

Minor in Design offered by the College of Architecture + Planning

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## **Section I**

### **1. 1 The Request:**

The Minor in Design is a plan of study developed for an undergraduate student who has a strong interest in understanding the creative process of the intentional making of products and ideas that serve humans for both individual and collective needs.

## **Section II**

### **2.1 Program Purpose:**

Buckminster Fuller noted, the designer “is an emerging synthesis of artist, inventor, mechanic, objective economist, and evolutionary strategist.” A designer bridges the gap between Art and Science through the intentional creation of items that are aesthetically pleasing and function for a specific purpose. However, in that last few years, Design has emerged as a discipline that has moved beyond form making with products and into the area of altering business practice, decision making and strategic planning. Design thinking has evolved into a dominant framework for creative and interdisciplinary problem solving. The Design thinking approach encourages creative problem solving through an empathetic lens and reinforces learning by doing. In today’s complex world there are few problems that can be determined. This new interdisciplinary minor will train our students to compete in an increasingly complex work environment and provide tools to tackle complex indeterminate problems.

### **2.2 Program Description:**

The students in the proposed Design Minor program will learn the processes, techniques and tools of Design in general and be exposed to different specific areas of Design such as architecture, industrial design, interface design, industrial design and print media. Using “design thinking” as a model, the curriculum and course projects will be constructed to present the conceptual ideas such as emotion, desire and aesthetics in the context of the rational, systematic and scientific.

The students will be introduced to the ‘studio’ concept that will serve as a pedagogical model that fosters critical thinking, collaborative engagement and clear communication. The students will be required to critique theirs and others work within the context of an interdisciplinary team. The students will learn through doing and making rather than passively absorbing.

The students will come from departments and schools such as Communication, Business, Engineering and Health and Education at the University of Utah whose educational experience would benefit from having training in design principles and strategies. The minor program will focus on preparing students for flexible careers that use “design thinking” to solve multi-disciplinary applied problems in different areas.

In addition to the classes and faculty from the design program in the College of Architecture + Planning, the proposed curriculum has been developed to leverage existing University of Utah faculty and courses from architecture, visual arts, communications, business, mechanical engineering and computer science. (See Appendix B for letters of support)

### **2.3 Advisement and Governance:**

Oversight will be provided by the Dean of the College of Architecture + Planning with advisement shared by faculty who teach aspects of the program through courses offered by the design program, School of Architecture, Fine Arts and Communication Departments.

### **2.4 Program Requirements for the Minor:**

**2.4.1 Objectives:** Provide a curriculum for students that encourages an understanding of the design process and the application of that process to solve a variety of problems through thinking by doing and participation in a studio based pedagogy.

**2.4.2 Entrance Requirements:** Acceptance into the Design Minor program is based on an application process. The student must: a) be an undergraduate in good standing with a designated Major. b) have at least a 2.8 GPA.

**2.4.3 Program Requirements:** Students will be required to earn a minimum of 17 credit hours of approved courses to complete the Minor in Design. Students will be required to take a foundation course: Design 2615 “Design Thinking” Design 3100 “Design Studio”, Exploration classes and Design 4010 “Design Capstone Studio” project. (See Appendix A)

Exploration classes can be taken from course offerings offered in the design program, the College of Fine Arts, School of Architecture and Communication.

Foundation: Design 2615 “Design Thinking”, 3 credit hours, Design 3100 “Design Studio” 3 credit hours

Explorations: Minimum 6 credit hours

Capstone Studio: Design 4010 “Capstone Studio” 5 upper division credit hours

Total number of hours: 17

## **Section III**

### **3.1 The Need:**

Due to the increased awareness of design thinking strategies to solve difficult and complex problems in a variety of fields, there has been an increased demand for individuals who are trained designers. In fact, the practice of design has shifted from a purely technical activity to be seen by many as the foundation for a new liberal art education. This shift has expanded the market need for individuals trained in design to business, interface designers, product designers and information architects.

Based upon research we conducted, it is estimated that designers will see job opportunities grow at a rate faster than average nationwide over the next 10 years. This trend will also be seen locally.

Title	2004 Employment	2014 Employment	% Change	Ave. Annual Openings
Art directors	560	700	25	30
Commercial and Indus. Design	840	1090	30	40
Graphic and Communication Designers	3420	4620	34	170
Multi-media Designers	1130	1480	30	60
<b>Totals</b>	<b>5950</b>	<b>7890</b>	<b>30</b>	<b>300</b>

Table 1. Long term employment projections in Utah. Source Utah Labor Market Information System

At a recent strategic meeting with Utah design business leaders it became apparent that there is a need for individuals with a broad understanding of design thinking strategies as well as specific technical skills. In fact, several design firms have resorted to partnering with out of state universities for internship opportunities due to the lack of quality students found locally.

### 3.2 Student Demand:

There has been a recent increase in student demand for design related programs throughout the country due to the growth of digitally related services and businesses. In addition, there has been an acknowledgment of the business community that design thinking is a valuable strategy for solving complex problems. As a result many design programs have been established such as the Design School at Stanford and other programs such as the Rhode Island School of Design and Harvard's Design School has seen significant enrollment increases. Current enrollment in the undergraduate "Design Thinking" class is 23. A majority of these students have indicated a strong interest in obtaining a design minor as have students in the previous offering of the class.

Through this interdisciplinary effort combining several efforts in different colleges, it is estimated that we would have 15 to 20 declared minors enrolled in the first year and subsequently add 15-20 individuals interested in the minor program each year until the growth reaches approximately 60 individuals enrolled at any one time.

	2010-11	2011-12	2012-13	2013-14	2015-16
Undergraduate minors	15	30	45	55	60

Table 2. Projected student enrollment for undergraduate minors

### 3.3 Existing Programs:

Currently in the State of Utah there are no State education programs that focus on "design thinking" and innovation as the cornerstone of its education foundation. BYU has a very successful design program, however it is focused on industrial design. Weber State and USU also have design programs but they are focused primarily on the graphic arts. Recently, the Art Institute of America

opened a branch in Utah. However, this education is very similar to a community college experience and is primarily focused on preparing students for trades. At the University of Utah there are existing programs scattered across multiple colleges which leads to student confusion and a lack of a cohesive, integrated degree associated with design thinking.

## Section IV

### 4.1 Institutional Impact:

We anticipate little to no institutional impact with the approval of this proposal. At the outset, The Design Minor program will rely almost exclusively on classes that already exist in the College of Architecture + Planning, College of Fine Arts, and Communication. The only new course is the capstone studio course.

During the 2010-2011 academic year we will offer both the Design 2615 “Introduction to Design Thinking” course and Design 3600 during the Fall semester. During the Spring semester we will offer Design 4010 “Capstone Studio” in addition to the other courses. This will allow for a new student in the minor to be able to complete the full experience within one year.

We do anticipate designing and offering new courses as demand for the minor increases.

## Section V

### 5.1 Budget

The proposed Minor in Design will be financially self-sufficient and will draw its instructors, coursework, and facilities from existing resources. The budget each year will be based on SCH growth income from the previous year’s enrollment.

The faculty, facilities, and software are already in place to serve the existing curriculum. We perceive no need for additional resources to start this program. However, as the program grows in student enrollment and reputation, we anticipate that additional funding resources will accrue.

		2010-11	2011-12	2012-13	2013-14	2015-16
Undergraduate minors	Amount	15	30	45	55	60
<b>Credit hours in Design</b>						
Lower division	6	90	90	180	270	300
Upper division	5		75	75	150	175
<b>Credit hours in Other</b>						
Lower division	6	90	90	180	270	300
<b>Revenue in Design</b>						
Lower division	\$360	\$32,400	\$32,400	\$64,800	\$97,200	\$108,000
Upper division	\$375		\$28,125	\$28,125	\$56,250	\$65,625
<b>Revenue in Other</b>						
Lower division	\$360	\$32,400	\$32,400	\$64,800	\$97,200	\$108,000
<b>TOTALS</b>						
		<b>\$64,800</b>	<b>\$92,925</b>	<b>\$157,725</b>	<b>\$250,650</b>	<b>\$281,625</b>

## Appendix A

### Class List

#### CORE

- Design 2615 Design Thinking (3)  
*An introduction to design thinking strategies and processes that help shape our designed world. Emphasis will be placed on methods and techniques that promote creative problem solving and their application to a diverse set of issues.*
- Design 3600 Design Studio (3)  
*An exploration of the design process through a series of studio exercises employing various physical materials and visual ordering systems. These exercises will aid the student in understanding how to manipulate design elements using design principles to create pleasing, unified artifacts.*
- Design 4010 Capstone Design Studio (5)  
*A “deep dive” studio where students will explore real world problems and derive solutions based on an interdisciplinary perspective. Emphasis on synthesis, process, and intention that results in the development of the students' own methodology.*

#### EXPLORATIONS

- Communication 2120 Group Decision Making (3)  
 *Basic elements of group processes in decision making with emphasis on participation and analysis in decision-making groups.*
- Communication 3510 Intro to Web Design (3)  
*Introduces the basics of web site design with emphasis on the design process; visual communication principles; usability; and current web communication theory and criticism. Computer literacy is required.*
- Communication 3550 Principles of Visual Communication (3)  
*Survey course that looks at physio-psychological bases of perception of cognition, semiotics, aesthetics and historical references that lead to realization of visual messages. Includes discussions of ethical dimensions of visual image-making. Presentations incorporate criticism of contemporary visual images across all mass media.*
- Communication 3670 Principles of Advertising (3)   
*Introduction to advertising's historical, social, and economic aspects. Marketing mix, communication theory, and advertising organizations. Designing persuasive messages for print and broadcast media.*
- Communication 5510 Advanced Web Design (3) Prerequisite: COMM 3510 or instructor's consent.   
*Integrates advanced web communication theory/criticism with a comprehensive exploration of the technologies used in web site*

*development and design, including XHTML, CSS and JavaScript.*

- Communication 5530 Visual Communication (3) Pre-requisite: COMM 3550 □  
*Explores a broad range of theoretical and research literature that provide useful perspectives or foundations for the study of visual communication. The literature representing these perspectives draws from a variety of areas including perception, cognition, aesthetics, and film/visualization theory.*
- Communication 5550 Digital Imaging (3) Pre-requisite: COMM 3550  
*Exploration of creative, ethical, and legal challenges of image manipulation. Students encounter imaging design questions by creating advertising and editorial illustrations using image manipulation software.*  
□
- Art 3010 Language of Color (3)  
*Course examines global and regional use of color as a visual language and as a means of trans-cultural/transnational communication. Color is explored as a cultural indicator of beauty, status, and group identity in a comparative study among geographically and culturally diverse locations. Course material takes a discipline-correlated approach where twentieth and twenty-first century visual artworks are used to present examples of color in a cultural context and to begin a dialog of contemporary issues and philosophies to include aesthetics, life style, religion, race, gender, global economics and politics. Collapse of cultural identity is addressed through a review of color as a function of global marketing strategies and Internet communications.*
- Art 3065 Bookbinding (3)  
*This class explores the basic elements of bookbinding, including design and construction of the traditional book as well as materials and their properties. Students construct and take away a variety of bookbinding models. A brief introduction to the history of the book, using examples from the rare book collection and focusing in particular on historical and contemporary book binding, is part of the course.*
- Art 3600 History of Graphic Design (3)  
*An overview of the history of graphic communication. Topics covered include: the invention of the written language, the origin of printing, graphic design in the Renaissance and Victorian eras, Art Nouveau, Pictorial Modernism, International Typographic Style, Post-Modernism, contemporary conceptual and "new wave" movements. Emphasis is on the Post-Art Nouveau eras.*
- Art 3610 Visual Communication I (4)  
*An introductory exploration into the basic design and hand skills necessary for contemporary typography and graphic design. The studio course addresses visual problem-solving both on and off the computer.*
- Art 3620 Visual Communication II (4)  
*An intermediate-level course in graphic design. This course is a continuation of 3610. Through an investigative process the basic design*

*and hand skills necessary for contemporary typography and graphic design are thoroughly explored.*

- Art 3630 Digital Studio Practices (3)  
*Advanced design methodology and processes are explored through the development of a series of graphic exercises and assignments. Problems provide students with a technical understanding of the digital and manual skills necessary for professional production of contemporary typography and graphic design.*
- Art 3640 Design Process 1 (4)  
*An introductory exploration into the basic formal processes, color, and structural elements utilized within graphic design.*
- Fine Arts 3000 Design for the Net 1 (4)  
*The course is an introduction to creating rich content for the Internet. Topics covered range from developing web site concepts, organizing content, creating sites, publishing, and updating content on the web. The focus of this course is to learn principles of web design, writing functional html and xhtml code.*
- Fine Arts 3600 Writing for New Media (3) Prerequisite: WRTG 2010  
*The course provides a theoretical basis and practical approaches for writing interactive, non-linear documents for the World Wide Web and other multimedia environments.*
- Fine Arts 3700 Graphics for Multimedia (4)  
*The class focuses on making images that are meaningful, creative and communicate, through an exploration of Adobe Photoshop and Illustrator.*

**Letters of Support**

**Appendix B**