Catalog Supplement E

Bachelor of Arts Degree in Dynamic Web Development

Effective
Winter, 2013

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Catalog Supplement Acknowledgement

I acknowledge receiving a copy of the Sullivan College of Technology and Design Catalog Supplement E for the above named program:

____________________________________________________________________________

Student Name (Print)    Student Signature    Date
Sullivan College of Technology and Design
Bachelor of Arts Degree
Dynamic Web Development

Program Description

The major objective of the Bachelor of Arts in Dynamic Web Development program is to further develop and expand students’ knowledge and skills of web development and what it takes to achieve success in that industry. This program provides in-depth instruction in both web design and the programming that makes the design work. Graduates will be able to deploy web content using a variety of programming languages, utilize best practices to ensure web visibility and access, adapt to new and emerging trends in the web development field, and utilize the features of hardware and software to best create, deploy and maintain websites.

Graduates of this program will qualify for employment as web developers, web designers, web layout designers and web programmers.

Dynamic Web Development Bachelor’s Degree Curriculum Outline

The Bachelor of Arts program in Dynamic Web Development has been developed as a 2+2 program, combining an associate degree phase or its equivalent with the additional work required to complete a bachelor’s degree. Information about the first two years or associate degree phase of the bachelor’s degree in Dynamic Web Development may be found on pages 32 and 33 of the college’s 2012-2013 Catalog & Student Handbook.

Bachelor’s Degree-Level Curriculum in Dynamic Web Development: 81 credit hours and 1056 contact hours; day = 18 months / 66 weeks and night = 18 months / 66 weeks

Associate Degree-Level Dynamic Web Development: 103 credit hours and 1410 contact hours; day = 18 months / 66 weeks; night = 24 months / 88 weeks

In the combined bachelor’s degree and associate degree in Dynamic Web Development are 184 total credit hours and 2466 total contact hours. Students wishing to obtain the bachelor’s degree in Dynamic Web Development must complete all course work in the associate degree program (or its equivalent) plus the upper-level bachelor’s degree course work outlined below:

A student with previous post-secondary experience may elect to transfer equivalent general education credits from one of the following: Languages (foreign, other than the student’s native language), Social Sciences, and Natural and Physical Sciences. Students should consult with the Academic Dean, Evening Division Dean, or Registrar to determine if a particular transfer course meets the general education eligibility guidelines. Other courses that meet the general education definition may be substituted with the approval of the Academic Dean, Evening Division Dean, Department Chairperson, or the Registrar.

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CCS301  *North American Geography  4

Quarter Six
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DWD460  Content Management (DWD372, DWD420)  3
DWD470  Software Engineering Practices  3
CGD467  Portfolio  3

Total Credit Hours  81

Course codes in parenthesis after a course title denote prerequisite courses. Course titles with an asterisk (*) before them are General Education courses.

Dynamic Web Development Upper Level Bachelor’s Degree Course Descriptions

CGD327 Writing Copy for Design - (3 credits) This course is an introduction to the basic elements of writing for print advertising. The student will be introduced to the function and methodologies of copy writing. They will also learn the structure of writing and how it lures the viewer deeper into the advertising message. Prerequisite: CGD234

CCS332 General Psychology - (4 credits) This course provides a framework for the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. Prerequisite: None

DWD358 Design for Web - (3 credits) This is an intermediate level course that covers the fundamentals of web design with a raster imaging program using a mixture of hands-on exercises, lecture and demonstration. Topics include web page layout, color correction, and image optimization for web. Prerequisite: None

DWD352 Vector-Based Presentation - (3 credits) This course covers the fundamentals of digital vector illustration through a mixture of hands-on exercises, lecture and demonstration. Topics include design, layout, typography, color principles, and vector graphics versus raster graphics. Prerequisite: None

DWD330 Search Engine Optimization – SEO - (3 credits) Students will study techniques used to increase website traffic utilizing search engine optimization (SEO) techniques. Students will study how to devise a search engine optimization plan and techniques to make websites more search-engine friendly. Prerequisite: None

DWD366 Multi-media IV - (3 credits) This course focuses on multimedia aspects as they apply to web-based cross-platform and handheld devices. The student will examine the technology and specifications required to implement applications that utilize dynamic imaging, animation, sound and video. Additionally, the student will study how to use software that creates, edits and delivers multimedia projects to the end user. Prerequisite: DWD266

CCS229 Environmental Psychology - (4 credits) This course is designed to familiarize students with the profound effect design can have on a person’s psychological behavior and attitude toward the environment. Students become aware of the importance design will have on people’s functioning within a given space. The class studies color theory, intimate environments, work and play environments, and therapeutic and community environments. Prerequisite: None

CCS228 Composition I - (4 credits) This course is designed to develop within the student a greater understanding of and proficiency with the college essay and develop improved critical thinking skills. The class will cover fundamentals of grammar and sentence structures, paragraph development, and essay structures. Prerequisite: None

DWD370 Data Structures - (3 credits) This course is an exploration of fundamental data structures including linked list, stacks, queues, and trees. Topics include how data structures are represented in the computer and how sorting and
searching algorithms relate to data structures. An introduction to time complexity concepts will be presented. Prerequisite: None

CCS330 Composition II - (4 credits) Composition II is a college-level writing class with a concentration on critical thinking, persuasive writing, and research paper writing skills. Composition II extends student abilities to communicate what they have read to include research for the purpose of simplifying complex problems in an original manner for the benefit of themselves and other members of the academic community. Prerequisite: CCS228

CCS445 Conversational Spanish - (4 credits) Students will learn words and phrases to improve communications, safety, morale, and functional language skills that will assist in communicating with Spanish speakers. The language component utilizes the most important Spanish commands, questions, and phrases pertinent to everyday conversation. Aspects involving Hispanic culture will be included. Prerequisite: None

DWD372 Network and Operating Systems - (3 credits) This course covers networking concepts including the Internet Protocol, Transmission Control Protocol, and IP addresses. Students will study ways that computers interconnect and communicate using protocols, including FTP, SSH, and HTTP. Students will investigate ways that operating systems manage system resources. Students will use a command prompt. Prerequisite: None

DWD420 Low Level Architecture - (3 credits) This course explores how a computer operates at its most fundamental levels. Numbering systems, data formatting/representation, computer architecture, and central processing unit (CPU) fundamentals will be the core topics examined. Prerequisite: None

DWD430 Human-Computer Interface - (3 credits) Students in this course will study human-computer interfaces with a focus on how users interact with websites. This course will also cover how to test and identify possible usability issues. Prerequisite: None

CCS402 Sociology - (4 credits) This course presents sociology as a way of understanding the world. Sociology is a field of study that explains social, political, and economic phenomena in terms of social structures, social forces, and group relations. This course will introduce students to the field by focusing on several important sociological topics, including socialization, culture, the social construction of knowledge, inequality, raving and ethnic relations, poverty, and political sociology. Prerequisite: None

CCS435 American Government - (4 credits) This course will study major concepts of American government from the beginning to the present. The course will consist of instruction and activities that will come from the text, instructor lectures and assignments, and related information. Prerequisite: None

DWD450 Advanced Programming - (3 credits) Students will study Java programming language as a tool used to develop dynamic web applications. In this course, java Server Pages and Servlets will be the core topics covered. Prerequisite: DWD255

DWD440 E-Commerce - (3 credits) In this course, students will be exposed to the different aspects of modern e-commerce. E-commerce business models, marketing, and security topics will be covered. A survey of popular e-commerce platforms will be covered. Prerequisite: None

DWD445 Web Development Trends - (3 credits) This course covers a number of current web development topics deemed by the instructor to be relevant to the students in their upcoming careers. Topics may include updating knowledge for new releases of software and current technology buzz words. Prerequisite: DWD 358

CCS301 North American Geography - (4 credits) This course will survey the geography of the United States and Canada and will include the physiography, culture and economics of the regions. Prerequisite: None

CCS365 Human Ecology - (4 credits) Students study the role of biology and ecology in the life of the average citizen, emphasizing behavioral aspects. Students learn how environmental and ecological issues affect the quality of human life. Prerequisite: None
**DWD460 Content Management** - (3 credits) This course explores content management systems (CMS) and how they are leveraged to manage and maintain a website. A variety of different content management systems will be explored. The concepts of themes, plug-ins and extensions will be introduced to show how a content management system can be customized for a client’s needs. Prerequisites: DWD372 and DWD420

**DWD470 Software Engineering Practices** - (3 credits) This course covers the development methodologies of creating software in a multi-person development environment. Topics include life-cycle management, problem analysis, testing, version control software, and development styles. Prerequisite: None

**CGD467 Portfolio for the Bachelor’s Degree** - (3 credits) This is an advanced course preparing the student for exiting the Bachelor of Arts program in Dynamic Web Development. Students review different types of portfolios and explore options of communicating various portfolio types. The student will have the opportunity to create a resume, business card, mailer portfolio, hard portfolio (book) and digital portfolio. The student will be exposed to various techniques to get recognized by potential employers. Prerequisite: Must be taken in student’s final quarter

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The course work in Sullivan College of Technology and Design’s existing Dynamic Web Development associate degree program (or its equivalent) constitute the first 103 credit hours for the bachelor’s degree. The Associate of Applied Science Degree program has been included in the college’s grant of accreditation for some time. A program description and curriculum outline for the Dynamic Web Development associate degree program can be found on pages 32 and 33 of the 2011-2013 Catalog & Student Handbook. The course descriptions for the program are on pages 73 – 97.