

Academic and Professional Landscaping Report on Digital and Social Media

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Executive Summary

In this report, we present our findings in our academic and professional landscaping study on digital and social media. Under the direction of Dr. Karen Schnakenberg, director of Carnegie Mellon University Master's in Professional Writing program (MAPW), we worked to compare and contrast how digital and social media are being taught in higher education, specifically in master's programs, with how they are being used in professional settings.

In October and November 2010, we conducted two phases of research. In our first phase, we reviewed the digital and social media offerings of 39 master's programs in 29 schools using data gathered from program websites and e-mail inquiries. In our second phase, we investigated current digital and social media trends and tools in the professional world. We also examined job prospects and differentiating skills necessary to pursue a career involving digital or social media using data compiled by the Pew Internet and American Life Project, the U.S. Bureau of Labor Statistics, and other academic and business sources.

The results of our research indicate that the amount of focus placed on digital and social media within most communications graduate programs (which include Communication, English, Journalism Departments as well as relevant technical schools) does not align with the rapidly growing uses of digital and social media in the communication field, especially in terms of social media.

Based on our research, we conclude the following:

- Digital media is studied in most (71.8 percent) of the academic programs we assessed, whereas only 25.6 percent of programs offer courses that study social media.
- Digital media courses are most frequently offered as elective courses (89.3 percent versus 42.9 percent required) and social media courses are almost always offered as electives (90 percent versus 30 percent required).
- Within programs that study digital media, 53.5 percent study web design, 60.7 percent study desktop publishing, and 64.2 percent study multimedia.
- Within programs that study social media, 50 percent focus on social media within public relations or marketing, 50 percent cover social networking in general and 30 percent are theory-based.
- Several programs have emerged as early adopters of digital and social media studies offering advanced or highly specialized degree programs and courses in digital and social media
- Social media is commonly used in communications, journalism, and online-specific careers
- Social media is far more prominent in the workplace than academic programs reflect.
- A high concentration on digital and social media in communications graduate programs will be necessary in order to provide students with the knowledge and skills needed to stay competitive in the communications job market.

Introduction

The following report presents and discusses our findings about the digital and social media landscape. The goal of this landscaping study was to compare and contrast how digital and social media are being taught in higher education, specifically graduate programs, with how they are being used in professional settings.

In this report we define digital media as any format or device that is used to create, transmit, or receive information via digital signals. Some examples of digital media include the Internet, mobile devices, video games, social networking, movies, and digital cable. We define social media as any tool or service that uses the Internet to facilitate conversations¹.

Research Methods

The research for this report was conducted in a two-pronged approach. For the first phase of our research, we compared the digital and social media offerings of the Carnegie Mellon MAPW program with the digital and social media offerings in 41 programs in 30 different schools. The list of competing schools was provided by Dr. Karen Schnakenberg. The schools we reviewed include:

Auburn University	Purdue University
Chatham University	Rensselaer University
Clemson University	School of Visual Arts
Eastern Michigan University	Southern Polytechnic State University
Emerson College	Texas Tech University
Florida State University	University of Central Florida
George Mason University	University of Florida
Iowa State University	University of Illinois
James Madison University	University of Massachusetts-Dartmouth
Miami University	University of Memphis
Michigan State University	University of Minnesota
Michigan Tech University	University of Washington
New Jersey Institute of Technology	Utah State University
North Carolina State University	Virginia Tech
Penn State University	West Virginia University

We eliminated three programs from two schools, Miami University and Rensselaer University, because Miami's program is suspended and Rensselaer provided no information about the program and course offerings. Therefore, we based our data on 39 programs in 29 schools, which included Carnegie Mellon's MAPW program.

¹ Defining Social Media: 2006-2010, Brian Solice, www.briansolice.com, 2010

We used school and program websites as well as e-mails to program directors and instructors to gather information about the digital and social media offerings at each school. We focused our attention on the following areas of interest:

- Program Name
- Digital Media Offering (Yes/No)
- Required Digital Media Courses
- Elective Digital Media Courses
- Digital Media Topics Covered
- Social Media Offering (Yes/No)
- Required Social Media Courses
- Elective Social Media Courses

The second phase of our research examined how digital and social media are being used in professional settings. To do this, we reviewed a variety of academic and business sources and case studies and extracted information about which professions primarily use digital and social media and how they use them. We also reviewed government occupational sources and career websites and obtained information about the current job outlook for positions that involved digital and social media.

The following report presents our findings about how graduate programs are teaching students about digital and social media and how well these programs are preparing students for careers that regularly use digital and social media tools. First, we will discuss the commonalities between the digital and social media offerings at Carnegie Mellon and its competing schools. Secondly, we will examine some interesting and recently developed programs that involve digital and social media components. Finally, we will explore current digital and social media trends and tools as they relate to the business world as well as the current job outlook and differentiating skills necessary to pursue a career involving a digital or social media component.

Digital and Social Media in Academia

Program Commonalities in Digital and Social Media

Among the 39 master's programs from 29 schools we used to analyze our data, consistencies throughout the programs began to arise in how schools set-up their programs, their curriculum topics, and their classroom approaches in digital and social media. Everything from common course offerings to requirements plays a role in illustrating how these programs view digital and social media. These commonalities illuminate an academic consensus, at least among these programs, of what is and is not important in the study of digital and social media.

Program Set-Up

Our research showed that most of the programs have similar set-ups in the basic structure, especially programs housed in English Departments. These programs, often location-based, generally have courses in digital media, but they often appear as electives rather than requirements. The programs as a whole also lack any significant development in social media.

Programs Overall

Of the 39 programs, only five programs were strictly web-based. The other 34 programs require master's students to take location-based courses. This fact shows that most schools have not deviated from the traditional avenues of delivering information.

Digital Media

Most of the programs did offer some courses in digital media. According to the information we received through course descriptions, website content, and additional e-mails, only 11 of the programs had no offerings in digital media. The remaining 28 programs, 71.8 percent of the programs looked at, incorporated digital media as a subject matter in at least one of their courses.

In programs that offer digital media options, digital media courses predominantly appear as electives rather than requirements. Twenty-five of the programs offer digital media classes as electives, which is 64 percent of the programs we looked at. Meaning that among the programs that do offer digital media, 89.3 percent have course offerings as electives

However, only 12 programs, 30.8 percent of the total programs studied, require students to take at least one digital media course, and nine of those programs have technical aspects, meaning they are either technical schools or have degrees centered on technical writing. Even among programs that offer digital media, 42.9 percent of the programs, less than half, have required digital media courses. Most of the programs that did require digital media also offered digital media as an elective, leaving only three programs that only had required digital media course(s).

The majority of programs offer less than five digital media courses. Among the programs studied, 33 programs offered less than five digital media courses, including those who offered nothing at all. Of the seven programs that offered five or more courses in digital media, only four programs offered more than

nine courses in digital media: School of Visual Arts, Michigan State University, Southern Polytechnic, and University of Washington. All four of these schools have programs focused specifically in digital media fields.

The majority of programs show that although digital media has a strong presence in these programs as electives, less than a third have digital media as a requirement.

Social Media

Most of the programs researched did not even offer social media, and even when it was offered, social media was often a part of a class rather than the main focus. Twenty-nine of the 39 programs did not have any courses that showed any integration of social media. Of the programs that did offer social media, none of the programs have more than two courses in digital media. Only three of the researched programs require social media, two programs at West Virginia University and one at Florida State University.

Course Topics

The course topics range wildly among digital and social media classes, but some consistencies arise in the general type of topics that are offered.

Digital Media

The digital media courses show the most variation in topics but also show more specialized courses than social media (quite possibly because for every four social media courses there are 37 digital media courses). However, most of the programs offer courses with common overarching topics. Most of these programs include courses with multimedia, desktop publishing, and web design. Website management and digital media theory also have a lesser, yet substantial presence in these programs.

The programs we researched show that multimedia is the topic most prevalent among the programs. Multimedia courses include the creation and analysis of animation, video, flash, graphics, gaming, and interactive elements. Eighteen programs, about 64.2 percent of the programs with digital media courses, have multimedia courses. However, the definition of multimedia is often left undefined in some course descriptions and is used to cover a large range of emerging media.

Desktop publishing has the second strongest presence in digital media courses. Desktop publishing includes the structuring of information and the creation of documents, typically using publishing programs, including document design courses. Seventeen programs, 60.7 percent of the programs with digital media courses, have courses in desktop publishing. This data probably represents the most straight forward information, and while more multimedia courses exist, multimedia consists of a much larger range of courses.

Over half of the programs that offer courses in digital media have web design courses. Fifteen programs, around 53.5 percent of the program that offer digital media courses, have courses in web design. Web design covers CSS, HTML, user interaction, web writing, content management, interface development, and hypertext. These programs also show variety in the degree of difficulty in the web design courses.

Fourteen programs offer courses on the theory behind digital media, and 12 programs have courses in website management. While these numbers do not represent a majority, they also have their own implications for the data. The theory in digital media courses suggest that digital media is becoming increasingly

academic. Studying digital media is not just about doing it, but the ideas behind how people should do it. The website management courses suggest that a higher percent of the programs study websites, yet the programs are further divided into different roles in working with websites.

These courses show that academia has taken the time to develop digital media courses by the diversity of content and the consistency with which topics appear across the programs.

Social Media

Among the 10 programs that did have social media courses, social networking came out as one of the most prevalent topics. Nine out of the 10 programs that offer social media have a course involving social networking, with five of those courses focused on a public relations or marketing approach. Other topics include blogs, wikis, podcasts, and theory in social media, but none of these courses has made a significant presence.

Because so few programs offer social media, it is hard to distinguish true relationships between the programs. The fact that social media is often buried in other courses makes this harder still. It can be inferred though that social media courses are not very developed in academia as of yet.

Class Approach

We found that almost all the programs include both production and analysis. The differences in the programs scale through the emphasis on production or analysis.

Digital Media

Twenty out of the 28 programs that have digital media courses offer both production and analysis. Three of the programs, offer just analysis, and five of them offer just production. This reflects a preference towards both understanding the theory as well as creating the product.

Social Media

Social media does show a preference for analysis. Five out of the 10 programs that offer social media do just analysis, and five of the 10 programs offer both, meaning 100 percent of the programs that offer digital media have a analysis focus. It should be noted perhaps that social media often appears as a part of a class rather than the entire class.

Atypical Programs in Digital and Social Media

Programs in our research pool that are atypical, dissimilar, or exemplary fall into three categories: online-only degrees, exceptional programs, and recently changed or established programs.

Online-Only Degrees

Our research found five online-only degrees:

- Chatham University: MA in Professional Writing
- University of Central Florida: MA in English, Technical Communication
- New Jersey Institute of Technology: MS in Professional and Technical Writing
- West Virginia University: MA in Integrated Marketing Communications
- Utah State University: MS in Technical Writing

All online programs except Utah State's offer specialized or advanced digital media courses; a higher percentage of the online programs integrate social media compared to our general research pool.

Digital Media in Online Programs

Digital media is advanced or highly specialized in four out of the five online degrees we researched, compared to our general research pool.

Chatham University's online MA in Professional Writing offers thorough digital media courses, but their program lacks the specialization that characterizes the other online degrees. Chatham's Web Content Concentration offers courses in wireframes, storyboards, full interface design, fundamentals of task analysis, scenario development, taxonomy creation, and findability design.

University of Central Florida's MA in English, Technical Communication features digital media that specializes in web content and program languages. Their course offerings include computer languages (such as HTML, XML, and JUXTA), computer programs (such as OmniPage Pro, Zotero, and MadCap Flare), and special interest studies (such as the Text Encoding Initiative).

The New Jersey Institute of Technology's MS in Professional and Technical Writing offers digital media courses covering DITA and DocBook, information architecture, and advanced text encoding studies such as (S)GML, (X)HTML, XML, and VoiceXML.

West Virginia University's MA in Integrated Marketing Communications specializes in digital media in marketing. West Virginia offers courses that teach mobile marketing trends, digital storytelling in marketing, visual information design, and producing electronic media.

Utah State University's MS in Technical Writing offers three digital media courses, two of which are recent additions. Utah State's website lists no information on their new courses and little information on their third digital media course. Of the five online programs we researched, only Utah State's program features lackluster digital media course offerings. However, only Utah State's program mentions hardware in addition to software in their general descriptions.

Social Media in Online Programs

Social media courses are featured in a higher percentage of online programs than in the total number of programs we researched. Whereas 71.8 percent of all programs we researched featured digital media and 25.6 percent covered social media, 80 percent of online programs had impressive digital media courses and 40 percent offered social media courses. It is possible that because online programs do not require dedicated faculty, integration of new technology can be addressed more easily.

Both the New Jersey Institute of Technology and West Virginia University offer social media courses. At the New Jersey Institute of Technology, the MS in Professional and Technical Writing program offers two social media classes: Theory and Practice of Social Media and Analyzing Social Networks. At West

Virginia's MA in Integrated Marketing Communications, there are two social media courses: Viral, Buzz & Word-of-Mouth and Emerging Media & the Market.

Chatham University, the University of Central Florida, and Utah State University do not list any social media offerings.

Exceptional Programs

The most impressive programs in our research pool are Michigan State University's MA in Telecommunication, Information Studies, and Media and the University of Washington's MS in Human Centered Research Design and Engineering. While both offer more "traditional" digital media courses, both pursue a more technical approach to their subject matter while rhetoric becomes a secondary course offering.

Michigan State University

Michigan State University's MA in Telecommunication, Information Studies, and Media program is noteworthy for their methods of integrating rhetoric and behavior studies into digital media studies, mainly in their Information, Policy, and Society track.

Michigan State's program covers advanced digital media with an emphasis in multimedia in game design. The Digital Media, Arts, and Technology and Serious Game Design tracks focus on what they call "Serious Games[, which] are games with a purpose beyond entertainment, including but not limited to games for learning, games for health, and games for policy and social change."

There are at least 16 electives in digital media at MSU; their classes span more traditional topics such as usability, research methods, and document design, to very modern topics such as 3-D animation and virtual reality.

The availability on rhetoric in Michigan State's program should not be understated: beside virtual reality classes and game design, they equally feature classes studying rhetoric, cognition, affect, engagement, learning, and persuasion in serious games.

University of Washington

University of Washington's MS in Human Centered Design and Engineering program is impressive and unique in its integration of rhetorical analysis into a predominantly engineering and digital media-based program. Their program is also notable as one of the most specialized and demanding programs in our research pool, having the most science and the least humanities in their program.

The program offers 12 digital media courses where topics generally fall into two categories: user experience and communication, and visual communication. User experience and communication topics include information design in hypermedia, audience analysis, task analysis, cognitive systems engineering, usability testing, and user-needs analysis. Visual communication topics include attention and perception, semiotics, depiction, information graphics, typography, and principles of page and screen design.

Recently Changed or Established

The University of Illinois at Urbana-Champaign

The University of Illinois at Urbana-Champaign's MS in Advertising program updated its program website, including course descriptions and offerings, in November 2010. The MS in Advertising's course curriculum was updated, but no new offerings in digital or social media were included. The website redesign does not seem emblematic of a program redesign, but rather aesthetic and factual updates.

Miami University

Miami University's Master of Technical and Scientific Communication program was suspended in November 2009. The notice on their website is as follows: "Important Note: 11/2009: We are sorry to report that, because of changing economic and other conditions in the university, the department and other university officials have agreed to suspend the MTSC program at this time. It is unlikely that the program will admit students again in the near future. If you have questions about the closure of the program, please don't hesitate to direct them to Dr. Kerry Powell, Chair, Department of English."

The School of Visual Arts

The School of Visual Arts' MFA in Interaction Design is a new program chaired by Liz Danzico, MAPW graduate. The program features 19 courses in digital media and no course offerings in social media.

Topics range from traditional areas such as information architecture, interaction design, and web design, to more specialized courses in service sector design, designing interactive technology for social responsibility, and cybernetics and systems design.

Digital and Social Media Gap in Academic Programs

As the previous sections demonstrate, the gap is rather large between academic offerings in digital media and social media in the masters' programs we researched. This gap is noticeable in program offerings and program curriculum.

Differences in Digital and Social Media Offerings

Twenty-eight programs, or 71.8 percent of the programs, offered digital media courses in desktop publishing, multimedia, theory, web design, or website development. Ten programs, or 25.6 percent of the programs, offered social media courses that covered blogs and wikis, general social networking, social networking for marketing and public relations, theory, or webcasts and podcasts.

Differences in Digital and Social Media Curriculum

The digital media and social media curricula both tended to consist of elective rather than required offerings. However, program curriculum in these two areas differed in terms of the emphasis on analysis or production in the courses and the range of course topics in the program.

Emphasis on Analysis or Production

There is a higher percent of production offerings in programs with digital media than in programs with social media. However, the analytic and production offerings in programs with digital media are balanced,

whereas, the course offerings in programs with social media focus more on analysis.

In terms of digital media, there seemed to be a balance between analysis and production in the courses of the programs we examined. Twenty-three programs, or 82.1 percent of the programs with digital media, offer courses with analysis, and 25 programs, or 89.3 percent of the programs with digital media, offer courses with production.

Conversely, in terms of social media, there was a heavier emphasis on analysis in the courses. All 10 programs with social media offer courses with analysis, while only half of those programs offer courses with production. Additionally, none of the programs with social media have any courses with only a production focus, whereas five programs with digital media offered production-oriented courses.

Range of Course Topics

In programs with digital media offerings, the five topic categories were covered more broadly than in programs with social media offerings. The broader topics in digital media is indicative of a more established presence in academia.

Out of the 28 programs that offered courses in digital media, 17 covered desktop publishing, 18 covered multimedia, 14 covered theory, 15 covered web design, and 12 covered website development. Website development was the only category covered by less than half of the programs offering digital media. Website development topics like Text Encoding Initiative and Search Engine Optimization are more specialized, however, which could be a reason they are not covered as much as other topics.

Out of the 10 programs with social media offerings, three covered blogs and wikis, five covered general social networking, five covered social networking for marketing and public relations, three covered theory, and two covered webcasts and podcasts. The only categories covered by at least half of the programs were general social networking and social networking for marketing and public relations. The numbers aren't that far apart, but because such a small number of programs offer social media, the percentages are larger. Still, social networking in general and for marketing and public relations are being covered in more programs than the other three categories combined. The social networking categories are covered in 10 programs, while the three remaining categories are covered in eight programs.

Professional Uses of Digital and Social Media

If digital media has gained popularity in the master's writing programs we have examined, in the professional world, it's ubiquitous. But where academic programs have been slow to adopt social media, the business sector has moved quickly to adopt these new tools.

The Digital Media Landscape

Digital media plays an increasing role in Americans' personal and professional lives, transforming everything from entertainment (especially filmmaking and video games) to disaster relief. In early 2010, when the American Red Cross solicited aid for earthquake victims in Haiti, it used a digital media campaign that included the ability to donate via SMS text-message.

Driven by the Internet's integral role, individuals' use of digital media is increasing, according to a recent report by digital consumer research firm comScore.¹ In 2009, about 86 percent of Internet users visited video websites like YouTube.com and Hulu.com each month, and ownership of smartphones and 3G phones rose by 6 percent and 11 percent, respectively. The core Internet search market grew 16 percent in 2009, led by search engines Google and Bing.

Professional Uses of Digital Media

In such a landscape, most occupations require at least some digital media skills. According to a 2008 report by the Pew Internet and American Life Project, nearly all U.S. workers use digital media in their jobs, especially the Internet, e-mail and mobile phones.² Of all employed workers, 96 percent use at least one of these tools, and 73 percent use all three (Pew iii).

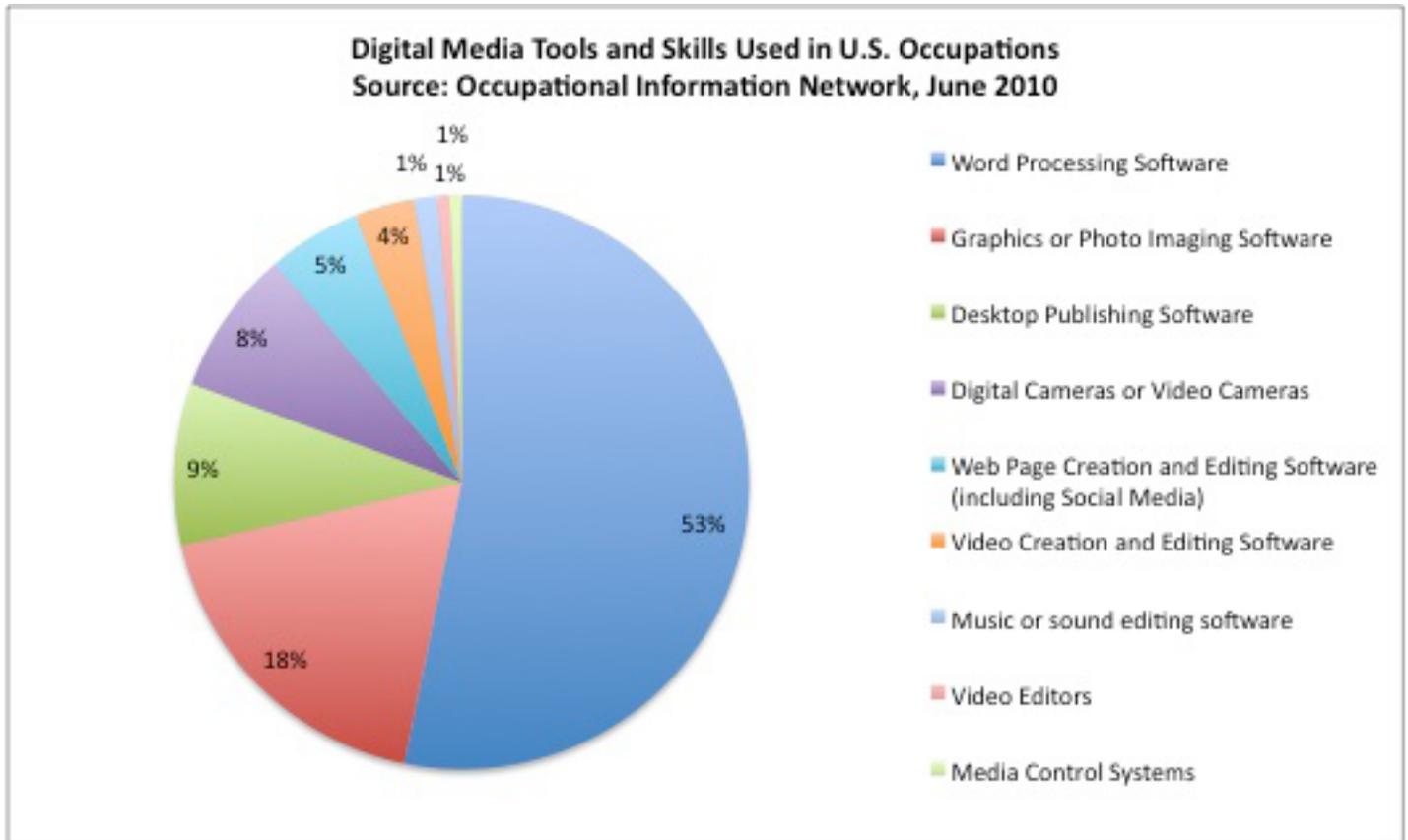
But many careers and positions demand more advanced digital media skills. Current business trends in digital media include a focus on search marketing, online video, online advertising, social networking and mobile media (comScore). Of employed Internet users, 23 percent now contribute "writing, files or other content" to their employers' websites, a percentage that rises quickly for workers who have college degrees or who earn \$75,000 or more (Pew 34).

A large number of careers that demand advanced digital media skills are listed in the U.S. Bureau of Labor Statistics' database of occupational descriptions. The database, called O*NET, groups technical skills and tools into categories, each with a corresponding list of occupations.³ The following chart illustrates the numbers of occupations using different digital media-related skills and tools:

1 "The 2009 U.S. Digital Year in Review," comScore, Feb. 2010.

2 "Networked Workers," Pew Internet & American Life Project, Sept. 2008, pg. ii.

3 O*NET Online, <http://online.onetcenter.org/>, June 2010.



Demand for Digital Media in Communications Careers

Many of the occupations most connected to digital media are communications-related, including technical writing, public relations managers and desktop publishing. Several communications positions using digital media are designated by O*NET as “bright outlook” jobs, fields which are “expected to grow rapidly in the next several years, [and] have large numbers of job openings, or are new and emerging occupations.”⁴ Bright outlook communications positions using digital media include:

- Public Relations Specialists
- Market Research Analysts
- Web Administrators
- Web Developers

Some communications careers should see increasing demand and changes due to the emerging “green economy,” according to O*NET, with environmentally-conscious enterprise “shaping the work and worker requirements needed for occupational performance, or generating new and emerging occupations.” These positions include:

⁴ O*NET Online, <http://online.onetcenter.org/>, June 2010.

- Marketing Managers
- Public Relations Specialists

All signs point toward increased opportunities for communications professionals with skills and experience in digital media; this is especially true for marketing professionals, since many companies are shifting marketing budgets from traditional channels to digital channels. While 66 percent of companies surveyed by MediaPost reported that they planned to increase their investments in digital marketing channels in 2010, 48 percent cited a lack of understanding about digital marketing as the biggest barrier to growth.⁵

The Social Media Landscape

The advent of social media tools such as blogs, wikis, online video and social networks has provided millions of consumers with outlets for expressing their thoughts and opinions through online conversations.⁶ Nearly four out of five Internet users visited social networking sites month in 2009 (comScore).

The fastest-growing social networking platforms are Facebook and Twitter (comScore). Facebook provides an environment for people to connect with friends, family and others by setting up a profile that allows them to share messages, images and video in real-time, while Twitter allows participants to publicly share messages of 140 characters or less (“tweets”) in real time. YouTube is the dominant social media site for watching and sharing online videos, securing 30 billion video views in March 2010; Hulu.com was ranked a distant second with 958 million views in the same month.⁷

This phenomenon has radically changed the way companies communicate with their audiences. Organizations can no longer simply push out marketing messages and wait for consumers to act; now they must join ongoing online conversations and build a rapport. To effectively motivate audiences to act, organizations must now speak to customers in an honest, authentic human voice.⁸

Professional Uses of Social Media

Companies are adopting social media tools at a rapid rate. A 2010 study from Burson-Marsteller found that 79 percent of the Fortune Global 100 companies -- the world’s top 100 companies by revenue -- are using at least one type of social media platform, be it Twitter, Facebook, YouTube, or corporate blogs.⁹ Furthermore, a University of Massachusetts study comparing corporate adoption of social media among the Inc. 500, a list of the fastest-growing private U.S. companies compiled annually by Inc. Magazine, concluded that “social media has penetrated parts of the business world at a tremendous speed.”¹⁰

Organizations can create and brand their own Twitter and Facebook accounts, which they use to post news and information and directly interact with people creating a personal, two-way dialogue between companies and their audiences. YouTube provides a venue for companies to share videos about the organization and read and respond to comments from viewers.

5 “Digital Shift in Marketing Budgets,” MediaPost, Feb. 2010.

6 “New Media, New Influencers and Implications for the Public Relations Profession,” Journal of New Communications Research, 2008.

7 “YouTube Dominates Online Video Views,” NYTimes.com, June 1, 2010.

8 “Jeff Jarvis on Tapping Social Media,” Businessweek.com, 2009.

9 “The Global Social Media Check-up,” Burson-Marsteller, 2010.

10 “Social Media in the Inc. 500: The First Longitudinal Study,” University of Massachusetts, 2008.

In terms of occupations using social media, the federal O*NET database suggests 39 likely occupations. The database currently groups social networking software under “Web page creation and editing software,” along with podcasting software, RSS, wiki software and Flickr photo-sharing website.¹¹

While customer service and human resources departments are using social media tools to resolve customer issues, provide customer support and recruit new employees,¹² our research shows that social media is being used primarily in marketing and public relations.

Demand for Social Media in Communications Careers

The growing social media landscape has a significant impact on careers in communications, including advertising and promotions managers, audio and video equipment technicians and desktop publishers. Additional related positions include: film and video editors; graphic designers; multi-media artists and animators; public relations managers; and technical writers (O*NET).

As with digital media in communications careers, social media turns up most often in marketing and public relations, where the changing landscape has given rise to a whole new marketing environment based on two-way dialogue and community.¹³

These professionals use social media to monitor conversations among consumers, engage directly with consumers, and send out news and information about an organization or its products, services and promotions.¹⁴

The “bright outlook” communications careers identified by O*NET with reference to digital media also use social media:

- Market Research Analysts
- Public Relations Specialists
- Web Administrators
- Web Developers

Overall, our research suggests career prospects in communications are improving in jobs that include digital and social media components. Professionals with training in digital and social media should be well positioned and in higher demand than those without, an advantage shared with graduate programs that provide such training.

11 Twitter appears only once in the O*NET database, under “Instant messaging software.” Twitter is the only such tool in the category, and mentioned in connection with only one profession: public relations. O*NET Online, <http://online.onetcenter.org/>, June 2010.

12 “Social media like Twitter change customer service,” USA Today, Nov. 18, 2009.

13 “New Media, New Influencers and Implications for the Public Relations Profession,” Journal of New Communications Research, 2008.

14 “The Global Social Media Check-up,” Burson-Marsteller, 2010, and “Marketers’ Current and Future Use of Social Media,” Extra Mile Audience Research, 2010.

Conclusion

In the past decade, technology has become increasingly vital to our lives. Almost every day something new makes everyday tasks easier, more convenient, more exciting. Digital and social media are part of this technological boom, and their growth has affected the skills necessary to survive in today's job market. The number of companies that use digital and social media has grown to the point that a company that does not use some sort of digital or social media is a rarity. The data shows that basic digital media skills have become a necessity, while the demand for advanced digital media skills is on the rise. In communications fields in particular, jobs description are asking for expertise in digital and social media.

Despite this growth in the need for digital and social media skills, communication programs (which include Communication, English, and Journalism Departments as well as relevant technical schools) have not adopted emerging media at the same rate a professionals in communications fields have, especially in terms of social media. This slow adoption could be for many reasons, ranging from the quick development of new technologies to the uncertain future of these new technologies to the bureaucracy associated with hiring new faculty and instituting new courses into the curriculum.

Only quarter of the programs we researched included social media at all. The largest number of offerings per program was three courses, although the majority of these programs offered only one social media course. Digital media was more prevalent in the programs we researched, but only slightly less than a third of the programs required even one digital media course.

Communications programs do have innovative courses that delve into more obscure or advanced topics in digital and social media, like writing for video games. While not all programs have integrated digital and social media, there are programs out there with a high concentration of courses in digital media, if not social media. While the disparity between digital and social media offerings in academia might be large, digital media does cover significantly more topics than social media, which could contribute to the gap.

We find that most programs will need to increase the number and quality of social media courses to meet the demand of up-and-coming professions, and while some programs are on par with their digital media courses, continued growth will be required in others to bring students up to a competitive level in the job market in communication fields.

Appendix A: School Profiles

Auburn University

Program Name

MA in Technical and Professional Communication
 Educational Media Minor
 Graduate Certificate in Technical Communication

Department

English

Program URL and Contact Information

<http://media.cla.auburn.edu/mtpc/>
 MTPC Coordinator: Dr. Isabelle Thompson / thompis@auburn.edu / 334-844-4339

Digital Media Offerings

Required:

- Document Design in Technical and Professional Communication: document design, InDesign, instruction in typography, page layout, and color use

Elective:

- Instructional Technology for Teaching and Learning: instructional technologies
- Instructional Design and Development: (various through semesters): XML, HTML, CSS
- Instructional and Information Technologies: no description
- Communications Department Elective: Studies in Technical and Professional Communication: Web design, web usability, information architecture

Analysis/Production

Both, emphasis on production

Social Media Offerings

Required:

None

Elective:

- Social Media and Public Relations: how social media impacts PR strategies

Analysis/Production

Both

Digital Media Course Descriptions

Course Name: Document Design in Technical and Professional Communication

Description: This course studies the concepts of and rationale for using document design in technical communication. Students learn techniques for designing and producing technical and professional documents, including instruction in typography, page layout, and color use. The goals of the course are to inform students about the principles of technical and professional communication and to help them gain experience working both individually and collaboratively in designing documents. This course also provides instruction in using software programs for document design.

Course Name: Instructional Technology for Teaching and Learning

Description: Introduction to the systematic application of instructional technologies in teaching and learning environments.

Course Name: Instructional Design and Development

Description: Introduction to the systematic application of instructional technologies in teaching and learning environments.

Course Name: Instructional and Information Technologies

Description: Evaluation, selection, and use of traditional and current technologies for instruction, information, and administration in learning environments.

Course Name: Studies in Technical and Professional Communication

Description: Extensive study of selected types of research and writing for special purposes and novel situations.

Social Media Course Descriptions

Course Name: Social Media and Public Relations

Description: Course examines how new social media impact PR strategies.

Chatham University

Program Name

MA in Professional Writing (Online Degree)
Web Content Development Concentration

Department

Continuing and Professional Studies

Program URL and Contact Information

<http://www.chatham.edu/ccps/profwriting/>
Program Director: William Lenz / lenz@chatham.edu / 412-365-1186

Digital Media Offerings

Required:

None

Elective:

- Writing for Digital Media (alternate name: Writing for the Internet): audience, user interface design, multimedia application development
- Web Design and Development I: multimedia tools for use in creating web-based products, integration of visuals, the animation of text and graphics, and digital video web-deployment
- Web Design and Development II: continuation of Web Design and Development I
- Principles of Information Architecture: information architecture, task analysis, scenario development, taxonomy creation, and findability design
- Visual and Interface Design: interactions and behaviors, wireframes and storyboards, full interface design

Analysis/Production

Production

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Writing for Digital Media

Description: This class will prepare students to enter these fields by teaching the strategies and skills needed to make compelling interactive experiences. Specifically, students will focus on developing their abilities to conceptualize, design, and create multimedia applications. Areas of focus will include: strategies for understanding and documenting audience needs and expectations; basics of effective user interface design; and typical process and artifacts involved with multimedia application development.

Course Name: Web Design and Development I

Description: This course will provide an introduction to the technical skills needed for designing on-line content and interactive multimedia. Current multimedia tools for use in creating web-based products will be taught with ample opportunity for practice. Students learn authoring tools and multimedia techniques while covering topics, including non-text-based communication, integration of visuals, the animation of text and graphics, and digital video web-deployment.

Course Name: Web Design and Development II

Description: A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.

Course Name: Writing for the Internet

Description: Alternate name for Writing for Digital Media class (sometimes used in course catalog, it has the same number designation as Writing for Digital Media)

Course Name: Principles of Information Architecture

Description: In this course students will learn about the evolution of the discipline and the underlying principles and fundamentals, including task analysis, scenario development, taxonomy creation, and findability design. We will build on these basics with practical and contemporary applications and tools.

Course Name: Visual and Interface Design

Description: Students will use audience analysis to help develop wireframes and storyboards, progress to full interface design, as well as gain an appreciation for the basic elements of design and how content is an integral part of design. Students will focus on interactions and behaviors.

Clemson University

Program Name

MA in Professional Communication
Specialization in Digital Publishing

Department

English

Program URL and Contact Information

<http://www.clemson.edu/caah/english/graduate/mapc/>

Program Director: Dr. Summer Taylor / ssmith@clemson.edu / 864-656-6689

Digital Media Offerings

Required:

None

Elective:

- Digital Publishing: plan, design, and develop digital publications for corporate intranets, onsite computer-based training (CBT) programs, distance education programs, and online documentation sets; videocasts, podcasts, and webinars
- Usability Testing: usability testing methodologies
- Global Communication: analysis of digital communication through various perspectives: management, marketing, anthropology, sociology, postcolonial theories, contrastive/comparative rhetoric, visual communication, and cultural usability
- Special Topics: Public Relations: general study of new media in PR

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Digital Publishing

Description: The major goal of this course is to provide students with readings and hands-on experiences which will enable them to plan, design, and develop digital publications for corporate intranets, onsite computer-based training (CBT) programs, distance education programs, and online documentation sets. The course is an intense hands-on survey of digital publishing technologies and theories. It meets in a computer classroom, and the major projects involve publishing videocasts, podcasts, webinars, and other interactive media. A basic grasp of Windows file management is helpful but not required.

Course Name: Usability Testing

Description: Research methodologies used in testing the usability of professional communication.

Course Name: Global Communication

Description: This course examines the forms and practices of intercultural professional communication.

tion and their impact on the contemporary global society. We will explore various concepts and issues of global communication as well as traditional, cultural, and critical approaches to global communication. We will read materials from a variety of disciplines, i.e., management, marketing, anthropology, sociology, postcolonial theories, contrastive/comparative rhetoric, visual communication, and cultural usability. Students will produce a seminar paper to analyze online or onsite communication practices in translocal or transnational corporations and to explore possible ways to improve existing approaches to global communication in individual corporations.

Course Name: Special Topics: Public Relations

Description: Public Relations in Professional Communications emphasizes the development and dissemination of the public image for high-profile businesses, non-profit organizations, government organizations, and academic settings. Living in a technologically advanced society, public relations necessitates not just professional skills and effective implementation new media communication technologies, but also requires an appreciation and understanding of technological and scientific advancements. This graduate level course encompasses the above topics as well as current technical communication issues such as technology transfer, informative marketing (also referred to as “technical marketing communications”), and ethics in technical communication. In this course, we will combine both the academic study and evaluations of major public relations events as well as model a public relations department for the production of such communications.

Eastern Michigan University

Program Name

MA Written Communication
Professional Writing concentration

Department

English

Program URL and Contact Information

http://www.emich.edu/english/writing/grad_profwriting.php
Cheryl Cassidy / cheryl.cassidy@emich.edu

Digital Media Offerings

None

Social Media Offerings

None

Emerson College

Program Name

MA Communication Management
Concentration in Public Relations and Stakeholder Communication

Department

Communication Studies

Program URL and Contact Information

<http://www.emerson.edu/academics/departments/communication-studies/graduate-degrees/communication-management>

Program Director: Linda Gallant / Linda_Gallant@emerson.edu

Digital Media Offerings

Required:

None

Elective:

- Web-based Communication: information architecture, usability testing, website functionality
- Global Communication: [from email] information hierarchy for web-based clients and international implications
- Emerging Communication Technologies (AKA Organizational and Political Culture in a Networked Society): media literacy to inform mediated content, effects and uses of information technology in the shaping of institutions; strategic use of media formats, applications, and technology in organizational communication.

Analysis/Production

Both, emphasis on analysis

Social Media Offerings

Required:

None

Elective:

- Public Affairs: Ethical, effective issue advocacy campaigns and campaigns to build identity, and enhance and protect reputation of individuals and organizations. [From email]: Has begun to look at use of Facebook by large corporations to build brand image.

Analysis/Production

Analysis

Digital Media Course Descriptions

Course Name: Web-based Communication

Description: Investigates the development and strategic management of web-based information using communication principles such as audience analysis and message construction strategies based on stakeholder analysis. Using systematic techniques to analyze the internal goals of the organization, stu-

dents learn to produce an information design structure that maximizes outcome. The course examines the internal workings of information architecture to develop recognizable patterns that improve communication effectiveness. Students also learn usability testing strategies to determine website functionality from a communication outcome perspective.

Course Name: Global Communication

Description: This course focuses on the management of communication with stakeholders in a world defined by globalization. Case studies, role-play workshops, and ethnographic inquiry are employed to enhance and update the student's knowledge and awareness of best-practices in contemporary business negotiations and transactions, public diplomacy initiatives, and cross-sector partnerships. Examples from small business to multinationals and from local nonprofits to global NGO's will be used.

Course Name: Emerging Communication Technologies (AKA Organizational and Political Culture in a Networked Society)

Description: This course surveys the political, social, and economic trends of the 21st century with an eye on the effects and uses of information technology in the shaping and reshaping of institutions. Students develop a media literacy that informs their own consumption of mediated content. Through a series of exercises and collaborative projects, they use this literacy to guide their strategic use of media formats, applications, and technology in developing every aspect of organizational communication—from the narrowest internal communication to the broadest public communication campaigns.

Social Media Course Descriptions

Course Name: Public Affairs

Description: Students gain the knowledge and skills necessary to identify, analyze, and communicate with internal and external stakeholder groups for the purpose of persuasion. Rhetorical strategies are developed for ethical, effective issue advocacy campaigns and campaigns to build identity, and enhance and protect reputation of individuals and organizations. New media developments, diverse and global stakeholder groups, and the 24/7 media environment will be addressed. Students design and produce at least one original communication campaign for a client in the private or public sector.

Emerson College

Program Name

MA Publishing and Writing

Department

Writing, Literature, and Publishing

Program URL and Contact Information

<http://www.emerson.edu/academics/departments/writing-literature-publishing/graduate-degrees/publishing-writing>

Program Director: Jeffrey Seglin / jeffrey_seglin@emerson.edu

Digital Media Offerings

None

Social Media Offerings

None

Florida State University

Program Name

MA in Rhetoric and Composition

Department

Department of English

Program URL and Contact Information

<http://www.english.fsu.edu/graduate/gradmain.htm>

Program Assistant: Janet Atwater / jatwater@fsu.edu

Digital Media Offerings

Required:

- Rhetoric: analysis of texts, events, and communication in digital media

Elective:

- Visual Rhetoric in the Digital Age: analysis of visual texts, composition of visual texts and multiple media
- The Digital Revolution, Web 2.0, And Convergence Culture: How We Read, Write, and Make Knowledge in the Age of the Internet: analysis of digital technologies, creation of some digital media

Analysis/Production

Both

Social Media Offerings

Required:

- Writing and Editing in Print and Online: creation of text for various formats, creation of digital portfolio

Elective:

- The Digital Revolution, Web 2.0, And Convergence Culture: How We Read, Write, and Make Knowledge in the Age of the Internet: social networking, blogs, wikis, hypertext
- Advanced Writing and Editing: wikis, blogs, digital portfolio

Analysis/Production

Both

Digital Media Course Descriptions

Course Name: The Digital Revolution, Web 2.0, And Convergence Culture: How We Read, Write, and Make Knowledge in the Age of the Internet

Description: Using several frames of reference, ENGL 6939-01 will explore two related questions. First, what difference does technology, especially *digital* technology, make in the ways that we read, the ways that we compose, and the ways that knowledge is made, sanctioned, and shared? Second, what do the changes related to digital technology mean for those of us who teach reading, literature, and composing? To answer these questions, we will consider briefly the relationship between literacies and technologies, marking the shift from manuscript culture to print culture; and from models of private

knowledge to mass consumption of knowledge abetted by mass media and the role of politics, economics, and ideology in each shift. Our focus, however, will be on the changes that are occurring now: What are they? What do we make of them? How are societies and public institutions reacting? As scholars and teachers, how do we respond to them?

Course Name: Rhetoric

Description: Rhetoric introduces students to key concepts and frameworks useful for analysis of texts, events, and communication. Rhetorical canons of invention, arrangement, delivery, style, and memory will be discussed in the context of different media (speech, print, digital, network).

Course Name: Visual Rhetoric in the Digital Age

Description: This course focuses on images as texts, including photographs, illustrations, paintings, monuments, and museums. It will help students to “read” the visual, providing a critical vocabulary and a set of conceptual frameworks. Students will learn both how to analyze visual texts, for surface and encoded meaning, and how to compose visual texts, utilizing multiple media.

Social Media Course Descriptions

Course Name: Writing and Editing in Print and Online

Description: Students in this course will compose written, visual, and / or auditory texts, using a variety of technologies, all in the context of Bolter and Grusin’s suggestion (in *Remediation*) that different media are always informing each other. Students will be expected to create texts (1) for the page (2) the screen, and (3) the network. Each text will also be edited in accord with its medium. In addition, at least one of these texts will be re-purposed for another medium. Students will conclude the course by creating a digital portfolio.

Course Name: Advanced Writing and Editing

Description: Students will compose a diversity of texts to be shared with a wide range of audiences, the academic as well as the public. Outcomes include the successful creation of (1) a print essay posted on a public class website; (2) a contribution to wikipedia; and (3) the creation of a blog that is linked to a set of other blogs, complemented by a report on the effects of the blog on others. In addition, students may be asked to conduct field studies as well as complete a portfolio.

George Mason University

Program Name

MA Professional Writing and Rhetoric
Graduate Certificate in Professional Writing and Rhetoric

Department

English

Program URL and Contact Information

<http://english.gmu.edu/concentrations/show/LA-MA-ENGL-PWR>
Program Manager: Jennifer Stone / jstone22@gmu.edu / 703.993.1180

Digital Media Offerings

Required:
None

Elective:

- Digital Rhetoric and Design: rhetorical theory in the design, analysis, and assessment of digital media

Analysis/Production

Analysis

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Digital Rhetoric and Design

Description: Provides an examination of major works on digital rhetoric and digital media framed by contemporary rhetorical theories that inform the emergent field of digital rhetoric. Course work includes projects that engage in the design, analysis, and assessment of digital media.

Iowa State University

Program Name

MA in Rhetoric, Composition, and Professional Communication

Department

English Department

Program URL and Contact Information

<http://engl.iastate.edu/programs/rhetoric/ma>

English Department Secretary: Teresea Smiley / englgrad@iastate.edu

Geoffrey Sauer / gsauer@iastate.edu

Digital Media Offerings

Required:

None

Elective:

- Multimedia Content Management: database design, interface development, usability testing, content management
- Production Process for Technical Documents: principles of desktop publishing, document design, digital prepress techniques
- Multimedia Design in Professional Communication: principles of multimedia design, applications used in multimedia development, interactive hypertext, digital audio, video editing
- Visual Communication in Professional Writing: designing text, document design, principles of visual communication, graphics, data displays, illustrations
- Technology in Business, Technical, and Professional Communication: examination of the role of technology in communication (both in workplace and academia)

Analysis/Production

Both

Social Media Offerings

None

Special Note: Iowa State University has a Studio for New Media.

Digital Media Course Descriptions

Course Name: Multimedia Content Management

Description: Strategies for developing and delivering multimodal content via digital media. Focus on the principles on database design, interface development, usability testing, and collaborative content management within technical communication settings

Course Name: Production Process for Technical Documents

Description: Review of the principles of desktop publishing as practiced in the field of technical communication. Focus on theories of print document design and project management, as well as digital prepress techniques.

Course Name: Multimedia Design in Professional Communication

Description: Rhetorical principles of information-based multimedia design. Practical understanding of computer applications used in multimedia development. Focus on theoretical and practical elements of producing multimedia training programs in both education and industry. Work with interactive hypertext, digital audio, and non-linear video editing.

Course Name: Visual Communication in Professional Writing

Description: Rhetorical theory and research in graphics, document design, and related principles of visual communication. Methods of designing texts, data displays, illustrations, and other visual elements in business and technical communication.

Course Name: Technology in Business, Technical, and Professional Communication

Description: Examination of the role of technology, especially computer technology, in communication practices within academic and workplace settings.

James Madison University

Program Name

MA in English

Department

English Department

Program URL and Contact Information

http://www.jmu.edu/english/grad_academics.html

Director of Graduate Program in English: Dr. Dabney Bankert / bankerda@jmu.edu

Digital Media Offerings

None

Social Media Offerings

None

Miami University

Program Name

MA Technical and Scientific Communication

*Suspended

Department

English

Program URL and Contact Information

<http://www.units.muohio.edu/mtsc/>

Department of English Chair: Dr. Kerry Powell / kerry.powell@muohio.edu

Special Note

Miami University's MA Technical and Scientific Communication program is suspended.

From their website:

“Important Note: 11/2009

We are sorry to report that, because of changing economic and other conditions in the university, the department and other university officials have agreed to suspend the MTSC program at this time. It is unlikely that the program will admit students again in the near future. If you have questions about the closure of the program, please don't hesitate to direct them to Dr. Kerry Powell, Chair, Department of English.”

Michigan State University

Program Name

MA in Telecommunication, Information Studies, and Media

Tracks: Digital Media; Arts and Technology; Serious Game Design; Information and Telecommunication Management; Information, Policy, and Society

(Note: “Serious Games are games with a purpose beyond entertainment, including but not limited to games for learning, games for health, and games for policy and social change.”)

Department

Telecommunication, Information Studies, and Media

Program URL and Contact Information

http://tism.msu.edu/modules.php?name=Pages&sp_id=532

Director of MA studies: Cliff Lampe / lampecli@msu.edu

Digital Media Offerings

Required:

None

Elective:

- Advanced Video Design and Production: no description
- Game Design: no description
- Advanced Interactive Media Design and Production: no description
- 3D Graphics and Simulation: no description
- eCommerce: no description
- Foundations of Serious Games: applications of serious game genres and simulations
- Serious Game Theories: cognition, affect, engagement, learning, and persuasion
- Serious Game Design and Development: design documentation, storyboarding, prototyping, playtesting, implementation, and summative research
- Foundations of Digital Media Arts and Technology: design concepts and skills unique to and common across video, audio, multimedia, and 3-D animation/virtual reality
- Design Research for Digital Media Arts and Technology: research methods, usability testing
- Design and Development of Media Projects: design of digital media arts projects in video, audio, multimedia, 3-D animation/virtual reality and other new media
- Digital Media Project: determined by student
- Special Topics in Digital Media Arts and Technology: “current topics at the cutting edge of digital media arts and technology”
- Economics of Media Markets and Strategies: economic forces and incentives underlying structure, conduct, and responses to new technologies in media markets
- Information Networks and Electronic Commerce: electronic commerce strategies and the telecommunications infrastructure
- Electronic Information and Entertainment Media Management

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Foundations of Serious Games

Description: Rationales, principles, processes, and pedagogies for serious game design. Applications of serious game genres and simulations. Funding and distribution.

Course Name: Serious Game Theories

Description: Theories and research on effects of serious games on cognition, affect, engagement, learning, and persuasion. Creating effective serious games.

Course Name: Serious Game Design and Development

Description: Design and development. Design documentation, storyboarding, prototyping, playtesting, implementation, and summative research. Management of interdisciplinary project teams.

Course Name: Foundations of Digital Media Arts and Technology

Description: Foundational technology and design concepts and skills unique to and common across video, audio, multimedia, and 3-D animation/virtual reality.

Course Name: Design Research for Digital Media Arts and Technology

Description: Research methods used by design teams for asking and answering questions related to digital media arts and technology, before, during, and after design of creative work. The design goals and the design prototype are tested to guide development and evaluate effectiveness.

Course Name: Design and Development of Media Projects

Description: Design of digital media arts projects in video, audio, multimedia, 3-D animation/virtual reality and other new media. Proposal development, team building, project management and workflow methods, production techniques and evaluative methods in the creation of media projects.

Course Name: Digital Media Project

Description: Digital media arts and technology individual student project.

Course Name: Special Topics in Digital Media Arts and Technology

Description: Current topics at the cutting edge of digital media arts and technology.

Course Name: Economics of Media Markets and Strategies

Description: Conceptual tools and analytical perspectives on economic forces and incentives underlying structure, conduct, and responses to new technologies in media markets.

Course Name: Information Networks and Electronic Commerce

Description: Design and management of electronic commerce strategies and the telecommunications infrastructure. Impact of electronic commerce on organizations and society.

Michigan State University

Program Name

MA in Digital Rhetoric and Professional Writing

Department

English

Program URL and Contact Information

<http://www.reg.msu.edu/academicprograms/ProgramDetail.asp?Program=5601>

Contact not available

Digital Media Offerings

Required:

None

Elective:

- Digital Rhetoric: electronic writing and publishing; rhetorical dynamics of computer-mediated writing spaces such as the Internet, World Wide Web, e-mail, and synchronous chat
- Multimedia Writing: digital short subjects; write, direct, critique, and produce motion-based digital compositions that include multiple media
- Information Design: information design theory, rhetoric of science and technology, research on computer-mediated writing

Analysis/Production

Production

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Digital Rhetoric

Description: Rhetorical, social, political, economic, and ethical dimensions of electronic writing and publishing. Rhetorical dynamics of computer-mediated writing spaces such as the Internet, World Wide Web, e-mail, and synchronous chat.

Course Name: Multimedia Writing

Description: Visual rhetoric and design theories applied to digital short subjects. Write, direct, critique, and produce motion-based digital compositions that include multiple media.

Course Name: Information Design

Description: Theory and research informing technical and professional writing practices. Workplace studies, usability research, information design theory, rhetoric of science and technology, research on computer-mediated writing.

Michigan Tech University

Program Name

MS in Rhetoric and Technical Communication

Department

Humanities

Program URL and Contact Information

http://www.hu.mtu.edu/hu_dept/graduate/rtc/rtc.php

Director of Graduate Studies: Michael Bowler / mjbowler@mtu.edu

Digital Media Offerings

Required:

- Technical Communication and Technology Studies: issues in technical communication, scientific communication, and technology studies; technical communication and technology in academic and non-academic settings

Elective:

- Computer Applications in Technical Communication: how industry and educational institutions employ computers to create, design, and distribute information; interactive computer-assisted instruction, computerized telecommunications, word processing, document design, and graphics
- Special Topics in New Media: interactive texts on the computer, visibility, shifting word-image ratio, and interactivity possible on computer screens

Analysis/Production

Analysis

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Technical Communication and Technology Studies

Description: This course considers key historical, pedagogical, and theoretical issues in technical communication, scientific communication, and technology studies. Considerable attention is paid to the practice and critique of technical communication and technology in academic and non-academic settings.

Course Name: Computer Applications in Technical Communication

Description: An examination of how industry and educational institutions employ computers to create, design, and distribute information. Emphasizes such topics as interactive computer-assisted instruction, computerized telecommunications, word processing, document design, and graphics.

Course Name: Special Topics in New Media

Description: A study of the design and evaluation of interactive texts on the computer, with emphasis on critical and theoretical issues raised by the visibility, shifting word-image ratio, and interactivity possible on computer screens

New Jersey Institute of Technology

Program Name

MS in Professional and Technical Writing (Online Degree)

Department

Humanities

Program URL and Contact Information

<http://msptc.njit.edu>

ptc@njit.edu

Digital Media Offerings

Required:

- Elements of Visual Design: theories of design, composition techniques, technologies in electronic and print publishing
- Advanced Online Design: design and creation of multimedia documents, navigation theory, online community building

Elective:

- Research Methods for Information Design: research methods to provide foundation for user-centered interaction design
- Theory and Practice of Text Encoding: no description
- Hypertext Design Studio: no description
- Content Management and Information Architecture: no description

Analysis/Production

Both

Social Media Offerings

Required:

None

Elective:

- Analyzing Social Networks: no description
- Theory and Practice of Social Media: no description

Analysis/Production

Both

Digital Media Course Descriptions

Course Name: Advanced Online Design

Description: This course will focus on online visual communication strategies and community building. The course will cover the design and creation of multimedia objects, usability heuristics, navigation theory, contemporary design practices and online community building. Students will be required to create media rich multidimensional online projects that encourage and facilitate interaction and team-building in the online environment.

Course Name: Elements Of Visual Design

Description: Provides an understanding of and competency in the visual presentation of information. Course integrates theories of design, techniques of composition, and technologies of electronic and print publishing. Modules include both design principles and hands-on practice in visual literacy, layout and design, and graphic tools. Design and updating of the MSPTC ePortfolio will be required in this seminar.

Course Name: Research Methods for Information Design

Description: Introduces user research methods such as contextual inquiry, ethnographic field studies, card sorting, affinity diagramming, and usability testing that provide the foundation for user-centered interaction design.

North Carolina State University

Program Name

MS in Technical Communication

Department

English

Program URL and Contact Information

<http://english.chass.ncsu.edu/graduate/ms/msprogram.php>

Director: Dr. Stan Dicks / sdicks@unity.ncsu.edu

Digital Media Offerings

Required:

- Advanced Technical Writing, Editing, and Document Design: document design, technical editing

Elective:

- Online Information Design and Evaluation: research methods to provide foundation for user-centered interaction design
- Usability Studies for Technical Communication: usability testing for instrumental and instructional texts
- Multimedia Technology: no description
- Computer Graphics: no description

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Advanced Technical Writing, Editing, and Document Design

Description: Advanced study of document design, technical editing and usability. For students planning careers as technical communicators.

Course Name: Online Information Design and Evaluation

Description: Concepts and practices related to multimedia information design, information architectures, human-computer interaction, and genre for complex websites.

Course Name: Usability Studies in Technical Communication

Description: Advanced study of usability inspection, inquiry, and testing theories and practices related to instrumental and instructive texts (i.e., computer-related, legal, medical, pharmaceutical, financial, etc.). Practical experience testing a variety of texts using several testing methods, including completion of a substantial, lab-based usability test. For students planning careers in technical communication, human factors, software design, and multimedia design.

North Carolina State University

Program Name

MA in Communication

Department

Communication

Program URL and Contact Information

<http://communication.chass.ncsu.edu/graduate/about.html>

Dr. Melissa Johnson / melissa_johnson@ncsu.edu

Digital Media Offerings

None

Social Media Offerings

Required:

None

Elective:

- Social Media and Public Relations: no description
- Gaming and Social Networks: mobile technologies, location-based activities, and social spaces; games as social environments

Analysis/Production

Analysis

Social Media Course Descriptions

Course Name: Gaming and Social Networks

Description: Exploration of inter-relations among mobile technologies (cell phones, PDAs), location-based activities, and playful/social spaces. Investigates: (1) the definition of basic gaming concepts (community, narrative, play, and space); (2) the history of games as social environments, with particular emphasis on multi-user domains (MUDs); and (3) the definition of games, which use the physical space as the game environment, such as pervasive games, location-based games, and hybrid reality games.

Discussion of inter-connections among games, education, and art. By permission of department.

Pennsylvania State University

Program Name

MA in English

Department

English Department

Program URL and Contact Information

<http://english.la.psu.edu/graduate/Masterofarts.htm>

Director of Graduate Studies: Mark Morrisson / englgradoffice@psu.edu / 814-863-3069

Digital Media Offerings

None

Social Media Offerings

None

Purdue University

Program Name

MA in Composition and Rhetoric

Department

English Department

Program URL and Contact Information

<http://www.digitalparlor.org/rhetcomp/>

Director of the Graduate Program in Rhetoric and Composition: Patricia Sullivan / Sullivanatpurdue@gmail.com

Digital Media Offerings

Required:

None

Elective:

- Computers and Writing: no description
- Advanced Professional Writing: document design, electronic publishing
- Rhetoric and Digital Publishing: opportunities for new media
- Digital Writing Studio: analysis of digital media
- Writing in Virtual Worlds: no description
- New Media: producing and analyzing new media
- Multimedia Writing: websites, interactive media, digital video, visual presentation, visual argument, user documentation

Analysis/Production

Both

Social Media Offerings

Required:

None

Elective:

- New Media Studio: no description

Analysis/Production

Both

Digital Media Course Descriptions

Course Name: Advanced Professional Writing

Description: This course is designed for undergraduates and graduates interested in professional writing and electronic publication. Students learn to produce documents and coordinate assorted publishing projects, study and apply principles of document design and electronic publication using assorted application software, and work as teams in a computer-networked environment.

Course Name: Rhetoric and Digital Publishing

Description: The omnipresence of new media poses new opportunities and challenges for publishing. This seminar focuses on the implications and possibilities of digital multimedia for the dissemination and archiving of knowledge, the problems multimedia poses for traditional disciplinary and discursive formations, and the means of production that are transforming literate practice in the humanities.

Course Name: New Media

Description: What is “new media?” English 680N will examine this question from a variety of perspectives, investigating forms and examples of new media as well as the theories that underlie and emerge from these forms. As Liest, Morrison, and Rasmussen observe, new media forces us to reflect on our own positions--in front of the screen, in front of the classroom, in both public and private spaces. Our positions converge at the heart of “new media” -- the network -- the nexus of threads that allow for the distribution of information and communication among individuals, groups, and institutions. Networks create the conditions of possibility for new social formations, interactions, and communications. Since new media, in accordance with network logics, does not inhabit one particular discipline, our course will be profoundly interdisciplinary, drawing from areas of study such as communication, law, art, political science, history, science, game theory, economics, international relations, and, of course, rhetoric. Moreover, we will not concentrate our work solely on academic texts; rather, we’ll also look at efforts from activists, technologists, programmers, and industry workers to theorize new media. We’ll also not look solely at print texts. Much of the work of the course will be online examining forms of new media, as well as reading, interacting, and creating online texts.

Course Name: Multimedia Writing

Description: This course helps students practice and understand the principles of multimedia design and implementation, with emphasis on writing in multimedia contexts. Students closely examine various multimedia products, doing oral and/or written analyses of a number of such pieces. Course readings focus on how different media communicate meaning, shape our reactions, and interact with one another. Students propose, plan, and develop a number of individual and/or group multimedia projects, including those for the Web, using a variety of technologies that support and enhance the presentation of content in multimedia forms.

Rensselaer Polytechnic Institute

Program Name

MS in Communication and Rhetoric

Department

Department Of Language Literature and Communication

Program URL and Contact Information

<http://www.llc.rpi.edu/pl/ms-communication-rhetoric-651>

Graduate Program Coordinator: June Deery / e-mail deeryj@rpi.edu / 518-276-6467

Digital Media Offerings

N/A, no data

Social Media Offerings

N/A, no data

Rensselaer Polytechnic Institute

Program Name

MS in Technical Communication

Department

Department Of Language Literature and Communication

Program URL and Contact Information

<http://www.llc.rpi.edu/pl/ms-technical-communication-649>

Graduate Program Coordinator: June Deery / e-mail deeryj@rpi.edu / 518-276-6467

Digital Media Offerings

N/A, no data

Social Media Offerings

N/A, no data

School of Visual Arts

Program Name

MFA in Interaction Design

Program URL and Contact Information

http://www.schoolofvisualarts.edu/grad/index.jsp?sid0=2&sid1=364&page_id=964#Fundamentals%20Studio

Chair: Liz Danzico / gradadmissions@sva.edu

Digital Media Offerings

- Communicating Design: design principles for web, mobile, and more
- Content Strategy: approaches to audio, video, and text, improving content, content management, style guides for the web.
- Design and the Service Experience: service sector design and innovation
- Design in Public Spaces: integrating technology interfaces with physical world
- Design Management: designing and examining for web designs and mobile design
- Designing for Good: designing interactive technology for social responsibility.
- Designing the Conversation
- Entrepreneurial Design: needs analysis, framing, prototyping, iteration and collaboration in an applied context
- Ethics and Professional Practices: design business practices, networking
- Fundamentals of Physical Computing: computational interaction
- Fundamentals Studio: fundamental interaction and communication design concepts
- Information Visualization: data visualization and information graphics
- Introduction to Cybernetics and the Foundations of Systems Design: cybernetics and systems design
- Interface Design Beyond the Screen: print and electronic document design
- Narrative and Interactivity: using narrative to frame and evaluate interactions
- Prototyping User Experiences: prototyping, research, and testing techniques in interaction design
- Research Methods: quantitative and qualitative design research, usability testing
- Selling Design: marketing and selling ideas
- Strategic Innovation in Product/Service Design: strategic decisions, creation of innovative parts and services

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Communicating Design

Description: Centuries' worth of design principles are based on predictable constraints of physical media, but how does the unpredictable nature of designing for the screen affect those principles? This course looks at the impact our creative choices in typography, color, and layout have on the way we interact with screen-based design on the web, mobile, and more. Emphasis is placed on advanced techniques in constructing meaningful, responsive and contextual layouts across media. Students research,

design, and test their creations to inform further iterations of their ideas.

Course Name: Content Strategy

Description: The Web has made everyone a publisher—and content is a critical component of user experience. This course will explore content development as an aspect of creating user experiences, and will pay particular attention to its relationship to information architecture. Students will examine different approaches to audio, video, and especially text, exploring ways that content can improve user experience (while looking out for legal and copyright pitfalls). We will also address the basics of content management and examine how to develop a large-scale editorial strategy that can be used to guide the creation of Web sites with millions of pages.

Course Name: Design and the Service Experience

Description: Throughout our lives we encounter services that span industries as varied as health care, banking, transportation, and retail. In fact, the service sector makes up nearly 70 percent of the U.S. economy, yet frustrating service experiences still abound. This course will examine the increasing need for the improvement of services and the development of service innovations. Working individually and in groups, students will address the challenges and opportunities in designing for the service sector through methods such as blueprinting, service enactment, and front- and back-stage processing. By employing these methods in combination with interaction design approaches, students will be able to gain an understanding of service ecologies and learn to choreograph human-centered, responsive, and memorable services.

Course Name: Design in Public Spaces

Description: Interfaces are embedded in nearly every aspect of our daily lives—from grocery shopping to banking to reading books. How can we integrate technology with the physical world to create better interfaces and more useful, playful and meaningful experiences? This course explores how interaction design fundamentals apply to physical spaces by surveying branded environments, retail stores, museums, urban settings and corporate venues with specific user goals and design considerations in mind.

Course Name: Design Management

Description: Once a product or service is designed, it needs to be managed. Whether as an entrepreneur, a design consultant, or an in-house designer, integrating the creative and business sides is rarely easy. This course will illustrate how to mediate between the two, empowering students to merge the design and business aspects effectively. We will examine design in its real-world, contemporary contexts (rather than silos such as product design, Web design, or mobile design) to realize its broad potential and reach.

Course Name: Designing for Good

Description: People talk a lot about good design but they don't talk much about its responsibilities. What are the social responsibilities of a designer, and how much impact can designers have? This project-based course encourages students to spread ideas through interactive technology. We will use New York City as a project background to explore how design can move socially responsible ideas forward.

Course Name: Designing the Conversation

Description: A fundamental shift is going on in design: control is passing from designers to design consumers, and it's changing the way we practice our craft. Now more than ever, design consumers are demanding control over the way design solutions look, behave, respond to their needs—even how design is delivered. The very patterns for consumption are evolving quickly and unpredictably. This course will examine this transformation in the role of designers. What is the nature of this change? Is it temporary or evolutionary? Can it be reconciled with traditional design values?

Course Name: Entrepreneurial Design

Description: Building on topics of design processes, this studio course will focus on needs analysis, framing, prototyping, iteration and collaboration in an applied context. Each student will choose a client, as well as engage in semester-long projects that bring together business goals, user needs and technology.

Course Name: Ethics and Professional Practices

Description: Creative business practices, ethical standards and effective networking are the cornerstones of this course. Through studio tours, students will observe examples of successful practice. Case studies will illustrate the importance of creating viable and responsible business models.

Course Name: Fundamentals of Physical Computing

Description: This course explores the fundamentals of extending computation beyond the glowing screen and into the physical world. Using a programmed single-chip computer, students will learn how to connect sensors, actuators and indicators to create devices, installations and environments that move computational interaction “outside the box.” Our focus is on people rather than on devices. We will consider how the human mind is affected by physicality in all environments. By making a hands-on exploration of reactive, expressive, interactive and embodied behaviors, students learn to observe users, understand affordances and move seamlessly from digital processes to tangible actions. Course work is done individually in weekly technique labs and in groups for longer creative assignments. *Note: No previous programming or electronics experience is required.*

Course Name: Fundamentals Studio

Description: Through a series of themes, this course will explore diverse disciplines, both historical and theoretical, to demonstrate how these themes shape contemporary practices in interaction design. Beginning with the core interactions of the body manifested in dance, language, music, art and architecture, continuing to the psychological and sociological ideas that have shaped how we interact with one another, through the inventions and technologies that transform the human condition, the course provides context and inspiration for the practicing designer. The fundamental interaction and communication design concepts, influential people and movements, and iconic projects and designs will be addressed. By the end of the semester, students will have acquired a vocabulary and toolkit for future design challenges.

Course Name: Information Visualization

Description: This course allows students to examine problems across space, time, and location by understanding the methods needed to develop a range of complex data visualizations and information graphics. By the end of the course, students will have the skills to conduct a rigorous examination of the choice of models and their place in the applied practice of interaction design.

Course Name: Interface Design Beyond the Screen

Description: Concepts and methods of layout, grid and typography form the foundation for constructing meaningful layouts and, in turn, effective communications. This course will explore how to create meaning through useful, usable, and desirable interfaces across the complex environments of different media at different scales. Understanding basic concepts through the development of a vernacular, students will be encouraged to re-interpret concepts for interactive environments.

Course Name: Introduction to Cybernetics and the Foundations of Systems Design

Description: This course presents frameworks for modeling interaction in terms of structure and context, augmenting traditional discussions of form and syntax. We will collaboratively address questions that are fundamental to design practice: What is a system, and what are the different types? How do we interact with systems, and what are the different types of interaction? Systems may act independently, interact with other systems, learn, and even converse. What do such systems have in common, and how can we describe them? How can we measure their limitations? The course explores the integral struc-

tures and coherent processes for the design of effective artifacts, communications, collaborations, and services. Students will apply frameworks for steering design processes and/or design outcomes based on their own interests, encompassing domains as broad as education, health and wellness, and sustainability.

Course Name: Narrative and Interactivity

Description: A well-told story transcends any particular medium, and at a very basic level, defines a satisfying interaction. The study of narrative offers designers a tool for exploring the user journey and understanding that journey from different perspectives. This course will explore aspects of narrative such as plot, setting, and point-of-view, and train students to use narrative as a way to frame and evaluate interactions.

Course Name: Prototyping User Experiences

Description: Interaction design concepts can be hard to describe. And the best way to both communicate and improve your design is to prototype it quickly and often. This course examines how to integrate lightweight prototyping activities, as well as some basic research and testing techniques, into every stage of the interaction design process. A range of methods will be covered, from paper prototyping to participatory design to bodystorming. Students will learn how to choose the appropriate method to suit different dimensions of a design problem at different stages in the process and the pitfalls of each approach. The course is highly collaborative with hands-on prototyping and testing. Working individually and in teams, students will create rapid exercises, with one prototype developed or iterated each week, with the goal of evolving toward more robust ways of expressing ideas in rich interactive form.

Course Name: Research Methods

Description: User-centered design begins, by definition, with an understanding of users. In this course, students will learn how to model interaction by conducting qualitative and quantitative research into users' behaviors, attitudes and expectations. By exploring ethnographic techniques, usability testing, log analysis, surveying, and other research methods, students will learn how to engage user feedback effectively at every stage of the design process. We will also address how to conduct secondary research into published literature and other sources that can inform thesis projects and beyond.

Course Name: Selling Design

Description: Realizing a great idea can be easy, but selling the idea can be a real challenge. This course will explore proven approaches to marketing and selling ideas. Students will learn how to be strategic in the market and crafty in their efficiency.

Course Name: Strategic Innovation in Product/Service Design

Description: The design of interactive products and services differs from other forms of design in important ways. Developing the context for successful user experiences requires designers to think more holistically about the business models for the products they create: how the value proposition to customers and users unfolds over time; what's being "sold" and where the costs of production and management occur; how to engage, complement, and benefit from other services that intersect with what is being offered. This course will help students in becoming more effective at understanding and describing the strategic decisions involved in the creation of interactive products and services, and to equip them with tools and methods for generating innovative options and making smart strategic choices.

Southern Polytechnic State

Program Name

MS in Information Design and Communication (online and location classes offered)

Department

Department of English, Technical, Communication, & Media Arts

Program URL and Contact Information

<http://www.spsu.edu/htc/home/Grad/pages/programs-ms.htm>

IDC Program Assistant: Donna McPherson / tcom@spsu.edu / 678-915-7202

Digital Media Offerings

Required:

None

Elective:

- Information Design: designing for various medias
- Writing Across Media: writing for the web, document design
- Information Graphics: info graphics, desktop publishing
- Applied Graphics I & II: graphics, digital illustrations
- Foundations of Multimedia: producing multimedia and theory
- Applied Multimedia: communication skills, multimedia software tools, production techniques
- Website Design: web development, HTML, CSS, site design, site management, SEO meta content, writing for websites, style guides for websites, content development
- Digital Rhetoric: argument in digital environments

Analysis/Production

Both

Social Media Offerings

None

Special Note: While this program has no specified program requirements, they seem to fulfill this role through class requirements.

Digital Media Course Descriptions

Course Name: Information Design

Description: Study of the main design elements in information products with an emphasis on rhetorical and theoretical underpinnings for design decisions. Students work on designing and redesigning products in various media. Should be taken as soon as possible after admission.

Course Name: Writing Across Media

Description: Course examines rhetorical, structural, and stylistic requirements of various communications media. Topics include writing for the Web, narrative design, and document engineering.

Course Name: Information Graphics

Description: Process and product of visual representation and display of information utilizing advanced techniques to produce infographics. Must have working knowledge of PhotoShop and Illustrator.

Course Name: Applied Graphics I & II

Description: Students develop competency in raster-based digital image editing for information design and technical communication. Students complete practical graphics projects using typography and digital illustrations.

Course Name: Foundations of Multimedia

Description: A study of the foundations of multimedia including theory, planning, scripting, storyboarding, and production. Students will submit research work on the theory of multimedia. This course is double-listed for both undergraduate and graduate students. Graduate students will be required to complete additional work that emphasizes theory and research over application.

Course Name: Applied Multimedia

Description: Course introduces and applies the literature, tools, and techniques of professional multimedia. Includes major online course elements. Students will choose a project in technical communication and apply the major phases of multimedia: definition, planning, execution, and closing. Topics of emphasis include communication skills, multimedia software tools, and project team dynamics.

Course Name: Website Design

Description: This course covers the basics of website development for information design and communication professionals. In IDC 6135, we'll build our web skills through a variety of weekly exercises on server basics, HTML, templates, CSS, site design and management, accessibility, meta content, SEO, and other issues. Graphics and color theory for websites will also be included in this course. Additionally, we'll look at some of the issues underlying complex sites (databases, servers) and the different professionals involved in enterprise development projects. Writing for websites comprises a significant portion of this course. We'll work on content development for sites and creating a style guide for contributing authors.

Course Name: Digital Rhetoric

Description: Course provides students with a foundation in rhetoric as a study of argument, persuasion, and convention. In particular, the course focuses on rhetorical practice within a digital environment. Students will develop strong digital literacy skills to help them analyze both audience and content of new media. They will explore how a medium creates assumptions for its users, and how these media interact with one another in a larger social context. Through case studies and applied projects, students will learn to integrate digital rhetoric into the practices of professional and technical communication.

Texas Tech University

Program Name

MA in Technical Communications

Department

Technical Communications

Program URL and Contact Information

<http://www.english.ttu.edu/tcr/MATC/default.asp>

Director of Technical Communication,:Dr. Thomas Barker / thomas.barker@ttu.edu

Digital Media Offerings

Required:

- Discourse and Technology: Computer networks and digitally mediated knowledge management on theoretical, practical, and pedagogical notions of discourse and discourse communities

Elective:

- Online Publishing: Design, writing, and testing of online documents

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Discourse and Technology

Description: Study of the effects of computer networks and digitally mediated knowledge management on theoretical, practical, and pedagogical notions of discourse and discourse communities.

Course Name: Online Publishing

Description: Design and testing of online documents to support instruction and information retrieval.

University of Central Florida

Program Name

MA in English, Technical Communication (Online degree)

Department

English

Program URL and Contact Information

<http://english.cah.ucf.edu/graduate/technical.php>

Brooks Pingston / bpingsto@mail.ucf.edu

Digital Media Offerings

Required:

- Production and Publication Methods: Production of technical documents including typography, visual rhetoric, layout and design, and planning and managing production projects; InDesign

Elective:

- Computer Documentation: Online help systems, particularly tutorials, procedures, and reference; HTML Help, MadCap Flare, Doc-to-Help, WinHelp, pdf Help
- Graphics in Technical Editing
- Digital Editing, Database, and Publication: Text Encoding Initiative (TEI), OmniPage Pro, HTML, XML, Zotero, JUXTA
- Writing and Hypertext

Analysis/Production

Production

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Production and Publication Methods

Description: ENC 6297 will cover all aspects of the production of technical documents including typography, visual rhetoric, layout and design, and planning and managing production projects. Students will work on real-world projects and will also research production and publication methods.

Course Name: Computer Documentation

Description: In addition to learning some of the specialized language of the software industry, students will study the theory and practices concerning online help systems, particularly tutorials, procedures, and reference. The major focus will be on writing and designing an online help system from a task-oriented point of view using one or more Help authoring tools (for example, HTML Help, MadCap Flare, Doc-to-Help, WinHelp, pdf Help). Another focus is on researching a current issue or trend in the computer industry concerning online help. Several practicing help system specialists will contribute to selected class discussions.

Course Name: Digital Editing, Database, and Publication

Description: Will Google overtake the digital world? What is the latest copyright law, and how does it apply to digital texts or media? Are you prepared for what's coming with electronic texts, editing, and publication? Ever wonder if learning about humanities computing practices now might give you a competitive "digital edge" in the future?

The course aims to explore the latest developments in electronic textual reproduction, or where "texts" and "technology" literally meet: the world of digital reproduction and editing, database information retrieval, and publication. We will learn about how scholars in the humanities are applying digital concepts and practices to their work, and specifically about the latest standards for digital reproduction, the Text Encoding Initiative (TEI), and other digital humanities initiatives. Students will also get "hands on" practice with a variety of processes for textual reproduction, including the use of high resolution scanning software like OmniPage Pro, and understanding how markup languages like HTML and XML and editing tools like allow us to code and edit texts on the computer screen. In addition, students will also experiment with computer-assisted textual analysis and web wrangler tools like Zotero and JUXTA, and critically assess large-scale academic and commercial database environments as well as current practices and trends in electronic publication. Students will participate in Web Course modules, online discussion, tutorial assignments in the Texts and Technology lab, a collaborative electronic text project, and a final online exam.

University of Illinois

Program Name

MS in Advertising

Department

Advertising

Program URL and Contact Information

<http://www.media.illinois.edu/programs/msa.html>

Department Head: Dr. William Berry / weberry@illinois.edu

Digital Media Offerings

None

Social Media Offerings

None

University of Illinois

Program Name

MS in Journalism

Department

Journalism

Program URL and Contact Information

<http://www.media.illinois.edu/programs/msj.html>

Department Head: Brian Johnson / bkj@illinois.edu

Digital Media Offerings

Required:

None

Elective:

- Graphics and Design: visual reporting and editing, information graphics research and design, online design

Analysis/Production

Production

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Graphics and Design

Description: Principles of visual reporting and editing. Introduction to newspaper page design, information graphics research and design, photojournalism, online design, and project planning.

University of Florida

Program Name

Master of Fine Arts in Studio Art

Department

Department of Art and Art History

Program URL and Contact Information

<http://www.arts.ufl.edu/programs/grad.aspx>

Katerie Gladdys / kgladdys@ufl.edu

Digital Media Offerings

None

Social Media Offerings

None

Special Note

This program mentions that they discuss these topics, but there is no clear cut curriculum division: data, interactivity, installation, networks, video, sound, text, animation, Internet, sensing devices, GPS, biotechnology, mapping, immersive spaces, and aesthetic computing.

University of Florida

Program Name

MA in Mass Communications

Department

Department of Communication and Journalism

Program URL and Contact Information

<http://www.jou.ufl.edu/grad/masters.asp>

Professor and Associate Dean for Graduate Studies: Debbie M. Treise / dtreise@jou.ufl.edu

Digital Media Offerings

None

Social Media Offerings

Required:

None

Elective:

- New Media and a Democratic Society: relationships between new media and government

Analysis/Production

Analysis

Social Media Course Descriptions

Course Name: New Media and a Democratic Society

Description: Relationships among new media, citizens, and governments; effects of Internet on democracy and globalization; role of journalism in democratic society.

University of Massachusetts—Dartmouth

Program Name

MA in Professional Writing

Department

English

Program URL and Contact Information

<http://www.umassd.edu/cas/english/programs/graduatepwp/>

Director of Graduate Programs: Chris Eisenhart / ceisenhart@umassd.edu

Digital Media Offerings

Required:

None

Elective:

- Web Authoring: usability testing for instrumental and instructional texts
- Visual Display, Formatting, and Desktop Publishing: visual design, designing in electronic medium

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Web Authoring

Description: Problems, issues, and rhetorical strategies in authoring effective Web pages and content. The primary focus of the course is in authoring hypertext and hypermedia documents for the World Wide Web. In the process, students grapple with a host of problems related to effective non-linear writing, efficient and user-friendly interface design, and inventive mixing of text, graphics, video, sound, animation, and navigational components to achieve the most dynamic messages possible within the many constraints of hardware and software.

Course Name: Visual Display, Formatting, and Desktop Publishing

Description: This course is designed to expose students to the principles of visual display in working documents so that, as editors and writers, they can work effectively with photographers and artists in the creation of finished texts. Students will explore the use of photos, headlines, graphics and visual elements as they can be used to enhance the meaning and effectiveness of written text. Students will learn to plan visual elements in the early stages of story, computer program or document conception. They will explore basic principles of visual design and experience the limitations and problems inherent in generating visual elements. Students will receive practical experience in dummied and layout, and will oversee several projects incorporating visual elements into written works. The purpose of the course is to train writers and editors to be sensitive and effective users of visuals designed primarily by others.

University of Memphis

Program Name

MA in English with Professional Writing concentration

Department

English

Program URL and Contact Information

<http://www.memphis.edu/gradcatalog/degreeprog/cas/engl.php>

<http://www.memphis.edu/english>

Sarah Ellis / smellis@memphis.edu / 901-678-1448

Digital Media Offerings

None

Social Media Offerings

None

University of Memphis

Program Name

MA in Journalism

Department

Journalism

Program URL and Contact Information

<http://www.memphis.edu/gradcatalog/degreeprog/ccfa/jour.php>

Contact not available

Digital Media Offerings

Required:

None

Elective:

- Web Publish I/html/CSS: creating and developing web sites, target audience analysis, usability
- Web Publish II/html/CSS: advanced web publishing, CSS, integrating multimedia elements
- Interactive News/Flash: Flash and its ActionScript, multimedia stories
- Multimedia Mass Communication: graphic design, multimedia editing

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Web Publish I/html/CSS

Description: Creation and development of journalism/mass media organization Web sites; incorporation of target audience analysis and Web usability; and application of information products' conceptualization and layout.

Course Name: Web Publish II/html/CSS

Description: Creation and development of journalism/mass media Web sites; focus on Web advanced skills of web publishing, using cascading style sheet and integrating multimedia elements of audio, video, slide show and pictures.

Course Name: Interactive News/Flash

Description: Creation and development of interactive news story for web and projectors using Flash and its ActionScript; integrating writing, reporting, designing and presenting skills in production of multimedia story.

Course Name: Multimedia Mass Communication

Description: Developing command of computer software in graphic design and multimedia editing by creating a CD or DVD to convey information appropriate for journalism/ mass media organizations.

University of Minnesota

Program Name

MA in Rhetoric and Scientific and Technical Communication

Department

English

Program URL and Contact Information

<http://writingstudies.umn.edu/grad/rstc.html>
writ@umn.edu

Digital Media Offerings

Required:

None

Elective:

- Information Design Theory and Practice I: audience analysis, media selection, message design, usability testing
- Information Design Theory and Practice II: media selection, message design, online design
- Editing and Style for Technical Documents: editing/style for visual design and online documents
- Visual Rhetoric: visual range and development

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: WRIT 5111 Information Design Theory and Practice I

Description: Audience analysis, media selection, message design through various theoretical perspectives, including cognitive/schema, social construction, feminist, intercultural theories. Usability testing, contextual inquiry as means to study effectiveness of messages.

Course Name: WRIT 5112 Information Design Theory and Practice II

Description: Political, economic, social, and technical aspects of media selection and message design. Media analyses, scripts, budgets, treatments, project-design plans, interactive screens. Online design project.

Course Name: WRIT 5561 Editing and Style for Technical Documents

Description: Proofreading, copyediting. Students use primarily electronic editing methods in assignments. Editor's responsibilities, relationship to writer, and roles within an organization. Style guides, technical editing, ethical choices, editing in a global setting. Editing/style for visual design and online documents.

Course Name: WRIT 5671 Visual Rhetoric

Description: Range/development of visuals, especially those in science/technology. Vocabulary for commenting on, criticizing, and creating visuals.

University of Minnesota

Program Name

MS in Scientific and Technical Communication

Department

English

Program URL and Contact Information

<http://writingstudies.umn.edu/grad/rstc.html>
writ@umn.edu

Digital Media Offerings

Required:

- Information Design Theory and Practice I: audience analysis, media selection, message design, usability testing
- Information Design Theory and Practice II: media selection, message design, online design
- Editing and Style for Technical Documents: editing/style for visual design and online documents
- Visual Rhetoric: visual range and development

Elective:

None

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: WRIT 5111 Information Design Theory and Practice I

Description: Audience analysis, media selection, message design through various theoretical perspectives, including cognitive/schema, social construction, feminist, intercultural theories. Usability testing, contextual inquiry as means to study effectiveness of messages.

Course Name: WRIT 5112 Information Design Theory and Practice II

Description: Political, economic, social, and technical aspects of media selection and message design. Media analyses, scripts, budgets, treatments, project-design plans, interactive screens. Online design project.

Course Name: WRIT 5561 Editing and Style for Technical Documents

Description: Proofreading, copyediting. Students use primarily electronic editing methods in assignments. Editor s responsibilities, relationship to writer, and roles within an organization. Style guides, technical editing, ethical choices, editing in a global setting. Editing/style for visual design and online documents.

Course Name: WRIT 5671 Visual Rhetoric

Description: Range/development of visuals, especially those in science/technology. Vocabulary for commenting on, criticizing, and creating visuals.

University of Washington

Program Name

MS in Human Centered Design and Engineering

Department

Human Centered Design and Engineering

Program URL and Contact Information

URL: <http://www.hcde.washington.edu/nav-prog-advise/pmp>

Department Chair: Dr. Jan Spyridakis / jansp@u.washington.edu / 206-221-0997

Digital Media Offerings

Required:

- Computer-Assisted Communication: cultural roles of communication technologies, information technologies in workplace and academia, audience analysis, task analysis, cognitive systems engineering
- International User Experiences and Communication: theory, research, and approaches for creating digital media for international audience
- Information Design: design principles for print and electronic documents, hypermedia

Elective:

- Visual Communication: visuals in electronic media, principles in page and screen design, information graphics, icons
- Usability Testing: human-computer interface, usability issues, usability testing
- User-Centered Design: design process, user research
- User-Centered Web Design: theory and practice of user-centered web development process
- Introduction to Content Management: building, managing, and using content management systems
- Web Design and Web Publishing: navigation, functional design, visual design, content development, Internet social issues
- Web Technologies: technical design issues, markup languages, scripting, data management technologies
- Interactive Multimedia: design and application
- Advanced Multimedia Design: design and application

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Computer-Assisted Communication

Description: Explores computer-assisted communication from three perspectives: (1) cultural roles of communication technologies; (2) relationships between communication and information including information technologies in the workplace, academe, and other settings; and (3) application to design including models for audience analysis, task analysis, and cognitive systems engineering. Prerequisite: graduate standing or permission of instructor.

Course Name: International User Experiences and Communication

Description: Theory, research, and approaches for creating digital media for international audiences. Topics include cultural schemata and contrastive rhetoric, content and text types and corresponding translation and localization strategies, market relevance and adaptation, international user research and usability, international policies and geopolitics, and cross-cultural business management and team work.

Course Name: Information Design

Description: Examination of the design principles and procedures underlying the creation of both print and electronic information presentations. Topics include: print vs. electronic media, designing for the page and screen, information topologies, and hypermedia. Seminar includes a design project.

Course Name: Visual Communication

Description: Use of visuals in print and electronic media. Topics include vision, attention and perception, semiotics, depiction, information graphics, icons, typography, and principles of page and screen design.

Course Name: Usability Testing

Description: Discusses the human-computer interface (HCI) as the communicative aspect of a computer system. Analyzes usability issues in HCI design, explores design-phase methods of predictability, and introduces evaluative methods of usability testing. Prerequisite: substantial experience with computers and graduate standing, or permission of instructor.

Course Name: User-Centered Design

Description: Explores the user-centered design paradigm from a broad perspective, emphasizing how user research and prototype assessment can be integrated into different phases of the design process. Students learn to think like a user-centered designer and carry out activities that are key to user-centered design. Offered: jointly with IND E 545.

Course Name: User-Centered Web Design

Description: Theory and practice of the user-centered web development process. Principles and processes for documenting and implementing various development stages, including requirements analysis, user needs analysis, information architecture, prototyping, mockups, and production.

Course Name: Introduction to Content Management

Description: Principles and practices of building, managing and using content management systems in the technical communication workplace. Examines both the intricacies of collaborative workflow technologies and the organizational contexts that surround them.

Course Name: HCDE 437 Web Design & Web Publishing

Description: Design principles and skills including navigation, functional design, visual design, and content development. Includes the ongoing process of Web publishing. Addresses societal issues pertaining to the Web and Internet. Students build a website and plan for ongoing Web publishing. Prerequisite: HCDE 310

Course Name: Web Technologies

Description: Students are introduced to technical design issues, markup languages, client-side and server-side scripting, and data management technologies. Students will be able to use these technologies at a core level of functionality, and be able to leverage this knowledge either to manage others using these technologies or to expand and extend their abilities with these technologies. Prerequisite: HCDE 310; HCDE 437.

Utah State University

Program Name

MS in Technical Writing (online only degree)

Department

English Department

Program URL and Contact Information

<http://techcomm.usu.edu/grad/index.htm>
Keith Grant-Davie / keith.grantdavie@usu.edu

Digital Media Offerings

Required:

None

Elective:

- Studies in Digital Media: production of digital media documents, theories on digital media
- Digital Media: Online Training and Education: no description
- Digital Media: Integrating Web Development Software: no description

Analysis/Production

Both

Social Media Offerings

None

Special Note: The Introduction to Public Relations course in the BS/BA in Journalism (Department of Journalism and Communication) brings in a guest lecturer to discuss social marketing.

Digital Media Course Descriptions

Course Name: Studies in Digital Media

Description: Production of advanced digital media documents, theories underlying such publications, plus related hardware and software. Topics vary.

Virginia Tech

Program Name

MA in Communication

Department

Department of Communication

Program URL and Contact Information

<http://www.comm.vt.edu/graduate/>

Director of Graduate Studies, Department of Communication: Dr. Beth M. Waggenpack / bwaggens@vt.edu

Digital Media Offerings

None

Social Media Offerings

None

Special Note: Communication Campaigns and Media Issues are two new courses that might teach social media, but they are in the process of being created.

Virginia Tech

Program Name

MA in English

Department

Department of English

Program URL and Contact Information

<http://www.english.vt.edu/graduate/MA/index.html>

Director of Graduate Studies in English: Joe Eska / eska@vt.edu

Digital Media Offerings

Required:

None

Elective:

- Digital Literacy : design and create hypertexts and hypermedia
- Introduction of Digital Humanities: create digital documents, theory, critical skills

Analysis/Production

Both

Social Media Offerings

None

Digital Media Course Descriptions

Course Name: Digital Literary Culture

Description: The interpretation of literary forms produced specifically for digital environments. Students will learn to analyze the design and rhetoric of hypertexts and hypermedia.

Course Name: Introduction to Digital Humanities

Description: This course introduces students to the history and critical theory necessary to understand the broad import of digital technology for English Studies and to the knowledge and skills required to critique and produce digital documents.

West Virginia University

Program Name

MA in Professional Writing and Editing

Department

Department of English

Program URL and Contact Information

http://pwe.wvu.edu/future_students/graduate_program
Professor Brian Ballentine, PWE Coordinator, 304-993-9704
brian.ballentine@mail.wvu.edu

Digital Media Offerings

None

Social Media Offerings

None

West Virginia University

Program Name

Digital Marketing Communications – Graduate Certificate Program
(operates on five 9-week terms)

Department

Department of Journalism

Program URL and Contact Information

<http://digital.wvu.edu/>
Chad Mezera / Chad.Mezera@mail.wvu.edu / 304-293-3505

Digital Media Offerings

Required:

- Introduction to Digital Media: evolution of digital media, ethics of digital media, uses of digital media
- Digital Production for Interactive Media: production of digital media, audio files, video files, content for marketing campaigns
- Digital Campaigns: visual narratives, digital storytelling, creation of digital campaigns
- Web Metrics and SEO: Search Engine Optimization (SEO)

Elective:

None

Analysis/Production

Both

Social Media Offerings

Required:

- Social Media + Marketing: marketing strategies through social media, analysis of popular platforms
- Web Metrics and SEO: Social Media Optimization (SMO)

Elective:

None

Analysis/Production

Analysis

Digital Media Course Descriptions

Course Name: Introduction to Digital Media Communication

Description: Provides an overview of digital media and the latest methods for collecting, creating and disseminating persuasive messages using these media. The course focuses on the evolution of traditional media to digital media, as well as the ways digital media are being used in entertainment, information gathering and community building. We will also discuss the unique marketing capabilities of the latest digital media platforms and the ethics of digital marketing.

Course Name: Digital Production for Interactive Media

Description: Provides a basic understanding of the technical and conceptual skills needed to produce

creative, engaging audio and video files for the web. Students will gain hands-on experience in integrating audio and video elements into interactive content for integrated marketing campaigns.

Course Name: Digital Campaigns

Description: Gives students an opportunity to demonstrate skilled storytelling techniques to modify their own values into aesthetic and emotive threads for audiences. The course provides a series of workshops in the craft's most effective conventions, as well as an introduction to constructing effective visual narratives. A series of exercises will lead to mastery of the essential elements of digital storytelling and will culminate in creating a digital campaign.

Course Name: Web Metrics + SEO

Description Examines how marketers can strategically gather online information to measure traffic, engagement and potential impact on ROI. Students also learn to gauge what is being said online about brands and how that information can be used to develop marketing messages. We will also explore the search engine optimization (SEO) and social media optimization (SMO) strategies and tactics marketers are using to build an online presence for their clients.

Social Media Course Descriptions

Course Name: Social Media + Marketing

Description: Arms students with the latest strategies for monitoring and engaging consumers in social media from a marketing perspective. Learning how to connect with target audiences and analyzing what consumers are saying about companies, brands, competitors and products will be emphasized as we explore popular platforms, such as Twitter, Facebook, MySpace and YouTube.

West Virginia University

Program Name

MA in Integrated Marketing Communications (exclusively online)
 Certificate in Integrated Marketing Communications (exclusively online)

Department

Department of Journalism

Program URL and Contact Information

<http://digital.wvu.edu/>
 Chad Mezera / Chad.Mezera@mail.wvu.edu / 304-293-3505

Digital Media Offerings

Required:
 None

Elective:

- Digital Storytelling: storytelling for digital audiences
- Mobile Marketing: digital and wireless marketing
- Direct/Interactive Creative Strategy: creative execution for electronic media, studies marketing strategies

Analysis/Production

Both

Social Media Offerings

Required:

- Emerging Media and the Market: use of emerging media, webcasts, podcasts, social marketing, RSS feeds, blogs, ethics and the targeting of youth and minorities

Elective:

- Social Marketing: commercial marketing principles, theories and techniques for multifaceted campaigns

Analysis/Production

Both

Digital Media Course Descriptions

Course Description: Digital Storytelling

Description: Over nine weeks, students will learn how to develop a marketing story that has a beginning, middle and end as well as an intriguing plot dramatic enough to effectively connect with a digital audience.

Course Name: Mobile Marketing

Description: This course will examine exciting new business developments in mobility, explore fundamental forces that shape the wireless industry, discuss keys to establishing a competitive advantage and examine emerging trends that may tell us where the industry is heading.

Course Name: Direct/Interactive Creative Strategy

Description: Studies the creative person's role in idea generation, creative strategy development, creative execution, integrating direct/interactive marketing into the overall marketing mix, research, database marketing and customer relationship management, media, strategic business planning, offer development, business-to-business marketing, selecting mailing lists, executing creative for magazines, newspapers, electronic media, co-ops and telemarketing, and production of various media.

Social Media Course Descriptions

Course Name: Emerging Media and the Market

Description: An inside look at how modern industry uses emerging media to enhance the IMC process. Webcasts, podcasts, social marketing, RSS feeds, blogs, ethics and the targeting of youth and minorities are discussed.

Course Name: Social Marketing

Description: This course examines the application of commercial marketing principles, theories and techniques for multifaceted campaigns designed to influence social change. Both non-profit and public sector organizations that utilize marketing for the public good in promotion of health, the environment and social issues will be studied.

Appendix B: Professional Research References

References

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