Students enrolled in the MFA who want to pursue a career in teaching may also teach undergraduate courses. Establishing a master's degree program in Interactive Media provides continuity and a logical graduate-level option for students with a desire for professional training in this field.

Physical Resources

Lab Equipment and Facilities Needed

The School of Communication has adequate facilities to accommodate most classes in this program. Current classrooms and labs are already fitted with the necessary computers and software required for students. Some open source software packages might have to be installed in lab computers.

University of Miami School of Communication Materials Budget

Total materials expenditures for the University of Miami School of Communication in 2011 was $500,000. We do not foresee any significant increase required in this budget.

Survey of Libraries

We do not foresee any immediate need for additional library resources.

Other Physical Resources Needed

We do not foresee any immediate need for additional physical teaching space because current classrooms are adequate for this program's courses.

Number and Source of Students

We estimate that the first class will welcome at least 15 students with an increase to nearly 30 students by the third year. Currently, there is no equivalent program offered by any major university in South Florida and we have reason to believe that over half of the students will be local with the remainder coming from across the United States and the world.

Marketing Strategy

Target Market

Our target market are professionals and recent graduates who want to expand their existing skillset by learning to use interactive media technologies.

Positioning Statement

The MFA in Interactive Media is aimed at educating graduates to become innovators, entrepreneurs, and original thinkers intent on making a difference in our society.

Offering to Students

There is a growing demand for talented and original creators in all forms of interactive development. The MFA in Interactive Media will enable students to become creative, responsible arbiters of interactive communication technology and design and able to shape their own path regardless the industry they end up in.

Promotion Strategy

The promotion strategy for the MFA in Interactive Media will be multifaceted. Below are the steps we plan to take to publicize the program to prospective students. A $5,000 budget is allocated for promotion of this program.

Website

The first point of contact most students with the University is the website. We will build an informational website for the program

Paid Search Campaigns

To drive traffic to the website, we plan to launch a keyword-specific Google AdWords campaign tuned to deliver leads to the site. This approach will place advertising banners on search results delivered to prospective students matching our target audience.

Email Marketing Campaigns

We plan to email recent alumnus and seniors informing them about the new degree. We also will reach out to E-Veritas for additional publicity.

Social Media

Social media will be built into every aspect of this campaign. Like, Tweet and Recommend buttons will be integrated into the site. A Facebook page and Twitter profile will be created and launched as soon as the program is approved by the Faculty Senate.

Traditional Media

Press releases will be sent to local media outlets informing them of the new program. In addition, we will reach out to on-campus publications like E-Veritas and The Miami Hurricane.

PR Campaign

We plan to conduct a traditional public relations campaign for the program in conjunction with students in Spring 2013 and faculty in the Advertising and Public Relations program at the School of Communication. An entire class will be dedicated in Spring 2013 to creating a public relations campaign for the program.

Word-of-mouth Marketing

This communication channel has always proven to be the most valuable asset to promoting a program. Since we have started developing this degree we have spoken to former students, and word has gotten around the University. We have a list of people who are already interested in learning more about the the program once it's launched.

Radio

WVUM reaches out to the entire Miami Dade community and has listeners who fit the demographic target we are trying to reach. Budget permitting, we would like to launch a campaign on WVUM.

Degree

Master of Fine Arts in Interactive Media

The Curriculum will include four components:

1) Core skill building and theory/research coursework
2) Studio curriculum
3) Cooperative and interdisciplinary work
4) Capstone experience

Admissions Requirements

Requirements for admission to the Master of Fine Arts degree in Interactive Media are:

- A baccalaureate degree from an accredited institution
- The School's official application
- A $65.00 non-refundable application fee
- Official transcripts of all undergraduate and graduate college work
- Three letters of recommendation
- Portfolio. Digital work should be submitted as a list of links on an electronic document or on CD, DVD or USB flash drive in a single folder or presentation. Papers must be submitted electronically and must include applicant's name, title of paper, and class or teacher if produced as a class assignment or with the assistance of a mentor. Non-digital works should be photographed and submitted in digital format on CD, DVD or USB flash drive. Portfolios must be clearly labeled with the applicant's name and contact information and will not be returned.
- Official TOEFL scores for international applicants only
- TOEFL speaking and listening with a minimum score of 26 in each category. This requirement is waived is the student has an undergraduate degree from an English-speaking university.
- Letter of intent - 500 word typed statement of academic and professional goals

Justification for not having a GRE requirement

Standard MFA programs in digital/Interactive media do not require a GRE. Instead, they require portfolio reviews. From the list of comparable MFA programs at AAU aspirational peers none currently requires applicants to take the GRE for admission. We will implement a rigorous portfolio review process to identify strong and competitive applicants.

MIT MEdia Lab -> No GRE Required
NYU Interactive Telecommunications Program -> No GRE Required
U.S.C. Interactive Media MFA -> No GRE Required

UCLA Design Media Arts -> No GRE Required
UF Art and Technology Program -> No GRE Required

Requirements for Graduation

- Students must complete a minimum of 45 credits at the graduate level with an average of B and no grade lower than a C-. Course substitutions will not apply towards graduation without written approval of the the Program Chair and the Graduate Studies Director. Students are required to have the Program Chair's and the Graduate Studies Director's approval prior to taking a course at another university.
- Students must complete all courses with a standing 3.0 GPA prior to starting their capstone coursework.
- Students are required to register for a capstone project seminar that is designed to help define and execute their final projects.
- Students are expected to complete and present a fully articulated capstone project and related documentation to graduate.
- Students are required to complete all master's degree requirements within 6 years.
- Transfer credits will not be accepted without permission of Graduate Director.

Additional Program Requirements

The faculty of the School of Communication is committed to the ongoing assessment of the quality and effectiveness of its curriculum and the learning experience that seeks to fulfill its mission and stated student learning outcomes. Students are required to archive their capstone projects and supporting documentation in both electronic format and hard binding together with supporting documentation. Directions for archiving of the capstone projects will be provided in further detail to students.

Students enrolled in this program are expected to abide by the University of Miami Honor Code. The purpose of the Honor Code is to protect the academic integrity of the University by encouraging consistent ethical behavior in assigned coursework by students.

Curriculum

Core Courses (12 credits)

Students are required to complete all four core courses with a grade no lower than a B-. Course substitutions will not apply towards graduation without written approval of the Department Chair and the Graduate Studies Director. Students are required to have the Departments Chair's and the Graduate Studies Director's approval prior to taking a course at another university.

1. Trends in Technology
2. Interaction Design

3. Systems
4. Programming

Other Program Courses (24 credits)
These courses allow for a deeper specialization in the students areas of interest.

1. User Interface Design and Development
2. Information Graphics and Visualization
3. Game Development Studio
4. Web Applications
5. CoLab
6. Usability Design and Research
7. 3D for Graphics Storytelling
8. Entrepreneurship+Design
9. Media as Activism

Electives (6):
Two 500-level and above elective courses from other programs in the School of the Communication and across the University.

Capstone Project(3) [CXX700]*:*
Independent project.

Course Descriptions

As human communication evolves, we are more and more dependent on technology to communicate effectively. The courses in this MFA program will give students a foundation to mold these technologies with a goal of simplifying and innovating how we use technology to communicate, thus enhancing the quality of our lives.

Trends in Technology
Trends is an introductory course intended to promote a dialogue about the current state of business, art, culture and innovation and how new technologies are affecting these fields. Students will learn to dissect hype and analyse which are the technologies that will really affect our lives while engaging students in challenging and meaningful discussions about design and technology as a field of knowledge.

Interaction Design (IxD)
Interaction design is "the practice of designing interactive digital products, environments, systems, and services." In this class students will learn the fundamentals to the design and implementation of effective interfaces. Students will learn to design websites using HTML, CSS and Javascript.

Sample syllabus:

http://interaction.wiki.usfca.edu/file/view/ART+390+Spring+2010+Interaction+Design+Syllabus.pdf

Systems

Programming
This course will teach students the basics of programming using Processing. Processing is a language created by Ben Fry and Casey Reas of MIT. It was created to make computer programming accessible to people who might imagine it but do not always have the skills to execute it, thus making it an excellent tool to teach programing concepts to designers. Processing gives students immediate results allowing them to easily create beautiful, interactive graphics. Read about processing at: http://processing.org/about/

Sample syllabus:
http://classes.dma.ucla.edu/Fall11/252A/syllabus.html

User Interface Design and Development
This in an introductory Human-Computer Interaction (HCI) course that covers the design, architecture, prototyping, and evaluation of user interfaces.

Information Graphics and Visualization
Humans are a visual species. Therefore, designing charts, graphs, maps, diagrams, and explanatory illustrations is a key skill to communicate ideas and improve public understanding of relevant issues. In this course you will learn the conceptual basics of information graphics and visualization, how to transform raw data into functional and beautiful displays that will not only attract users' attention, but that will also enlighten them.

Game Development

Students work in teams throughout the semester to design and playtest a game through multiple iterations.

Web Applications
With the evolution of technology there has been an exponential adoption of cloud computing technologies and an increasing number of applications are being pushed on the Web. Software will be consumed through the browser and the implications for software development are significant. In this course students will learn the concept of interoperability of applications: server-side scripting, web server configuration, caching servers, and data stores.

CoLab
CoLab is designed to provide students the opportunity to work with experts across disciplines and industries. This course is designed as a unique collaboration between the University,

nonprofits and/or private sector companies to address complex socio-technical issues that currently challenge businesses today.

Usability Design and Research
This course takes a comprehensive look at how different contexts shape the outcome of interactive media, products, and services by (a) focusing on the "theory to practice" connection underlying the product development process and (b) employing research methodology to test technology. Students will critically evaluate and analyze user experiences by conducting and executing a wide range of methods from ethnographic techniques, usability testing, log analysis, surveying, as well as how to engage user feedback effectively at every stage of the design process. There is considerable focus on practicing selected research skills and the analysis and write-up of the results from these activities.

3D for Graphics Storytelling
Today, 3D design is everywhere: in movies, in videogames, in TV commercials, and in newspapers and magazines. In this course you will learn to use Autodesk Maya, the leading 3D software tool, as a means to making real-world issues understandable to your users.

Entrepreneurship+Design
What does it take to make an idea a reality? This course teaches students to explore their projects beyond the "idea," teaching them how to write a business plan, i.e., creating a budget, developing a prototype, developing a financial model, and seeking funding. Students will learn the advantages and disadvantages of bootstrapping a business vs. seeking venture capital funding and how to leverage social media to augment their market share and improve their brand. Case studies will include start-up scenarios for established companies like Google and LinkedIn as well as for pre-IPO companies like Twitter and Facebook.

Media as Activism
In this course, students will examine the role of media in shaping social reform to document social issues such as poverty, human rights, social inequities, the environment, and powerless groups. We will review the philosophy and history of media as activism ranging from documentary, journalism, to news and information, the Internet, social media and newer forms of media. Emphasis is placed on developing a critical understanding of current media advocacy practices with a conscious goal: awareness, change minds, to affect policy, and action.

Capstone Project
After completing all course requirements students will be required to do a project. The capstone project course is designed to help and guide students with their final project and is structured as a series of critique and presentation sessions in which individual final projects are discussed. Capstone projects may be done collaboratively with prior approval of the Program Chair. Both the project and the supporting documentation must be submitted for archiving as directed by the

instructor. Oral presentation of the final project is required.

Schedule

Semester	Course	Professor	Program	Credits
1	Trends in Technology	Grinfeder	CIM	3
1	Interaction Design	Seelig/Cairo	CIM	3
1	Systems	Ewing	CIM	3
1	Programming	Tran	J	3
2	User Interface Design and Development	Grinfeder	CIM	3
2	Information Graphics and Visualization	Cairo/Seelig	CIM	3
2	Game Development	Ewing	CIM	3
2	Web Applications	Tran	J	3
3	CoLab	Any	CIM	3
3	Elective	Any	CIM	3
3	Entrepreneurship+Design	Adjunct	All	3
3	3D for Graphics Storytelling	Cairo	CIM	3
4	Elective	Any	All	3
4	Usability Design and Research	Seelig/Dupagne	CIM/J	3
4	Capstone Project	Grinfeder	CIM	3
			Total	45

It is estimated that core faculty will teach one course per semester in the program.

Teaching

The primary teaching approach for this program will be small class seminars and labs similar to existing graduate courses in the School of Communication.

Adequacy of Present Curricular Structure

With the exception of Information Graphics and Visualization and 3D for Graphics Storytelling most of these courses will be new or adaptations of existing courses to fit the new curriculum.

Additions, Deletions, and Changes to Curricular Structure

We are proposing the addition of eleven new courses to the CIM curricular structure.

Faculty

Faculty Vitae

See Appendix N

Proposed Interactive Media Faculty

Kim Grinfeder, Associate Professor
Michelle Seelig, Associate Professor
Michel Dupagne, Professor
Alberto Cairo, Lecturer
Clay Ewing, Assistant Professor
Lien Tran, Lecturer

Need for Additional Faculty

As the program expands we have a need for additional lines to teach physical computing and an interaction designer, but the current faculty is adequate for launch of the graduate program.

Administration

Board of Advisers

The Board of Advisers of the School of Communication represents a collective resource of senior business people, professionals, industry leaders, and other supporters of the school, organized to assist in the development of the school and to help shape and realize its vision. We propose to establish a five-member board consisting of members of the South Florida tech community.

FINANCIAL INFORMATION

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FINANCIAL INFORMATION

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This technology-intensive program is our optimal class size was determined by the number of available stations in the classroom labs. The minimum class requirement at the School of Communication for a class to be financially justifiable is 6 students. In the event we get less than 6 students in the Interactive Media MFA program we will merge classes with the MFA in Cinema and include an Interactive component that both MFA programs can take.

Competitive Analysis

Differentiators

The Interactive Media program leverages the existing strengths at the School of Communication, working at the intersection of traditional mass media and emerging interactive technologies. An interdisciplinary program merging design, usability, communication science, computer science, and media management like this one could be unique in the current competitive landscape.

Aspirational Peers

AAU Institutions only.

MIT Media Lab

http://www.media.mit.edu/
2-year M.S. degree and 3 ½-year Ph.D.

- **Established:** 1985
- **Degrees offered:** Master of Science and Doctor of Philosophy in Media Arts and Sciences
- **Number admitted:** 61 master's and 80 Ph.D. students in 2011/12.
- **Degree requirements:** The MS requires five academic courses and a research thesis in a two-year residence. The doctoral program requires three semesters in residence beyond the MS plus a written and oral qualifying exam and an original research thesis. There is no core program. Course requirements depend on selection of three faculty program areas or interdependent modules.
- **Admission requirements:** Statement of objectives, online portfolio, official transcript and three recommendation letters. Interviews by invitation. GRE not required. Acceptance is heavily leveraged by compatibility with specific projects and faculty.
- **Number of applications received:** Approximately 600 to 700 applications for 30 spots.
- **Mission:** The Media Lab is focusing on "human adaptability" projects to create a better future. Initiatives range from treating diseases such as Alzheimer's and depression, to sociable robots that can monitor the health of children or the elderly, to smart prostheses that can mimic or exceed the capabilities of biological limbs.

- **Funding:** The Media Lab is almost 100% corporate-funded. Project specific funds come from DARPA, NIH and NSF. Students receive full tuition, medical insurance and a stipend, and spend most of their time doing research. Visit http://www.media.mit.edu/sponsorship/sponsor-list for a list of current corporate sponsors.
- ***Differentiators:*** The Media Lab differentiates itself as a community of inventors with diverse backgrounds from the arts to computer science, working in a cross-disciplinary, atelier environment.

NYU Tisch Interactive Telecommunications Program (ITP)

http://itp.nyu.edu/itp/
2-year M.P.S. degree

- **Established:** 1971 as Alternate Media Center; 1983 as ITP.
- **Degrees offered:** Master of Professional Studies (M.P.S.)
- **Degree requirements:** Two years of full-time study requiring 60 graduate credits in foundation courses (16 credits), workshops and seminars (40 credits) and a thesis (4 credits).
- **Admission requirements:** Personal statement, resume, two letters of recommendation, official transcript, optional creative portfolio, and optional group interview. GRE not required.
- **Acceptance rate:** About one in three applicants are accepted.
- **Mission:** An outgrowth of the Alternate Media Center, ITP aims to be a pioneer of socially responsive, user-centric, interactive new media applications. The founding vision of Red Burns, Founder, former Chair and new Chief Collaborations Officer of the Interactive Telecommunications Program, has shifted somewhat to emphasize public spaces and computer interfaces.
- **Where graduates work:** Diverse employment is the operative word. Some start businesses, some become successful artists, others work for large or small companies and agencies in non-profit, education, advertising and media sectors. Follow this link to a list of alumni job titles: http://itp.nyu.edu/sigs/program/itp-alumni/
- ***Differentiators*:** Venerable art school and access to New York as well as university resources.

Carnegie Mellon Human Computer Interaction Institute

http://www.hcii.cmu.edu/
1.5- year Master of Human-Computer Interaction degree
2-year Master's in Interaction Design degree

- **Established:** Conceptually in 1967. First HCI course offered 1993. Fully programmed and staffed in 2000.
- **Degrees offered:** Master's and Ph.D.

- **Number admitted:** Class size varies year to year. Admits about 30% of applicants each year. In 2009, *Master's:* 42 in the Pittsburgh program; 14 in the Portugal program. *Ph.D.*: 35 to 45.
- **Degree requirements:** *Master's*: Six core courses, 5 electives and a capstone project in a 12-month program. *PhD:* 6 courses in 3 areas of specialization (human sciences, computer science, and design); 1 full and 4 half-semester required courses; a teaching requirement; and a dissertation of original research including proposal and defense.
- **Admission requirements:** *Master's:* Relevant undergraduate degree and strong academic record, transcript, three references and GRE. *PhD:* Statement of purpose, online portfolio, transcript, three letters of recommendation and GRE.
- **Number of applications received:** *Master's:* 123*; *Ph.D.*: 700 to 900.**
- **Mission:** Understand and create technology that harmonizes with and improves human capabilities, goals, and social environments through interdisciplinary research and education in design, computer science, and behavioral and social sciences.
- **Where graduates work:** Careers have included usability specialists, interface specialists, user interface designers, research programmers, project directors and usability engineers for EBay, Google, IBM, Microsoft, Motorola, Nokia, Sandia, and TiVo among others.
- **Funding:** Corporations fund projects and research. Follow this link to a list of sponsors: http://www.hcii.cmu.edu/project-sponsors.
- ***Differentiators*:** Achievement record in human interaction; renowned researchers; access to university and partner resources; 16-month master's abroad at the University of Madeira.

**Deduced from the website, which states "Of the Fall 2009 applicant pool, we admitted approximately 33% of the students; some years have been higher."*
***Deduced from the website statement: "For the Fall 2002 term, we admitted just over 5% of the applicants and we estimate being even more selective in the years ahead."*

USC Interactive Media Division

http://interactive.usc.edu/
3-year M.F.A. and Ph.D.

- **Established:** 2002.
- **Degrees offered:** M.F.A. and Ph.D.
- **Number admitted:** *MFA*: 14-17; *PhD*: 14
- **Degree requirements:** Three-year program of 50 units (36 required and 14 elective), an internship and interactive project master's thesis.
- **Admission requirements:** Personal statement, writing samples, creative work sample, portfolio, three letters of recommendation, transcript, No GRE for MFA.
- **Mission:** To encourage interactive entertainment and grow professionals in the field.
- **Where graduates work:** The program bills itself as a staging ground for employment in the LA entertainment industries, whether or not students actually wind up there. This link leads to a list of alumni directors, producers, writers, cinematographers, animators, etc.:

http://cinema.usc.edu/alumni/notable.cfm.

- **Funding:** Electronic Arts funded Interactive Media Division projects when its gaming executive Bing Gordon assumed a faculty chair (2005 -). Robert Wood Johnson Foundation funded a Wellness Partners project (2009). Harvard's Center on the Developing Child and USC Zilkha Neurogenetic Institute funded gaming prototypes to understand brain development in children (2009). Follow this link for details on other project funders: http://interactive.usc.edu/research/projects/.
- ***Differentiators*:** "The only program of its kind tied to a cinematic arts school." Explores media convergence in L.A. setting with access to "artists, writers, directors, producers, sound designers, and cinematographers, many of whom are--or soon will be--entertainment industry leaders."

UCLA Digital Media Arts

http://dma.ucla.edu/
2-year MFA degree

- **Established:** 2000.
- **Degrees offered:** M.F.A.
- **Number admitted:** 7 to 12, with 20 enrolled at any given time.
- **Degree requirements:** A two-year program of 85 quarter-units culminating in a thesis. The second year includes 16 units of required electives and 24 core units whose studio emphasis guides students through the thesis process.
- **Admission requirements:** Portfolio, statement of purpose, official transcript, no recommendations, no GRE.
- **Number of applications received:** Undisclosed.
- **Mission:** Design Media Arts (DMA) lays a creative and intellectual foundation for students to make unique contributions to culture. The program positions itself at the eroding boundaries of design, media art, visual, mass communication and interactivity.
- **Where graduates work:** While the MFA candidates are overwhelmingly practicing artists, undergraduates work at media companies like NBC and the *New York Times*; as free-lancers or employees of advertising, architecture and design agencies; and as founders of their own design start-ups.
- ***Differentiators*:** A renowned international faculty, coupled with the diversity and multidisciplinary resources of an important public university and urban center.

Penn: Digital Media Design Program

http://cg.cis.upenn.edu/dmd_program.html
2-year Master of Science degrees

- **Established:** B.S. program founded 1998; M.S. program 2004.

- **Degrees offered:** B.S. (Digital Media and Design) and M.S. (Computer Graphics and Game Technology)
- **Number admitted:** 55, of which approximately 23 finished the program.
- **Degree requirements:** For *M.S.*: Two-year program of 9 interdisciplinary courses (computer science, art and design, product development, etc.) and a design project. Candidates with non-computer science backgrounds are referred to the Master of Computer and Information Technology program as a prerequisite. For *B.S.*: Four-year program of 40 credits in math, natural science, computer science/engineering, communications, fine arts and social science and humanities.
- **Admission requirements:** Strong computer science background and high GPA. Two recommendations, personal statement and GRE. Average GRE scores of accepted candidates: V 580; Q 780; AW 3.5.
- **Number of applications received:** *M.S.* program: 119 in 2010.
- **Mission:**
  - *Digital Media Design program:* To educate a new generation to work in computer graphics with integrated skill sets in computer science, art, communications, and collaboration.
  - *Computer Graphics and Game Technology program*: To prepare students for multi-disciplinary careers as designers, technical animators, technical directors, and game programmers.
- **Where graduates work:** DreamWorks Animation, Disney Animation, Electronic Arts, Zynga Games, Microsoft and Pixar are the largest employers.
- ***Differentiators*:** Computer science emphasis and renowned alumni in computer animation and gaming fields.

UF Art and Technology Program

http://digitalmedia.arts.ufl.edu/main.php
3-year MFA studio art degree

- **Established:** 2004.
- **Degrees offered:** M.F.A.
- **Number admitted:** 2 to 5. There are 8 to 10 students in the MFA program at a given time.
- **Degree requirements:** 60 credit hours in a three-year residency including creative thesis.
- **Admission requirements:** Letter of intent, artist's statement, portfolio of digital work, three letters of recommendation, resume, official transcript, no GRE.
- **Number of applications received:** About 20.
- **Mission:** The program recently changed its name from Digital Media Arts to Art and Technology. Its goal is to develop artists whose practice integrates artistic research, contemporary theory and practice, reaching beyond screen-based works to electronically mediated human experiences at the "cutting-edge" of science and commerce.

- **Where graduates work:** Students come mostly from the visual arts and enter a Ph.D. program or become college professors when they leave. Some are practicing artists, public school teachers, or involved in community and social programming.
- ***Differentiators*:** Transdisciplinary opportunities and program flexibility. Students can focus on digital arts or explore research and content areas outside the department in the university at large.

UNC Master of Arts in Technology and Communication (MATC) program

http://matc.jomc.unc.edu/
2 ½-year online MA program

- **Established:** In its first year, based on the school's 2003 Certificate in Technology program.
- **Degrees offered:** M.A. in Technology and Communication with three tracks in professional (journalism and PR), mass communication, and interdisciplinary health communication.
- **Number admitted:** 20 students.
- **Degree requirements:** Nine courses, final project and an exam.
- **Admission requirements:** Resume, written statement, official transcript, three letters of recommendation, interview and GRE.
- **Number of applications received:** 44.
- **Mission:** Enable journalists and communications professionals to upgrade their skills and knowledge to "deliver news and information in a wired world."
- **Where graduates work:** The underlying assumption is that mid-career professionals are already employed in PR, journalism or corporate communications. This proved true with the program's first matriculating students.
- **Funding:** A UNC general administration grant funded the program's two-year development.
- ***Differentiators:*** Online curriculum targets mid-career professionals who cannot break for school full time.

Ohio University School of Visual Communication

Interactive Multimedia program
http://www.viscom.ohiou.edu/grad_home.phtml
2 year MA degree

- **Established:** 1978 as a program; 1986 as a standalone school. New website under construction.
- **Degrees offered:** Two-year M.A. visual communication degree with specializations in photojournalism, commercial photography, informational graphics, interactive multimedia and visual media management.
- **Number admitted:** 20 students.

- **Degree requirements:** 45 credits, one or more internships, and a master's project. In 2012 the program will shift from its quarter system to a more traditional one.
- **Admission requirements:** Letter of intent, resume, three recommendations, portfolio, transcripts, no GRE.
- **Number of applications received:** 44.
- **Mission:** To equip students with the necessary skills to be successful in the media; to provide assistance and professional guidance to working photographers, editors, and other media professionals; and to promote scholarly and creative output.
- **Where graduates work:** The program boasts grads such as "Today" show host Matt Lauer, Emmy winners Paul Miller and Terrence McDonnell, Grammy Awards producer Ken Ehrlich, and *Chicago Tribune* columnist Clarence Page. Grad students have won eight Fulbrights in the past five years. Recent grads (past two years) are working at *Boston Globe, Concord Monitor*, NPR/PBS, Gannett Design Studios, *National Geographic,* Discovery, *Columbus Dispatch* and *People*, or have chosen freelancing or studio assistant paths. Undergraduate and graduate placement is over 80 percent according to university statistics. Currently "placement in a down economy" is VisCom's top priority.
- **Funding:** It can be assumed that the current project areas of survey research, food and cancer education, game research, and on-campus public broadcasting outlets have received corporate and government as well as school funds.
- **Differentiators:** The reputation, resources and alumni of Scripps College of Communication gives the VisCom program its lustre. A generous Knight Fellowship assures there is at least one professional from mainstream media in each year's class.

Appendix A: Dean Shepherd's letter of support and budgetary approval

UNIVERSITY OF MIAMI
SCHOOL of
COMMUNICATION

Office of the Dean
5100 Brunson Drive
Coral Gables, FL 33146-2105

Phone: 305-284-3420
Fax: 305-284-2454
www.comm.miami.edu

MEMORANDUM

August 28, 2012

TO: Richard Williamson
Chair, Faculty Senate

FROM: Gregory J. Shepherd
Dean, School of Communication

SUBJECT: Support for the MFA degree program in Interactive Media and approval of budget

I write to express my strong support for the plan to mount an MFA degree program in Interactive Media. The School recently created a department of Cinema and Interactive Media. We have a strong MFA program in cinema and need to build a similarly strong program in interactive media. We anticipate that this will be a fee-paying, revenue-enhancing program. We have recently hired faculty in this area who are eager to work with MFA students. As the proposed budget indicates, we anticipate that the new MFA will generate a profit for the school and I do not anticipate any significant budgetary costs associated with creating this program.

Appendix B: Memo from the Graduate Council Regarding the MFA in Interactive Media

UNIVERSITY OF MIAMI
GRADUATE SCHOOL

M. Brian Blake, Ph.D.
Vice Provost for Academic Affairs
& Dean of the Graduate School

Graduate School
P.O. Box 248125
Coral Gables, FL 33124-3220

Phone: 305-284-4154
Fax 305-284-5441
graduateschool@miami.edu

MEMORANDUM

DATE: September 5, 2012

TO: Richard Williamson
Chair, Faculty Senate

FROM: M. Brian Blake
Dean, The Graduate School

SUBJECT: New Degree Program – MFA in Interactive Media

At the August 16, 2012, meeting of the Graduate Council, the new Master's of Fine Arts degree in Interactive Media was approved, the second reading was waived.

cc: Gregory Shepherd, Dean
Jyotika Ramaprasad, Dean of Graduate Studies
Office of Planning, Institutional Research and Assessment

Appendix C: Memo from Dean Shepherd Regarding Full Faculty Vote at the School of Communication

UNIVERSITY OF MIAMI
SCHOOL of
COMMUNICATION

Office of the Dean
5100 Brunson Drive
Coral Gables, FL 33146-2105

Phone: 305-284-3420
Fax 305-284-2454
www.com.miami.edu

MEMORANDUM

September 6, 2012

TO: Richard Williamson, Chair
Faculty Senate

FROM: Gregory J. Shepherd, Dean
School of Communication

RE: MFA in Interactive Media Faculty Vote

Following is an excerpt from the March 23, 2012 minutes of the School of Communication's full faculty meeting relative to the approved faculty vote on the creation of an MFA in Interactive Media.

"The next order of business was to vote on the approval of Kim Grinfeder's proposal for the creation of a Master's in Fine Arts Program in Interactive Media in the School. Sig Splichal moved to accept the proposal. Ellen Fleysher seconded. A vote was taken by show of hands with 36 votes for, 0 against and 0 abstentions."

Appendix D: Minutes of the School of Communication's School Council's Meeting Regarding the MFA in Interactive Media

Wednesday, February 15, 2012 - 3:30 p.m.

"In new business, Kim Grinfeder provided a proposal to the School Council for the creation of a Master's in Fine Arts program in Interactive Media in the School of Communication. He gave an overview of the rationale for developing such a program and the costs involved and explained that if the program is approved, it could launch in the fall of 2013. Kim Grinfeder noted that the proposal had previously been approved by the Graduate Committee and to proceed, needed School Council endorsement. Following discussion of the detailed proposal, Robert Hosmon moved for the School Council's endorsement. Sig Splichal seconded the motion. The School Council voted unanimously to endorse the MFA proposal and add it to the agenda for discussion at the February 24, 2012 faculty meeting. "

Appendix E: Minutes of the School of Communication's Graduate Committee Meeting Regarding the MFA in Interactive Media

Wednesday, February 8, 2012 - 3:50 p.m.

Ramaprasad gave Grinfeder the floor to present his MFA in Interactive Media proposal. He stated that such a program is long overdue at the University of Miami and the timing is right because the proposal catches the second wave of change in technology (move to mobile, move away from keyboard, etc.). Bloom asked whether resources were sufficient to move the programs forward, a concern also expressed by Beckman via email (among other concerns). Grinfeder addressed these concerns. Hosmon moved to put the MFA in Interactive Media proposal to vote; Kontaxis seconded. The motion passed by unanimous vote by members present in the meeting and through one email vote sent to Ramaprasad. The proposal was approved by a majority vote. Grinfeder left the meeting after the vote.

Appendix F: Faculty Vitae