

West Hills College Lemoore

Program Title: Web Programming Certificate of Achievement

Title of proposed program: Web Programming Certificate of Achievement

Contact Person: James Preston

Title: Dean of Educational Services

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Projected start date: Fall 2015

Type of change requested: Add new Major or Area of Emphasis

Projected annual completers: 40

Units for degree major or area of emphasis: 16-18

Total units for certificate: 16-18 units

Criteria A: Appropriateness to Mission

1. Program Goals and Objectives

Web programming students have advanced and varied skills in web programming, development, and design areas. Designers are responsible for designing the overall layout of the pages of a website including graphics. In addition to having a keen understanding of computer science, they may work within the IT department of an organization, for a graphic design firm, or for themselves as an independent contractor. The programming certificate teaches students to create interactive and dynamic websites using web programming languages and databases. Students will also acquire experience working in teams and learn to communicate effectively with others. The curriculum prepares students for a number of industry certifications and job titles including web designer, web developer, web technology, advanced web developer, and web server administrator. Upon successful completion of the certificate program students will be able to:

- Demonstrate competency in the use of common HTML code.
- Demonstrate competency using FTP to transfer web pages to a server.
- Construct pages that meet guidelines for efficient download.
- Construct pages that meet the needs of an identified audience.
- Construct efficient file structure for web sites.
- Demonstrate proficiency in the use of a WYSIWYG design software.
- Evaluate the functions of specific types of web pages in relationship to an entire web site.
- Design electronic text and web pages that include the standard textual components needed on web pages.
- Create web pages that meet accessibility needs of those with physical disabilities.
- Understand how CSS will affect web page creation.
- Understand the role of JavaScript in web page creation.
- Modify CSS and JavaScript for use on a web site.
- Understand the function of copyright in relationship to web design and coding.
- Utilize graphic design to enhance web pages.

2. Catalog Description

A Web programmer is an information technology professional. They are responsible for designing the graphics and overall layout of a website. The Web Programmer certificate teaches students to create interactive and dynamic websites using web programming languages and databases such as HTML, CSS, Java, JavaScript, and Internet Server Side Scripting. Students will also acquire experience working in teams and learn to communicate effectively with others. Web programmers have advanced and varied skills in web programming, development, and design areas and may work within the IT department of an organization, for a graphic design firm, or for themselves as an independent contractor. The certificate prepares students for a number of industry certifications and job titles including web designer, web developer, web technology, advanced web developer, and web server administrator.

3. Program Requirements

Course Dept./Number	Course Title	Units
CIS 2	Internet Programming HTML	3.0
CIS 2B	Internet Programming CSS	3.0
CIS 2C	Internet Programming JavaScript	3.0
CIS 2D	Java	3.0
CIS 2F	Internet Server Side Scripting	3.0
WE 15XX or CIS 15XX	General or Occupational Work Experience	1.0-3.0
	Total Units	16.0-18.0

4. Background and Rationale

Web presence today means more than simply putting an attractive site out on the web. Developers must plan strategically, creating dynamic, user-friendly web pages while organizing content to maximize impact. This certificate program enables students to develop the technical competencies that are required to plan, develop, and implement websites that are both eye-catching and useful.

Criteria B: Need for Program

5. Enrollment and Completer Projections

Learning Area	Course Title	Year 1		Year 2	
		Annual Sections	Annual Enrollment Total	Annual Sections	Annual Enrollment Total
CTE	CIS 2 Internet Programming HTML	2	50	2	50
CTE	CIS 2B Internet Programming CSS	2	50	2	50
CTE	CIS 2C Internet Programming JavaScript	2	50	2	50
CTE	CIS 2D Java	2	50	2	50

CTE	CIS 2F Internet Server Side Scripting	2	50	2	50
CTE	WE 15XX or CIS 15XX	2	50	2	50

6. Place of Program in Curriculum/Similar Programs

The college currently has an A.S. degree in Computer Information Systems with a variety of certificates. The new web programming certificate is part of a series of certificates of achievement that are being developed within the Information and Communication Technology (ICT) fields to match industry needs. In addition to the web programming certificate, the college is developing certificates in Network⁺ and Security⁺ certificates. The Web Programmer Certificate has the support of the local CTE advisory committee and meets growing demand for web designers and developers in the college's service area and across California.

7. Similar Programs at Other Colleges in Service Area

The Web programming certificate is offered in various formats at numerous colleges in the region. Colleges in the Central/Motherlode region such as Fresno City College, West Hills College Coalinga, College of the Sequoias (COS), Delta College, and Modesto College have been working the Deputy Sector Navigator to align programs. Although there are other similar programs in the region, the labor market data in the region and the ability to use the skills acquired in this certificate program outside of the region make it a needed and marketable certificate.

8. Labor Market Information and Analysis (CTE only)

Attachment Required: Labor Market Information & Analysis (CTE only)

The growth rates in this area reflect job growth rate for the area and reinforces the need for a program that prepares students for this occupation. Furthermore, students often travel outside the Central San Joaquin Valley to gain employment and have access to employment outside the region.

ONet Online (<http://www.onetonline.org>) reports that 78 percent of Computer Programmers in California have a bachelor's degree, 11 percent have a post-secondary degree, and 6 percent have a high school diploma or equivalent. Sample of reported job titles related to Computer Programmer are: Analyst Programmer, Applications Developer, Computer Programmer Analyst, Internet Programmer, Java Programmer, Programmer, Programmer Analyst, Software Developer, and Web Programmer.

Median California wage for Computer Programmer (2014), reported by ONet, is \$37.28/hour or \$77,550/year.

Salary Surfer (salariesurfer.cccco.edu/salaries.aspx) reports that the median annual salary for Computer Programming with "certificate" award type is: \$42,128 (2 years before certificate), \$46,247 (2 years after certificate), and \$51,400 (5 years after certificate).

The State of California, Employment Development Department (www.labormarketinfo.edd) reports a mean hourly wage of \$37.62/hour for Computer Programming (SOC Code: 15-1131) in Fresno County. Occupational projections of employment (outlook or demand) for Computer Programming in Fresno County (2012-2022) are 230 estimated, 300 projected. This is a 30.4 percent increase with 13 annual job openings for the ten-year period.

California EDD also reports the top three industries employing computer programmers in Fresno County as:

Other Professional & Technical Services (593 employers)
Accounting and Bookkeeping Services (561 employers)
Management & Technical Consulting Services (513 employers)

California EDD reports the top three industries employing computer programmers in Kings County as:

Accounting and Bookkeeping Services (46 employers)
Management & Technical Consulting Services (33 employers)
Other Professional & Technical Services (32 employers)

9. Employer Survey (CTE only)

Attachment Required: Employer Survey (CTE only)

Faculty does not believe a survey is needed as labor market data indicates a demand for employees with these skill sets.

10. Explanation of Employer Relationship (CTE only)

The Web Programmer Certificate of Achievement follows Title 5, section 51006 requirements and is not designed exclusively for individuals already employed by a particular employer or in a particular industry. This program is available to all interested students who are not already employed in that industry to obtain entry-level employment. Through the advisory committee, faculty contacts with industry, and through the Work Experience instructor the college is developing relationships with multiple businesses and Information Technology departments within the area to develop relationships for internship and job placement

11. List of Members of Advisory Committee (CTE only)

- April Betterson-West Hills College Lemoore-CTE Academic Advisor
- David Rengh-West Hills College Lemoore-CIS Instructor
- Jonathon Giles-Lemoore Police Department
- Michelle Arenas-MSA- Employment Training
- Maribel Guzman-MSA- Employment Training
- Bobby Bossarte-CDRC- Information Technology
- Roxana Bojorge-Farmer Boys- Shift Leader
- Dan Beeler-HRCM- Adjunct Catering Supervisor
- Debbie Muro-LUHSD- Superintendent
- Loren Kelly-West Hills College Lemoore- Business Adjunct
- Diana Schartz-SI Leader- Business
- Wendy Denney-West Hills College Lemoore- Adjunct Counselor
- Brian Kron-West Hills College Lemoore-Business/CIS Instructor
- Reagan Roach-Harris Ranch- Executive Chef
- Angela Barginear-West Hills College Lemoore- Career Tech
- Jennifer Solis-FAST Credit Union- Vice President
- Jeff Garner-Kings County Action Organization- Director
- Margie Newton-Kings County Office of Education- Program Director
- Terry Davis-West Hills College Lemoore AOJ Instructor
- Monte Paden- West Hills College Lemoore Business/Entrepreneurship Instructor

- James Preston-West Hills College Lemoore- Dean of Educational Services

12. Recommendation of Advisory Committee (CTE only)

During the CTE learning area advisory committee meeting in October 2015 the web programming certificate of achievement was discussed and met a positive response. This certificate will be beneficial to the students because it will give the credibility when applying for beginner position employment and at the same time they will be able to continue with their studies to achieve higher level certificates.

Attachment Required: CTE Advisory Committee Approval Meeting Minutes (CTE only) Attached

Criteria C. Curriculum Standards

Narrative Items #13 - 14

13. Display of Proposed Sequence

The initial offering of the Web programmer certificate of achievement will be in an academy format with cohort classes that require co-enrollment in all of the courses in the program. The students will take a new course offering every 8 weeks with an online section of one course and work experience built in during the final semester to provide an opportunity to put their programming skills into action.

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WE 15XX or CIS 15XX	General or Occupational Work Experience	1.0-3.0
	Total Units	16.0-18.0

Course Sequence

CIS 2 Internet Programming HTMLFall Semester 1st eight weeks
 CIS 2B Internet Programming CSS.....Fall Semester 2st eight weeks
 CIS 2C Internet Programming JavaScriptSpring Semester 1st eight weeks
 CIS 2D Java.....Spring Semester 2nd eight weeks
 CIS 2F Internet Server Side Scripting.....Spring Semester 1st eight weeks (online)
 WE 15XX or CIS 15XX- Work1 to 3 units- Spring or Summer semester

14. Transfer Applicability (if applicable)

N/A

Criteria D. Adequate Resources

Narrative Items #15 – 18

15. Library and Learning Resources Plan

No additional library and learning resources will be required beyond the college’s current resources.

16. Facilities and Equipment Plan

No additional facilities and equipment resources will be required beyond the college's current resources.

17. Financial Support Plan

No additional financial support resources will be required beyond the college's current resources.

18. Faculty Qualifications and Availability

No new faculty will be needed, and no additional costs will be incurred. All of the faculty that will teach in this program meet the State minimum qualifications and possess knowledge and experience in this program area.

Criteria E. Compliance**Narrative Items #19 - 21****20. Based on Model Curriculum (if applicable)**

N/A

21. Licensing or Accreditation Standards

There are no licensing or accrediting standards that apply to this program. No additional student selection criteria is required, this program complies with California Code of Regulations, title 5 section 55201 and 58106.

22. Student Selection and Fees

There are no additional fees required beyond those identified in California Education Code section 76300.

West Hills College Lemoore CTE Advisory Committee Meeting
West Hills College Lemoore- Room 256
Monday, October 5th, 2015

Members present:

- April Betterson-West Hills College Lemoore-CTE Academic Advisor
- David Rengh-West Hills College Lemoore-CIS Instructor
- Jonathon Giles-Lemoore Police Department
- Michelle Arenas-MSA- Employment Training
- Maribel Guzman-MSA- Employment Training
- Bobby Bossarte-CDRC- Information Technology
- Roxana Bojorge-Farmer Boys- Shift Leader
- Dan Beeler-HRCM- Adjunct Catering Supervisor
- Debbie Muro-LUHSD- Superintendent
- Loren Kelly-West Hills College Lemoore- Business Adjunct
- Diana Schartz-SI Leader- Business
- Wendy Denney-West Hills College Lemoore- Adjunct Counselor
- Brian Kron-West Hills College Lemoore-Business/CIS Instructor
- Reagan Roach-Harris Ranch- Executive Chef
- Angela Barginear-West Hills College Lemoore- Career Tech
- Jennifer Solis-FAST Credit Union- Vice President
- Jeff Garner-Kings County Action Organization- Director
- Margie Newton-Kings County Office of Education- Program Director
- Terry Davis-West Hills College Lemoore AOJ Instructor
- Monte Paden- West Hills College Lemoore Business/Entrepreneurship Instructor
- James Preston-West Hills College Lemoore- Dean of Educational Services

Minutes by: Sheryl Shortnacy- West Hills College Lemoore- Senior Secretary

1. Call to Order

J. Preston called the meeting to order at 5:31 p.m.

2. Additions to the Agenda

There were no additions or changes to the agenda.

3. Introduction of members

J. Preston asked everyone to introduce themselves

4. JP Updates

a. Campus Updates (President, Student Center, CTE Enhancement Funds, Eagle Express)

J. Preston reported that Don Warkentin will be retiring in December and the new president Dr. Kristian Clark will take over in January. The student center is under construction and is planned to be completed in October 2016. West Hills College Lemoore has received local and regional CTE Enhancement funds. Some of the funds will be used for a new CTE Center on campus. Eagle Express is our mobile food kiosk that is open to everyone to purchase food items. The kiosk is run by WHCL culinary and business students and is a VTEA-funded project.

b. CTE Advisory Committee Member Responsibilities

J. Preston asked all CTE Advisory Committee members to attend 3 meetings a year, review all documents and give input.

c. CTE 2015-16 Mission

J. Preston reported on what the mission is for CTE learning area 2015-2016.

i. New Certificates

J. Preston reported that new certificates are being developed this year with a goal of completing 6 or more.

ii. CTE Academy Model

J. Preston reported on the CTE Academy that has started this year. There are 26 students in the new programming academy that is funded through the IDRC grant and the students will complete the program in one year. The students received free textbooks for the academy. This is a pilot program.

iii. CTE Center

J. Preston reported that a new CTE Center is in the process of being created. One key element will be internship development and placement.

5. New Business/Action Items- presentation, input, discussion, consideration of approval

D. Rengh gave a presentation on Programming, Networking and Security proposed certificate programs which included program objectives and a timeline for development.

a. ICT/CIS Certificates

i. Programming

D. Rengh shared the curriculum and program information for a proposed certificate in programming. He reported that the Programming academy started in the 2015 Fall

semester and filled up right away. D. Rengh asked for input and suggestions on the certificate and discussion followed.

ii. Networking

D. Rengh shared the curriculum and program information for a proposed certificate in networking. He reported that the Networking academy is planned to start in the 2016 Fall semester. D. Rengh asked for input and suggestions on the certificate and discussion followed.

iii. Security

D. Rengh shared the curriculum and program information for a proposed certificate in security. He reported that the Security academy is planned to start in the 2017 Fall semester. D. Rengh asked for input and suggestions on the certificate and discussion followed.

After the presentation on proposed ICT certificates a motion was made to approve them by Debbie Muro-LUHSD Superintendent and seconded by Jeff Garner-Kings County Action Organization-Director. A vote was called for and the motion passes unanimously, no abstentions.

b. Business Certificates

B. Kron reported on Business Certificate programs and handed out a pamphlet that outlined the courses needed for Business Management/Entrepreneurship, Business Information Worker and Accounting Information Worker.

i. Bookkeeping

B. Kron shared the curriculum and program information for a proposed certificate in Bookkeeping/Accounting Information Worker. B. Kron asked for input and suggestions on the certificate and discussion followed.

ii. Business Information Worker/Office Tech

B. Kron shared the curriculum and program information for a proposed certificate in Business Information Worker/Office Tech. B. Kron asked for input and suggestions on the certificate and discussion followed.

iii. Entrepreneurship

B. Kron shared the curriculum and program information for a proposed certificate in Entrepreneurship. B. Kron asked for input and suggestions on the certificate and discussion followed.

After the presentation on the proposed Business Certificate programs a motion was made to approve them by Jennifer Solis-FAST Credit Union VP and seconded by Reagan Roach-Harris Ranch Executive Chef. A vote was called for and the motion passes unanimously, no abstentions.

6. Suggestions and Input from CTE Advisory Committee

J. Preston asked for input from the CTE Advisory Committee. One suggestion was to invite guest speakers from businesses to come and present to their students. Another suggestion was to change the meeting time to 9:00-11:30am or 2:00-5:00pm.

7. Agenda Items for Future Meetings and Upcoming Events

J. Preston went over future agenda items and asked for input. A suggestion was made to add E. Guest Speakers. The following items will be on the agenda for the next advisory committee meeting.

- a. Labor Market Data**
- b. New Certificates (Commercial Energy Auditing, Project Management)**
- c. CTE Outcomes Survey Results**
- d. Guest Speakers**

8. Adjourn

Meeting adjourned at 7:01 p.m.