

## LEVEL II – A.A.S. in Graphic Design Technology

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### 1. Overview

Montana State University-Great Falls College of Technology (herein after “the College”) is requesting approval by the Montana Board of Regents to offer an Associate of Applied Science in Graphic Design Technology. The College is advancing this request as a Level II request – addition of a course of study.

The Great Falls and area communities and students have expressed significant interest in a Graphic Design Technician program. This interest has come from existing students, people currently working in the field and seeking a formal credential, area businesses, and prospective students encountered on recruitment trips across the region. When assessing the interest and current curricular offerings, the College recognized that much of the necessary coursework for a robust Graphic Design Technology program already existed between the campus’ Art offerings and Web Design program. It was clear that this program could be implemented with minimal resource investment, responding to the rising interest, and adding another facet to the College’s Business and Technology academic division.

### 2. Need

- a. *To what specific need is the institution responding in developing the proposed program?*

The national Occupational Supply Demand System identifies graphic design as a high demand profession, estimating that Montana will see 26% growth from 2004-2010.

However, graphic designers as defined by the Department of Labor are typically individuals who have earned bachelor’s degrees and have management as a career goal.

What these data do not show is that printing firms, advertising agencies, web development firms and sign producers need technicians to support graphic designers or to manage the final preparation of graphic files produced by customers. Additionally, many web developers are often tasked with the production of print materials or other non-web electronic visual materials because of their design and production skills. Local industry representatives have reported that new hires often lack the technical production skills and software expertise they need to complete these tasks.

The makeup of the College’s graphic design advisory board shows the breadth of the industry in this area alone. There are representatives of 12 different advertising agencies, printing businesses and web development firms. These firms are doing regional and national work, as well as serving local clients, because of the power of electronic file exchange and communication.

The College currently offers a variety of coursework in the business, arts and Web Design (computer graphics) content areas. Spurred by repeated and growing interest in a Graphic Design Technician program, the College began developing a curriculum based on current course offerings. It was discovered a program could be implemented with mostly existing courses and minimal new investment using existing faculty expertise or qualified adjunct faculty from industry. Considering this, and realizing the potential positive impact the addition of a Graphic Design Technician program would have on the College’s offerings, it has been determined the addition of this program would enhance overall offerings and allow the College to respond to student and industry demand.

- b. *How will students and any other affected constituencies be served by the proposed program?*

This degree will provide an option for students who are seeking a Graphic Design Technician program or wish to couple Graphic Design Technology with art coursework or a Web Design degree. Skills developed and credentials earned in Graphic Design Technology open numerous career options such as graphic designers, graphic design assistants, production artists, pre-press technicians, entrepreneurs, office executives or various support occupations

with general businesses. The degree also will provide courses that will be attractive for working professionals who wish to upgrade their technical graphic design and production skills and knowledge. Graphic design industry professionals have reported new hires lack the complete skill set necessary for success in a commercial design production environment.

*c. What is the anticipated demand for the program? How was this determined?*

The College anticipates enrollment of twelve to 20 students initially, gradually increasing by the second year. Additional students from other programs or working professionals are expected to enroll each semester in individual graphic design courses as electives or for lifelong learning purposes. Student demand information has come from two main sources. Roughly a third of the students in the Web Design program have reported they are enrolled in that program because some of the courses are similar to what they would find in a graphic design technology program. They have repeatedly requested a graphic design option so they can expand their knowledge beyond web design. Also, the College's recruiter has reported numerous and repeated requests for a graphic design program. She reported during the annual college tour of high schools, more than 30 prospective students inquired about graphic design programming at the College.

**3. Institutional and System Fit**

*a. What is the connection between the proposed program and existing programs at the institution?*

One of the advantages of this proposed degree is it makes use of a number of courses in the Art, Business and Computer Information Technology disciplines that already are offered in other degree programs. Thus, the program can be implemented without a significant new investment and utilize existing faculty expertise in areas critical to this field. Therefore the College views the addition of this program as an excellent way to maximize existing offerings while connecting internal and external expertise to provide a demanded program with minimal impact on the institution's budget.

*b. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.*

The current graphic design course, offered in the Web Design program, has been changed from four credits to three credits. It will be renumbered from CIT 217 to GRD 217. GRD 217 is required in both Web Design and the proposed Graphic Design Technology degree. Some of the subject matter that was covered briefly in CIT 217 has been expanded in the Typography and Publishing and Pre-Press courses. Web Design students will get a more appropriate, general introduction to graphic design, while Graphic Design Technology students will learn the expanded information in these topics that a single course cannot offer. It is also anticipated some minor modifications to existing courses may occur as faculty identify content gaps or areas for programmatic refinement that will take advantage of the new connection between disciplines.

*c. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).*

The Web Design Associate of Applied Science degree is the most closely related program. Web Design includes some graphic design elements, but does not cover the technical and design aspects of non-web-related design, such as preparing and producing print artwork. In addition, this program will have a significant art focus to foster the creative skills needed of individuals in the Graphic Design industry. The proposed degree may draw some students from the Web Design program, but that program has been one of the fastest growing in the computer department and will not likely be adversely impacted by this new offering. Enrollment in Web Design has tripled in the past several years.

*d. How does the proposed program serve to advance the strategic goals of the institution?*

This program fits with the College's goals of workforce development and providing students with an affordable education, leading to a rewarding job. This program offering takes the education responsibility out of the employer's

hands and places it in the College's hands where it belongs. Entry-level employees who already have these skills can spend less time learning on the job and can move up the career ladder faster. Additionally, this program can serve the needs of employees who need to upgrade and expand their graphic production skills.

The business management courses proposed speak specifically to the College's goal to promote entrepreneurship as a core ability. The program also should appeal to employees who have worked their way into the graphic design field without a formal credential. This is in line with the College's goal to "increase participation and credential attainment" by adult learners.

- e. *Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.*

There are varying approaches to graphic design education in the state's college and universities. Flathead Valley Community College's certificate program has five graphic design courses supplemented by one art course and two web design courses. MSU-Northern has both associate of applied science and bachelor's degrees in graphic design. MSU-Bozeman has graphic design as an option of its bachelor's degree in art. The University of Montana has a bachelor's degree in art with a graphic design program that covers not only print and web site production, but also motion courses, such as video, sound and animation production.

This program would provide students with another alternative leading to an entry-level position in the printing and advertising business or to a credential for those already working in the field. In fact, the inclusion of courses such as illustration and packaging, pre-press techniques, and typography are designed to provide a unique experience for future technicians in the Graphic Design industry. During the following two years, the College will work with other Montana University System institutions to establish, where applicable, articulation agreements or course transfer equivalencies to ensure students who wish to seek a bachelor's degree in Graphic Design have that option.

The program most closely resembling the College's proposal is MSU-Northern's associate of applied science program. However, that program – similar to UM and MSU-Bozeman – has a heavier emphasis on art. At MSUN, 15 of the required credits are art courses and 15 are graphic design courses. The remaining 28 credits are instructor-approved electives.

The College proposes a different approach. Of the required courses, 22 credits are graphic design with a heavy emphasis on production techniques, nine are art and nine are business (Introduction to Business, Advertising and Marketing). This latter stems from the realization that graphic designers need to understand the advertising and marketing principles that drive their profession, as well as an acknowledgement that some graduates will be self-employed and will need a grounding in business management. Local industry representatives report the need to employ freelance designers because of the boom or bust nature of the business. (Nationally, 26% of graphic designers are self-employed according to the Department of Labor's Occupational Supply Demand System. Caution is urged here as graphic designers as referred to here may be mainly from bachelor degree programs, although some designers likely work their way up to graphic designers through experience.)

One of the innovations of this program is the inclusion of two "tracks" in the electives. Students who are planning to use their skills immediately will be advised to concentrate their electives on the computer courses (Web Page Construction, Web Page Programming, Database Management, and New Web Technologies – 12 credits). Those who wish to transfer to the more artistic focused bachelor degree programs will be advised to enroll in the art courses (Color Theory, 2D Fundamentals and 3D Fundamentals – 11 credits).

It needs to be stressed here in summary, that the proposed program differs significantly from existing programs in Montana in that it is a technician preparation program versus the fine arts emphasis and approach of the others programs in the MUS.

#### 4. Program Details

- a. *Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.*

The programs' curriculum is included in Appendix A.

- b. *Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.*

Upon approval from the Board of Regents, existing faculty will begin development of the Introduction to Graphic Design and Technical Writing courses – the only new courses that will be necessary for Fall Semester 2008. Existing faculty also will develop the Color Theory elective course. Registration will be ongoing through the summer beginning May 12. The College is expecting 12-15 students to enroll in the fall for the program.

During Fall Semester, existing faculty will develop the Introduction to Photography and Typography courses to be delivered in spring 2009. The 2-D Fundamentals elective course also will be developed. Enrollment is expected to continue with 12-15 students formally enrolled in the program, supplemented by 2-5 students from other programs or from the community who wish to learn either Photography or Typography. This pattern is expected to continue as the more specific graphic design courses are added.

During spring and summer 2009, existing faculty will develop the remaining program courses: Digital Illustration & Packaging, Publishing and Pre-Press, Capstone Portfolio Internship courses and the 3D Fundamentals elective course. Again, the College is expecting 12-15 students to be formally enrolled in the program and 2-5 students from other programs or the community who are interested in that particular subject.

The first graduates are expected in spring 2010.

#### 5. Resources

- a. *Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.*

The College does not anticipate the need for additional faculty lines to facilitate the delivery of the program's coursework. Many of the courses proposed in this program are currently being offered by the College. As those courses are not typically oversubscribed, the additional students can be absorbed in those classes by existing faculty. New courses discrete to the program will be taught by professional graphic designers and artists who have indicated an interest in teaching as adjunct faculty for the College.

- b. *Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.*

Stated previously in this proposal, one of the motivating factors for the College to add a Graphic Design Technology program is the minimal new investment needed to get the program operational. The College does not anticipate any need for significant resources to ensure the success of the program; however it is likely that small investments in computer software, hardware, and minor equipment may be required. The College is creating an operating budget for the program for the upcoming Fiscal Year. It is anticipated student enrollment and the revenue accompanying it will suffice to off-set these expenditures.

## **6. Assessment**

The proposed program will be assessed using the College's institutional outcomes assessment practices. These include assessing standard performance metrics such as graduation/completion rates, student retention, student success by course, and program/course enrollments. Additionally, the program will undergo an internal program review as required by Board of Regent Policy and standard College practice. In addition, the program's student learning outcomes will be assessed to evaluate student success in obtaining the skills identified as goals of the program.

## **7. Process Leading to Submission**

In late spring of 2007, the College's Art and Web Design faculty began the exploration process into the development of a Graphic Design curriculum. Two options were developed: the first resembling the curriculum of a fine arts preparatory program similar to other programs in the state; and the second being a purely technical curriculum with minimal inclusion of the arts. The College's Curriculum Committee entertained a discussion on the program concept at its July 16, 2007 meeting. Shortly thereafter, the College put the program's development on hold due to the institution's focus on developing and implementing other programs viewed as a top priority.

Over the course of the remaining summer months, and throughout the fall 2007 semester, the continual and increasing interest in a Graphic Design program spurred the College to reinstate its work on the program's development. Joint meetings were held between all involved faculty to create a programmatic plan that might encompass both concepts of the two model curriculum. In mid semester of spring 2008, a draft curriculum was finalized and agreed upon internally. The program's advisory board, comprising art faculty from the high schools, professional graphic designers and artists, and representatives from advertising agencies and graphic design businesses, reviewed and made minor modifications at their April 17, 2008, meeting. They then approved the curriculum as proposed. The program was approved by the College's Curriculum Committee at its April 21, 2008, meeting.

## Appendix A

**Graphic Design  
Associate of Applied Science**
**Fall Semester**

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>
GRD	XXX*	Intro to Graphic Design Seminar	1
ART	101	Intro to Visual Art	3
ART	140	Drawing I	3
CIT	110	Intro to Computers	3
ENGL	124	Business and Professional Communication	3
COMM	135	Interpersonal Communication	3
			Subtotal 16

**Spring Semester**

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>
ART	114	Art Fundamentals	3
GRD	XXX*	Intro to Photography	4
GRD	XXX*	Typography	3
CIT	280	Desktop Publishing	3
BUS	106	Intro to Business	3
			Subtotal 16

**Fall Semester**

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>
GRD	217	Digital Graphic Design	3
GRD	XXX*	Digital Illustration & Packaging	3
MATH	104	Business Math	4
BUS	235	Marketing	3
		Elective Option	3-4
			Subtotal 16-17

**Spring Semester**

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>
GRD	XXX*	Publishing and Pre-Press	3
GRD	XXX*	Capstone Portfolio/Internship	3
CIT	231	Web Page Design	3
BUS	240	Advertising	3
		Elective Option	3-4
			Subtotal 15-16

**Total Program Credits: 63-65****Suggested Elective**

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>
GRD	XXX*	Color Theory	3
GRD	XXX*	2-D fundamentals	4
GRD	XXX*	3-D fundamentals	4
CIT	229	Web Page Construction	3
CIT	250	Web Page Programming	3
CIT	205	Database Management	3
CIT	XXX*	New Web Technologies	3

\* Indicates courses currently being or proposed for development.

## **Course Descriptions**

### **ART**

#### **ART 101 INTRODUCTION TO VISUAL ARTS**

Credits: 3 (F, S, SU)

This slide lecture course will introduce the students to forms of creative expression within visual arts, encouraging the students to more actively explore art verbally and in written form. The course material will focus on various issues of aesthetic expression rather than the historical development of the arts.

#### **ART 114 ART FUNDAMENTALS**

Credits: 3 Studio Course (S)

This course is an exploration of visual concepts through studio projects supplemented by lecture, discussion, and writing assignments. Art fundamentals will be investigated through drawing, color theory, and 3-dimensional processes.

#### **ART 140 DRAWING I**

Credits: 3 Studio Course (F, S)

This course introduces the fundamentals of drawing with consideration for line, form, space and perspective in rendering from 3-dimensional shapes, still life, landscape or the human form utilizing a variety of drawing materials. Emphasis will be placed on learning to see and render basic shapes, line quality, value, light and shadow, texture, mass, perspective and composition. Students will be encouraged to apply these skills to develop a personal style of drawing.

### **BUSINESS MANAGEMENT**

#### **BUS 106 INTRODUCTION TO BUSINESS**

Credits: 3 (F,S)

This course provides an overview of business from a broad perspective.

Topics covered include business ownership, free enterprise, management, human resources, marketing, finance, and accounting and data systems.

#### **BUS 235 MARKETING**

Credits: 3 (F,S)

Prerequisite: BUS 106

This course is designed to develop students' knowledge of marketing terminology and strategies. Subject areas covered include product development, the marketing concept, consumer behavior, research, pricing, channels of distribution, and promotion.

#### **BUS 240 ADVERTISING**

Credits: 3 (S)

Prerequisite: BUS 106

This course is designed to acquaint students with the fundamentals and terminology of advertising. Topics covered are the role of advertising, demographic segmentation, advertising psychology, advertising strategies, media strengths and weaknesses, layout and design, and careers in advertising. Class participants will develop their own advertisements using a variety of media.

## **COMPUTER INFORMATION TECHNOLOGY**

### **CIT 110 INTRODUCTION TO COMPUTERS**

Credits: 3 (F,S,SU)

Using lecture and lab experience, this course introduces the technology and terminology of computer systems and demonstrates how computers have impacted individuals and society. The course also provides instruction in the basics of operating systems and word processing, spreadsheet, and database soft ware.

### **CIT 229 WEB PAGE CONSTRUCTION**

Credits: 3 (F)

Prerequisites: CIT 110, CIT 120

This course focuses on the skills and concepts necessary to create effective web pages that include links, graphics, sound, tables, forms, and style sheets using common editors. Other utilities, such as image mapping and graphics editing soft ware, will also be examined and utilized.

### **CIT 231 WEB PAGE DESIGN**

Credits: 3 (F)

Prerequisites: CIT 120

This course continues to utilize the skills developed in CIT 229 to build Web pages, concentrating on high profile, advanced applications to develop their craft. Students will research the essentials of good Web design and will master the skills necessary to create their own styles and designs. Management of community client sites will be established and published.

### **CIT 250 WEB PAGE PROGRAMMING**

Credits: 3

Term: (S)

Prerequisites: CIT 229

Among Web page builders and programmers there is a necessity to build pages that include programming to allow interaction between the visitor and the site as well as connectivity to databases that serve the client and site owner. Web Page Programming will explore, examine, and evaluate currently used programming languages that allow Web interactivity and connectivity. Students will be required to design pages using various languages in ways that lead the mission of the site to its desired outcomes. The overall objective of the course will be an assembly of useful programming tools, processes and examples for the Web designer.

### **CIT 280 DESKTOP PUBLISHING**

Credits: 3 (S)

Prerequisite: CIT 110/111

Students learn to design, prepare, edit, and enhance publications by integrating text, graphics, spreadsheets, and charts that have been created in other soft ware programs. They build skills in using a desktop publishing soft ware program by creating publications such as newsletters, brochures, advertisements, programs, business cards, and stationery.

### **CIT XXX WEB TECHNOLOGIES**

Credits: 3

Acknowledging that technologies used in Web sites and Web applications are growing at a dizzying pace, this class will research, identify, implement and evaluate emerging technologies currently used in Web settings. Students will collaborate to investigate assigned technologies and discover others of their choice. All research will be collected and shared among class participants. Additional resources from the community, such as established Web Developer professionals, will enhance the learning experience. Students will have online server hosting available to test the technologies they study and to demonstrate their usefulness to the class.



Cutting edge technologies will also be supported through the World Organization of Webmasters, whose members constantly investigate, predict, recommend and support emerging Web tools and strategies.

## **COMMUNICATION**

### **COMM 135 INTERPERSONAL COMMUNICATION**

Credits: 3 (F,S,SU)

This course is designed to show some of the difficulties that language and understanding present us. It is concerned with better understanding of ourselves and our semantic and interpersonal environments. It attempts to develop meaningful, effective, and sensitive means of relating to others. Varied group experiences and oral presentations provide students the opportunity to explore current topics.

## **ENGLISH**

### **ENGL 124 BUSINESS AND PROFESSIONAL COMMUNICATION**

Credits: 3 (F,S, alternate SU)

Prerequisite: ENGL 119 with a grade of "C" or higher, qualifying admission assessment score, or instructor approval  
Students of this course develop the skills to generate clear, concise documents for the world of work. Emphasis is placed on format, tone, style, and organization of business letters, memos, and reports. Appropriate conventions for business style, punctuation, and handling of electronic communications are included. Course is taught by, computer-assisted instruction.

## **GRAPHIC DESIGN**

### **GRD XXX INTRODUCTION TO GRAPHIC DESIGN SEMINAR**

Credits: 1

This course is designed to introduce students to the career field of graphic design. Through exploratory activities focused on the different occupational fields graphic designers work in, students will gain an insight into the field of graphic design. Field trips to companies employing graphic designers will be incorporated into class.

### **GRD XXX TYPOGRAPHY**

Credits: 3

The eye is trained to appreciate the sensibilities and subtleties of typographic conventions such as kerning, leading, style, and practice. Students will gain a full understanding of vocabulary surrounding letter forms and the design of text. Symbolic communication inherent in different typefaces is also explored. Typographic relationships with other graphic elements are investigated through brochures, posters and other two-dimensional projects.

### **GRD 217 DIGITAL GRAPHIC DESIGN**

Credits: 3 (S)

Prerequisite: CIT 110/111

Graphic design is a form of visual communication that sends a specific message to a specific audience. This course takes a thorough look into brainstorming, strategies/ techniques with graphics and layout, and the tools/equipment used to accomplish the design/concept at hand. The overall objective of the course will be a thorough examination and use of Adobe Photoshop to assemble strategies/processes and a firm understanding of the role of graphic design in print and web presentation.

### **GRD XXX INTRO TO PHOTOGRAPHY**

Credits: 4

This course will instruct the student in fundamental concepts and techniques of photography, including aesthetics and technical aspects as a basis for creating a photographic image. The student will learn to use the camera, film processing, composition, print finishing, and basic darkroom printing. Students will be introduced to digital photography and computer imaging. Students will learn how to use photography as a creative tool for self-expression, social exploration, and still documentation.

### **GRD XXX COLOR THEORY**

Credits: 3

This course will cover concepts in color's properties, attributes, harmonies and disharmonies, relationships and schemes. The student will study color's psychological and perceptual nuances and learn how color is perceived in the visual arts.

### **GRD XXX TWO DIMENSIONAL DESIGN**

Credits: 4

The object of this course is to introduce students to basic ideas, issues and skills in the area of drawing, composition, two-dimensional design, and color theory through a series of problem-solving activities and to heighten students' awareness of the creative visual world.

### **GRD XXX THREE DIMENSIONAL DESIGN**

Credits: 4

The object of this course is to introduce students to basic ideas, issues and skills in the area of drawing, composition, three-dimensional design, and color theory through a series of problem-solving activities and to heighten students' awareness of the creative visual world.

### **GRD XXX DIGITAL ILLUSTRATION & PACKAGING**

Credits: 3

Prerequisite: GRD 217

An intensive examination of materials and processes as they relate to the manipulation of forms for packaging. Through an understanding of the qualities inherent in various packaging materials, students produce a variety of packaging solutions dealing with shape, form and volume. Skills are sharpened by through a thorough examination and use of the drawing capabilities of Adobe Illustrator, which will aid in the creation of packaging projects.

### **GRD XXX PUBLISHING AND PRE-PRESS**

Credits: 3

Prerequisites: GRD 217

Provides a technical background to the Designer. The course covers material related to the actual production of design materials that are often overlooked during education and usually learned by experience. Press-checks, color specifications and proofing, pre-press art, file preparation, paper selections, and characteristics will all be addressed as well as search engine optimization, buying a domain name and hosting. Field trips will be included.

### **GRD XXX CAPSTONE PORTFOLIO/INTERNSHIP**

Credits: 3

Prerequisites: GRD 217

A senior-level course dealing with the dynamics involved in the preparation of a highly professional and competitive portfolio for interviewing purposes. Discussion and analysis of student work under consideration for portfolio inclusion is emphasized. Interviewing techniques include preparation of an appropriate resume, personal letterhead, appropriate methods used for contacting potential employers, personal dress, and attitudes relating to the interview presentation process.

## **MATH**

### **MATH 104 BUSINESS MATHEMATICS**

Credits: 4 (F,S,SU)

Prerequisite: Qualifying admission assessment score or consent of faculty, MATH 085

Students in this course will examine the mathematics of business ownership and will demonstrate an understanding of business decisions. Concepts include marketing, payroll, cash flow, simple and compound interest, credit, promissory notes, insurance, financial statements, ratio analysis, depreciation, annuities, and inventory.