

University of La Verne

La Verne, California

Program Review for the
Computer Science and Computer Engineering Program
2005-2012 Academic Years

Computer Science Program Chairperson: Seta Whitby, Ed.D.

Computer Science Department Chairperson: Michael Frantz, Ph.D.

Natural Science Division Chairperson: Robert Neher, Ph.D.

Computer Science Program Faculty: Ray Ahmadnia, M.S.

Computer Science Program Faculty: Jozef Goetz, Ph.D.

Table of Contents

1. Executive Summary	4
2. Program Vision Statement	5
3. Program Mission.....	5
4. Program Learning Outcomes	5
5. Program Capacity and Description	6
5.1. Organizational Overview Timeline.....	7
5.2. Summary of Previous Program Review.....	8
5.3. Computer Science Curriculum.....	9
5.3.1. Major Requirements.....	9
5.3.2. Minor Requirements	13
5.3.3. Curriculum Map Courses Where Learning Outcomes are met.....	14
5.3.4. Four Year Curriculum Plan.....	17
5.3.5. Program Map / 4 year Course Rotation	19
5.3.6. Courses Offered 2009 - 2010.....	21
5.3.7. Four year Course Offerings Fall 2006 – Spring 2010.....	22
5.3.8. Enrollment History (Average class size)	24
5.3.9. Degree conferred.....	25
5.4. Faculty.....	28
5.4.1. Adjunct Faculty.....	28
5.4.2. Full Time Faculty.....	30
5.4.3. Summary of Percentage of Courses Taught by FT and PT Faculty	39
5.4.4. Academic Advising.....	40
5.5. Students.....	41
5.6. Facilities, labs, computers resources (Inventory)	43
6. Assessment Procedures (Analysis of Various Surveys)	44
6.1. Curriculum comparisons with Peer Institutions.....	44
6.2. Adjunct Faculty Survey Analysis	50
6.3. Focus Group.....	53
6.4. Internship Supervisor Survey Analysis.....	57
6.5. Comprehensive exams	60

6.6.	Capstone Senior Projects	62
6.7.	Senior Exit Surveys.....	66
6.8.	Alumni Survey	73
7.	Findings.....	78
7.1.	Curriculum	78
7.2.	Faculty.....	79
7.3.	Focus Group.....	79
7.4.	Internship	80
7.5.	Comprehensive Exams.....	80
7.6.	Senior Project.....	81
7.7.	Senior Exit Survey	81
7.8.	Alumni Survey	82
8.	Action Plan Recommendations.....	85
9.	Appendices.....	88
9.1.	Appendix A: 2004 – 2005 Action Plan.....	88
9.2.	Appendix B: Course Descriptions	90
9.3.	Appendix C: Syllabi (2009 – 2010).....	98
9.4.	Appendix D: Class Enrollments (Fall 2005 - May 2010).....	160
9.5.	Appendix E: Summary Statistics of Course Enrollments	163
9.6.	Appendix F: Adjunct Faculty Survey Instrument.....	172
9.7.	Appendix G: Faculty CVs.....	176
9.8.	Appendix H: Recent Faculty Presentations and Grants.....	206
9.9.	Appendix I: Internship Records 2005 – 2011	212
9.10.	Appendix J: Internship Forms.....	215
9.11.	Appendix K: Sample of Comprehensive Exam	218
9.12.	Appendix L: Titles and Abstracts of Recent Senior Projects	225
9.13.	Appendix M: Senior Project Presentation Evaluation Form.....	227
9.14.	Appendix N: Senior Exit Survey Form.....	228
9.15.	Appendix O: Computer Science Alumni Letter & Survey Form	229
9.16.	Appendix P: Electronic Parts Inventory	236

1. Executive Summary

Purpose: The purpose of this program review is to reflect on the Computer Science and Computer Engineering major and identify the strengths, weaknesses, areas of improvement, and investigate various opportunities for increasing competitive advantages for the program. This program review considered only the Computer Science and Computer Engineering major in the College of Arts and Sciences. The program reviewed all data compiled by the program chairperson from 2005 – 2010. The program data is organized into three major sections, including curriculum, faculty, and students. The curriculum was compared to that of three universities with similar programs. A summary of course enrollments and graduation statistics is presented. Full-time and adjunct faculty members' qualifications and workloads are listed. Finally, student performance in the comprehensive exam and internships are presented.

Methods: One focus group was conducted using current students. In addition, five different surveys were conducted and analyzed to conclude the findings of this review. The surveys include: adjunct faculty member survey, internship supervisor survey, senior project presentation survey, senior exit survey, and alumni survey. The comprehensive exam was analyzed to investigate students' performance.

Summary of Findings: The program is ready to move to the next level by becoming an independent department. The curriculum is of good quality and it is comparable with all three universities. Students are eager to listen to guest speakers from industry. Adjunct faculty members do not have any administrative assistance or space. In general, internship supervisors are happy with student performances. The audiences of senior project presentations feel students were presenting their senior projects professionally, and the majority of the students who filled out the senior exit survey seemed very satisfied with the program. Some alumni pursued their further education, and some started working immediately after graduation. Students feel faculty members are dedicated and caring; they are happy with the program.

Weaknesses: The program has exceeded its capacity and there is no more room for growth. The need for extra lab space is a must. A new full-time faculty member is needed to satisfy the needs of the engineering concentration. Finally, a 50% lab technician / stockroom supervisor and 50% administrative assistant is needed to assist in organizing the internship network connections, keep the web page current, maintain the electronic lab and assist in alumni connections. etc.

2. Program Vision Statement

To be a leader in serving the needs of culturally diverse student body, by empowering them with desire for lifelong learning, theoretical, practical, and applied approaches which improve not only their own lives, but also their communities.

3. Program Mission

The mission of the Computer Science and Computer Engineering program is to provide an opportunity for undergraduate students to achieve their highest potential, and to prepare undergraduate students for their academic, professional, and personal growth by providing them with a well-balanced undergraduate education in Computer Science covering theory, application, research, and practice.

4. Program Learning Outcomes

Graduates of the Computer Science and Computer Engineering program will acquire the following program learning outcomes:

- 4.1. Acquire basic concepts in engineering, information science, internet programming, and software
- 4.2. Communicate effectively both orally and in writing to their peers
- 4.3. Acquire leadership skills and collaborate in team projects
- 4.4. Demonstrate skills in analyzing problems before and during a project
- 4.5. Acquire project management skills including data collection, time management and self-learning of new applications
- 4.6. Conduct research to solve problems independently
- 4.7. Acquire preparation to gain admittance to graduate schools
- 4.8. Obtain a sense of “urgency” to meet deadlines
- 4.9. Acquire the flexibility to function in a variety of work environments
- 4.10. Acquire preparation to obtain jobs in industry related to concentration areas such as Computer Engineering, Information Science, Internet Programming, and Software Engineering

5. Program Capacity and Description

The Computer Science and Computer Engineering undergraduate program is in the Department of Math/Physics/Computer Science and offers the Bachelor of Science degree in Computer Science and Computer Engineering. In addition, the program offers an E-Commerce major. Both majors have the same program chairperson who reports to the department chair. The department is structured as one academic unit within the Natural Science Division, which also contains the departments of Biology and Chemistry. The department chair reports to the division chair, who in turn reports to the Dean of the College of Arts and Science.

The E-Commerce major is not included in the current review process because E-Commerce is a separate major and it therefore requires a separate program review. Even though the major is an interdisciplinary major between the Computer Science in the College of Arts and Science and the College of Business and Public Management, the Computer Science faculty members are responsible for advising and helping all E-Commerce students.

The current review process includes the Computer Science and Computer Engineering major. This major serves two distinct populations: the Campus Accelerated Program for Adults (CAPA) and Main Campus Traditional Undergraduate (Main Campus) students.

To satisfy the needs of its population, most courses in Computer Science are offered once a week from 6:30 – 10:00 p.m. All courses in the major include laboratory work, and offering 50-minute classes three times a week is inefficient. Since 2005 the program has been offering morning and afternoon classes. Those courses are two hours long, meeting twice a week.

5.1. Organizational Overview Timeline

In 1979, the Computer Science and Computer Engineering Department was founded within the American Armenian International College (AAIC). The department was structured as one academic unit within the AAIC Engineering School, which also contained Electronic Engineering and Optical Engineering. The Computer Science and Computer Engineering Department was the strongest of the three. In 1992, the Computer Science and Computer Engineering Department graduated 93 students. The Computer Science major was offered at two locations: the campus in Athens, Greece, and the Main Campus.

In 1993, AAIC closed its doors. The Electronics and Optical Engineering Departments were taught out. The Computer Science and Computer Engineering department was transferred to the University of La Verne, where it was renamed as a program, and was hosted within the newly named Math/Physics/Computer Science Department.

In December 2004, the Athens, Greece campus closed its doors. Most of the students transferred to the main campus in La Verne. Currently the major is offered solely on the main campus.

Since 1993, the Computer Science and Computer Engineering Program introduced the following four concentrations to the major under the leadership of the current Program Chair: Engineering, Information Science, Software, and Web Computing. In 2007, the Web Computing concentration was renamed the Internet Programming concentration, and all concentrations were completely redesigned by changing the number of units in the concentration to 20 units and allowing the students to take two elective courses. Students are required to complete the core requirements in Computer Science and Computer Engineering and specialize in one of the four concentrations.

5.2. Summary of Previous Program Review

The previous program review was during the 2004-2005 academic year. At that time the program was located in Leo Hall and had more physical space available than it currently does. However, the physical distance of the Computer Science program from the other two programs in the department, mathematics and physics, was felt to be detrimental to all three programs, and a recommendation was made to move the Computer Science program to Founders Hall to be closer to the mathematics and physics programs, as well as the Natural Science Division.

Due to scarceness of financial resources, an outside consultant was not hired to review the program. The program attempted to its utmost ability to accomplish the entire list of action plan items listed in that report (See **Appendix A** for the complete list of action plan items).

The majority of the action plan items mentioned in the report were achieved. There were numerous action items such as creating an advisory board or becoming an independent department that were not addressed, due to lack of human resources in the program. These action items will be added to the current report.

In 2007, the program was relocated to Founders Hall to a smaller facility. Consequences of this move included the loss of the stockroom, a part-time faculty office, a student lounge, and an administrative assistant position. The program has outgrown the capacity of the facility in which it now operates.

5.3.Computer Science Curriculum

This section presents several tables that are relevant to the Computer Science curriculum. The tables include the following: Computer Science and Computer Engineering [major requirements](#); three [minor requirements tables](#); a [curriculum map](#) for identifying in which courses the learning outcomes are met; a [four year curriculum plan](#) document that is given to students who first join the program (students are advised to follow this 4-year plan in order to graduate in 4 years); a [four year course rotation](#) program map; a list of [courses offered in Fall 2009 – Spring 2010](#) with the names of the instructors and the enrollments for each course; a list of four year [course offerings in 2006 – 2010](#); an [enrollment history](#); and a list of [degrees conferred](#).

5.3.1. Major Requirements

The Computer Science and Computer Engineering major has four distinct concentrations: Engineering, Information Science, Internet Programming, and Software. Students majoring in Computer Science and Computer Engineering are required to complete a list of Core requirements, select one of the concentrations, and choose two elective courses. The Computer Science and Computer Engineering major requires 48 units for completion (see **Appendix B** for course descriptions).

In addition, students majoring in Computer Science and Computer Engineering are required to complete a list of supportive requirements. The purpose of the supportive requirements is to teach students the appropriate skills to help them understand more advanced content in the major. The supportive requirements are excluded from the 48 units. The table below presents the course and supportive requirements.

Computer Science and Computer Engineering Major Requirements

I. Core Requirements:

Code	Course Title	Units
CMPN 280	Computer Organization	4
CMPS 367	Object Oriented Language C++	4
CMPS 368	Principles of Computer Networks	4
CMPS 370	Seminar	1
CMPS 385	Data Structures	4
CMPS 471	Internship	1-4
CMPS 499	Senior Project	1-4
	Comprehensive Exam	0

II. A. Engineering Concentration:

Code	Course Title	Units
CMPN 150	Principles of Electronics and Computer Engineering	4
CMPN 202	Electronic Devices and Circuits	4
CMPN 220	Digital Logic Systems	4
CMPN 330	Microprocessor Systems	4
CMPN 480	Advanced Computer Architecture	4

II. B. Information Science Concentration:

Code	Course Title	Units
CMPN 220	Digital Logic Systems	4
CMPS 375	Systems Analysis and Design	4
CMPS 392	Project Management	4
CMPS 410	Management Information Systems	4
CMPS 490	Database Management Systems	4

II. C. Internet Programming Concentration:

Code	Course Title	Units
CMPS 318	Publishing on the Web I	4
CMPS 319	Publishing on the Web II	4
CMPS 320	Internet Applications	4
CMPS 378	C# Programming Using .NET	4
CMPS 480	Distributed Internet Computing	4

II. D. Software Concentration:

Code	Course Title	Units
CMPN 220	Digital Logic Systems	4
CMPS 371	Assembly Language	4
CMPS 455	Compiler Design	4
CMPS 460	Operating Systems	4
CMPS 490	Database Management Systems	4

III. Electives:

A minimum of **two courses** from the following or from a concentration outside the chosen one:

Code	Course Title	Units
CMPN 303	Integrated Electronics	4
CMPS 362	Numerical Algorithms	4
CMPS 369	Local Area Networks	4
CMPS 377	Visual Basic.NET	4
CMPS 379	Java	4
CMPS 400	Analysis of Algorithms	4
CMPS 451	Artificial Intelligence	4
CMPS 463	Computer Graphics	4
CMPS 465	Programming Languages	4
CMPS 475	Systems Design Process	4
CMPS 495	Information Systems Project	4

IV. Supportive Requirements:

Code	Course Title	Units
CMPS 301	Programming Concepts	4
MATH 201	Calculus I	4
MATH 327	Discrete Mathematics	4
PHYS 201,203	General Physics I, or Mechanics	5

V. A. Additional for Engineering Concentration:

Code	Course Title	Units
CHEM 201	General Chemistry I	5
MATH 202	Calculus II	4
PHYS 202,204	General Physics II, or Electricity and Magnetism	5

VI. B. Additional for Information Science Concentration:

Code	Course Title	Units
ACCT 201	Fundamentals of Accounting I, or	
ACCT 203	Financial & Managerial Accounting	4
ECON 221	Economic Analysis II, or	
ECON 228	Economic Theories and Issues	4
MGMT 300	Principles of Management	4

VII. C. & D. Additional for Internet Programming and Software Concentrations:

Code	Course Title	Units
MATH 202	Calculus II	4
PHYS 202, 204	General Physics II, or Electricity and Magnetism	5

5.3.2. Minor Requirements

The lists below are simply recommendations. The exact program of courses must be worked out with the approval of the program chairperson. A minor contract must be filed with the Registrar's office.

Minor in Information Science		
Prefix and Number	Title	Units
CMPN 368	Principles of Networks	4
CMPS 369	Local Area Networks	4
CMPS 375	Systems Analysis and Design	4
CMPS 410	Management Information Systems	4
CMPS 490	Database Management Systems	4
Total:		20

Minor in Internet Programming		
Prefix and Number	Title	Units
CMPS 318	Publishing on the Web I	4
CMPS 319	Publishing on the Web II	4
CMPS 320	Internet Applications	4
CMPS 378	C# Programming Using .NET	4
CMPS 480	Distributed and Web Based Computing	4
Total:		20

Minor in Software		
Prefix and Number	Title	Units
CMPS 362	Numerical Algorithms	4
CMPS 367	Object Oriented Language C++	4
CMPS 377	Visual Basic.NET, or	4
CMPS 378	C# Programming Using .NET	4
CMPS 385	Data Structures	4
CMPS	Elective	4
Total:		20

5.3.3. Curriculum Map Courses Where Learning Outcomes are met

The table below presents the relationship of the curriculum and the learning outcomes. The curriculum courses were placed horizontally and the learning outcomes vertically. A checkmark is placed when the learning outcome is addressed in the course.

Curriculum Map (Which learning outcome is addressed in what course)										
Course Prefix and Number	1. Basic Concepts	2. Communication	3. Leadership and Collaboration	4. Analysis	5. Project Management	6. Research & Problem Solving Skills	7. Graduate school Prep. & Life Long Learning	8. Time Management	9. Versatile	10. Prepare for Industry
CMPN 150	X			X			X	X		
CMPN 202	X			X			X	X		
CMPN 220	X	X	X	X	X	X	X	X		
CMPN 280	X	X	X	X	X	X	X	X	X	X
CMPN 303				X			X			
CMPN 330				X			X			
CMPN 480				X			X	X		
CMPN 499	X	X	X	X	X	X	X	X	X	X
CMPS 200 (2 unit)	X	X	X	X	X	X	X	X	X	X
CMPS 301	X			X			X	X		
CMPS 318	X	X		X		X	X	X		

Curriculum Map (Which learning outcome is addressed in what course)										
Course Prefix and Number	1. Basic Concepts	2. Communication	3. Leadership and Collaboration	4. Analysis	5. Project Management	6. Research & Problem Solving Skills	7. Graduate school Prep. & Life Long Learning	8. Time Management	9. Versatile	10. Prepare for Industry
CMPS 319	X	X		X		X	X	X		
CMPS 320	X			X		X	X	X		X
CMPS 362							X			
CMPS 368	X	X	X			X	X	X		X
CMPS 369	X	X	X			X	X	X		
CMPS 370 (1 unit)							X			
CMPS 371	X						X			
CMPS 375		X	X		X		X	X		
CMPS 377	X						X			
CMPS 378	X			X		X	X			
CMPS 379	X			X			X			
CMPS 385	X	X		X			X	X		X
CMPS 392		X	X		X		X	X	X	

Curriculum Map (Which learning outcome is addressed in what course)										
Course Prefix and Number	1. Basic Concepts	2. Communication	3. Leadership and Collaboration	4. Analysis	5. Project Management	6. Research & Problem Solving Skills	7. Graduate school Prep. & Life Long Learning	8. Time Management	9. Versatile	10. Prepare for Industry
CMPS 400				X			X			
CMPS 410	X	X	X		X	X		X		
CMPS 451		X		X			X	X		
CMPS 455	X	X		X			X	X		
CMPS 460	X	X	X	X		X	X			
CMPS 463	X						X			
CMPS 465		X				X	X		X	
CMPS 471 (1 unit)		X	X	X	X	X	X	X	X	X
CMPS 475		X	X		X		X	X		
CMPS 480	X	X			X	X	X			
CMPS 490	X	X	X	X	X		X	X	X	
CMPS 495		X	X	X	X	X	X		X	
CMPS 499	X	X	X	X	X	X	X	X	X	X

5.3.4. Four Year Curriculum Plan

The Computer Science program offers a variety of courses every semester. Students majoring in Computer Science are encouraged to follow a structured four year plan. Often the program chairperson modifies the course offerings based on enrollment projections. The table below reflects the four year course plan. Students are given this plan when they first declare the major. Students who follow this plan should be able to graduate in four years.

The pink color represents the Engineering and Information Science concentrations. These two concentrations are managed and operated under the leadership of Dr. Seta Whitby. The bold numbers are major courses and regular fonts are the supportive requirement courses.

The green color represents the Internet Programming concentration. This concentration is managed under the leadership of Dr. Jozef Goetz. The bold numbers are major courses and regular fonts are the supportive requirement courses.

The blue color represents the Software concentration. This concentration is managed under the leadership of Mr. Ray Ahmadnia. The bold numbers are major courses and regular fonts are the supportive requirement courses.

Computer Science & Computer Engineering 4 Year Curriculum Plan								
Computer Science	Year I		Year II		Year III		Year IV	
Concentration	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Engineering	220 Math 201	280 301S Math 202	150 367	202 385 Math 327	330 368 Phys 201	480 Phys 202	Elective Elective Chem 201	499
Information Science	301S	367 Math 201	385 220 Acct203	410 280 Math 327	375 368 Phys 201	490 392 Mgmt 300	Elective Elective Econ 221	499
Internet Programming	318 Math 201	319 301S Math 202	378 367	480 385 Math 327	Elective (220) Phys 201	280 320 Phys 202	368	Elective 499
Software	301S Math 201	367 Math 202	385 220	371 280 Math 327	460 368 Phys 201	490 455 Phys 202	Elective Elective	499

Findings:

1. In the Internet Programming concentration, students have a choice of only one elective, since they are required to sign up for CMPN 220 as an elective because it is the pre-requisite of CMPN 280.
2. This map assumes that students are ready to take Math 201 Calculus I in their first year.

5.3.5. Program Map / 4 year Course Rotation

The table below reflects the program's curriculum 4 year course rotation offerings.

Program Map / 4 Year Course Rotation																	
Computer Science Program		Year I				Year II				Year III				Year IV			
		F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S
Supportive Requirements:																	
CMPS 301	Programming Concepts	x		x		x		x		x		x		x		x	
MATH 327	Discrete Mathematics			x				x				x				x	
Core Requirements:																	
CMPN 280	Computer Organization	x				x				x				x			
CMPS 367	Object Oriented Language C++	x		x		x		x		x		x		x		x	
CMPS 368	Principles of Computer Networks	x				x				x				x			
CMPS 370	Seminar		x				x				x				x		
CMPS 385	Data Structures	x		x		x		x		x		x		x		x	
CMPS 471	Internship	x	x	x		x	x	x		x	x	x		x	x	x	
CMPS 499	Senior Project	x	x	x		x	x	x		x	x	x		x	x	x	
	Comprehensive Exam	x		x		x		x		x		x		x		x	
Engineering Concentration:																	
CMPN 150	Princ. of Electron. & Comp. Eng.	x								x							
CMPN 202	Electronic Devices and Circuits			x								x					
CMPN 220	Digital Logic Systems	x		x		x		x		x		x		x		x	
CMPN 330	Microprocessor Systems					x								x			
CMPN 480	Advanced Computer Architecture							x								x	
Information Science Concentration:																	
CMPN 220	Digital Logic Systems	x		x		x		x		x		x		x		x	
CMPS 375	Systems Analysis and Design	x				x				x				x			
CMPS 392	Project Management (Also cross listed with Business)			x				x				x				x	
CMPS 410	Management Information Systems (Also cross listed with Business)	x		x		x		x		x		x		x		x	
CMPS 490	Database Management Systems			x				x				x				x	
Internet Programming Concentration:																	
CMPS 318	Publishing on the Web I (Also cross listed with Business)	x				x				x				x			
CMPS 319	Publishing on the Web II			x				x				x				x	
CMPS 378	C# Programming Using .NET	x				x				x				x			
CMPS 480	Distributed Internet Computing			x				x				x				x	
CMPS 320	Internet Applications			x				x				x				x	
Software Concentration:																	

Program Map / 4 Year Course Rotation																	
Computer Science Program		Year I				Year II				Year III				Year IV			
		F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S
CMPN 220	Digital Logic Systems	x		x		x		x		x		x		x		x	
CMPN 371	Assembly Language						x								x		
CMPS 455	Compiler Design	x								x							
CMPS 460	Operating Systems							x								x	
CMPS 490	Database Management Systems			x				x				x				x	
Electives: A minimum of 2 courses																	
CMPN 303	Integrated Electronics																
CMPS 362	Numerical Algorithms (Also cross listed with MATH)					x											
CMPS 369	Local Area Networks			x													
CMPS 377	Visual Basic.NET										x						
CMPS 379	Java		x														
CMPS 400	Analysis of Algorithms	x															
CMPS 451	Artificial Intelligence					x											
CMPS 463	Computer Graphics											x					
CMPS 465	Programming Languages													x			
CMPS 475	Systems Design Process	x															
CMPS 495	Information Systems Project							x									
General Education / non major Courses																	
CMPS 200	Information Technology (Also cross listed with Business)	x		x		x		x		x		x		x		x	
CMPS 302	The Digital Society						x								x		

5.3.6. Courses Offered 2009 - 2010

The table below presents the courses offered in 2009-2010 academic year (See **Appendix C** for Syllabi). The second column reflects the semester the course was offered (F = Fall, S = Spring, J = January Interterm), the name of the faculty member who taught the course, and the number of students enrolled in the class. Directed studies, Internships, and Senior Projects were excluded from this table. The part-time faculty are highlighted in yellow (See **Appendix D** for class enrollments 2005 – 2010).

Computer Science Courses Offered in Fall 2009 and Spring 2010	
Course Name	2009 - 2010
CMPN 220: Digital Logic	F / Whitby / 11
CMPN 280: Computer Organization	S / Whitby / 11
CMPS 200: Information Technology	F / Whitby / 36 S / Whitby / 46
CMPS 301: Programming Concepts	F/Ahmadnia/ 19 S/Ahmadnia/ 16
CMPS 318: Publishing on the Web I	F / Goetz / 18
CMPS 319: Publishing on the Web II	S / Goetz / 9
CMPS 367: Object Oriented Language C++	F/Ahmadnia/ 12 S/Ahmadnia/ 12
CMPS 368: Principles of Networks	F / Goetz / 11
CMPS 370 (1 unit): Seminar	J / Son / 13
CMPS 371: Assembly Language	J/Ahmadnia/10
CMPS 375: Systems Analysis and Design	F / Son / 8
CMPS 378: C# Programming Using .NET	F / Goetz / 13
CMPS 385: Data Structures	F./Ahmadnia/ 9
CMPS 410: Management of Information Systems	F / Whitby / 16 S / Whitby / 22
CMPS 410 Online: Management of Information Systems	F / Whitby / 23 S / Whitby / 22
CMPS 455: Compiler Design	S/Ahmadnia/ 9
CMPS 480: Distributed Internet Computing	S / Goetz / 8
CMPS 490: Database Management Systems	S / Goetz / 16

5.3.7. Four Year Course Offerings Fall 2006 – Spring 2010

The table below reflects the schedule of courses taught from 2006 – 2010. The program does not offer any courses during the summer due to low enrollments.

The program teaches CMPS 301 Programming Concepts and MATH 327: Discrete Mathematics from the supportive requirements. The Chemistry Department, Math and Physics programs, and the College of Business and Public Management offer the rest of the supportive courses.

The CMPS 200 Information Technology course is offered to business majors and is not a required course for Computer Science students. Similarly, CMPS 302 Digital Society is a general education course that satisfies the Life Long Learning G.E. requirement, but it is not a major course.

Program Map / 4 Year Schedule of Courses																	
Computer Science Program		2006 - 2007				2007 - 2008				2008 – 2009				2009 - 2010			
		F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S
Supportive Requirements:																	
CMPS 301	Program. Concepts	✓		✓		✓		✓		✓		✓		✓		✓	
MATH 327	Discrete Mathematics			✓				✓				✓				✓	
Core Requirements:																	
CMPN 280	Comp. Organization			✓				✓				✓				✓	
CMPS 367	Obj. Or. Lang. C++	✓		✓				✓		✓		✓		✓		✓	
CMPS 368	Princ. of Comp. Net.	✓				✓				✓				✓			
CMPS 370	Seminar		✓	✓			✓				✓				✓		
CMPS 385	Data Structures	✓		✓						✓				✓			
CMPS 471	Internship	✓		✓		✓				✓		✓					
CMPS 499	Senior Project	✓	✓	✓		✓				✓		✓					
	Comprehensive Exam																
Engineering Concentration:																	
CMPN 150	Prin. El & Com Eng.																
CMPN 202	Elec. Dev. & Circuits																
CMPN 220	Dig. Logic Systems	✓				✓				✓				✓			
CMPN 330	Microprocessor Sys.																
CMPN 480	Adv. Comp. Arch.																

Program Map / 4 Year Schedule of Courses																	
Computer Science Program		2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010			
		F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S
Information Science Concentration:																	
CMPN 220	Dig. Logic Systems	✓				✓				✓				✓			
CMPS 375	System Anal. & Des.	✓				✓				✓				✓			
CMPS 392	Project Management			✓							✓						
CMPS 410	Man. Info. Systems	✓		✓		✓		✓		✓		✓		✓		✓	
CMPS 490	Database Man. Sys.			✓				✓				✓				✓	
Internet Programming Concentration:																	
CMPS 318	Publish. on the Web I			✓			✓	✓		✓				✓			
CMPS 319	Publish. on Web II											✓				✓	
CMPS 378	C# Prog. Using .NET	✓				✓				✓				✓			
CMPS 480	Dist. Internet Comp.																✓
CMPS 490	Database Man. Sys.			✓				✓				✓				✓	
Software Concentration:																	
CMPN 220	Dig. Logic Systems	✓				✓				✓				✓			
CMPN 371	Assembly Language														✓		
CMPS 455	Compiler Design	✓				✓										✓	
CMPS 460	Operating Systems			✓		✓						✓					
CMPS 490	Database Man. Sys.			✓				✓				✓				✓	
Electives: A min. of 2 courses																	
CMPN 303	Integrated Electronics																
CMPS 362	Num. Algorithms					✓											
CMPS 369	Local Area Networks			✓				✓				✓					
CMPS 377	Visual Basic.NET		✓														
CMPS 379	Java									✓							
CMPS 392	Project Management																
CMPS 400	Anal. of Algorithms																
CMPS 451	Artificial Intelligence					✓											
CMPS 463	Computer Graphics																
CMPS 465	Prog. Languages																
CMPS 475	Sys. Design Process																
CMPS 495	Info. Systems Project																
G. E. and None major courses																	
CMPS 200	Info. Technology					✓		✓		✓		✓		✓		✓	
CMPS 302	The Digital Society																

5.3.8. Enrollment History (Average class size)

The tables in this section are extracted from the ULV Fact Book. The data reflects student demographics for freshmen, transfer, and CAPA students. The Athens students are merged with the Main Campus enrollment (See **Appendix E** for a summary statistics of course enrollments 2005 – 2010.)

The table below reflects new student enrollment in the fall semesters only.

Computer Science and Computer Engineering New Student Enrollment (Fall semester only)								
Location	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012
CAPA	1	2	4	2	1	4	4	6
Main Campus Freshmen	5	9	4	11	10	7	8	13
Main Campus Transfer	0	2	1	3	3	4	2	4
Total:	6	13	9	16	14	15	14	23

Source: ULV Fact Book

The table below represents the average class size of FTE students / Full time faculty ratio.

Average Class Size and FTE students / FT Faculty Ratio (Fall semester only)								
Location	2005 – 2006	2006 – 2007	2007 – 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013
Unduplicated Head Count Majors – all campuses fall #s	45	46	37	46	50	66	78	93
Main Campus	25	35	23	37	39	50	57	65
CAPA	20	11	14	9	11	16	21	28
FTE Faculty (# of courses per year/6)	5.5	5.7	6.2	5.3	5.8	-	-	-

Source: ULV Fact Book. (The highlighted numbers are not in the fact book)

5.3.9. Degrees Conferred

The table below presents the total number of students who have had degrees conferred since 1993. This data was extracted from the Banner database at the registrar's office. This information is inconsistent with the number of students who walk during graduation commencement because some students sometimes participate in the commencement ceremony even though they have not yet completed their senior projects.

Computer Science Degrees Conferred					
Year	AAIC	Athens	CAPA	Main Campus	Total
1993	3	4	-	1	8
1994	-	12	1	1	14
1995	2	6	-	1	9
1996	1	10	4	3	18
1997	-	4	3	7	14
1998	-	3	2	1	6
1999	-	3	9	5	17
2000	-	4	5	1	10
2001	-	5	5	7	17
2002	-	5	3	9	17
2003	-	8	3	6	17
2004	-	6	7	12	25
2005	-	5	6	14	25
2006	-	4	2	9	15
2007	-	5	-	-	5
2008	-	1	1	8	10
2009	-	3	1	6	10
2010	-	-	1	3	4
2011	-	-	0	3	3
2012	-	-	1	9	10
2013	-	-	5	16	21
Total:	6	88	53	94	275

Source: Registrar's Banner Database

The data in the table below was extracted from the Fact Book:

Majors and Degrees Conferred								
Students	2005 – 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013
Main Campus	25	35	23	37	39	57	67	81
CAPA	20	11	14	9	11	28	42	42
Unduplicated Head count majors – all campuses fall #s	45	46	37	46	50	85	109	123
FTE Students – All campuses (Based on unit generated / 30 for undergraduates.)	46.0	40.2	29.7	39.4	43.1	59.1	70.3	77.7
IPEDS	42.5	40.8	31.2	43.6	49.8	49.8	70.8	76.6
New Freshmen Admission	5	9	4	11	10	7	7	13
New Transfer Admission	0	2	1	3	3	4	2	5
New CAPA Admission	1	2	4	2	1	4	3	5
Degrees conferred – Athens	1	0	1	1	1	-	-	-
Degrees conferred – CAPA	6	1	0	1	1	0	1	5
Degrees conferred – Main Campus	7	8	5	8	3	3	9	16
Degrees conferred – All campuses (year, 7/1 – 6/30	14	9	6	10	5	3	10	21
# of Graduates	-	7	8	6	6	-	-	-

Source: ULV Fact Book (The highlighted number was not in the fact book.)

The four tables below represent the following: number of students who graduated who are first time freshmen or international students; average number of years to complete degree (CAPA data unavailable); gender of students majoring in computer science; and average number of years to complete degree by ethnicity.

Computer Science Student Graduation					
Location	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	Total
New 1st Time Freshmen	7	8	5	6	26
International Students with F1 Visa	4	1	2	1	8
Total:	11	9	7	7	34

Source: ULV Fact Book

Average of Time-to-Degree (Year) by College				
Graduation by College	2006-2007	2007-2008	2008-2009	2009-2010
CAS	7	8	5	6
CAPA	N/A	N/A	N/A	N/A

Source: ULV Fact Book

Average of Time-to-Degree (Year) by Gender				
Gender	2006-2007	2007-2008	2008-2009	2009-2010
Female	6.3	6.3	5.5	5.6
Male	7.2	5.5	5.7	6.5
Total:	7.1	5.8	5.7	6.2

Source: ULV Fact Book

Average of Time-to-Degree (Year) by Ethnicity				
Ethnicity	2006-2007	2007-2008	2008-2009	2009-2010
Asian/Pacific Islander		9.7	3.5	
Black				5.3
Caucasian	5.4	5.6	5.3	5.3
Hispanic	5.3	3.9	7.3	6.0
Non Resident Alien	7.8	6.1	5.4	10.3
Declined to Answer		5.7		
Unknown		3.7		
Total:	7.1	5.8	5.7	6.2

Source: ULV Fact Book

Findings: The data is skewed since some students walk during graduation after 4 years without completing their senior projects. After a variable period of time, most return to complete their senior projects and degrees.

5.4. Faculty

The Computer Science program is one of the three programs which collectively comprise the Mathematics/Physics/Computer Science Department. In the 2009-2010 academic year the Computer Science program had three full-time faculty and one adjunct faculty. However, beginning in fall 2010, the program started hiring additional adjunct faculty to fulfill the increasing demand for additional courses by increasing student enrollments. The sections below start with the qualifications of [adjunct faculty](#) members, followed by the qualifications of [full time faculty](#) members and workloads. A [summary of percentage of courses taught by full time and part time faculty](#) is then presented. The section concludes with [academic advising](#) information, since advising is a critical part of full time faculty workload.

5.4.1. Adjunct Faculty

From Fall 2005 – Spring 2010 the Computer Science program utilized the following part time faculty members (See **Appendix G** for complete CVs of all adjunct faculty members). An analysis of an adjunct faculty survey is presented in section 6.2 (See **Appendix F** for the instrument). The table below reflects a summary of the adjunct faculty qualifications.

Adjunct Faculty Profile					
Name	Highest Degree	Year Degree Obtained	Degree Area or Specialization	Faculty Status	Teaching Semesters
Freibott, Leonard	M.S.		Database Management	Adjunct	Spring 2006 & Spring 2007
Liu, Shih-Chen	Ph.D.		Information Technology	Adjunct	Fall 2005 & Spring 2006
Mortagy, Yehia	Ph.D.		Decision Support	Full Professor	Fall 2005
Saghian, Rosine	M.B.A.	1999	Database Management Systems	Adjunct	Spring 2011
Son, Samuel	Ph.D.	2007	Project Management	Senior Adjunct	2001 - present
Van Der Wende, Nicolas	M.B.A.	2003	Information Technology	Adjunct	Fall 2010

Freibott, Leonard: Mr. Leonard Freibott has a Masters degree in Information Systems from Claremont Graduate University. He was a full time faculty at Cal Poly University. He taught the Database Management Systems course for 2 semesters until 2007. In 2008 Dr. Goetz started teaching the course (see **Appendix G** for CV).

Liu, Shih-Chen: Dr. Shih-Chen Liu earned her Ph.D. in Information Systems from Claremont Graduate University. Dr. Liu taught the CMPS 200 Information Technology course in Fall 2005 and Spring 2006 (See **Appendix G** for CV).

Mortagy, Yehia: Dr. Yehia Mortagy is a Full Professor at the University of La Verne in the College of Business and Public Management. He earned his Ph.D. in Information Systems from Claremont Graduate University. He is qualified to teach most of the courses in the Information Science concentration. He teaches BUS 410 Management of Information Systems which is cross listed with CMPS 410 during the summer sessions and CMPS/BUS 318 Publishing on the Web I. Dr. Mortagy is the co-chair of the E-Commerce major. He is treated as an adjunct in this report for budgeting purposes.

Saghian, Rosine: Mrs. Rosine Saghian earned her M.B.A. from the University of La Verne in 1999. She has been a Database Administrator (DBA) for over 10 years. Mrs. Saghian started teaching CMPS 490 Database Management Systems in Spring 2011 (See **Appendix G** for CV).

Son, Samuel: Dr. Samuel Son is a senior adjunct faculty at the University of La Verne. He is a senior Project Manager at the Boeing Company. In 2008 he was recognized at La Verne with the *Part-Time Faculty Teaching Award*. Dr. Son earned his Ph.D. in Theology, and in 2011 he received his Ph.D. in Systems Engineering and Architecture. Dr. Son teaches the following courses: CMPS 375 Systems Analysis and Design (4 units) during the fall semester, CMPS 370 Seminar (1 unit) during the January term, and CMPS 392 Project Management (4 units) during the spring semester (See **Appendix G** for CV).

Van Der Wende, Nicolas: Mr. Nicolas Van Der Wende earned his M.B.A. from the University of La Verne in 2003. He works for JPL. He started teaching CMPS 200: Information Technology course in fall 2010 (See **Appendix G** for CV).

5.4.2. Full Time Faculty

The table below summarizes full time faculty profiles with their specializations.

Full Time Faculty Profile					
Name	Highest Degree	Year Degree Obtained	Specialization	Faculty Status	Year Hired
Ahmadnia, Ray	M.S.	1982	Software	Assoc. Prof.	1998
Goetz, Jozef	Ph.D.	1979	Internet Programming	Full Prof.	2005
Whitby, Seta	Ed.D.	2003	Information Science	Full Prof.	1984

1. **Ray Ahmadnia**

Academic Qualifications: Mr. Ray Ahmadnia has two Masters' degrees - M.S., Applied Mathematics, University of Nebraska - Lincoln in 1982; and M.A., Mathematics from Eastern New Mexico University in 1976. His B.S. is in Mathematics from the National University of Iran in 1971 (See **Appendix G** for CV).

Computer Science teaching workload: Mr. Ahmadnia joined the University of La Verne in 1985 as a part time faculty member. In 1998 he became a full time faculty member in the Computer Science program. Mr. Ahmadnia's normal teaching load is 6 courses per academic year. Due to program needs, Professor Ahmadnia teaches 3-4 courses per semester and one course during Interterm. Normally he teaches one overload course to satisfy the needs of the program. In addition, he teaches several senior projects and internships as directed studies.

Teaching: Mr. Ahmadnia's specialty is programming languages. He teaches all courses in the Software concentration, including most of the programming languages. He teaches the following courses: MATH 327 Discrete Mathematics, CMPS 301 Programming Concepts, CMPS 367 Object Oriented Languages C++, CMPS 362 Numerical Algorithms, CMPS 370 Seminar, CMPS 371 Assembly Language, CMPS 377 Visual Basic .NET, CMPS 379 Java, CMPS 385 Data Structures, CMPS 400 Analysis of Algorithms, CMPS 451 Artificial Intelligence, CMPS 455 Compiler Design, CMPS 460 Operating Systems, CMPS 463 Computer Graphics, CMPS 465 Programming Languages, CMPS 471 Internship, and CMPS 499 Senior Project.

In addition, Professor Ahmadnia is responsible for administering and grading the Senior Comprehensive Exams every semester.

Governance Structure: Mr. Ahmadnia is active in the University of La Verne governance structure. He is a member of the following committees:

1. Admission Committee (2005 – present)
2. Library Committee (2005 – 2008, 2010 – present)
3. Honors Committee (2010 – present)
4. Faculty Technology Committee (2008 – 2010)
5. CAS Curriculum Committee (2009 – 2010)

Moreover, Mr. Ahmadnia is the faculty advisor of the Computer Science Club.

Research Interests: Mr. Ahmadnia's research interests are in Programming Languages, Design and Analysis of Algorithms, and Computational Theory.

Extracurricular Activities: Mr. Ahmadnia is active outside the University of La Verne. Some of the highlights include the following:

1. Visiting professor at California State University Fullerton, Department of Computer Science. He teaches: Compiler Design, Computer Impact, or Problem solving strategies when needed.
2. Member of Architectural committee, Rocky Point Community Association

2. Jozef Goetz

Academic Qualifications: Dr. Jozef Goetz earned his Ph.D. in Computer Science with Honors from Wroclaw University of Technology in Poland. He earned his M.S. degree in Computer Science and minored in Electrical Engineering from the same University (See **Appendix G** for CV).

Computer Science teaching workload: Dr. Jozef Goetz started teaching for the University of La Verne in Fall 2005 as a full-time tenure track Associate Professor. His normal teaching load is 6 courses per year, and he frequently teaches in January Interterm. He has developed websites supporting each of his classes. The entire course contents are posted on his websites and available to students. In addition, he teaches several senior projects and internships as directed studies.

Teaching: Dr. Goetz's specialty is in Internet Programming and programming languages. He teaches all courses in the Internet Programming concentration. He is qualified to teach all programming languages. He teaches the following courses: CMPS 318 Publishing on the Web I, CMPS 319 Publishing on the Web II, CMPS 320 Internet Applications, CMPS 367 Object Oriented Languages C++, CMPS 368 Principles of Computer Networks, CMPS 369 Local Area Networks, CMPS 370 Seminar, CMPS 377 Visual Basic .NET, CMPS 378 C# Programming Using .NET, CMPS 460 Operating Systems, CMPS 463 Computer Graphics, CMPS 471 Internship, CMPS 480 Distributed Internet Computing, CMPS 490 Database Management Systems, and CMPS 499 Senior Project.

Since 2005 he has proposed, designed and developed four new courses (CMPS 319, 320, 378, and 480) in order to incorporate current trends in cutting edge technology. CMPS 320 is scheduled to appear in the spring of 2011. He completely redesigned and rebuilt the Web Computing concentration. He replaced all past courses with the courses he developed and implemented (CMPS 319, 378, 320, 480). The title of the new concentration has been changed to the Internet Programming concentration. In the academic year 2008/9 catalog, his proposal of a **minor** in Internet Programming was accepted. Moreover, CMPS 377/379 was replaced by a newly developed course CMPS 320 Internet Applications in the academic year 2010/11.

Governance Structure: Dr. Goetz is active in the University of La Verne governance structure. He is a member of the following committees:

1. Faculty Technology Committee (2010 – 2013).
2. College of Arts and Sciences Faculty Professional Support Committee (2009 – 2012).
3. University-wide Faculty Professional Support Committee (2009 – 2012).
4. Undergraduate Academic Policies (UGAP) Committee (2010 - pres).
5. Retreat Committee (2008 – pres).
6. Faculty Financial Aid Committee at the university level (2006 – 2009).
7. Arts and Science College Teaching and Technology Committee (2005 – 2006).

On Campus Activities: Dr. Goetz participated in the following activities:

1. He advised 23 students as of 10/23/10 (19 students majoring in Computer Science with Internet Programming concentration, one minor in Internet Programming, three students majoring in E-Commerce).
2. He was the Faculty Marshal for Bachelor Rite Candidates at the *Winter Commencement Ceremonies* on January 30, 2010.
3. He actively participated in **STEM** Science Summer Camp from July 5 – July 16, 2010. He presented Introduction to Research Projects and he provided lecture/lab activities at the STEM Summer Camp in the first week.
4. He prepared materials for the Fall 2010 picnic contest for the Math/Physics/Computer Science students.
5. He discussed and tested the **NOYCE STEM SCHOLARSHIP TRACKING** application (developed by his advisee) with Harvey Good and Ben Wishner to determine if there were any issues with the application, December 16 and 22, 2009.
6. He has developed a website which supported all his classes. The website is built on his designed framework (template) which allows access to all class materials from the web interface.
7. He was a mentor for High School Student: James Van Voorhis (2008/2009).

Research Interests: Dr. Goetz's research interests are in software engineering, e-commerce, Internet development, Web Services, computer networks, and modeling systems using Petri Nets (See **Appendix H** for list of publications).

Extracurricular Activities: Dr. Jozef Goetz is very active in the community, and brings his experiences into the classroom. Some of his academic and extracurricular activities are as follows:

1. Since 2005, he has reviewed 17 research papers for International Conferences and the World Congress in Computer Science and he reviewed a Maryland University partnership research project proposal.
2. He has subsequently presented his research at International Conferences and the World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'07). Since 2005, he has delivered six international talks and two additional talks were delivered by his collaborators.
3. Since 2005, he has served on four Program Committees for four international conferences.
4. He has published eight papers since 2005.
5. He has actively participated in professional meetings. Since 2005, he has attended 109 seminars/workshops, including 63 off-campus professional seminars/workshops.
6. Every September, since 2006, he served the local community during the Harvest Festival at the John Paul II Center, Yorba Linda.
7. In 2009 and 2010, he served as both a computer and an academic advisor during the 10th and 11th "Proud To Be Polish" Festival at the John Paul II Center, Yorba Linda.
8. He brought Krakusy - Polish Folk Dance Ensemble for the ULV Faculty Retreat at Lake Arrowhead on January 15th, 2009.
9. On May 3, 2009, he organized a field trip to the Jet Propulsion Laboratory in Pasadena. Together with the Computer Science students, they participated in the 2009 Laboratory Open House.
10. On September 24, 2009, he organized a field trip for his advisees and Computer Science students to the Los Angeles County Fair.
11. In 2008, he brought his CMPS 368 Principal of Computer Network class to the Beckman Center for the lecture on "Tracking the Internet into the 21st Century," given by Vinton Cerf, Vice president and chief Internet Google evangelist.

12. In 2008, to foster collaboration between Poland and the University of La Verne, he organized a visit of the president of the University of Czestochowa. The visit helped strengthen the scientific and cultural exchange. Subsequently, he had prepared two reports: first dealing with the background information on the potential partner institution and second, exploring the areas of potential collaboration.
13. **MSDN Academic Alliance program:** Since 2006 he helped the MSDN Academic Alliance program at ULV - students have free access to download cutting edge technology applications/programs of Microsoft from our university site at http://msdn07.e-academy.com/ulv_cs.

3. **Seta Whitby**

Academic Qualifications: Dr. Seta Whitby earned her Ed.D. degree in Organizational Leadership from the University of La Verne in 2003. She completed all coursework for the Ph.D. in Management Information Systems at the Claremont Graduate University in 1999. She earned two Masters degrees -- M.S. in Management Information Systems from Claremont Graduate University in 1995, and M.Ed. in Computer Education from the University of La Verne in 1988. She earned her B.S. in Computer Science and Computer Engineering from the University of La Verne in 1985 (See **Appendix G** for her CV).

Computer Science teaching workload: Dr. Whitby started teaching for the University of La Verne in 1984. In addition to her normal teaching load, she frequently teaches overloads to fill the needs of the program. Moreover, she teaches several senior projects and internships as directed studies.

Teaching: Dr. Whitby's specialty is in Information Science. She teaches all courses in the Information Science concentration and hardware courses. She teaches the following courses: CMPN 220 Digital Logic, CMPN 280 Computer Organization, CMPS 200 Information Technology, CMPS 370 Seminar, CMPS 375 Systems Analysis and Design, CMPS 392 Project Management, CMPS 410 Management of Information Systems, CMPS 471 Internship, CMPS 490 Database Management Systems, CMPS 499 Senior Project.

Governance Structure: Dr. Whitby is active in the University of La Verne governance structure. She has been the Faculty Senate secretary from 2002 until the present. She is involved in the faculty mentoring program, first generation student mentoring program, summer melt program, and is a faculty advisor to ASULV. In addition, she is a member of the following committees:

1. Faculty for Excellence in Advising and Transfer Services (FEAT).
2. Faculty Personnel Committee
3. Faculty Senate
4. Faculty Technology Committee.
5. General Education
6. Teacher Education Advisory Board

Research Interests:

Dr. Whitby's research interests are in online distance education, the use of Information Communication Technology (ICT) in Medium Size Enterprises (MSE) in developing countries, and the digital divide. (See **Appendix H** for a list of publications).

External Activities: Dr. Whitby is a well known scholar outside the University community as well. She brings her knowledge and experience to the classroom. Some of her academic and extracurricular activities are as follows:

1. She has reviewed 14 research papers for International Conferences (2008 – present).
2. She served as a Member of the International Board of Reviewers of 2008 IⁿSite Conference Informing Science and IT Education.
3. She served as a Member of the International Board of Reviewers on 2011 IⁿSite Conference Informing Science and IT Education.
4. Member of International Editorial Review Board of International Journal of Web-based Learning and Teaching Technologies (IJWLTT) (2009 – present).
5. Member of Academic Alliance of National Center of Women and Information Technology (NCWIT) (2011 – present).

5.4.3. Summary of Percentage of Courses Taught by FT and PT Faculty

Prior to 2005 the majority of the courses in the Computer Science program were taught by adjunct faculty. In fall 2005, after Dr. Jozef Goetz joined the Computer Science program as a full-time faculty member, the program attempted to the best of its ability to fulfill the needs of the students by using its full time faculty and avoiding hiring adjunct faculty. Since 2005, the Computer Science and Computer Engineering courses were mostly taught solely by its full-time faculty members. In the 2007-2008 academic year the program did not have any part-time faculty. Since that time, the program has had one senior adjunct faculty member who taught one course per semester. Starting in fall 2010, the program began adding one adjunct instructor per semester to fulfill the needs of the students (See **Appendix D** for Class enrollment 2005 – 2010 and see **Appendix E** for Summary statistics of course enrollment).

The table below reflects the percentage of courses taught by full-time and part-time faculty. The green color indicates full-time faculty workload. The red color indicates full-time faculty overload as well as directed study, internship, and senior projects. The blue color indicates percentage of courses taught by part-time faculty

Percentage of Students /Courses Taught by FT and PT Faculty					
Faculty	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 – 2010
% taught by FT Faculty on Load	55%	53%	49%	56%	51%
% taught by FT Faculty overload	15%	9%	16%	16%	14%
% taught by FT Directed Study/ 471 / 499	9%	26%	32%	19%	29%
% taught by PT Faculty	21%	12%	3%	9%	6%

5.4.4. Academic Advising

The Computer Science and Computer Engineering faculty members advise all students majoring in Computer Science and Computer Engineering and E-Commerce. Since E-Commerce is not a part of this program review, the data regarding the E-Commerce majors is excluded from these tables. The faculty divide the advising workload based on concentrations. Mr. Ahmadnia advises most Software concentration students. Dr. Goetz advises students with the Internet Programming concentration. Dr. Whitby advises Information Science, Engineering, and E-Commerce majors. The figures below do not mean the number of majors in each concentration. Students have the choice of selecting any advisor they feel comfortable with, regardless of concentration. The green color represents traditional students (Athens and Main Campus), the red color represents CAPA students, and the black color is for the total number of students.

Computer Science Academic Advising								
Students	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012
Ahmadnia, Ray								
Athens	2	1	1	-	-	-	-	-
Main Campus	8	9	6	7	6	10	21	20
CAPA	<u>5</u>	<u>5</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>6</u>	<u>6</u>
Total:	15	15	10	9	8	12	27	26
Goetz, Jozef								
Athens	-	-	-	-	-	-	-	-
Main Campus	-	3	3	11	15	21	17	22
CAPA	=	=	=	=	=	=	<u>2</u>	<u>5</u>
Total:	=	3	3	11	15	21	19	27
Whitby, Seta								
Athens	5	3	3	1	-	-	-	-
Main Campus	10	19	10	18	18	26	29	39
CAPA	<u>15</u>	<u>6</u>	<u>11</u>	<u>7</u>	<u>9</u>	<u>26</u>	<u>34</u>	<u>31</u>
Total:	30	28	24	26	27	52	63	70
Main Campus	25	35	23	37	39	57	67	81
CAPA	20	11	14	9	11	28	42	42
Unduplicated headcount of majors – all campuses fall #s	45	46	37	46	50	85	109	123

5.5.Students

The number of Computer Science and Computer Engineering majors has slightly declined over the years due to national decline in Computer Science majors cross the nation. In addition, a large number of students graduated in Spring 2006. Twenty five (25) students graduated in 2004, twenty five (25) students graduated in 2005, and fifteen (15) students graduated in 2006 (see table of degrees conferred). The table below reflects the number of main campus freshmen students who declared a major in Computer Science, as well as their gender and ethnicity. A significant number of students majoring in Computer Science are first generation students. Students have the following ethnic backgrounds: Asia Pacific Islander, African American, Caucasian, Hispanic, and International. The major is dominated by male students. CAPA students are not reflected in this table.

Computer Science Majors First Time Freshmen Fall Numbers					
Students	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009
Minority and 1st Generation Statistics					
Minority	100%	60%	40%	75%	60%
1 st Generation		40%	17%	40%	
Main Campus New 1st Time Freshman Gender					
Female	-	-	-	2	-
Male	2	5	6	8	11
Ethnicity					
Asian Pacific Islander					3 30%
Black				2 50%	1 10%
Caucasian		2 40%	2 40%		4 40%
Hispanic	2 100%	3 60%	2 40%	1 25%	2 20%
International			1 17%	1 20%	1 18%
1st Time Freshman Total:	2	5	6	10	11

Source: ULV Fact Book

5.6. Facilities, Labs, Computer Resources (Inventory)

The table below represents the major inventory (see **Appendix P** for electronic parts inventory).

Inventory of Equipment and Facilities			
Type of Equipment	Number	Adequate (Yes / No)	Need
Computers			
FH 206	12	Yes	The room is too small to fit more computers
FH 207	24	No	Better projection is needed to make a healthier environment.
Lab Equipment			
Digi- Designers	15	No	The equipment are getting old and need replacing
Electronic parts		Yes	Please see Appendix P for the complete inventory
Space	2	No	Electronics stock room. Computer Lab for the Network class. Computer Lab to increase offering more courses. The whole program utilizes 2 computer labs. There is no room for expansion to satisfy the needs of the students.

6. Assessment Procedures (Analysis of Various Surveys)

This section is organized into three major themes – curriculum, faculty, and students. The section starts with a [curriculum comparison with peer institutions](#). Second, an analysis of the [adjunct faculty survey](#) report is presented. Third, results of [focus group](#) of current students are listed. Fourth, an analysis of an [internship supervisor’s survey](#) is presented. Fifth are the results of the [senior comprehensive exams](#). Sixth, a [capstone senior project](#) presentation analysis report is presented. Seventh is an analysis of the [senior exit survey](#). The section ends with an [alumni survey](#) analysis report.

6.1. Curriculum Comparisons with Peer Institutions

The Computer Science major was compared with the following schools: California State University at Fullerton, Azusa Pacific University, and Biola University. These universities were selected because they have programs that are similar to La Verne’s program. The table below reflects the findings. The green color represents ULV, the blue color represents Cal State Fullerton, the pink color represents Azusa Pacific University, and the salmon color represents Biola University.

Degree Requirements at Comparison Institutions											
ULV			Cal State Fullerton			Azusa Pacific			Biola University		
Code	Title	Unit	Code	Title	Unit	Code	Title	Unit	Code	Title	Unit
Major: 1. Computer Science and Computer Engineering Total = 128 units			Majors: 1. Computer Science (CS) 2. Computer Engineering No electives in CS, only tracks (5 course block) are electives			Majors: 1. Computer Science (CS); 2. Information System (CIS)			Major: Computer Science with Concentrations: 1. Comp. Science (CS); 2. Info. Systems (IS)		
3 Full Time + 2 Part Time Faculty			19 Full Time CS & CE Faculty			4 Full Time + 2 Part Time Faculty			2 Full Time Faculty		
Computer Science: min 51 CS units + 12 math units + 10 physics; Total = 128 units			BS in Computer Science: min 61 CS units + 18 math and 12 science units + 33 GE units; Total = 124 units			E = CS & CIS Elective BS in Computer Science: min 48 CS units + 12 math units; Total = 126 units.			BS in Computer Science: min 36 CS units + 17 math units; Total = 130 units		
Information Science (67 units): min 51 CS units + 12 business units + 4 math units + 5 physics;			CE = Computer Engineering only No Information Science track			IS = CIS only BA in CIS (57 units): min 44 CS units + 7 business units + 6 math units; Total = 126 units.			IS = CIS only BS in IS (57 units): min 30 CS units + 15 business units + 9 math units + 3 CS or business; Total = 130 units		
Engineering: min 51 CS units + 12 math units + 10			C = CS only; BS in CE (65 units) (includes 6 electives)			C = Computer Science only			C = Computer Science only		

Degree Requirements at Comparison Institutions											
ULV			Cal State Fullerton			Azusa Pacific			Biola University		
Code	Title	Unit	Code	Title	Unit	Code	Title	Unit	Code	Title	Unit
physics ; Total = 128 units			+18 math & 12 science units + 49 GE unit Total = 129 units						No electives		
Core Requirements						CS225	Fund. of CS	4			
CMPN 280	Computer Organization	4	CPSC 240-C	Computer Org. & Assembly Lan	3	CS445-C	Computer Architecture & Org.	4	CSCI 220	Computer Org. & Assembly Lang Prog.	3
CMPS 367	Object Oriented Lang. C++	4	CPSC 121	Programming Concepts	3	CS330	System Programming I	3	CSCI 230	Programming Languages	3
CMPS 368	Principles of Computer Networks	4	CPSC 471	Computer Comm.	3	CS420E CS420-IS	Telecomm. & Interfacing	3	CSCI 430	Computer Comm.	
CMPS 370	Seminar	1				CS496E	Senior Seminar: Ethics in Computer Science	3	CSCI 440	Topics in Computer Science	2 x 3
CMPS 385	Data Structures	4	CPSC 131	Data Structures Concepts	3	CS 320	Data Structures	3	CSCI 106	Data Structures	3
CMPS 471	Internship	1-4		Internship (optional)	1-3						
Comprehensive Exam		0									
			CPSC 254-C	UNIX and Open Source Systems	3						
			CMPS 253U-CE	UNIX Workshop	1						
Engineering Concentration											
CMPN 150	Principles of Electronics and Computer Engineer.	4	EGCP 303-CE	Electronics & EGCP 303L-CE	3,1						
CMPN 202	Electronic Devices and Circuits	4	EGCP 203-CE,	Electronic Circuits & EGCP 203L-CE	3,1						
CMPN 220	Digital Logic Systems	4	EGCP 180-CE	Digital Logic and Computer Structures	3						
CMPN 330	Microprocessor Systems	4	EGCP 450 -CE	Embedded Processor Interfacing	4						
CMPN 480	Advanced Computer Architecture	4	EGCP 441-CE	Advanced Electronics for Computer Engineers	4						
CMPN 499	Senior Project	1-4									
			EGCP/E GEE 280-CE	Microcontroller	3						
			EGCP/E GEE	Designing with	2						

Degree Requirements at Comparison Institutions											
ULV			Cal State Fullerton			Azusa Pacific			Biola University		
Code	Title	Unit	Code	Title	Unit	Code	Title	Unit	Code	Title	Unit
			281-CE	VHDL							
			EGCP 371-CE	Modeling & Simulation of Signals & Systems	3						
			EGCP 381-CE	Computer Design and Organization	4						
			EGCP/E GCE /EGEE 401-CE	Engineering Economics & Professionalism	3						
Information Science Concentration						Computer Information System (CIS)					
						CS205-IS	Microcomputer Software Tools	3			
CMPN 220	Digital Logic Systems	4	EGCP 180-CE	Digital Logic and Computer Structures	3						
CMPS 375	Systems Analysis and Design	4	CPSC 362-C	Software Engineering	3	CS470, CS480	Software Engineering I and II	3	CSCI 301	Software Engineering	3
CMPS 392	Project Management	4									
CMPS 410	Management Information Systems	4									
CMPS 490	Database Management Systems	4	CPSC 332	File Structures and Database Systems	3	CS325	Database Management Systems	3	CSCI 402 - IS	Database Management	3
CMPS 499	Senior Project	1-4				CS499E	Thesis/Project	1-4			
Software Concentration											
CMPN 220	Digital Logic Systems	4	EGCP 180-CE	Digital Logic and Computer Structures	3						
CMPN 371	Assembly Language	4				CS340-C	System Programming II	3			
CMPS 455	Compiler Design	4				CS400-C	Compiler Construction	3			
CMPS 460	Operating Systems	4	CPSC 351	Operating Systems Concepts	3	CS250	Operating Systems	3	CSCI 311	Operating Systems	3
CMPS 490	Database Management Systems	4	CPSC 332	File Structures and Database Systems	3	CS325	Database Management Systems	3	CSCI 402 - IS	Database Management	3
CMPS 499	Senior Project	1-4				CS499E	Thesis/Project	1-4			
Internet Programming Concentration			Internet and Enterprise Computing Track								
CMPS 318	Publishing on the Web I	4				CS363E	Web Programming	3			
CMPS 319	Publishing on the Web II	4	CPSC 473-C	Web Programming	3	CS363E	Web Programming	3			

Degree Requirements at Comparison Institutions											
ULV			Cal State Fullerton			Azusa Pacific			Biola University		
Code	Title	Unit	Code	Title	Unit	Code	Title	Unit	Code	Title	Unit
				and Data Management							
CMPS 378	C# Programming Using .NET	4	CPSC 223N-C	C# Programming	3						
CMPS 480	Distributed Internet Computing	4	CPSC 474-C	Distributed Computing	3				CSCI 335	User Interface Design and Programming	3
CMPS 490	Database Management Systems	4	CPSC 431-C	Database and Applications (similar to CMPS 320 at ULV)	3	CS325	Database Management Systems	3	CSCI 402 - IS	Database Management	3
				Any advisor-approved 3 unit 300/400 CS crs							
CMPS 499	Senior Project	1-4				CS499E	Thesis/Project	1-4			
Electives						Electives			Electives		
CMPN 303	Integrated Electronics	4									
CMPS 362	Numerical Algorithms	4				CS445-C	Numerical Analysis	3	MATH 321	Numerical Analysis	3
CMPS 369	Local Area Networks	4									
CMPS 377	Visual Basic.NET	4	CPSC 223H-C	Visual Basic Programming	3						
CMPS 379	Java	4	CPSC 223J-C	Java Programming	3						
CMPS 392	Project Management	4									
CMPS 400	Analysis of Algorithms	4	CPSC 335-C	Problem Solving Strategies	3				CSCI 400-C	Theory of Algorithms	
CMPS 451	Artificial Intelligence	4	CPSC 481-C	Artificial Intelligence	3	CS430E	Artificial Intelligence	3			
CMPS 463	Computer Graphics	4									
CMPS 465	Programming Languages	4	CPSC 323-C	Programming Languages and Translation	3						
CMPS 475	Systems Design Process	4									
CMPS 495	Information Systems Project	4									
			CPSC 311-C	Technical Writing for Comp. Science	3	CS425E	Fund. of Network Administration	3			
			CPSC 315-C	Social and Ethical Issues	3	CS435E CS435-	Adv. Database Applications	3			

Degree Requirements at Comparison Institutions											
ULV			Cal State Fullerton			Azusa Pacific			Biola University		
Code	Title	Unit	Code	Title	Unit	Code	Title	Unit	Code	Title	Unit
				in Computing		IS	Programming				
			CPSC 440-C	Computer System Architecture	3	CS460E	Software Project	3			
						CS495E	Special Topics in Comp. Sc.	3			
						CS497E	Readings	1-4			
						CS498E	Directed Research	1-4			
Supportive Requirements											
CMPS 301	Programming Concepts	4	CPSC 120	Intro to Programming	3	CS220	Intro to CS	4	CSCI 105	Intro to Computer Science	3
MATH 201	Calculus I	4	MATH 150A	Analytic Geometry and Calculus	4	MATH 161-C	Calculus I	5	MATH 105	Calculus I	4
MATH 327	Discrete Mathematics	4	MATH 270A + 270B	Mathematical Structures	3,3	MATH 280	Discrete Mathematics	3	MATH 112	Discrete Structures	3
			MATH 338	Statistics Applied to Natural Sc.	4						
Additional for Engineering Concentration											
CHEM 201	General Chemistry I	5	CHEM 120A	General Chemistry	5						
			CHEM 125	General Chemistry for Engineers	3						
MATH 202	Calculus II	4	MATH 150B	Analytic Geometry and Calculus	4	MATH 162-C	Calculus II	4	MATH 106	Calculus II	4
PHYS 201,	202 General Physics I, II or						No physics required			No physics required	
PHYS 203,20 4	Physics I: Mechanics, and Physics II: Electricity & Magnetism	5,5	PHYS 225+2 25L, 226+2 26L	Physics I: Mechanics, and Physics II: Electricity and Magnetism	4,4						
			EGEE 323- CE	Engineering Probability & Statistics	3						
Additional for Information Science Concentration.											
ACCT 201	Fundamentals of Accounting I, or					BUSI- IS	Principles of Accounting I	4	BUSN 211-IS	Princ. Account. I	3
ACCT 203	Financial & Managerial Account.	4							BUSN 212-IS	Principles of Act. II	3

Degree Requirements at Comparison Institutions											
ULV			Cal State Fullerton			Azusa Pacific			Biola University		
Code	Title	Unit	Code	Title	Unit	Code	Title	Unit	Code	Title	Unit
ECON 221	Economic Analysis II, or	4							BUSN 202-IS	Princ. of Microeconomics	3
ECON 228	Economic Theories and Issues	4							BUSN 328-IS	Organizational Behavior	3
MGMT 300	Principles of Management	4				BUSI 210-IS	Principles of Organization & Mgmt.	3	BUSN 370-IS	Business Finance	3
PHYS 201	General Physics I, or	5					No physics required			No physics required	
PHYS 203	Physics I: Mechanics	5	PHYS 225+2 25L	Physics I: Mechanics	4						
						MATH 151-IS	Applied Calculus I	3	MATH 103-IS	Calculus for Mgmt Sciences	3
									MATH 210-IS	Intro. to Probability & Statistics	3
Additional for Software and Internet Programming Concentrations											
MATH 202	Calculus II	4	MATH 150B	Analytic Geometry and Calculus	4	MATH 162-C	Calculus II	4	MATH 106	Calculus II	4
PHYS 201,202	General Physics I, II, or						No physics required			No physics required	
PHYS 203, 204	Physics I: Mechanics, & Physics II: Electricity & Magnetism	5,5	PHYS 225+2 25L, 226+2 26L	Physics I: Mechanics, and Physics II: Electricity and Magnetism	4,4				MATH 291	Linear Algebra	3
									MATH 333	Operations Research	3

6.2. Adjunct Faculty Survey Analysis

Adjunct faculty members were surveyed in fall 2011 (See **Appendix F** for the instrument). Since the program had only one faculty member teaching in 2010 – 2011, adjunct faculty members were surveyed to give the survey more substance. Below is the analysis of the survey.

Adjunct Faculty Survey (N = 3)

Demographic:

There were two male and one female adjunct faculty members who took the survey. Two faculty members were Caucasian and one Asian American. One faculty has been teaching for over nine years and the other two have been teaching for one year. Only one faculty member does not use online resources, and two faculty members use Blackboard as an online resource for teaching.

Issues and Perceptions:

1. What do you like about teaching for La Verne?

- ✓ *Smallness, friendliness, campus atmosphere, fairness among faculty*
- ✓ *Small school, warm, and friendly*

2. What do you dislike about teaching for La Verne?

- ✓ *Not enough parking at times, air conditioning is not well in some parts of the building*
- ✓ *No problems*

3. How would you describe the support you receive from faculty colleagues, including chairs?

- ✓ *Very good, including syllabi, old exams, resources, supplies, coverage of class, practicing exams*
- ✓ *Timely and always responsive*

Adjunct Faculty Survey (N = 3)

4. How would you describe the support you receive from administration?

- ✓ *Same as #3*
- ✓ *Excellent, quick responses, friendly*
- ✓ *Frequent / good communication, training for part time faculty*

5. What aspects of the support you personally receive are you

- ✓ *Communication from chair, sharing with colleagues, friendliness of colleagues*
- ✓ *Always responsive to my requests*
- ✓ *Maybe better response if lower levels had more authority. They don't pay attention to part-time faculty members*

6. What kind of support would you like to receive that you do not receive now?

- ✓ *Receive enough support*
- ✓ *Comment: Faculty computer print card at Lab*

7. Would you like to be involved when your program conducts program reviews or self studies?

If so, how?

- ✓ *Yes, consult on all aspects, allow to review and add comments to final reports*
- ✓ *Sure, not sure.*
- ✓ *Sure, however, I am needed and asked*

8. How would you describe the campus climate of the University of La Verne?

- ✓ *Small campus, pleasant environment. Friendly and helpful*

9. What do you think you can do to help students attain higher levels of learning outcomes?

- ✓ *Assign projects and more group work in the classroom*

Adjunct Faculty Survey (N = 3)

10. What do you think students can do to attain higher levels of learning outcomes?

- ✓ *Ask more questions, think about reasonableness of answer, applications to life*
- ✓ *Study more, work together outside of class, and use LEC and library resources*

11. In your opinion to what extent do students in your classes develop the following attributes and / or abilities?

- a. Acquire basic concepts in engineering, information science, internet programming, and software. *Adequate, High Degree.*
- b. Communicate effectively both orally and in writing to their peers. *Adequate.*
- c. Acquire leadership skills and collaborate in team projects. *Adequate, High Degree.*
- d. Demonstrate skills in analyzing problems before and during a project. *Adequate, High Degree.*
- e. Acquire project management skills including data collection, time management and self-teach new application. *Somewhat, Adequate.*
- f. Conduct research to solve problems independently. *Somewhat, Adequate, High Degree.*
- g. Be prepared to go to graduate schools. *Somewhat, Adequate.*
- h. Obtain a sense of “urgency” to meet deadlines. *Adequate, High Degree.*
- i. Be flexible to function in a variety of work environments. *Somewhat, High Degree.*
- j. Be prepared to get jobs in industry related to concentration areas such as Computer Engineering, Information Science, Internet Programming, and Software Engineering. *Adequate, High Degree.*

12. Comments:

- ✓ ULV needs a bridge between academia and industry for students’ future careers
- ✓ CS&E Department needs to develop networks with professional organizations for students’ future career. (e.g. IEEE, INCOSE, PMI, etc.)
- ✓ Highly recommend to open Systems Architecture class (4 units) and Systems Engineering Certificate Program for the future careers of students

6.3. Focus Group

On March 7, 2011 Michelle Alfaro conducted a focus group in the Digital Logic course. Thirteen students were enrolled in that class. Four students were Computer Engineering concentration, four were Information Science concentration, two were Internet Programming concentration and three were software concentration. Below is her report.

Executive Summary: The Computer Program review process included a student focus group with students that are currently majoring in Computer Science in the College of Arts and Sciences. The focus group was conducted on 15 February 2011, during the Spring 2011 semester. Participants were asked about key aspects of the Computer Science program, including topics such as the strengths, weaknesses, and areas of growth for the program of study. A summary of the findings is provided in the following write-up.

Purpose: The goal of the student focus group was to gather as much feedback regarding issues about the computer science program: what are the strengths of the program, what are the weaknesses, how can the program be improved, and what does the program lack for students.

Methods: *Participants* - The participants included 15 student members that are currently majoring in Computer Science in the College of Arts and Science. There were only male participants. Participants varied in age and ethnicity, and all volunteered to be a part of the focus group and were willing to provide essential feedback.

Procedure - Participants were informed that their comments would be kept confidential and that identifying information would not be recorded or provided in the final summary. Participants' comments were recorded electronically on a laptop using the program Microsoft Word.

Instrumentation - The following questions were used to guide the focus group discussion:

1. What are the strengths of the Computer Science program?
2. What are the weaknesses of the Computer Science program?
3. What could be done to improve the Computer Science program?
4. Any additional comments.

After the focus group was completed, participants' comments were collectively grouped. To further assist in a content analysis, the comments were then sorted into four main categories of

Strengths, Weaknesses, Improvements, and Additional Comments. The comments were then subjected to a thematic analysis to identify underlying themes and to address the primary questions addressed by the student focus group.

Summary of Findings: Based on the focus group conducted with students who are majoring in Computer Science at the University of La Verne, the following results were produced. Four major categories of content were identified through the analysis: Strengths, Weaknesses, Improvements, and Additional Comments.

Strengths: Strengths of the computer science program include the professors that teach the students and the accessibility students have in their classes. Students commented that they enjoy the fact that their professors use technology in their courses by allowing students to email their work via email. They stated that this relates to being eco-friendly since less paper is being used. Most importantly, students feel that their professors are knowledgeable and know the material very well, which makes the learning process easy and fun. By having professors that are dedicated to students, they are able to grasp the materials and retain the information. Another strength is the caring advisors and professors that make up the department. Students feel that there is an open-door policy and that there is a great deal of one-on-one attention.

A strength that the students felt was very important was that in their classrooms there is one computer for each student. They stated that the university provided each technology so that each student has their own materials. They also appreciate that the classrooms are small. Thirdly, students like the implementation of blackboard in their courses because it is easy to use and access.

Weaknesses: Students expressed that one of the main weaknesses of the program involved the programs and computers that are at the University of La Verne as needing to be updated. Participants feel that the programs and computers available to students are not equivalent to the technology that is available to students at other universities. Participants feel that ULV is falling behind on the implementation of technology. Another weakness is that there is a lack of

computer language variation which, impacts students because they are not gaining a well-rounded experience.

Students also commented that there is a lack of workshops for the computer science program and that the lack of seminars impedes the learning process for students. Students also commented that they cannot develop programs in their courses which does not allow them to test the skills they have spent their time learning. Students are frustrated that there is no outlet for them to demonstrate what they have learned. Students did acknowledge that there is a senior project but many felt that it is not a true assessment of their skills.

Students also feel that some of their courses are very overlapping and that the material is highly repetitive and students feel that some courses are redundant and pointless. Students are also unable to fulfill all their major units because passing or skipping a course that they already know the material for affects when they may graduate. Students also commented on weaknesses that affect the entire ULV population that include the quality of programs is poor, there are compatibility issues, and OIT is extremely unorganized.

Improvements: Students feel that if there were more seminar classes, it would greatly improve the program. As well, students would like guest speakers to come and specifically discuss computers or technology, and feel that it is a disadvantage to the major since other departments are able to get guest speakers. Students also commented that courses in the catalog are not taught, and some courses are taught only on specific terms, which can impact their time of graduation.

Students would also like more theory implemented into the courses and have more projects incorporated into the courses. Students feel that the lack of projects impedes their learning process and that they are unable to demonstrate and practice their learned skills. Students also expressed that these projects can be done in groups so that they can learn from one another.

Students also feel that it would be beneficial for OIT to accept students from the computer science department and allow them to do semester clerkships. Students also feel it would be beneficial for the university to update itself on technology and allow more programming for students. Lastly, students also feel it would be beneficial for the computer club to have a room in order to conduct meetings.

Additional Comments: Students shared that they are pleased with the professors that are teaching the information. Students feel that the professors are knowledgeable, helpful, and caring towards the students. Students also shared that professors do become limited because they are teaching many courses, serving as advisors, and so hiring more faculty for the department would be beneficial. Lastly, students would like if departments could speak to one another when creating the scheduling of classes, because often times, courses collide and students are unable to take general requirement courses because they have to take their major courses.

6.4. Internship Supervisor Survey Analysis

The internship became a graduation requirement in Fall 2005. Students are allowed to sign up for an internship as 1 to 4 units (See **Appendix I** for the internship records starting from 2005 to 2011. **Appendix J** presents a sample of forms used by the students who enroll in internship. The forms include the following: Internship coversheet form, Sign up form, and Supervisor's Evaluation Survey form. The table below represents the Supervisor's Evaluation Survey of the students who registered for the Internship course.

University of La Verne Internship Supervisor Evaluation Form (N = 20)
Please fill out the following form and either send it directly to my address or put it in a sealed envelope and give it to the student. Your Cooperation is greatly appreciated.
1. Company name <ul style="list-style-type: none"> ✓ Children are our Future ✓ Chuck E. Cheese ✓ Computer Ease ✓ Computer Network USA ✓ Computer Village ✓ Furniture Central ✓ Future Concepts ✓ Hollis Computer Corporation ✓ Independent Community Resources Inc ✓ Northrop Grumman ✓ Surado CRM solution ✓ Symbolic Action ✓ Ternica / ITG ✓ U.S. Army ✓ Union Bank ✓ University of La Verne, Center for Teaching & Learning ✓ University of La Verne, OIT

2. Student job title

- ✓ Computer Technician
- ✓ Desktop Technician
- ✓ Embedded Engineer / PC Integrator
- ✓ General Manager
- ✓ Intern - Jr. Web Developer
- ✓ Internship
- ✓ Internship Web Developer
- ✓ Multimedia and Computer Assistant
- ✓ Network Security UNIX / Linux Administrator
- ✓ Research Assistant
- ✓ Software Engineer
- ✓ Software Engineer Intern
- ✓ Store Manager
- ✓ Student Job Title
- ✓ Student Technician

3. Average number of hours worked per week 24 hours**4. Length of time in the current job assignment 26 weeks****5. Please describe your overall assessment of this student's job performance**

- ✓ "A" is an extremely hard working person, displaying eagerness and integrity. It has been an absolute pleasure working with him.
- ✓ "A" has worked on PCs and MAC hardware. Believe the business very knowledgeable and we could send her out on any work order pertaining to hardware.
- ✓ Excellent
- ✓ Excellent. Would consider for hiring.
- ✓ Exceptional
- ✓ "B" has a solid understanding of computer applications and graphic design. His production of our multimedia projects was professional and he will be an asset to his future employers.
- ✓ Internship
- ✓ "C" was assigned various tasks in support of software test and analysis on a large ground software processing program. The type of work given to Joey was software requirements flow into software test plans. Joey was an excellent performer. He worked very well with his team members and he learned quickly. We were very happy to have Joey help our team this summer. Our test effort is now ahead of schedule and in excellent shape as we move into the next phase. Joey is hard working, highly motivated, and has high integrity. We would be happy to talk to Joey upon graduation.
- ✓ "D" is a good developer and has the potential. He has the researching skill which is important asset. Many times he has done research over the Internet to find solutions. He has picked up his SQL skills well. Jose's technical weakness is in objected oriented development and troubleshooting skill, but may be improved as times goes by.
- ✓ "E" is very detail oriented. He goes above his assigned tasks to help the project as a

whole. He produces high quality work. Michael has been an asset to the project.

- ✓ Notice Trent is very pleasant and always on time. The lead technician stated that he would like to see him dig in more, become more inquisitive and research more things on his own will develop confidence in his abilities.
- ✓ "F" did a good job with all the tasks assigned to him.
- ✓ overall assessment
- ✓ "G" was exceptional during his time of work for the university. He gained a wealth of knowledge as well as learning new skills which will translate into a better, well rounded IT technician. Patrick went above job duties helping with higher level system problems as well as researching solutions to said problems. He was a great asset to the University.
- ✓ The USAARL research team is very impressed with Bradley Fong's performance. His motivation, Computer Science expertise, and quick grasp of new concepts allowed him to rapidly integrate into our team of scientists. Before his arrival to our lab, we had completely written all components for the study protocol "Correction of Higher-Order Visual Aberrations (Supernormal Vision)", but we did not have a clear concept how to develop a computer program for our proposed target recognition task. With minimal guidance - just the conditions and desired end product - Bradley was able to develop new ideas, suggest a number of possible courses of action, and write a program for a realistic military operational target recognition task. His contribution to our study is immeasurable. It was a pleasure working with Bradley.
- ✓ Good
- ✓ Very good performance. He is always on time. He finishes his job above and beyond what is required. Overall very good manager.

6. How would you rate this student's job performance?

Outstanding **65%** **Good** **25%** **Average** **10%** **Fair** **Poor**

7. In comparison with other internship students whom you have known, how would you rate this student? Outstanding **70%** **Good** **20%** **Average** **10%** **Fair** **Poor**

8. To what degree do you believe this student has been prepared by the University of La Verne, in the area of Computer Science, to perform the duties required by their position? Please explain.

6.5. Comprehensive Exams

In 2005 the Computer Science program added the comprehensive exam as a graduation requirement. Graduating seniors are required to take the comprehensive exam at the beginning of their senior year. Senior comprehensive exams are scheduled twice a year: the first Friday of December and the first Friday of May (See **Appendix K** for a sample of the comprehensive exam.) The table below reflects the results of student performance.

Computer Science and Computer Engineering Program Results of the comprehensive examination (N = 62): (NT= Subject Not Taken by the student)								
Student no.	Date	Conc.	CMPS301, 367, 385 (7 qst)	CMPN 280 (2 qst)	CMPS 450/ 455 (3 qst)	M327/ CS368 (2 qst)	CMPS 490 (4 qst)	Result
1	5/18/05	CS	6/7	2/2	2/3	1/2	3/4	Pass
2	5/18/05	CS	5/7	2/2	2/3	1/2	3/4	Pass
3	5/18/05	CS	6/7	2/2	2/3	1/2	4/4	Pass
4	5/18/05	CS	4/4	2/2	3/3	2/2	NT	Pass
5	5/18/05	IS	7/7	2/2	2/3	1/2	3/4	Pass
6	5/18/05	CS	2/7	0/2	1/3	NT	2/4	Fail
7	5/18/05	CS	6/7	2/2	2/3	0/2	2/4	Pass
8	5/18/05	CS	6/7	1 /2	2/3	NT	3/4	Pass
9	5/18/05	IS	5/7	2/2	NT	1/2	3/4	Pass
10	5/18/05	IS	5/7	1 / 2	NT	2/2	3/4	Pass
11	5/22/06	IS	5/5	3/3	2/2	4/4		Pass
12	4/18/07	WEB	3/3	2/2	2/2	2/2		Pass
13	12/12/07	CS	3/3	2/2	2/2	NT		Pass
14	12/12/07	CS	3/3	2/2	2/2	4/4		Pass
15	5/5/08	IS	NT	31/40	25/30	5/20	10/10	71% Fail
16	5/5/08	IS	NT	30/40	10/30	9/20	10/10	59% Fail
17	5/5/08	CE	NT	40/40	7/30	20/20	NT	74% Pass
18	5/5/08	IS	NT	40/40	22/30	20/20	10/10	92% Pass
19	5/5/08	IS	NT	19/40	10/30	10/20	10/10	49% Fail
20	5/5/08	IS	NT	37/40	24/30	0/20	10/10	71% Fail
21	5/5/08	IS	26/30	40/40	28/30	15/20	10/10	91% Pass
22	6/26/08	IP						Fail
23	7/17/08	IP						Fail
24	7/24/08	IP						Pass
25	8/6/08	IS	40/50	25/35	16/30	30/30	NT	76% pass
26	12/8/08	IS	50/50	26/35	20/30	30/30	NT	86% Pass
27	12/8/08	IP	50/50	24/35	25/30	25/30	NT	88% Pass
28	12/8/08	IP	33/50	20/35	10/30	25/30	NT	72% Fail
29	12/8/08	CS	28/50	10/35	25/30	29/30	0/30	66% Fail
30	12/8/08	IS	50/50	25/35	20/30	29/30	NT	84% Pass
31	12/8/08	IS	31/50	20/35	25/30	29/30	NT	76% Pass
32	12/8/08	IS	46/50	28/35	20/30	30/30	NT	83% Pass
33	12/17/08	CS	50/50	24/35	25/30	25/30	22/30	88% pass
34	5/1/09	IP	41/50	7/35	20/30	25/30	NT	64% Fail
35	5/1/09	IP	50/50	26/35	23/30	30/30	NT	89% pass

Computer Science and Computer Engineering Program Results of the comprehensive examination (N = 62): (NT= Subject Not Taken by the student)								
Student no.	Date	Conc.	CMPS301, 367, 385 (7 qst)	CMPN 280 (2 qst)	CMPS 450/ 455 (3 qst)	M327/ CS368 (2 qst)	CMPS 490 (4 qst)	Result
36	5/1/09	IS	25/50	20/35	10/30	15/30	NT	31% Fail
37	5/15/09	IS	42/50	24/35	20/30	25/30	NT	77% pass
38	12/4/09	IP	48/50	25/35	25/30	30/30	NT	88% pass
39	5/7/10	IS	40/40	15/30	25/30	28/30	NT	83% Pass
40	5/7/10	IS	37/40	23/30	20/30	27/30	NT	82% Pass
41	5/7/10	CS	35/40	15/30	30/30	20/30	23/30	76% Pass
42	5/20/11	IS	30/40	24/30	20/30	30/30	NT	80% Pass
43	5/20/11	IP	35/40	22/30	22/30	21/30	NT	76% Pass
44	5/20/11	CS	40/40	NT	15/30	26/30	18/30	76% Pass
45	5/20/11	CE	32/40	7/30	30/30	28/30	NT	74% Fail
46	5/20/11	CS	37/40	7/30	NT	10/30	9/30	48% Fail
47	5/20/11	CS	34/40	16/30	15/30	30/30	17/30	70% Fail
48	5/20/11	CS	30/40	8/30	10/30	30/30	26/30	65% Fail
49	5/20/11	CS	31/40	7/30	30/30	25/30	14/30	66% Fail
50	5/20/11	CE	20/40	10/30	24/30	30/30	26/30	68% Fail
51	5/20/11	CS	30/40	14/30	20/30	26/30	4/30	58% Fail
52	5/20/11	IS	37/40	14/30	15/30	27/30	NT	72% Fail
53	12/10/11	CS	40/40	30/30	24/30	40/40	28/30	96% Pass
54	12/10/11	CS	30/40	25/30	16/30	5/40	27/30	62% Fail
55	12/10/11	CS	24/40	28/30	0/30	26/40	22/30	63% Fail
56	12/7/12	CS				44/90	12/60	56% Fail
57	12/7/12	CE				79/90	12/20	81% Pass
58	12/7/12	CE				79/90	12/20	81% Pass
59	12/7/12	IP				80/90	55/60	90% Pass
60	12/7/12	IP				52/90	35/60	54% Fail
61	12/7/12	IS				79/90	43/50	88% Pass
62	12/7/12	IS				78/90	48/50	84% Pass

As of 2011, the program is proud to announce that the majority of the students in the program passed the comprehensive exam on the first attempt. There was a handful of students who passed the exam on the second attempt. One student had to take the exam three times.

6.6. Capstone Senior Projects

All students are required to complete CMPS 499 Senior Project. Students are required to complete their senior project under the supervision of one of the faculty members. Students are required to present their senior projects to the ULV community. Finally, students are required to document and write their senior project report before earning their final grade. The senior project presentations are scheduled for the second Wednesday of May and December (see **Appendix L** for list of recent senior project presenters and their project abstracts). **Appendix M** contains the instrument used to evaluate the presenters. The table below reflects the results of the analysis.

Senior Project Presentation Evaluation (N = 52)																	
#	Class	N	Q1: Introduction	Q2: Abstract	Q3: Purpose	Q4: Research Ref.	Q5: Concept & Rationale	Q6: Methods / Proc.	Q7: Analysis & Design	Q8: Demonstration	Q9: Discussion	Q10: Organization	Q11: Relation to Audience	Q12: Audio Visual	Q13: Questions	Q14: Attire	Average
3	2005	13	4.0	3.8	3.6	2.3	3.8	3.5	3.9	3.2	3.8	3.5	3.4	3.6	2.6	4.0	3.5
6	2005	11	3.8	3.7	3.5	2.4	3.6	3.3	3.3	3.5	3.7	3.5	3.5	3.6	3.0	3.9	3.5
9	2005	12	3.3	3.3	3.3	2.4	3.5	3.7	2.3	3.4	3.1	3.3	3.3	3.8	3.1	3.3	3.2
18	2005	11	3.3	3.2	3.4	2.9	3.2	3.3	3.1	3.5	3.2	3.3	3.4	3.2	3.5	3.0	3.2
19	2005	13	3.3	3.2	3.2	2.6	3.1	2.8	2.8	2.9	3.2	3.2	3.2	3.1	2.5	3.5	3.0
22	2005	11	3.9	3.8	3.8	2.5	3.8	3.8	3.2	3.7	3.6	3.7	3.8	3.6	3.1	3.6	3.6
29	2005	18	3.7	3.6	3.6	3.0	3.6	3.7	3.5	2.6	3.4	3.4	3.6	3.8	2.8	3.9	3.4
32	2005	10	3.8	3.8	3.8	1.9	3.8	3.8	3.2	3.5	3.2	3.7	3.6	3.7	3.5	4.0	3.5
34	2005	11	3.7	3.7	3.7	3.1	3.7	3.3	2.7	3.9	3.9	3.2	3.7	3.8	3.5	3.5	3.5
36	2005	8	2.6	2.6	2.8	2.4	2.8	2.6	2.5	2.3	2.4	2.8	2.8	2.8	2.8	3.4	2.7
37	2005	10	3.6	3.1	3.0	2.4	3.0	3.1	2.3	3.4	3.1	3.3	3.2	3.3	3.5	3.3	3.1
43	2005	13	3.7	3.7	3.6	2.7	3.5	2.8	2.5	3.2	3.2	3.2	3.7	2.7	3.4	2.1	3.1
49	2005	12	3.9	3.8	3.8	2.7	3.6	3.5	2.9	2.1	3.6	3.5	3.4	3.7	3.3	3.3	3.4
52	2005	12	3.3	3.3	3.4	3.3	3.3	3.2	3.5	2.3	3.3	3.2	3.2	3.2	3.3	3.4	3.2
1	2006	12	3.2	3.1	3.5	2.3	3.4	3.3	3.5	3.3	3.0	3.5	3.6	3.4	3.3	3.8	3.3
8	2006	11	3.8	3.5	3.5	3.8	3.7	3.8	3.8	3.0	3.3	3.8	3.9	3.7	1.9	4.0	3.5
10	2006	8	2.5	3.4	3.9	3.1	3.3	3.5	3.4	2.9	3.3	3.4	3.9	4.0	3.8	3.5	3.4
11	2006	7	3.7	3.9	3.9	3.6	3.1	3.6	3.7	3.7	3.7	3.6	3.6	4.0	4.0	4.0	3.7
12	2006	13	3.2	3.2	3.5	2.0	3.5	3.4	3.5	2.7	3.2	3.4	3.6	3.2	3.2	3.8	3.2
13	2006	10	3.8	3.8	3.7	3.0	3.7	3.8	3.7	3.7	3.5	3.9	3.7	3.7	3.3	2.6	3.6
15	2006	9	3.6	3.2	3.4	3.8	3.3	3.8	3.8	3.8	4.0	3.9	3.7	3.9	4.0	4.0	3.7
23	2006	15	3.3	3.3	3.4	2.1	3.3	3.1	3.6	3.1	2.7	3.3	3.0	3.1	3.2	3.7	3.2
25	2006	12	3.6	3.5	3.5	3.0	3.3	3.6	3.4	3.8	3.5	3.3	3.3	3.4	3.5	3.3	3.4
26	2006	11	3.5	3.6	3.5	3.8	3.7	3.9	3.7	3.8	3.5	3.7	3.8	3.7	3.4	3.5	3.7
41	2006	8	3.6	3.5	3.6	3.1	3.3	3.3	3.0	3.4	2.1	3.6	3.6	3.8	3.0	3.8	3.3
42	2006	12	3.6	3.7	3.5	2.8	3.5	3.7	3.6	3.5	3.4	3.4	3.4	3.8	2.8	3.7	3.5

44	2006	6	3.7	3.7	3.7	3.7	3.5	3.3	3.7	3.3	3.0	3.8	3.7	4.0	3.3	4.0	3.6
45	2006	9	3.3	3.4	2.8	3.3	3.4	3.6	3.1	3.9	3.6	3.8	3.4	3.8	3.3	4.0	3.5
46	2006	10	3.6	3.5	3.5	3.3	3.5	2.2	3.3	2.9	3.1	3.1	3.5	3.1	3.0	3.2	3.2
2	2007	19	3.7	3.7	3.6	3.1	3.7	3.5	3.6	2.7	3.7	3.8	3.7	3.9	3.6	4.0	3.6
14	2007	15	3.8	3.7	3.9	3.3	4.0	3.7	3.8	3.7	3.9	3.7	3.8	3.9	3.7	3.9	3.8
21	2007	9	3.2	3.4	3.2	3.0	3.6	3.4	3.6	3.6	3.7	3.4	3.6	3.4	3.4	3.7	3.4
40	2007	8	3.8	3.8	3.3	3.3	3.8	3.6	3.4	3.6	3.4	3.1	3.5	3.6	3.5	4.0	3.5
48	2007	10	3.5	3.8	3.4	2.8	3.3	3.2	3.5	3.5	3.3	3.4	3.8	3.5	3.5	3.9	3.5
7	2008	14	3.1	3.1	3.4	2.6	3.4	3.4	3.1	3.6	3.4	3.1	2.6	3.1	2.7	3.1	3.1
16	2008	12	3.5	3.0	3.8	3.1	3.8	3.5	3.5	3.8	3.3	3.1	3.3	3.3	2.7	3.3	3.4
24	2008	11	3.3	2.8	3.4	2.5	3.5	3.0	2.4	3.2	3.0	3.1	3.3	3.0	2.5	3.1	3.0
27	2008	13	3.5	3.2	3.7	3.1	3.5	3.5	3.1	2.7	3.5	3.6	3.5	3.7	3.5	3.7	3.4
30	2008	10	3.2	3.1	3.1	2.6	3.0	3.0	2.7	2.6	2.6	2.9	2.9	2.8	2.1	2.9	2.8
35	2008	14	3.5	3.3	3.4	2.7	3.4	3.1	3.2	3.5	3.4	3.4	3.0	3.4	2.7	3.6	3.3
38	2008	12	3.8	3.8	3.8	3.1	3.7	3.6	3.4	2.5	3.6	3.7	3.2	3.7	3.6	3.6	3.5
47	2008	13	3.8	3.7	3.7	3.7	3.7	3.7	3.3	2.1	3.8	3.7	3.5	3.7	3.5	3.8	3.5
51	2008	9	3.6	3.4	3.3	3.0	3.3	3.0	3.0	2.0	3.0	2.8	3.3	3.6	1.2	3.6	3.0
4	2009	6	2.8	2.7	2.8	2.2	3.2	2.5	2.8	2.8	2.8	3.0	3.3	2.8	2.7	3.3	2.8
17	2009	11	3.7	3.7	3.7	3.7	3.4	3.5	2.8	3.7	3.6	3.7	3.3	3.5	3.2	3.5	3.5
20	2009	8	3.6	3.6	3.8	3.4	3.6	3.5	3.5	3.4	3.5	3.6	3.5	3.6	3.9	3.6	3.6
28	2009	6	3.0	3.0	3.2	3.0	3.0	2.8	2.7	2.8	2.8	3.2	2.8	3.2	2.8	3.2	3.0
31	2009	10	3.9	3.7	3.7	3.2	3.6	3.4	3.2	3.7	3.7	3.8	3.9	3.8	3.9	4.0	3.7
50	2009	8	3.6	3.0	3.5	2.5	3.4	2.9	2.8	3.3	3.4	2.8	3.8	3.5	3.1	4.0	3.2
5	2010	9	3.8	3.8	3.6	3.1	3.4	3.7	3.4	2.4	3.6	3.3	3.3	3.4	3.9	3.8	3.5
33	2010	10	4.0	3.8	3.8	2.9	3.9	3.7	3.3	3.3	3.7	4.0	4.0	3.9	4.0	4.0	3.7
39	2010	9	3.3	3.6	3.7	2.9	3.3	3.7	3.2	3.8	3.3	3.1	2.8	3.3	3.6	3.9	3.4
		Ave	3.5	3.5	3.5	2.9	3.5	3.4	3.2	3.2	3.3	3.4	3.4	3.5	3.2	3.6	3.4
		Max	4.0	3.9	3.9	3.8	4.0	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.0	4.0	3.9
		Min	2.5	2.6	2.8	1.9	2.8	2.2	2.3	2.0	2.1	2.8	2.6	2.7	1.2	2.1	2.3

Summary of Comments

1. While I am still learning the basics I understood what he was saying. Although he did seem nervous. Seems like he needed a bit more in research to what he wanted site to do. Misspelling on PowerPoint: It's open source and it is customizable. I really liked Mr. Alvarez's presentation. Considering it is a work in progress, it is very good.
2. Satisfactory! Professionally presented. Probably don't need to flash back to agenda screen. Great presentation. Good application of data.
3. Who will update it? Very nice presentation, slides looked very good. Nicely organized. Needed more eye contact.
4. Very wordy, project does not seem like it works yet. Needs more time? Ideas not clear/consistent. Keep up the good work. Grammar used on PPT slides is substandard for college level work. Could use a better color scheme.
5. Very well done. Please, please, do not read your presentation off your papers. Just needed to memorize a bit. All and all very well done. Very dedicated, very ambitious. Impressive project, and very successful and important, too. However, the presentation was largely a list of lists, and I found it hard to follow. I loved the videos she created! Great job.
6. Too much text on some slides, very good topic for project.
7. Nice Job! Good Job! A little too much straight reading off the text on the screen.

8. Very impressive. I was a little confused about the purpose, but very impressive. I really did not understand what he was talking about, but he did a good job. Good job.
9. Keep your hands still. Good Job. Good Job!
10. Nice product, it was a very good presentation. I believe it will become very popular. Good presentation.
11. The design was confusing, typos.
12. Coming late to your senior project does not give a good impression. Very good.
13. Very impressive presentation. I found this to be quite inspirational and exciting. Good job! Although I did not understand what he was saying, his presentation was very well presented and thought out.
14. Very informative and effective, she did a great job.
15. Nicely presented. Great Job! Just speak a little slower.
16. Nice project. I'm sure you will be upgrading this program a lot. I like the palm! Don't read off of slides! Maximize slides to full screen at the end of presentation.
17. The demonstration was not very robust. Keep Still. "outweighs," not "out ways" Don't read all the words off the screens; the audience can do that. Talk about the concepts.
18. Read info at first - better as presentation went. Excellent flow. I agree "wow wow" Lots of detail. Great job!! Demonstration component was too long, detailed. Maintain eye contact with more than just Dr. Whitby. Do not read all text directly off of PPT pages.
19. Very good project that only needs a few future additions. Very good presentation. Very Good. Impressive project did a good job. Good project. It must have been very difficult to organize, a wonderful job was done. Good concept, but there's room for many little improvements.
20. Very good.
21. Spell check, a lot of room for improvement, design was unclear. Great presentation, it was fun to hear.
22. Too much animation with power point. Nice Design. Good Idea. Good marketing. Don't read off your screens. Not clear how much you actually needed ULV's program and knowledge from courses to do this project.
23. Very good. Very good. PowerPoint was unprofessional, design was very good. Nailed it.
24. Your project was very professional. I enjoyed your final project because it was simple and factual. Great Job.
25. Great Job. Good luck redoing your project. Make sure to backup.
26. Needs more contact with audience. Great job!! Good presentation. Don't cram so much text on the PPT slides; don't read off of slides. No eye contact; eyes were reading off the screen all the time. If you show a slide full of information for 2 seconds, it's probably not worth showing at all.
27. Very interesting project, professional approach, and analysis of problems. Presentation showed to have included a lot of work. Good organization. It's a good project. Good job. "Manner," not "Manor".
28. Too much information. Did not have enough time to demonstrate or talk about his project. Too much background. I liked your design and set up. Great Job! Don't hit the keyboard so hard to change the sides! Big arrows on over. Chart were confusing.
29. Very good presentation.
30. Great job--very informative.
31. Very clear, useful in many different ways. Takes the listener to the process very simply. I was not here for introduction. excellent presentation. Excellent organized material. Very logical speech. password issues.
32. Very interesting and challenging project. Very good project. Great job! I'll look forward to playing it
33. Speak clearly, distinctively, and loud enough for your audience. I don't know when the computer science input occurs. Great speaking voice and great knowledge of project itself. Great job and congratulations. Good job!

34. Slides have too much text--first slide. Late to presentation and went over time limit. Poor presentation of Access database (excuses vs. execution).Don't read large amounts of text off the screen. We can do that. Discuss what you have done!
35. Great Job!
36. Not enough eye contact during slides, but he made up for that during the Q&A. Amazing job. Just add color to the website! A good job.
37. Very well presented, and he is thinking ahead with the updates. Very excellent, satisfaction of customers wants.
38. Outsourcing on a greater than necessary scale. Great job, well organized. Brad can do much better. Weekend project.
39. It was clear that you really enjoyed doing the project. Excellent Job
40. No professional attire. No PowerPoint presentation. Lack of professional attire reflects negatively on presentation, even though very thorough and knowledgeable. Had a typo on flow diagram.
41. Lots of room for improvement on actual code and website. It is a good start.
42. Great job, real professional work, well done. Great job!
43. This presentation was excellent! Very Good. Great Job!
44. Very good presentation and good insight to future upgrades. Still a little questionable as to what the project was and what he actually did. I have no idea what he did for the project.
45. Very well, I liked the explanations of user end impact. Very knowledgeable on topic of project. Great!
46. What is the point of lashing through numerous PowerPoint pages without saying anything? power point could have been organized better.
47. Hard to figure out what the application actually supposed to be doing.
48. Very soft spoken voice. Hard to hear sometimes. Nice PowerPoint. Very extensive. Useful information and is understandable as a "non-system architect." Nice job! Very good project! Well planned and designed. Don't read off of slides, especially at the beginning of the talk.

6.7. Senior Exit Surveys

A Senior Exit Survey instrument was created in Spring 2004 (see **Appendix N** for instrument). The same instrument has been used consistently every semester. Students are asked to fill out the survey before they present their senior projects.

The table below reflects the results of students who filled out the survey from Fall 2005 until present.

Computer Science Senior Exit Survey Results	
	(N= 56)
1. Date completed:	
5/11/2005	7
12/7/2005	6
5/10/2006	14
12/18/2006	3
5/25/2007	2
12/10/2007	2
5/7/2008	4
12/10/2008	6
5/6/2009	4
12/2/2009	3
5/12/2010	3
12/8/2010	2
2. Expected semester of graduation:	
Spring 2005	7
Fall 2005	2
Spring 2006	14
Fall 2006	6
Spring 2007	3
Fall 2007	2
Spring 2008	3
Fall 2008	5
Spring 2009	6
Spring 2010	6
Fall 2010	1
Spring 2011	1
3. Gender	
Female	15
Male	41
4. Are you a CAPA student?	
CAPA	13
Main Campus Traditional student	43

Computer Science Senior Exit Survey Results					
(N= 56)					
5. Number of years at ULV?					
1 Year	2				
2 Years	3				
3 Years	9				
4 Years	22				
5 Years	12				
6 Years	4				
7 Years	3				
10 Years	1				
6. Started ULV as:					
Freshman	38				
Transfer	18				
7. Plans to continue education (circle your answers):					
a. <input type="checkbox"/> No plan at this time	13				
b. <input type="checkbox"/> Currently working and no plan for a graduate degree	12				
c. <input type="checkbox"/> Have been accepted into a graduate program	3				
d. <input type="checkbox"/> Definite plan to go to graduate school	28				
8. Would you recommend this program to others?					
Yes	56				
No	0				
9. Are you currently working in a job that is related to your field?					
Yes	37				
No	19				
10. Instructions: Please indicate below the degree to which you are satisfied with different aspects of the Computers science program					
	Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory	Not Applicable
a. Faculty respect for students	51	5			
CAPA: Female	3				
Male	10				
Traditional: Female	12				
Male	26	5			
b. Faculty availability	40	16			
CAPA: Female	3				
Male	7	3			
Traditional: Female	10	2			
Male	20	11			
c. Advisement	41	13	2		
CAPA: Female	3				
Male	9	1			
Traditional: Female	10	2			
Male	19	10	2		
d. Variety of courses	20	31	5		

CAPA: Female	2	1			
Male	4	6			
Traditional: Female	7	4	1		
Male	7	20	4		
e. Quality of the program	36	20			
CAPA: Female	3				
Male	8	2			
Traditional: Female	8	4			
Male	17	14			
f. Quality of instructions	44	12			
CAPA: Female	2	1			
Male	7	3			
Traditional: Female	10	2			
Male	25	6			
g. Scheduling of courses	26	24	6		
CAPA: Female	3				
Male	4	5	1		
Traditional: Female	7	4	1		
Male	12	15	4		
h. Hands on experience	30	25			1
CAPA: Female	3				
Male	5	4			1
Traditional: Female	5	7			
Male	17	14			
i. Class size	49	6			1
CAPA: Female	3				
Male	9	1			
Traditional: Female	10	1			1
Male	27	4			
j. Class environments	46	9			1
CAPA: Female	2	1			
Male	8	2			
Traditional: Female	10	1			1
Male	26	5			
k. Preparation for career	29	22	3	2	
CAPA: Female	2	1			
Male	6	4			
Traditional: Female	6	6			
Male	15	11	3	2	
l. Developing problem solving skills	39	15	2		
CAPA: Female	3				
Male	7	3			
Traditional: Female	6	6			
Male	23	6	2		

m. Developing self confidence	40	14	2		
CAPA: Female	3				
Male	8	2			
Traditional: Female	10	1	1		
Male	19	11	1		
n. Met the goals I came to achieve	43	10	3		
CAPA: Female	3				
Male	8	2			
Traditional: Female	10	2			
Male	22	6	3		
o. My accomplishments in this program	40	16			
CAPA: Female	3				
Male	8	2			
Traditional: Female	9	3			
Male	20	11			
p. Program use of feedback from students	34	21		1	
CAPA: Female	2	1			
Male	7	3			
Traditional: Female	6	6			
Male	19	11		1	
11. What do you consider to be the challenges of the computer science program?					
❖ The challenge is staying on track, and working with diverse technologies.					
❖ The lack of classes other than required courses.					
❖ Availability of convenient class schedules, better career preparation (i.e. career fairs), better hardware for labs.					
❖ Need of more quality teachers like Seta and Ray.					
❖ Limited financial support by ULV Administrators in relation to student needs.					
❖ One good lab is not enough.					
❖ Number of teachers.					
❖ Little more of integration of technologies.					
❖ The math courses that are a supportive requirement.					
❖ Requirements and the amount of courses needed for graduation. Had bad experience with one professor who is no longer here.					
❖ Have part time faculty that change over both years.					
❖ Senior Project					
❖ Schedule of classes and how often they are offered.					
❖ Keeping up with ever changing technology.					
❖ The most challenging part of computer science is the 1st and 2nd semester. This is because you are just getting acquainted with a completely different school environment.					
❖ No graduate program.					
❖ The department has grown and they have handled the challenge well.					
❖ Add material for database administrators. Only 1 SQL class while many programming classes.					

❖ The numerous programming courses.
❖ E-commerce needs supportive classes in Web design, study on what and why makes a better website, etc. Supplemental tutoring for coding would be helpful.
❖ GED requirements.
❖ Course availability for students working full time.
❖ Course work is hard and challenging for every class.
❖ Completion of the course load in four years.
❖ Some courses were not consistent with regards to material and quality of material taught. Real-life examples/practice should be more abundant.
❖ Since the program/school is smaller, the variety of times and courses available are very limiting.
❖ Senior Project
❖ The many courses that are given as requirements. However those courses have given me the skills and knowledge to succeed.
❖ I feel that there should be more language classes required for software concentration students. Also the programming classes could be more difficult /advanced.
❖ Diversity in the program in terms of types of courses.
❖ When trying to solve a problem encountered on the job.
❖ Lack of certifications, facilities, and outside intellectual pursuits. Would be great if we could get more lecturers and offer certifications at the end of classes. Also some on campus research opportunities would really holster the program.
❖ So many languages to learn, which isn't bad, just a challenge.
❖ Learning how to program in new languages. Hard at first.
❖ The program can benefit from greater school support.
❖ Some challenges are class projects because we have to use everything we learned to implement complicated programs.
❖ Code was easy for me. Terminology and description and background info about languages and computers. Design fancy pages. There needs to be PHP class provided at ULV.
❖ Balancing real life with college courses and managing time properly to fulfill requirements to be successful.
❖ No LINUX or UNIX classes.
❖ It was very good just have to be prepared to work and put in hours to understand concepts.
❖ The number of courses made it difficult to graduate in 4 years.
❖ Challenging technology.
12. What do you consider to be the strength of computer science program?
✓ Ability to use cognitive powers.
✓ All professors.
✓ Availability and approachability. Faculty and staff are always willing and available to help in any way, shape, or form.
✓ Caring faculty. The core teachers I have had (Son, Seta, Ray) have pushed me to excel and help lead me the whole way.
✓ Class size, great instructors, very personalized instruction.
✓ Core faculty members are dedicated to their students within and outside of the classroom

setting.
✓ Faculty.
✓ Faculty and program that students embark.
✓ Faculty really cares about the students as people.
✓ Flexibility of choosing courses.
✓ Gives a good background of all the skills you will need to have in a real life situation.
✓ Great faculty experience.
✓ Great faculty. Personal relationships with students were the key.
✓ Great instructors! I love the class size. And the courses offered are very diverse.
✓ Individualized teaching styles, teachers are very personable and supportive of not only academic endeavors but of overall growth. Pay great deal of attention to individual student's needs.
✓ Lots of programming practice, hands on exp. And understanding faculty.
✓ Professor, lab availability.
✓ Project management and software programming.
✓ Quality of teaching from Ray and Seta.
✓ Selected professors are fantastic.
✓ Seta, Ray, the growth of the program and the students.
✓ Seta.
✓ Small and easy to work with staff and students.
✓ Small class size, helpful professors.
✓ Small classes, more attention from the staff.
✓ Strong faculty.
✓ The continued support and encouragement even after being a student. Without Seta and Ray, I would not have considered coming back. They are awesome!
✓ The experience of the faculty and their availability.
✓ The faculty knowledge.
✓ The faculty members are definitely the strength of the program. They are always willing to help to overcome your challenges.
✓ The faculty works hard and challenges the students.
✓ The faculty.
✓ The flexibility of the faculty and the class size.
✓ The good professors it has now.
✓ The professor's do a great job making sure that the students keep on track and understand.
✓ The program has excellent faculty who are knowledgeable in the material. They are very helpful, caring, and understanding. The courses were pertinent to the program and I learned a lot from them. The class sizes were also a huge strength.
✓ The quality of the professors.
✓ The senior projects are solo. There was a lot emphasis on individual needs.
✓ The teachers are always there to help you and ALWAYS know your name. They watch you like a parent, which is good because sometimes a student needs one.
✓ The teachers.
✓ Variety of teachers with different experiences.
✓ Very good professors, really proud to be part of this program.

✓ Very knowledgeable teachers who are experienced in the fields they teach.
✓ We have good teachers who are available and knowledgeable about topics.
✓ Wide base of classes that I needed to take to be ready for my career.
✓ Wonderful staff that is knowledgeable and useful. Staff provides great care and support for their students.

The table below indicates the percentages of the results.

Senior Exit Survey Percentages					
	Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory	Not Applicable
a. Faculty respect for students	91.1%	8.9%	0.0%	0.0%	0.0%
b. Faculty availability	71.4%	28.6%	0.0%	0.0%	0.0%
c. Advisement	73.2%	23.2%	3.6%	0.0%	0.0%
d. Variety of courses	35.7%	55.4%	8.9%	0.0%	0.0%
e. Quality of the program	64.3%	35.7%	0.0%	0.0%	0.0%
f. Quality of instructions	78.6%	21.4%	0.0%	0.0%	0.0%
g. Scheduling of courses	46.4%	42.9%	10.7%	0.0%	0.0%
h. Hands on experience	53.6%	44.6%	0.0%	0.0%	1.8%
i. Class size	87.5%	10.7%	0.0%	0.0%	1.8%
j. Class environments	82.1%	16.1%	0.0%	0.0%	1.8%
k. Preparation for career	51.8%	39.3%	5.4%	3.6%	0.0%
l. Develop.problem solving skills	69.6%	26.8%	3.6%	0.0%	0.0%
m. Developing self confidence	71.4%	25.0%	3.6%	0.0%	0.0%
n. Met the goals I came to achieve	76.8%	17.9%	5.4%	0.0%	0.0%
o. Accomplishments in program	71.4%	28.6%	0.0%	0.0%	0.0%
p. Feedback from students	60.7%	37.5%	0.0%	1.8%	0.0%

6.8.Alumni Survey

All Alumni who graduated from 2006 – 2010 were contacted by mail in January 2011 and asked to fill out a survey. The survey instrument was first created in 2005. The instrument was slightly modified to address current learning outcomes (see **Appendix O** for instrument). Ten out of 60 students returned the survey. The table below reflects the analysis of the survey.

<u>Alumni Survey (N = 10)</u>	
1. Which school or college did you attend?	College of Arts and Sciences 100%
2. Which campus/center did you attend?	
a. Central Campus; La Verne	70%
b. Central Campus; CAPA (Campus Accelerated Program for Adults)	30%
3. Which of the following was your concentration?	
a. Engineering	10%
b. Information Science	70%
c. Software	20%
4. Did you have a minor?	No 100%
5. What year did you graduate from ULV?	
2001, 2004, 2010 =	10%
2005, 2006, 2009 =	20%
6. What was your status upon entry to ULV?	
a. Freshman	50%
b. Transfer	50%
7. What is your gender?	Male = 90% . Female = 10%
8. What is your ethnic background?	
a. African American	10%
b. Asian	10%
c. Caucasian	60%
d. Hispanic	20%
<u>Further Education and Employment after ULV</u>	
9. Did you pursue further education after attending ULV?	
a. Yes	50% , No 50%
10. Did you attend graduate/professional school after attending ULV?	
a. Yes	50% , No 50%
11. When did you attend?	
a. Within 6 months after graduating from ULV	40%
b. But less than a year	10%
c. Did not attend	50%

12. Please specify the name of the degree or certificate program: a. M.S. 60% b. M.B.A. 40%
13. Please specify the name of the School or Institution: a. University Southern California (USC) b. London School of Economics c. University of La Verne
14. How well did the education you received at ULV prepare you for graduate/professional school? a. Excellent preparation 10% b. Good preparation 40% c. Not Applicable 50%
15. How well were you prepared for graduate/professional school compared to your peers from other universities? a. Better prepared than most 20% b. Equally prepared 20% c. No basis for comparison 10% d. Not Applicable 50%
16. What is the highest degree that you have obtained? a. Bachelor's Degree 50% b. Master's Degree 50%
17. Are you currently employed in a job related to your major? a. Yes, Please indicate your job title: 50% i. Network Administrator ii. Hardware Manager iii. Systems Engineer iv. Software Engineer v. IT Project Manager b. No, Please indicate your job title: 50% i. Operations Supervisor ii. Interpreter / Instructor iii. Unemployed iv. M.S. Student
18. Did you find employment after graduation from ULV? a. Was employed at time of graduation 40% b. Within 6 months? 30% c. More than 6 months, but less than a year later? 20% d. More than a year, but less than 2 years later? 10%
19. How well were you prepared for your career compared to your peers from other universities? a. Better prepared than most 10% b. Equally prepared 70% c. No basis for comparison 20%
20. With all other things being equal, if you had to go to college all over again, what would you have done?

a. Gone to the University of La Verne 80% b. Gone to a state college 10% c. Gone to another Private University 10%			
21. If you would not have gone to the University of La Verne, please explain, a. I have heard there are better computer science programs elsewhere b. Just to have another experience			
	Very Well	Somewhat Well	Not Well
22. How well did ULV prepare you to acquire basic concepts in software engineering and information technology?	60%	40%	
23. How well did ULV prepare you to get jobs in industry related to your concentration areas? (CE, IS, IP, & CS)	20%	70%	10%
24. How well did ULV prepare you to analyze problems before and during a project?	70%	30%	
25. How did ULV prepare you to do research and problem solve independently.	80%	20%	
26. How well did ULV prepare you to manage projects (time management, and self teach new applications)?	60%	40%	
27. How well did ULV prepare you to be flexible to function in a variety of jobs?	90%	10%	
28. How well did ULV prepare you for the time demands of industry (meeting deadlines)?	60%	40%	
29. Were you happy with the existing technology in the department? <input type="checkbox"/> Yes 70% <input type="checkbox"/> No 30%			
30. Did you feel the supportive requirements helped you in your major? <input type="checkbox"/> Yes 100% <input type="checkbox"/> No			
31. Did the pre-requisite courses help you in your major? <input type="checkbox"/> Yes 100% <input type="checkbox"/> No			
32. Were you satisfied with the theory presented in your major? <input type="checkbox"/> Yes 90% <input type="checkbox"/> No 10%			
33. Were you satisfied with the hands on labs in your major? <input type="checkbox"/> Yes 100% <input type="checkbox"/> No			

Your Academic Experience

The following questions concern your quality of academic experiences, while at the University of La Verne, in various competency areas. Please indicate each competency about the quality of preparation you received at University of La Verne.

Academic Experience	Excellent	Good	Fair	Poor
Communication Skills-The ability to express ideas and concepts				
34. Oral	60%	40%		
35. Written	40%	60%		
36. Electronic (e.g. e-mail)	40%	60%		
37. Presentation to a large group	50%	40%	10%	
Computer Skills				
38. Word Processing	50%	50%		
1. Spreadsheet	30%	40%	20%	10%
2. Database	20%	50%	30%	
3. Internet	50%	40%	10%	
Analytical Skills				
4. Thinking Creatively	60%	40%		
5. Reading Comprehension	50%	50%		
6. Ability to Link Ideas to Practice	70%	10%	20%	
7. Research (Ability to Find Information)	70%	10%	20%	
8. Quantitative Reasoning	40%	40%	20%	
9. Qualitative Reasoning	50%	40%	10%	
Work Environment Skills				
10. Teamwork	90%	10%		
11. Leadership Skills	40%	60%		
12. Benefiting From Feedback	50%	50%		
13. Understanding of Ethical Issues	30%	60%	10%	
Sensitivity to Cultural and Environmental Issues				
14. Awareness of Issues of Cultural Diversity	50%	40%	10%	
15. Understanding Environmental Issues	30%	60%	10%	
16. Community Service	30%	60%	10%	

The following questions concern the quality of your experiences at ULV compared to your current peers (co-workers, students, etc). Please indicate each competency, how your preparation compares to your peers.

Experience compared to current peers	Better Prepared	Equally Prepared	Less Prepared
Communication Skills-The ability to express ideas and concepts			
17. Oral	60%	40%	
18. Written	60%	40%	
19. Electronic (e.g. e-mail)	30%	70%	
20. Presentation to a large group	50%	40%	10%
Computer Skills			
21. Word Processing	60%	40%	
22. Spreadsheet	50%	30%	20%
23. Database	40%	60%	
24. Internet	60%	40%	
Analytical Skills			
25. Thinking Creatively	90%	10%	
26. Reading Comprehension	30%	70%	
27. Ability to Link Ideas to Practice	67%	22%	11%
28. Research (Ability to Find Information)	50%	50%	
29. Quantitative Reasoning	40%	40%	20%
30. Qualitative Reasoning	40%	50%	10%
Work Environment Skills			
31. Teamwork	70%	30%	
32. Leadership Skills	80%	22%	
33. Benefiting From Feedback	40%	60%	
Sensitivity to Cultural and Environmental Issues			
34. Understanding of Ethical Issues	50%	50%	
35. Awareness of Issues of Cultural Diversity	30%	70%	
36. Understanding of Environmental Issues	20%	80%	
37. Community Service	Excellent 10%	Good 90%	

7. Findings

This section is organized by curriculum, faculty, and students themes. The Computer Science faculty reflected on the last five years and summarized the following observations:

7.1. Curriculum

- 7.1.1. Students will be able to complete their degree in four years if they follow the four year map.
- 7.1.2. Internet Programming concentration students will have only one elective course to choose from.
- 7.1.3. The elective courses are not being offered frequently. This is due to students fulfilling their elective requirements by taking courses from other concentrations.
- 7.1.4. Looking at the 4 year schedule, the engineering concentration courses were not offered. This is due to low enrolment in engineering concentration. However, in Fall 2010 more students declared in the Engineering concentration.
- 7.1.5. The faculty feels the engineering concentration is the weakest concentration in the major. The concentration needs to be revisited and modify the curriculum to match with industry needs.
- 7.1.6. The Computer Science major consists of a diverse student body. The diversity includes student age (CAPA / traditional students), geographic location (international students from Athens, Albania, China, Saudi Arabia), and ethnicity.
- 7.1.7. Since ULV took over the Computer Science program in 1993, as of spring 2010, 241 students have graduated with Computer Science and Computer Engineering major.
- 7.1.8. After comparing the major curriculum with 3 other comparable institutions, the Computer Science and Computer Engineering faculty concluded that the major at the University of La Verne has a curriculum which is equally as strong as at the comparison schools. A technical writing course is the only course that ULV does not offer.

7.2. Faculty

- 7.2.1. Students recognize that the Computer Science faculty members are caring and dedicated to the success of their students.
- 7.2.2. The program attempted to its utmost ability to rely on its full-time faculty and utilize a minimum number of adjunct faculty. The program succeeded in accomplishing that mission and had only one adjunct faculty for many years. However, this started to be very challenging due to growth. Since 2010, the program has been hiring more adjunct faculty to fill its needs.
- 7.2.3. The full-time faculty members are teaching overloads to satisfy the needs of the program and students. The growing percentage of overload courses taught is an indication that an additional full-time faculty member is a necessity.
- 7.2.4. The Internship and Senior Projects are taught as directed studies by full-time faculty members. These two classes are very time consuming to full-time faculty members.
- 7.2.5. A new faculty member is needed to take care of the engineering concentration and to assist with and balance the workload of the Computer Science program faculty.
- 7.2.6. Adjunct faculty raised concerns about lack of parking, office space, and administrative assistance.
- 7.2.7. Adjunct faculty recommended that the program should have a stronger connection with industry. This could be accomplished by organizing an advisory board.
- 7.2.8. Adjunct faculty recommended offering open systems architecture certification.

7.3. Focus Group

- 7.3.1. Students stated that the professors in the program are the strength of the program. They are knowledgeable, helpful, and caring towards the students. They are pleased because the faculty members have open door policy. They showed concerns that the faculty members are teaching too many courses.
- 7.3.2. Students would like to see the computers in the computer lab upgraded more frequently and the newest operating systems and applications installed.
- 7.3.3. Students would like to see more guest speakers invited to the campus.

- 7.3.4. Students would like to see more workshops offered.
- 7.3.5. Students would like to be trained for industry by working for the Office of Information Technology (OIT) department on campus.

7.4. Internship

- 7.4.1. The Internship and Senior Project are conducted as directed studies, and the time demands for this are overwhelming to the faculty members.
- 7.4.2. Supervisors of the internships were pleased with the performance of Computer Science majors.
- 7.4.3. The Computer Science program needs to have a more formalized, stronger, and more organized connection with industry for the internship requirement.
- 7.4.4. The faculty members need to revisit the internship requirement for CAPA students.
- 7.4.5. The Computer Science faculty members need to address the internship requirement for international students who are on F-1 visa and are not allowed to work outside the campus.

7.5. Comprehensive Exams

- 7.5.1. The majority of the students pass the comprehensive exam on the first attempt.
- 7.5.2. During the analysis of the comprehensive exam, the faculty members recognized that MATH 327 Discrete Mathematics is not a core course, but rather is a supportive requirement, and should not be included in the comprehensive exam.
- 7.5.3. In addition, Database Management Systems is no longer a required course for the Internet Programming Concentration, requiring modification of certain exam questions.
- 7.5.4. The computer science program needs to create workshops to help students prepare for the comprehensive exam. The workshop will help communicate faculty expectations to students to help them prepare for the exam.

- 7.5.5. The chairperson recognizes that Mr. Ahmadnia has volunteered to administer and correct the comprehensive exams all these years without being compensated. This task should be equally distributed among all faculty members in the program, or compensated.

7.6. Senior Project

- 7.6.1. All senior project reports are bound and archived in the program chairperson's office for future reference.
- 7.6.2. Students sign up for the senior project as a directed study. Faculty members work with students individually. This is a very time consuming process.
- 7.6.3. The faculty members need to rethink the senior project process and enforce some deadlines to help students achieve their objectives and be ready to present by the second Wednesdays of December and May.
- 7.6.4. Each faculty member has their own template that they use for senior project proposals. Students get frustrated because they are asked to revise their proposals and resubmit.
- 7.6.5. Some students do not take the senior project presentation seriously. Therefore, changing the title of the event to "Senior Project Defense" will create credibility to senior project.

7.7. Senior Exit Survey

- 7.7.1. Students find caring professors, small class sizes, and very personalized instructions to be the strength of the program.
- 7.7.2. Most students who filled out the survey already had jobs, and the majority planned on attending graduate school.
- 7.7.3. Students stated that not having a graduate program is a challenge for the program.
- 7.7.4. Students stated that not having enough full-time faculty members is a challenge for the Computer Science program.

- 7.7.5. Students stated that not having state of the art computer labs is a challenge for the Computer Science program.

7.8. Alumni Survey

- 7.8.1. Most students who graduated with Computer Science and Computer Engineering degrees were pleased with the program.
- 7.8.2. A large number of the students who graduated eventually continued on to graduate school.
- 7.8.3. Most students felt they were better prepared, well prepared, or equally prepared for industry as compared to their peers.
- 7.8.4. Most students rated their academic experiences as excellent and good.
- 7.8.5. One student who is currently unemployed gave a negative evaluation.

7.9. Learning Outcomes Findings

Summary of Findings

In conclusion, the Computer Science faculty identified the following strengths and challenges:

Strengths

Development of a computer science curriculum must be sensitive to changes in technology, new developments, and the importance of lifelong learning. Since 2005 the Computer Science program has proposed, designed and implemented the following new courses:

1. CMPS 200 (2 units) - Informational Technology with the attribute UVLL Lifelong Learning
2. CMPS 302 (4 units) – The Digital Society with the attribute INTD Interdisciplinary Thinking, UVLL Lifelong Learning
3. CMPS 378 (4 units)- C# Programming Using .NET
4. CMPS 319 (4 units)- Publishing on the Web II with the attributes INTD Interdisciplinary Thinking, UVLL Lifelong Learning
5. CMPS 320 (4 units)- Internet Applications with the attribute UVLL Lifelong Learning
6. CMPS 480 (4 units)- Distributed Internet Computing

To keep the Computer Science program current and up to date with rapidly changing technology, the program teaches and uses the following:

1. The most popular operating systems (i.e. most demanded by job recruiters):
 - a. Windows in almost all courses
 - b. Linux – Ubuntu (in CMPS 368, CMPS 320)
2. The most popular cloud computing platform:
 - a. Google Apps (in CMPS 368)
3. The most popular open source virtualization software:
 - a. Virtual Box (in CMPS 320)
4. The most popular Web servers:
 - a. Apache (in CMPS 320)
 - b. IIS – Internet Information Server (in CMPS 480)
5. The most popular general purpose computer languages:
 - a. Java (in CMPS 379)

- b. C# (in CMPS 378, CMPS 480)
 - c. C++ (in CMPS 301, CMPS 367, CMPS 385)
 - d. Visual Basic (in CMPS 377)
6. The most popular client side computer languages:
 - a. XHTML/XHTML, CSS (in CMPS 318, CMPS 319, CMPS 320)
 - b. JavaScript (in CMPS 319)
7. The most popular server side computer languages:
 - a. PHP (in CMPS 320)
 - b. ASP.NET (in CMPS 480)
8. The most popular open source database system:
 - a. MySQL (in CMPS 320)
9. The most popular database systems:
 - a. Microsoft Office Access (in CMPS 200, CMPS 490)
 - b. Microsoft SQL Server (in CMPS 490)
10. The most popular office software:
 - a. Microsoft Office (in CMPS 200)
11. The most popular Computer Aided Design CAD / CAM application:
 - a. ALTIUM Circuit Maker (in CMPN 220, CMPN 280)
12. The most popular tools:
 - a. Visual Studio 2008/2010 (in CMPS 378, CMPS 480)
 - b. Adobe Dreamweaver CS5(in CMPS 318 and CMPS 319)
 - c. Notepad++ (in CMPS 318 and CMPS 319)
 - d. Web Developer Toolbar and FireFTP for Mozilla Firefox (in CMPS 318 and CMPS 319)
 - e. WinSCP (in CMPS 318, CMPS 319, CMPS 368)
 - f. FireBug (in CMPS 319)
 - g. Erwin (in CMPS 490)
 - h. WireShark (in CMPS 369)

Challenges

1. Scheduling to satisfy both the ULV traditional population and CAPA students
2. Satisfying the students' needs with insufficient faculty to meet the program needs
3. A need for another faculty member to reduce workload to provide research time
4. A need for larger facilities to satisfy the needs of the program
5. A need for additional human resources to keep the program organized and in order
6. A need for state of the art new technology devices for faculty to integrate them into the classroom.
7. A need for an advisory board
8. Weakness of the Engineering concentration because of lack of faculty to teach in that area, and lack of state of the art equipment
9. A need for time and resources to create workshops and invite guest speakers
10. A need for an administrative assistant to centralize the program and make the students feel better connected to the program.

8. Action Plan Recommendations

The Computer Science and Computer Engineering faculty developed the following action plan for the future:

- 8.1. Take the program to the next level by becoming a separate department.
- 8.2. Create an **advisory board** that meets twice a year.
- 8.3. Keep the program **Web Page** current at all times.
- 8.4. **Curriculum:**
 - 8.4.1. Change the title of the Engineering concentration to System Engineering and Architecture.
 - 8.4.2. Update the existing Engineering concentration courses.
 - 8.4.3. Introduce a new course about "Systems Engineering."
 - 8.4.4. Develop a Systems Engineering certification.
 - 8.4.5. Develop an Internet Programming certification.
 - 8.4.6. Develop a XHTML / HTML CSS certification.
 - 8.4.7. Develop a Java Script Certification.
 - 8.4.8. Offer more hybrid and online courses.

- 8.4.9. Introduce a new course titled “Special Topics.”
- 8.4.10. Develop and offer more general education courses.
- 8.4.11. Develop and offer a Software Engineering course.
- 8.4.12. Develop and offer a Professional Writing course.

8.5. Faculty Resources:

- 8.5.1. Provide the full-time faculty members one course release per year to allow them to stay up to date with technology and attend training sessions from industry.
- 8.5.2. Designate an office for all part-time faculty members to share to have privacy while talking to students during their office hours.
- 8.5.3. Have faculty become members of professional organizations such as ACM, EDUCAUSE, IEEE, INCOSE, PMI.
- 8.5.4. Upgrade faculty computers on an annual basis compared to the original roll out schedule by OIT.

8.6. Capstone Senior Project:

- 8.6.1. Enforce deadlines for proposal submission.
- 8.6.2. Unify the templates used among faculty.

8.7. Internship:

- 8.7.1. Formalize and document the Internship program.
- 8.7.2. Establish a community network to provide internship programs and placement for students.

8.8. Organization:

- 8.8.1. Create a reception the first week of classes for freshmen and introduce all concentrations.
- 8.8.2. Apply for accreditation at the appropriate time.

8.9. Physical Facilities:

- 8.9.1. Add more laboratory space (the program has exceeded its capacity).
- 8.9.2. Provide adequate and specialized technical support to faculty and students.
- 8.9.3. Provide a rapid equipment replacement cycle with special infrastructure resources to support the requirements of the curriculum.
- 8.9.4. Equip a laboratory with proper hardware parts to provide experience in designing, installing, and running networks.

- 8.9.5. Equip a hardware laboratory with state of the art electronic parts to provide experience in designing, implementing, and presenting projects.
- 8.9.6. Dedicate the laboratory space for student use only. Teaching classes in the labs prevents students from making up their lab experiments or working on their senior projects.
- 8.9.7. Acquire personnel to be in charge of the electronics laboratory, assist in keeping the web page current, stay connected with alumni, organize the internship connections, and organize the advisory board event.
- 8.10. **Learning Outcomes:** Modify the existing learning outcomes to the following:
 - 8.10.1. Acquire basic concepts in system engineering, information science, internet programming, and software.
 - 8.10.2. Communicate effectively both orally and in writing.
 - 8.10.3. Acquire leadership skills and collaborate in team projects.
 - 8.10.4. Demonstrate skills in analyzing problems.
 - 8.10.5. Acquire project management skills including data collection, time management, and self-teach new application.
 - 8.10.6. Conduct research to solve problems.
 - 8.10.7. Be prepared to go to graduate schools.
 - 8.10.8. Obtain a sense of “urgency” to meet deadlines.
 - 8.10.9. Be versatile to function in a variety of work environments.
 - 8.10.10. Be prepared to get jobs in industry related to concentration areas such as Computer Engineering, Information Science, Internet Programming, and Software Engineering.

9. Appendices

9.1. Appendix A: 2004 - 2005 Action Plan

In 2004 -2005 the Computer Science and Computer Engineering program generated the following Action Plan Items. The items below are taken from the departmental review report.

Action Plan Items

After this intensive program review exercise and after analyzing the program's efficiency and effectiveness, the Computer Science faculty summarized all of the challenges that were identified by the consultant, focus group, SWOT analysis, students, and alumni and developed the following action plan list for the future.

1. Create an **advisory board**.
2. Revise the Program **Web Page** to be more appealing to prospective students.
3. **Faculty Resource:**
 - 3.1. All faculty members must remain current in the discipline. It is recommended that a significant part of each faculty member's workload be spent in receiving training in new technologies and acquiring new knowledge and skills. The changes in the field place heavy demands on Computer Science faculty who are required to tailor the curriculum to meet regional conditions, develop up to date instructional materials, and manage student projects and internships. Therefore, ULV should provide the Full time faculty members one course release per year to allow them to stay up to date with technology and attend any training sessions.
 - 3.2. All full time faculty members must have adequate office space for research.
 - 3.3. All Part time faculty members must have an office to have privacy while talking to students during their office hours.
4. **Organization:**
 - 4.1. Take the program to the next level. Consider becoming a separate department.
 - 4.2. Consider changing the name of the program from "Computer Science" (Obsolete name) to one that reflects current field, e.g." Computer Information Technology" or "Information Science".
 - 4.3. Rethink scheduling.
 - 4.4. Consider dropping the Computer Engineering concentration.
 - 4.5. Consider the possibility of operating under the College of Business.
 - 4.6. Take advantage of Information Technology faculty in the College of Business.
 - 4.7. Go for accreditation when ready.
5. **Physical Facilities:**
 - 5.1. Provide rapid equipment replacement cycle with special infrastructure resources to support the requirements the curriculum.
 - 5.2. Classrooms must be equipped with computer projection, Internet, and local network access, and appropriate computing and software infrastructure, so that the entire curriculum can be adequately delivered.
 - 5.3. Laboratories must be equipped with computer workstations, network ports, high-speed Internet access and wireless capabilities.
 - 5.4. Laboratories must be equipped with proper hardware parts to provide experience in designing, installing, and running networks.

- 5.5. Laboratories must be equipped to accommodate team projects essential to the Information Science concentration.
- 5.6. Laboratories must be equipped with state of the art electronic parts to provide experience in designing, implementing, and presenting projects.
- 5.7. Students must have a study lounge close to the faculty members' office.
- 5.8. The computers in the student lounge must be updated and should have access to the wireless network.
- 5.9. Classrooms must be presentable to attract new prospective students.
- 5.10. Provide adequate and specialized technical support to faculty and students.
6. **18. Curriculum:**
 - 6.1. The program must formalize a Minor in Computer Science.
 - 6.2. Modify all course syllabi in the program to include standard 5 "course outcomes".
 - 6.3. Create course outlines (new course proposal) update the course objectives.
 - 6.4. Emphasize the Web Computing concentration.
 - 6.5. Develop certificate programs in specialized areas.
 - 6.6. Develop concentrations in Data base management, network security, data warehousing and data mining, remote access/wireless computing, and supply chain management.
 - 6.7. Develop multidisciplinary concentrations in graphic design, animation, and digital technologies.
 - 6.8. Offer more hybrid courses.
 - 6.9. Improve the senior project course to provide more guidance to students to increase the completion rate
 - 6.10. Rewrite course outlines to better reflect course objectives and developing technologies.
 - 6.11. Help senior project students better document code.
7. **Internship:**
 - 7.1. Formalize and document the Internship program.
 - 7.2. Change the IT work experience into internship, and enhance industry based internships.
 - 7.3. Establish a community network to provide internship program and placement for students.
8. **New courses:**
 - 8.1. The program must Introduce a course titled Personal Productivity with IS Technology
 - 8.2. The program must introduce .NET courses.
 - 8.3. Focus curriculum on "Front end" skills, such as webpage, visual basic, Java, C#, etc.
 - 8.4. The program must introduce a new course titled "Special Topics".
 - 8.5. Introduce more courses for non major students.
 - 8.6. Develop and offer variety of elective courses.
 - 8.7. Design and offer workshops prior to scheduling the senior comprehensive exams.

9.2. Appendix B: Course Descriptions

This appendix lists the course descriptions.

CMPN Course Descriptions
<p>CMPN 150 - Principles of Electronics and Computer Engineering: Introduction to electronics and computers for engineering majors. Active and passive electronic devices. Analog and digital electronic circuit principles, Magnetism, Electrical machines, Electromechanical devices. 4.000 Credit Hours Course Attributes: BS Computer Sci/Engr Elective Co-requisites: CMPN 150L Prerequisites: Undergraduate level MATH 201 Minimum Grade of C- and Undergraduate level PHYS 201 Minimum Grade of C-</p>
<p>CMPN 150L - Principles of Electronics and Computer Engineering Lab: See CMPN 150 - Principles of Electronics and Computer Engineering. Can be taken for credit/no credit only. Not challengeable. 0.000 Credit Hours Co-requisites: CMPN 150</p>
<p>CMPN 202 - Electronic Devices and Circuits: Bipolar and field effect transistor theory. Audio and RF circuit design and analysis. Bias stabilization techniques. Operational amplifiers. Lab included. 4.000 Credit Hours Course Attributes: BS Computer Sci/Engr Elective Co-requisites: CMPN 202L Prerequisites: (Undergraduate level CMPN 150 Minimum Grade of C- or Undergraduate level ELEN 150 Minimum Grade of C-) and (Undergraduate level MATH 201 Minimum Grade of C- or Undergraduate level MATH 202 Minimum Grade of C-)</p>
<p>CMPN 202L - Electronic Devices and Circuits Lab: See CMPN 202- Electronic Devices and Circuits. Can be taken for credit/no credit only. Not challengeable. 0.000 Credit Hours Co-requisites: CMPN 202</p>
<p>CMPN 220- Digital Logic Systems: Combination-al system design using MSI, LSI, TTL, and CMOS integrated circuits. Sequential circuit design. Sequencers; RAM units. Arithmetic logic units and register transfer operations. 4.000 Credit Hours Course Attributes: BS Computer Sci/Engr Elective Co-requisites: CMPN 220L</p>
<p>CMPN 220L - Digital Logic Systems Lab: See CMPN 220 - Digital Logic Systems. Can be taken for credit/no credit only. Not challengeable. 0.000 Credit Hours Co-requisites: CMPN 220</p>

CMPN Course Descriptions

CMPN 280 - Computer Organization: Registers and arithmetic logic units. Control unit. Memory unit. I/O systems. Instruction set fundamentals and addressing modes.
4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Co-requisites: CMPN 280L

Prerequisites: Undergraduate level CMPN 220 Minimum Grade of C-

CMPN 280L - Computer Organization Lab: See CMPN 280 - Computer Organization. Can be taken for credit/no credit only. Not challengeable.

0.000 Credit Hours

Co-requisites: CMPN 280

CMPN 299 - Independent Study: Student-designed courses approved by a faculty member. Prior approval of goals, objectives, procedures, and assessment plan as directed in the Independent Study Manual is required. May be taken multiple times with a different topic for credit. Not challengeable.

1.000 TO 4.000 Credit Hours

CMPN 303 - Integrated Electronics: Monolithic diodes, FETs, and transistors. Current mirrors. Voltage reference sources and their integration. Differential amplifiers. Class A, B, and AB output stages. Saturated state switching. TTL, ECL, and CMOS switching. A/D and D/A converters.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Co-requisites: CMPN 303L

Prerequisites: Undergraduate level CMPN 202 Minimum Grade of C-

CMPN 303L - Integrated Electronics Lab: See CMPN 303 - Integrated Electronics. Can be taken for credit/no credit only. Not challengeable.

0.000 Credit Hours

Co-requisites: CMPN 303

CMPN 330 - Microprocessor Systems: Studies of 16-bit microprocessors. Architecture, addressing modes, assembly language programming, input and output. Simple analog and digital interfaces. Hardware and software debugging aids.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Co-requisites: CMPN 330L

Prerequisites: Undergraduate level CMPN 280 Minimum Grade of C-

CMPN 330L - Microprocessor Systems Lab: See CMPN 330 - Microprocessor Systems.

0.000 Credit Hours

Co-requisites: CMPN 330

CMPN 399 - Independent Study: Student-designed courses approved by a faculty member. Prior approval of goals, objectives, procedures, and assessment plan as directed in the Independent Study Manual is required. May be taken multiple times with a different topic for credit. Not challengeable.

1.000 TO 4.000 Credit Hours

CMPN Course Descriptions

CMPN 480 - Advanced Computer Architecture: System design with bit slice processors. Trends in microprogramming. High-speed arithmetic processors. Pipelined and multiprocessor systems. Performance evaluation techniques. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Co-requisites: CMPN 480L

Prerequisites: Undergraduate level CMPN 280 Minimum Grade of C- and Undergraduate level CMPN 330 Minimum Grade of C-

CMPN 499 - Senior Seminar/Project: Culminating activity required by majors in all departments. Papers/theses/projects researched, prepared, and written under the guidance of a faculty member. Comprehensive exams or recitals required in some departments. Academically, Students must be in Good Standing to enroll in 499. Can be taken for letter grade only. Not challengeable.

1.000 TO 4.000 Credit Hours

CMPS Course Descriptions

CMPS 110 - Introduction to Computer Science and Engineering: Basic functional units and components of a computer system. Software engineering and application programming through problem analysis, design, documentation, implementation, and evaluation. Lab included.

4.000 Credit Hours

CMPS 199 - Independent Study: Student-designed courses approved by a faculty member. Prior approval of goals, objectives, procedures, and assessment plan as directed in the Independent Study Manual is required. May be taken multiple times with a different topic for credit. Not challengeable.

1.000 TO 4.000 Credit Hours

CMPS 200 - Information Technology: The course gives the student the knowledge and experience needed to use technology effectively. Topics include the following: desktop and electronic publishing, presentation and multimedia, data collection and organization using spreadsheets and databases. Prerequisite: none. Lab included. (Also BUS 200.)

2.000 Credit Hours

Course Attributes: UVLL Lifelong Learning

CMPS 279 - JAVA for E-Commerce: Covers the principles of object-oriented programming language using Java. Includes classes, methods, graphical user interface (GUI), multimedia, and Java database connectivity (JDBC). Lab included. Can be taken for letter grade only. Not challengeable.

4.000 Credit Hours

CMPS 299 - Independent Study: Student-designed courses approved by a faculty member. Prior approval of goals, objectives, procedures, and assessment plan as directed in the Independent Study Manual is required. May be taken multiple times with a different topic for credit. Not challengeable.

1.000 TO 4.000 Credit Hours

CMPS Course Descriptions

CMPS 301 - Programming Concepts: Emphasizes problem solving and structured programming. Elementary input/output; arrays; strings; functions, and pointers. Not applicable toward the Mathematics major. Lab included. Can be taken for letter grade only.

4.000 Credit Hours

CMPS 302 - The Digital Society: The course will expose students to different technologies and their impact on society, business, personal relationships, and the legal ramifications thereof. The course introduces the effect of different technologies on the environment in which they are applied and public attitude affecting their use. The course emphasizes the impact of science and technology on human institutions, social values, ethics, and human self image. Students will improve their critical thinking skills, and explore current event topics. Moreover, students will formulate, analyze, synthesize, and defend their ideas both orally and in written form. In addition, students will work individually on some of the assignments and collaborate with teammates to produce a research paper. Prereq: None.

4.000 Credit Hours

Course Attributes: INTD Interdisciplinary Thinking, UVLL Lifelong Learning

CMPS 318 - Publishing on the Web I: Covers design and development of web pages, including HTML, CGI scripts, Java applets, and multimedia. Stresses human-centered design principles. Can be taken for letter grade only. Lab included. Not challengeable. Also BUS 318.

0.000 OR 4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective, INTD Interdisciplinary Thinking, UVLL Lifelong Learning

CMPS 319 - Publishing on the Web II: XHTML review, Cascading Style Sheets, Introduction to Scripting, JavaScript - control statements, functions, arrays, objects, object and event models, XML and RSS, building Ajax-enabled Internet applications. Course is not challengeable.

4.000 Credit Hours

Course Attributes: INTD Interdisciplinary Thinking, UVLL Lifelong Learning

Prerequisites: Undergraduate level CMPS 318 Minimum Grade of C-

CMPS 362 - Numerical Algorithms: Solution of linear and polynomial equations. Solution of ordinary and partial differential equations. Iterative methods, interpolation, and approximation. Lab included. Also MATH 362.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level MATH 202 Minimum Grade of C- and (Undergraduate level CMPS 367 Minimum Grade of C- or Undergraduate level MATH 367 Minimum Grade of C-)

CMPS 367 - Object Oriented Language C++: Object-oriented programming. Reviews basic C++ concepts, operators, functions overloading, classes and class inheritance, virtual functions, and file structures. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 301 Minimum Grade of C- or Undergraduate level MATH 301 Minimum Grade of C-

CMPS Course Descriptions

CMPS 368 - Principles of Computer Networks: Analyzes the mode of operation and the various interface standards and protocols associated with data networks. Reviews ISO/OSI standards, packet and circuit switched data networks, ISDN, local and wide area networks. Lab included. 4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

CMPS 369 - Local Area Networks: Covers LAN, server, client/server, and wireless technology; standardization; operating systems; commercial LAN products; inter-networking devices and protocols; metropolitan area networks; vendor specific solutions; LAN administration. Lab included. Not challengeable. 4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 368 Minimum Grade of C-

CMPS 370 – Seminar: Discussion of new and innovative topics in computer science, computer engineering, and information systems. May be taken for four semester hours for credit. Not challengeable. 1.000 Credit Hours

CMPS 371 - Assembly Language: Covers structure and principles of assembler operation; macro programming and use of assembly language in high level languages. Not challengeable. 4.000 Credit Hours

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: (Undergraduate level CMPS 301 Minimum Grade of C- or Undergraduate level MATH 301 Minimum Grade of C-) and Undergraduate level CMPN 280 Minimum Grade of C-

CMPS 375 - Systems Analysis and Design: Examines the information systems life cycle in relation to systems analysis. Presents current tools and techniques of systems analysis in data flow diagrams, data dictionaries, transform descriptions, database descriptions, prototyping, etc. Lab included. 4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective, INTD Interdisciplinary Thinking, UVLL Lifelong Learning

Prerequisites: Undergraduate level BUS 410 Minimum Grade of C- or Graduate level BUS 410 Minimum Grade of B- or Undergraduate level CMPS 410 Minimum Grade of C- or Graduate level CMPS 410 Minimum Grade of B- or Undergraduate level ECBU 410 Minimum Grade of C- or Graduate level ECBU 410 Minimum Grade of B-

CMPS 377 - Visual Basic.NET: Covers basic concepts of object oriented programming languages, problem solving, programming logic, data files, arrays, and design techniques of an event-driven language. Lab included. Can be taken for letter grade only. Not challengeable. 4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 301 Minimum Grade of C- or Undergraduate level MATH 301 Minimum Grade of C-

CMPS 378 - C# Programming Using .NET: Covers an overview of .NET technology and the role of C# programming, World Wide Web and C# programming, Visual Studio .NET, control structures, methods, arrays, exception, handling, object-based programming, inheritance, polymorphism, graphic user interface. Lab Included. Can be taken for letter grade only. Not challengeable. 4.000 Credit Hours

4.000 Credit Hours

CMPS Course Descriptions

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 301 Minimum Grade of C- or Undergraduate level MATH 301 Minimum Grade of C-

CMPS 379 – Java: Covers basic concepts of object oriented programming; Java and OOP classes, packages, and inheritance; and requirements for building a fully functional Java program. Lab included. Can be taken for letter grade only. Not challengeable.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 367 Minimum Grade of C- or Undergraduate level MATH 367 Minimum Grade of C-

CMPS 385 - Data Structures: Algorithms and data structures. Arrays. Lists. Stacks and queues. Tree structures. Searching and sorting algorithms. Files. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 367 Minimum Grade of C- or Undergraduate level MATH 367 Minimum Grade of C-

CMPS 392 - Project Management: Presents project types from public, business, engineering, and information science fields. Includes selecting, initiating, operating, and managing projects. Lab included. Can be taken for letter grade only. Not challengeable. Also BUS 375.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 375 Minimum Grade of C-

CMPS 399 - Independent Study: Student-designed courses approved by a faculty member. Prior approval of goals, objectives, procedures, and assessment plan as directed in the Independent Study Manual is required. May be taken multiple times with a different topic for credit. Not challengeable.

1.000 TO 4.000 Credit Hours

CMPS 400 - Analysis of Algorithms: Principles of algorithm design. Complexity of sorting algorithms. Combinational and graph algorithms. Cryptology and string matching. Linear programming and FFT algorithms. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 385 Minimum Grade of C- and Undergraduate level MATH 327 Minimum Grade of C-

CMPS Course Descriptions

CMPS 410 - Management Information Systems: Information systems viewed from needs of management. Data processing, collection, storage, updating, and retrieval. Design and implementation of systems. Not challengeable. Also BUS 410.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective, INTD Interdisciplinary Thinking, GESSc Economics, UVLL Lifelong Learning

Prerequisites: Undergraduate level BUS 346 Minimum Grade of C- or Undergraduate level ECBU 346 Minimum Grade of C- or Undergraduate level ENG 111 Minimum Grade of C- or Undergraduate level ENG 310 Minimum Grade of C- or Undergraduate level HSM 480 Minimum Grade of C- or Undergraduate level MGMT 480 Minimum Grade of C- or Undergraduate level WRT 111 Minimum Grade of C- or Undergraduate level LA 200 Minimum Grade of C- or Undergraduate level TWE2 XXXX Minimum Grade of C- or Undergraduate level TWE2 3XXX Minimum Grade of C- or Undergraduate level TSWB XXXX Minimum Grade of C- or Undergraduate level TSWB 3XXX Minimum Grade of C- or ULV English 111 Certification CRD

CMPS 451 - Artificial Intelligence: Representation of knowledge and control strategies. Searching. Predicate calculus. Automata theorem proving. LISP, PROLOG, VP Expert, etc. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 385 Minimum Grade of C- and Undergraduate level MATH 327 Minimum Grade of C-

CMPS 455 - Compiler Design: Introduces compilers. Finite automata and lexical analysis. Parsers. Error detection and recovery. Case studies. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 385 Minimum Grade of C- and (Undergraduate level CMPS 454 Minimum Grade of C- or Graduate level CMPS 454 Min. Grade of B-)

CMPS 460 - Operating Systems: Evolution of operating systems. CPU scheduling. File systems. Memory management. Device management. Protection. Multiprocessing and time-sharing. Case studies: Linux, UNIX, and VMS. Lab included. Not challengeable.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 385 Minimum Grade of C-

CMPS 463 - Computer Graphics: Fundamentals of programming for computer graphics. Covers interactive graphics, animation, color, and three-dimensional modeling. Lab included. Can be taken for letter grade only. Not challengeable.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level MATH 201 Minimum Grade of C- and Undergraduate level CMPS 385 Minimum Grade of C-

CMPS Course Descriptions

CMPS 465 - Programming Languages: Language syntax and semantics. Data types and operations. Sequence control. Introduction to translation. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 385 Minimum Grade of C- and Undergraduate level MATH 327 Minimum Grade of C-

CMPS 471 – Internship: Applies theoretical principles and methods in industry under supervision of working professionals. For Computer Science and Computer Engineering majors. Junior or senior standing and instructor approval required. Not challengeable.

0.000 TO 4.000 Credit Hours

Course Attributes: UVCS Community Service, UVLL Lifelong Learning

CMPS 475 - Systems Design Process: Integrates computer technology, systems analysis, systems design, and organizational behavior to aid in designing decision-support systems. Lab included. Not challengeable.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 375 Minimum Grade of C-

CMPS 480 - Distributed Internet Computing: Covers design and analysis of distributed systems. Focuses on object-oriented client/server Internet environments. Can be taken for letter grade only. Not challengeable.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 301 Minimum Grade of C- or Undergraduate level CMPS 379 Minimum Grade of C-

CMPS 490 - Database Management Systems: Design, analysis, and implementation of computerized database systems. Lab included.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 375 Minimum Grade of C-

CMPS 495 - Information Systems Projects: This capstone course uses projects to integrate all concepts regarding information system development from previous courses. Lab included. Not challengeable.

4.000 Credit Hours

Course Attributes: BS Computer Sci/Engr Elective

Prerequisites: Undergraduate level CMPS 375 Minimum Grade of C- and (Undergraduate level CMPS 490 Minimum Grade of C- or Graduate level CMPS 490 Min. Grade of B-)

CMPS 499 - Senior Seminar/Project: Culminating activity required by majors in all departments. Papers/theses/projects researched, prepared, and written under the guidance of a faculty member. Comprehensive exams or recitals required in some departments. Academically, Students must be in Good Standing to enroll in 499. Can be taken for letter grade only. Not challengeable.

1.000 TO 4.000 Credit Hours









9.3. Appendix C: Syllabi (2009 – 2010)

University of La Verne






COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM

Central Campus, Fall 2009

COURSE INFORMATION:

-  Title: CMPN 220 & CMPN 220L: Digital Logic Systems
-  Units: 4.0 Credit Hours
-  Pre-Req.: None
-  Course Attributes: None
-  Requirements: Required for computer science and computer engineering majors.
-  Class Location: Main Campus, FH 206
-  Time: T, R 12:40 – 2:10PM
-  Lab Time: T 2:11 – 4:50 p.m.

INSTRUCTOR INFORMATION:

-  Instructor: Dr. Seta Whitby, Professor, Program Chairperson
-  Office: FH 215
-  E-mail: swhitby@laverne.edu
-  Phone: (909) 593-3511 X4572
-  Office Hours: Thursday 8:30-9:30a.m. & by appointment

COURSE OBJECTIVE:

This course will teach students how to design digital logic circuits, specifically combinational and sequential circuits. Students will learn how to put these two types of circuits together to form dedicated and general-purpose microprocessors. The course combines the use of logic principles and the building of individual components to create data paths and control units, and finally the building of real dedicated custom microprocessors and general-purpose microprocessors.

COURSE OBJECTIVES:

Students enrolled in this class will be able to fulfill the following program objectives:

- Acquire basic concepts in software, engineering, and information science.
- Communicate effectively both orally and in writing to their peers.
- Acquire leadership skills and Collaborate in team projects.
- Demonstrate skills in analyzing problems before and during a project.

Acquire project management skills including data collection, time management, and self-teach new application.

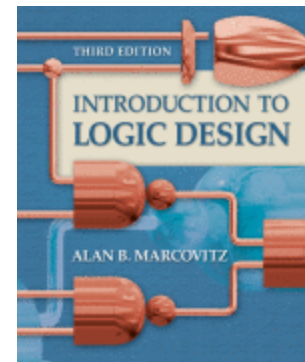
Be prepared to do research and problem solving skills independently.

Be prepared to go to graduate schools.


Obtain a sense of “urgency” to meet deadlines.


TEXTBOOKS:


Marcovitz, Alan B., Introduction To Logic Design, 3rd Edition, McGraw Hill, ISBN: 978-0-07-319164-5





NATURE OF ACTIVITIES AND REQUIREMENTS:


 Articles: Students are required to summarize and critique 3 articles related to information technology and current events (2009 articles). The assignment should not exceed more than 2 pages double-spaced. All assignments should be posted on Blackboard. Articles should be selected from academic journals. See the schedule for deadlines.


 Attendance: Students are required to attend all class meetings and participate in discussions. Students will earn 5 points for attending class. Students are required to e-mail or phone the instructor prior to missing a class. Missing more than 1 lecture may affect the final grade. Missing 3 lectures guarantees an “F” grade.


 Final exam: The final is a cumulative closed book in class exam. All students are to take the final exam to complete their course work and obtain a grade for the course. No make up exam will be given.


 Homework: Students are required to use headers and footers in every assignment they turn in (Look at the syllabus for a sample of the standard). Ten homework assignments are scheduled. No late homework will be accepted.


 Lab Experiments: 7 - 10 lab experiments are scheduled. Students have 7 days to complete writing their lab reports. Students are expected to (a) design their circuits, (b) draw their circuits using circuit maker application, (c) implement their circuits, and (d) write their lab reports to earn full credit for the experiment. Lab reports must be posted in the digital drop box on Blackboard.


 Midterm exams: All students are to take two midterm exams to complete their course work and obtain a grade for the course. No make-up exam will be given.

 Participation: Class participation is vital. As a part of your class participation grade, throughout the semester you will be making constructive comments to your classmates.

 **Research Project:** Each student is expected to (a) design (10p.), (b) implement (10p.), (c) present (10p.), Dress code is required (10p.), PowerPoint (10p.), and (d) write a report of a project (50p.). The project should be based on integrating the course subject with the personal interest of the student. Project proposal, progress, and draft are 10 points each.

 **Quizzes:** A Quiz will be given every Thursday at the beginning of the class session. One lowest grade quiz will be disregarded.

 **PLAGIARISM POLICY:** Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog) Please see the instructor for any questions or clarifications of the above policy.

 **Communication:** Please be consistent and type “CMPN 220:” in the subject section of your e-mail messages. Moreover, please do not forget to sign (type) your name at the end of your e-mail messages.

GRADING:

The grade for the course consists of the following:

	%	Points	
1. Article	3%	300	96 – 100 = A
2. Attendance	2%	130	92 – 95 = A-
3. Final	25%	100	88 – 91 = B+
4. Homework	10%	110	84 – 87 = B
5. Lab	20%	800	80 – 83 = B-
6. Midterm	20%	200	76 – 79 = C+
7. Project	15%	130	72 – 75 = C
8. Quiz	5%	110	68 – 71 = C-
			64 – 67 = D+
	100%	1880	10 – 59 = F

Note: CRD/NCR grade option is not allowed in the major. INC will be granted only if there was an emergency during the final exam.

☑TENTATIVE SCHEDULE

Week	Topics	Lab	Deadline
1. 09/01/09 09/03/09	Introduction course overview Ch. 1: Introduction	No Lab	Read Ch.1
2. 09/08/09 09/10/09	Ch. 2: Combinational Systems	Lab 1	HW 1, Quiz 1
3. 09/15/09 09/17/09	No Class		
4. 09/22/09 09/24/09	Ch. 3: The Karnaugh Map	Lab 2 Article 1	HW 2, Quiz 2
5. 09/29/09 10/01/09	Ch. 3: The Karnaugh Map Midterm I	Review for Midterm I	HW 3, Quiz 3
6. 10/06/09 10/08/09	Ch. 4: Function Minimization Algorithms	Lab 3 Project proposal	HW 4, Quiz 4
7. 10/13/09 10/15/09	Ch. 4: Function Minimization Algorithms	Lab 4 Article 2	HW 5, Quiz 5
8. 10/20/09 10/22/09	Ch. 5: Designing Combinational Systems	Lab 5 Project Progress report	HW 6, Quiz 6
9. 10/27/09 10/29/09	Ch. 5: Designing Combinational Systems		HW 7, Quiz 7
10. 11/03/09 11/05/09	Ch. 6: Analysis of Sequential Systems Mid Term II	Review for Midterm II	HW 8, Quiz 8
11. 11/10/09 11/12/09	Ch. 6: Analysis of Sequential Systems	Lab 6	HW 9, Quiz 9
12. 11/17/09 11/19/09	Ch. 7: The Design of Sequential Systems	Lab 7 Article 3	HW10, Quiz 10
13. 11/24/09 11/26/09	Ch. 7: The Design of Sequential Systems Thanksgiving (No Class)	Lab 8 Project draft	
14. 12/01/09 12/03/09	Ch. 8: Solving Larger Sequential Problems	Project Presentation Pizza	HW11, Quiz 11
15. 12/08/09 12/10/09	Ch. 9: Simplification of Sequential Circuits	Lab Final	HW12, Quiz 12
16. 12/15/09 12/17/09	Final Exam 10:00 - 1:00pm		

Sample of Cover sheet

University of La Verne

CMPN 220: Digital Logic Systems

Article #:1

Author, Date, "Title",
Journal, Volume, Issue, Starting Page, # of pages

Prepared by
Your Name

Fall 2009

Instructor: Dr. Seta Whitby

Sample of Article

Summary:

Write two to three paragraphs summarizing the article in your own words.

Thesis:

Write down the theses of the article in one or two sentences.

Issues:

Discuss some of the issues mentioned in the article such as standardization, automation, efficiency, etc.

Critique:

Utilize your critical thinking skills to critique the article, the issues, and state your personal opinion about the subject.

UNIVERSITY OF LA VERNE
COMPUTER SCIENCE & COMPUTER ENGINEERING
CMPN 280: COMPUTER ORGANIZATION

🔔 COURSE INFORMATION:

📖 **Title:** CMPN 280: Computer Organization

👉 **Units:** 4.0 Credit Hours

👉 **Pre-Req.:** CMPN 220. Minimum Grade of C-.

👉 **Course Attributes:** This is a core course in the major

👉 **Lab:** the course has 3 hour lab

📍 **Class Location:** Main Campus, FH 206

🕒 **Time:** T, R 12:40 – 2:10 pm, Lab is on T: 2:11 – 4:50 pm.

👤 INSTRUCTOR INFORMATION:

👤 **Instructor:** Dr. Seta Whitby, Professor, Program Chairperson

👉 **Office:** FH 215

👉 **E-mail:** swhitby@laverne.edu

📞 **Phone:** (909) 593-3511 X4572

🕒 **Office Hours:** Thursday 8:30-9:30am & by appointment

👉 COURSE OBJECTIVE:

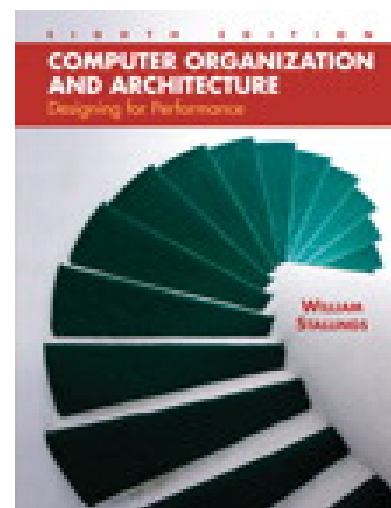
The purpose of this course is to provide an introduction to computer Architecture. Topics covered include: Basic computer organization and design. Data representation and register transfer. Arithmetic and logic units. Central processor and micro program control organization. Arithmetic algorithms. Input-Output organization. Instruction sets and addressing modes. Implementation pertaining to typical processor such as IBM 370, PDP-11, Z-80, I-8085 and MC 68000 will be include as case studies in order to show students how the concepts presented in the class are actually implemented.

📖 TEXTBOOKS:

Stallings, W., 2010, Computer Organization and Architecture:

Designing for Performance, 8/E, Prentice Hall.

ISBN-10: 0136073735, ISBN-13: 9780136073734



REQUIREMENTS:

Attendance: *Individual effort.* Students are required to attend all class sessions. Students will earn 5 points for attending class. Students are required to e-mail or phone the instructor prior to missing a class. **Leaving class early will be considered as missing class. Attending class late will be considered as missing class. Missing more than 1 lecture may affect the final grade. Missing 3 lectures guarantees an “F” grade.**

Homework questions are assigned. **No late homework will be accepted.**

A **Quiz** will be given every Tuesday at the beginning of the class session. The topic of the quiz is on the chapter discussed during the previous week. The lowest grade quiz will be disregarded at the end of the semester.

Midterm exam: All students are to take the midterm exam to complete their course work and obtain a grade for the course. **No make-up exam will be given.**

Each student is expected to **(a) design, (b) implement, (c) present** (Dress code is required), **and (d) write a report of a project.** The project should be based on integrating the course subject with the personal interest of the student.

Students are required to **summarize and critique 3 articles** related to information technology and current events. The assignment should not exceed more than 2 pages double-spaced. **Articles should be selected from academic journals.** Students have to post their articles on the discussion board on Black Board. See the schedule for deadlines.

7 - 8 lab experiments will be done. Students have 7 days to complete writing their lab reports. Students are expected to **(a) design the circuit, (b) draw the circuit using a CAD/CAM system (circuit maker), (c) implement the circuit using electronics parts, and (d) write the lab reports** to earn full credit of the experiment. Students have to turn their lab reports via Digital Drop Box on Black Board.

Students will be asked to prove the **ownership of their work.** The Instructor reserves the right to ask any questions about the work at any time. Credits will not be granted to the students if they do not know the answers to the questions asked.

Unethical practices will not be tolerated. All parties will receive “F” if suspected.

Everything you turn in should include a **header and footer.** Please look at this syllabus for a sample.

GRADING:

The grade for the course consists of the following:

Articles	5%
Homework	10%
Quiz/ Attendance	5%
Lab	25%
Midterm	15%
Final	25%
Project	15%

100%

95 – 100 = A ,	90 – 94 = A- ,	87 – 89 = B+ ,	84 – 86 = B ,
80 – 83 = B- ,	77 – 79 = C+ ,	74 – 76 = C ,	70 – 73 = C- ,
67 – 69 = D+ ,	64 – 66 = D ,	0 - 63 = F	

Note: CRD/NCR grade option is not allowed in the major.

TENTATIVE SCHEDULE

Date	Topics	Deadline
1. 02/01/2010 02/04/2010	Introduction	
2. 02/08/2010 02/11/2010	Chapter 1	HW 1, Quiz 1
3. 02/15/2010 02/18/2010	Chapter 2	Article 1 HW 2, Quiz 2
4. 02/22/2010 02/25/2010	Number Systems Digital Logic Combinational circuits	Project Proposal HW 3, Quiz 3
5. 03/01/2010 03/04/2010	Digital logic sequential circuits	Midterm I HW 4, Quiz 4
6. 03/08/2010 03/11/2010	Digital logic sequential circuits	Project progress report 1 HW 5, Quiz 5
7. 03/15/2010 03/18/2010	Spring Break	
8. 03/22/2010 03/25/2010	Memory	Article 2 HW 6, Quiz 6
9. 03/29/2010 04/01/2010	Memory	Project progress report 2 HW 7, Quiz 7
10. 04/05/2010 04/08/2010	Bus	Midterm II HW 8, Quiz 8

11. 04/12/2010 04/15/2010	ALU	Project progress report 3 HW 9, Quiz 9
12. 04/19/2010 04/22/2010	ALU	Project progress report 4 HW10, Quiz10
13. 04/26/2010 04/29/2010	ALU	Project report draft HW11, Quiz11
14. 05/03/2010 05/06/2010	Control	Article 3 HW12, Quiz12
15. 05/10/2010 05/13/2010	Control	Presentation and Final Report
16. 05/17/2010 05/20/2010	Control	
17. 05/25/2010 @ 10:00 – 1:00 pm	Final Exam	

University of La Verne
COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM
Main Campus, Spring 2010

🔔 COURSE INFORMATION:

📖 **Title:** CMPS/BUS 200: INFORMATION TECHNOLOGY

👉 **Units:** 2.0 Credit Hours

👉 **Pre-Req.:** None.

📖 **Attributes:** UVLL Lifelong Learning

👉 **Requirements:** This course is a graduation requirement for BUS and e-commerce majors.

🔔 **Class Location:** Main Campus, FH 207

🕒 **Time:** Monday or Thursday 4:30 – 6:00 p.m.

👤 INSTRUCTOR INFORMATION:

👤 **Instructor:** Dr. Seta Whitby, Professor and Program Chairperson

👉 **Office:** FH 215

👉 **E-mail:** swhitby@laverne.edu

📞 **Phone:** (909) 593-3511 X 4572

🕒 **Office Hours:** Thursday 8:30-9:30am & by appointment

👉 COURSE DESCRIPTION:

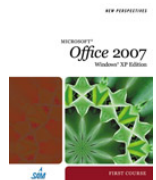
As a student in this course, you will learn the most important topics of Microsoft Office 2007. No prior computer experience is assumed. First you will become familiar with essential computing concepts and the Windows XP operating system. Then, you will learn file management, the basics of browsers and e-mail, and overview Microsoft Office 2007. The first application unit covers Microsoft Word 2007, followed by a unit on Microsoft Excel 2007. You will then learn to integrate the features of Microsoft Word and Excel. Next, you will learn to create, build, and maintain a Microsoft Access database, followed by a lesson on integrating Access with Word and Excel. The last application you will cover is Microsoft PowerPoint 2007, where you will create, apply and modify a presentation, then integrate PowerPoint with the previous three applications. Finally, you will learn to create Web pages using Microsoft Office 2007. Also CMPS 200.

📖 TEXTBOOK:

Text: Shaffer/Carey/Finnegan/Adamski/Ageloff/Zimmerman/Zimmerman, *New Perspectives on Microsoft Office 2007, First Course, XP Edition*, (978-1-4239-0577-6) Course Technology, 2008.

Software: Microsoft Windows 98, XP, 2000 or higher; Microsoft Office 2007; Internet Explorer 7. Instructor will provide information on how to use these packages.

Handouts: Additional handouts may be required. Instructor will provide information on obtaining this material.



👉 COURSE OBJECTIVES:

Students enrolled in this class will be able to fulfill the following **program objectives**:

Acquire basic concepts in Information Technology.

Communicate effectively both orally and in writing to their peers.

Acquire leadership skills and Collaborate in team projects.

Acquire project management skills including data collection, time management.

Be prepared to do research and acquire problem solving skills for decision making.

Obtain a sense of “urgency” to meet deadlines.

Students enrolled in this class will be able to fulfill the following **General Education Lifelong Learning** outcomes:

Demonstrate proficiency in skills that sustain lifelong learning, particularly the abilities to think both critically and responsibly and to access, evaluate, and integrate information.

Demonstrate the ability to determine and use the appropriate technology to support information search and discovery methods.

📁 CLASS CLIMATE:

✉️ Communication: Please be consistent and type “**200:**” in the subject section of your e-mail messages. Moreover, please do not forget to **sign (type) your name** at the end of your e-mail messages.

☺️ **Climate:** The approach that I will use for this course takes the view that the instructor and students *work in a collaborative effort* that recognizes the uniqueness of each person and encourages teamwork. As such, we are all co producers in learning. The underlying assumptions are that individuals are capable of changing their behavior, and are responsible for what happens to them; and that one person can never assume responsibility for another person's change. This means that *you must assume responsibility for learning and for the evaluation of that learning.*

📖 **Class session:** This course will be conducted as a set of workshops.

The role of *the instructor* in this environment will be: to establish a framework and put together a set of materials for exploration, to provide knowledge, opinions, and feedback about the process, and to provide guidance during the process of doing assignments.

The role of *the students* will be to: attend all class sessions, participate, do assignments, take exams, complete the project, and present findings.

👉 **Discovery Learning:** A learning strategy that you will use in this course is called the discovery frame. The discovery frame emphasizes learning from your own experiences -- discovering new knowledge rather than importing it from someone else's knowledge base. The key characteristics of this frame are:

All resources necessary for learning are resident in the individual.

It is learning through doing.

It is information gathering without evaluation. Ask yourself. "How did I do that? Can I do it again?" rather than "Did I do it right?"

It causes you to identify behavior patterns that make a difference for you.

It focuses on success and the use of feedback -- you cannot succeed unless you stop and ask: "How did I succeed?"

The use of the discovery frame highlights additional goals in this course: to help you learn how

to learn, and to learn that **learning can be fun**. This course aims to provide you with the tools and techniques that will help you continue to learn from your own experiences.

EVALUATION AND GRADING:

You will be evaluated based on your combined performance on participation, homework assignments, project, and exams.

Your ability to understand and follow the directions in the text thoroughly will be an essential component for successful completion of the projects/homework.

The following grading scale will be used:

Assessment	Total Points	Percent
Attendance <i>Individual</i> (5p.) 15 x 5	75	5%
Participation and class assignments <i>Team</i> (10p.) 15 x 10	150	10%
Homework <i>Individual</i> (10p.) 12 x 10	120	20%
Project <i>Individual</i> (30 p. Content + 10 p. PowerPoint + 30 p. oral presentation + 30 p. final project report)	100	30%
Exam #1, Exam #2 <i>Individual</i> (100 p. each)	200	15%
Final Exam <i>Individual</i> (100 p.)	100	20%
Total:	745	100%

95 – 100 = **A**, 90 – 94 = **A-**, 87 – 89 = **B+**, 84 – 86 = **B**,
 80 – 83 = **B-**, 77 – 79 = **C+**, 74 – 76 = **C**, 70 – 73 = **C-**,
 67 – 69 = **D+**, 64 - 66 = **D**, 0 - 63 = **F**

Note: CRD/NCR grade option is not allowed in the major. INC will be granted only if there was an emergency during the final exam.

PLAGIARISM POLICY:

Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog) Please see the instructor for any questions or clarifications of the above policy.

🌀 **NATURE OF ACTIVITIES AND REQUIREMENTS:**

🔔 **Attendance: Individual effort.** Students are required to attend all class sessions. Students will earn 5 points for attending class. Students are required to e-mail or phone the instructor prior to missing a class. **Leaving class early will be considered as missing class. Attending class late will be considered as missing class. Missing more than 1 lecture may affect the final grade. Missing 3 lectures guarantees an “F” grade.**

👉 **Participation and class assignments: Team effort.** Class participation is vital. As a part of your class participation grade, throughout the semester you will be making constructive comments to your teammates and classmates, you will assist your teammate with class assignments.

👉 **Homework assignments: Individual effort.** Please use **Headers and Footers** in every assignment you turn in (Look at the syllabus for a sample of the standard). See schedule for dates (10 p. each).

👉 **Project: Individual effort.** Outside class project is a fundamental part of the learning process. You are expected to complete an outside class project that integrates all the applications you learned in this class. You are expected to write a paper about your project. Finally, you are expected to present your project to the class. **Failure to turn in the Project paper will result in an “F” grade.**

👉 **Assessments:**

📅 **Exams: Individual effort.** All students are to take the 2 Midterm exams to complete their course work. **No makeup exam will be given.** These exams are combination of multiple choices and true/false. **The Exams are online (100 p. each).**

👉 **Final exam: Individual effort.** The final exam (given according to the university schedule for final exam week) is cumulative. **No makeup exam will be given. The final exam will be online (100 p.).**

TENTATIVE WEEKLY PLAN

Week	Topic	Homework
1. 02/01/2010 02/04/2010	Introduction, Blackboard, Grouping	Pre-Test Fact Sheet
2. 02/08/2010 02/11/2010	Word Tutorial	
3. 02/15/2010 02/18/2010	President's Day (No Class) Word Tutorial	
4. 02/22/2010 02/25/2010	Excel Tutorial 1: Getting Started with Excel	
5. 03/01/2010 03/04/2010	Excel Tutorial 2: Formatting a Workbook	
6. 03/08/2010 03/11/2010	Excel Tutorial 3: Working with Formulas & Fun.	
7. 03/15/2010 03/18/2010	Spring Break (No class)	
8. 03/22/2010 03/25/2010	Excel Tutorial 4: Working with Charts & Graphics	
9. 03/29/2010 04/01/2010	Integration Word and Excel	Midterm Exam
10. 04/05/2010 04/08/2010	Access Tutorial 1: Creating a Database Access Tutorial 2: Building a Database	
11. 04/12/2010 04/15/2010	Access Tutorial 3: Maintaining and Querying a DB Access Tutorial 4: Creating Forms and Reports	
12. 04/19/2010 04/22/2010	PowerPoint Tutorial 1: Creating a Presentation	Midterm Exam
13. 04/26/2010 04/29/2010	PowerPoint Tutorial 2: Applying and Modifying Text and Graphic Objects	
14. 05/03/2010 05/06/2010	Integration Tutorial 2: Integration. Word, Excel, & Access	
15. 05/10/2010 05/13/2010	Integration Tutorial 3: Integrating Word, Excel, Access, and PowerPoint	
16. 05/17/2010 05/20/2010	Project Presentation	
17. 05/24/2010 05/27/2010	Final Exam	

Class Norms

- Start and end on time.
- If you have to miss class, e-mail or call instructor before class session.
- DONOT chew gum in class. NO hats or sunglasses in the classroom.
- NO multi-tasking during lectures (playing games or text messaging).
- Decisions are made by consensus.
- Address the issue, not the person.
- Ask clarifying questions at all time (do not assume).
- Come with an open mind and be flexible, Give honest feedback.
- Take time to reflect (Active listening).
- Have fun/ sense of humor (If one succeeds, we all succeed!!).

University of La Verne
Department of Computer Science
Fall 2009

COURSE CMPS-301; Programming Concepts
 Lecture and Lab : M 6:30-9:00 PM Room, FH-207
 Prerequisite: none

OBJECTIVES Understand the basic concepts of C++ programming such as making decisions, loop structures, and functions. In addition students will learn how to implement each concept in real world.

INSTRUCTOR Ray Ahmadnia
 Office: FH-107; Phone: 909-593-3511 X4621
 E-mail: ahmadnia@ulv.edu
 Hours: MW: 4:00-6:00 and by appointment

TEXT C++ Programming: Program Design Including Data Structures
 D.S. Malik, 4th edition
 Publisher: Course Technology

TOPICS Chapters 1-7
 Basic elements of C++; Input/Output; Control structures I (if-else structures, switch structures) ; Control structures II (Loop structures; Predefined and User-defined functions.

GRADING

Exam No.1	20%(Chapters 1-3)
Exam No.2	20%(Chapters 4,5)
Exam No.3	20%(Chapters 5,6)
Programs/Quizzes.....	20%(every week)
Final Exam.....	20%(Chapters 1-7)

Grading Scale: 92-100%=A; 89-91%=A-; 85-88%=B+; 81-84=B;

There is a quiz at the beginning of each class meeting. All exams and quizzes are closed book and closed notes. Lab projects must turned in at the beginning of each class. Each project and quiz worth 20 points each. Late projects worth ZERO point.

ATTENDANCE Regular class attendance is expected. Quiz and Exam questions will concentrate on materials discussed in class. You are responsible for all announcements made in class. Please do not let yourself fall behind. If you do, you will find yourself in trouble very quickly. Your name will be removed from the class roster if you miss two consecutive classes or three classes throughout the semester.

HOMEWORK At the conclusion of each class, a program and a quiz will be given that will cover the topics discussed in class. Each program and quiz will be graded for 20 points each. No late assignment will be accepted and your lowest quiz score will be discarded. You have to turn

in (i) A hard copy of your program including a complete documentation (ii) A copy of a sample run.

DISHONESTY Any student who cheats or attempt to cheat during an exam or quiz will receive a grade of ZERO for that exam/quiz. You may help each other on the debugging process of your programming projects, but the design and code is to be the sole work of the student submitting the project. In case of similarities, penalties will apply to all people involved.

IMPORTANT DATES

September 07, labor day (no class)
 November 05, last day to withdraw
 November 26-27, Thanksgiving break
 December 14, Final Exam, 6:30-9:50 PM

TENTATIVE CLASS SCHEDULE (subject to change)

week	Topics	Chapter
1,2,3,4,5	Number systems; Identifiers; Data types (int, char, float, string); Arithmetic Operators; Expressions; Assignment operators; Input and output; Formatting outputs (setprecision, fixed, showpoint, setw, setfill, left, right)	1,2,3
6	Review and Exam No.1	
7,8,9,10	Relational and Logical operators, Making decisions; switch statements; loop structures	4,5
11	Review and Exam No.2.	1-5
12,13,14	Functions	6,7
15	Review	
16	Final Exam, Monday December 14 at 6:30	1-7

CALENDAR

<i>August</i>	<i>September</i>	<i>October</i>	<i>November</i>	<i>December</i>
31	7(no class)	5	2	7
	14	12	9	14(final)
	21	19	16	
	28	26	23	
			30	

University of La Verne

COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM

Central Campus, Fall 2009

CMPS 318 PUBLISHING ON THE WEB I

🔔 COURSE INFORMATION:

- 👉 **Units:** 4.0 Credit Hours
 👉 **Pre-Req.:** None
 👉 **Schedule Types:** Lecture/Seminar
 👉 **Requirements:** Computer Science and Computer Engineering B.S. Elective,
 Core Requirements for E-Commerce and Internet Programming

Concentration.

👉 **Attributes:** INTD Interdisciplinary Thinking, UVLL Lifelong Learning.

🔔 **Class Location:** Founders Hall 207

🕒 **Course Time:** Lecture/Seminar: TR: 12:40 – 2:10 p.m.

👤 INSTRUCTOR INFORMATION:

- ☺ **Instructor:** Dr. Jozef Goetz, Associate Professor
 👉 **Office:** Founders Hall 108 B
 👉 **E-mail:** JGoetz@laverne.edu
 📞 **Phone:** (909) 593-3511 x4803
 🕒 **Office Hours:** M: 3:00 – 5:00 p.m. or by appointment

👉 COURSE DESCRIPTION:

Through a combination of lecture, demonstration, hands-on exercises, assignments, students learn HTML, XHTML and Web Design concepts, XHTML Basic, Links, Tables, Color and Graphics, Frames, Forms, Web site design practices, Cascading Style Sheets (CSS) and Web Multimedia. Tools: Adobe Dreamweaver CS4, Notepad++, WinSCP, Kompozer, Web Developer Add-ons for Mozilla Firefox, Mozilla Firefox and Internet Explorer. This course introduces XHTML/CSS hand-coding with practical interactive exercises and projects.

👉 COURSE OBJECTIVES:

Students enrolled in this class will be able to fulfill the following objectives:

Gain historical perspectives of the Internet and World Wide Web.

Learn and understand the concepts and building blocks of Web pages with HTML, XHTML and CSS.

Gain hands-on experience by coding in XHTML/CSS and employ many important features of XHTML and CSS.

Learn the design principles, best practices of Web page design.

Learn how to add multimedia components to Web pages.

Able to create and publish Web pages.

Demonstrate the ability to apply XHTML and CSS constructs to designing, writing and testing web pages through successful completion of laboratory exercises and projects.

Gain hands-on learning via practical *exercises, and projects and exams.*

Continue their study of using XHTML/CSS to implement WEB applications with JavaScript and Ajax (CMPS 319).

👉GENERAL LEARNING OUTCOMES:

Acquire understanding of basic concepts in Computer Science.

Communicate effectively both orally and in writing to their peers.

Acquire leadership skills and collaborate in team projects.

3. Demonstrate skills in analyzing problems before and during project assignments.

4. Conduct research to solve problems independently.

5. Obtain a sense of “urgency” to meet deadlines.

6. Be flexible to function in a variety of work environments.

7. Get a foundation for a future employment in industry related to concentration areas such as Internet Programming, Software, e-commerce and Information Science.

📖 TEXT:**REQUIRED:**

[1] Terry Felke-Morris, *Web Development & Design Foundations With XHTML, 4/E*, Addison Wesley Higher Education, **2009**, Print ISBN-10: 0-321-53019-5, Print ISBN-13: 978-0-321-53019-6, eText ISBN-10: 0-321-55802-2, eText ISBN-13: 978-0-321-55802-2.

[2] Harvey M. Deitel, Paul J. Deitel, Andrew B. Goldberg, *Internet & World Wide Web How to Program*, 4th edition, **2008**, ISBN: 0131752421.

RECOMMENDED:

[3] Kelly L. Valqui, *Essentials for Design, XHTML Level One*, Prentice Hall, 2005, ISBN: 0131466453.

☺**Climate:** The approach that we will use for this course takes the view that the instructor and students *work in a collaborative effort* that recognizes the uniqueness of each person. As such, we are all co-producers in learning. You should plan to work at least 6 - 8 hours per week outside of class.

🔪 EVALUATION AND GRADING:


There will be lab assignments, projects, quizzes, midterm and a final. The course grade will be calculated as follows:

Lab and home assignments	25%
Final project	15%
Presentation	05%
Quizzes	15%
Midterm	20%
Final Exam	20%
TOTAL	100%

Final course grades will be assigned as follows:


94 – 100 = A	90 – 93 = A-	87 – 89 = B+
84 – 86 = B	80 – 83 = B-	77 – 79 = C+
74 – 76 = C	70 – 73 = C-	67 – 69 = D+
64 – 66 = D	0 – 63 = F	

NATURE OF ACTIVITIES IN THE CLASS:


 **Attendance and Participation:** Required and verified. Attendance and class participation are extremely important in this course. **If you miss two consecutive classes or total four classes you will receive a grade of F.** If you are absent from a midterm and have a **valid excuse**—an illness, a death in your family, illness or injury or another equally compelling reason—the weight of your final will be increased by the weight of the midterm. You must provide **adequate** and **verifiable** documentation. Without a valid excuse, you will receive a zero score for the midterm and the final's weight will remain unchanged. You should **notify** the instructor in advance of your absence from the scheduled course event. If you are absent from class, it is your responsibility to check on announcements made while you were absent. **It is essential that you attend all lectures and labs to succeed in the course. You are expected to be prepared prior to entering class by reading all material covered at the last class meeting.**

Class and home assignments are the **key** to your **success**. Don't expect to learn or have a good grade if you miss classes and/or home assignments. You will build your knowledge and skills based on the previous classes and home assignments. You cannot afford to miss any class meeting.

Each week keep track of the list of the skills and programming constructs you have learned during the course. At the end of semester you will be asked to turn in the detailed list for a grade.

 **Timeliness:** You are expected to be in your seats and ready to begin class promptly at the start of each class. Schedule your day such that you may manage contingencies (such traffic, doctor appointments, etc.) when they occur. The instructor maintains the discretion to mark you absent for all or part of the class in the event you fail to be timely and prompt.

▣ **Quizzes:** Approximately 4 brief quizzes (one per one or two chapters) will be given during lecture periods. The content will relate to the material covered in the lectures and assigned readings. Please **attend class regularly and keep up with course material. Do not get left behind.** No-makeup quizzes are allowed. However, your lowest quiz score will be dropped in determining your grade score.

 **Lab, home and project assignments:** Several lab and project assignments will be given over the course of the semester. An electronic version of the project assignments can be downloaded from the course's web site. All assignments will be graded on a scale from 0 to 2 after presenting the assignments to the instructor. Expect one to two quick questions to show your understanding.

You will need to submit the final project proposal of your Web site, see the schedule. At the end of the semester you will present your web site to the class, discussing all elements of phase 1-5 included in the **Project Submittal** handout (1_Project Submittals.doc). You need to turn in your

projects according to the description found in 1_Project Submittals.doc at http://faculty.ulv.edu/~jgoetz/classes/318_F09/Assignment.doc/ .

Each assignment will be submitted in a **clear plastic binder** with a firm **attached** CD ROM/USB flash drive to the binder. This CD ROM/USB drive should contain only all documents and executable file for the current assignment. Every time students should **bring a USB flash drive** to class to save their work.

☉ **Make-up and late assignments.** No credit will be given for late homework assignments. Assignments must be turned in on time. Unless extraordinary circumstances can be documented, no assignments will be accepted after the beginning of class on the day the assignment is due. **No assignments will be accepted after they have been handed back or reviewed in class.**

☞ **Midterm and Final Exams:** All students are to take two exams to complete their course work and obtain a grade for the course. **There will be no make-ups for the midterm and final examinations.** If you are absent for a midterm exam, you will receive a zero. A missed final will be dealt with according to University regulations on incompletes and withdrawals. Midterm and Final Exams will cover specified chapters (see schedule for dates and coverage). The final will be comprehensive.

📁 **Course material:** All handouts, lecture notes and assignments will be posted at <http://faculty.ulv.edu/~jgoetz/>. You will see a folder labeled **CMPS 318: Publishing on the Web I**, and you will find all **CMPS 318** documents there. You may copy them to your computer.

Others: Please don't use **cell phones, e-mails, keyboards, browsers** etc. during lectures unless the instructor asks you. **No clicking keyboard while lecturing.** Please don't leave the class meeting during lectures. All the above activities are very disruptive to others in class. **Patience and attention** to detail are important to succeed in programming in XHTML and CSS.

Tentative schedule (subject to change):

Date	Week No.	Topic	Reading Chapter	Quiz from Chapter
Sept 1, Sept 3	1	Syllabus. Intro to Course. Intro to the Internet & WWW	[1]ch1	
Sept 8, 10	2	XHTML Basics Lab Exercises	[1]ch2	
Sept 15, 17	3	Configuring Color and Text with CSS Lab Exercises	[1]ch3	[1]ch1, 2
Sept 22, 24	4	Visual Elements & Graphics Lab Exercises	[1]ch4	
Sept 29, Oct 1	5	Web Design Adobe Dreamweaver Tutorial	[1]ch5	[1]ch3, 4
Oct 6, 8	6	Page Layout with CSS	[1]ch6	

		Lab Exercises		
Oct 13, 15	7	More on Links, Lists and Layout Lab Exercises	[1]ch7	Project proposal submission
Oct 20, 22	8	Midterm: Oct 20 Publishing on the WEB using browsers and WinSCP	above chapters	
Oct 27, 29	9	Tables Lab Exercises	[1]ch8	Project updates - phase 2
Nov 3, 5	10	XHTML Forms Lab Exercises	[1]ch9	
Nov 10, 12	11	Web Media & Interactivity Lab Exercises	[1]ch11	[1]ch8, 9
Nov 17, 19	12	A Brief Look at Java Script Lab Exercises	[1]ch14	Project updates - phase 3
Nov 24	13	E-Commerce Overview Lab Exercises	[1]ch12	Project updates - phase 4
Dec 1, 3	14	Web Site Development Web Promotion	[1]ch10 [1]ch13	[1]chapters will be announced
Dec 8, 11	15	Project presentation		Project submission and presentation
Dec 15	16	Final: Tuesday	above chapters	

PLAGIARISM POLICY:

A grade of “F” will be assigned for the course for any occurrence of the academic dishonesty either in exam, quiz or assignments. It is all right to ask someone else about how to solve a problem, but it is not all right to copy their code. Any cases of someone turning in work that is not originally theirs will be dealt with by assigning zeros to both parties involved.

Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog).

**University of La Verne
Department of Computer Science
Fall 2009**

COURSE CMPS-367

C++ Programming

Meeting time and room: M, 6:30-9:45 FH-207

Prerequisite: CMPS-301 or equivalent

GOALS

This is the continuation of CMPS-301. In this course we will review chapters 1-7 and then introduce advanced topics such as Strings, Arrays, Function templates, and recursive functions. All together we'll cover chapters 1-11 and part of 15 and 17.

INSTRUCTOR

Ray Ahmadnia

Office: FH-107

E-mail: mahmadnia@laverne.edu

Office Hours: MW:4:00-6:00 PM and by appointment

TEXTC++ Programming and Data Structures, 3rd or 4th edition

D.S. Malik

You do not need any supplementary book for this course

TOPICS

Part I (Chapters 1-5) 5 weeks

Basic elements of C++; Input/Output; if-else and switch statements. Loop structures

Part II (chapters 6-8, and part of 15 and 17) 4 weeks

Predefined functions; user defined functions, string functions; function templates. Recursive functions.

Part III(Chapter 9,10,11) 4 weeks

Arrays, Application of arrays, Multidimensional arrays, Array of records

GRADING

Exam No.120%(Chapters 1-5)

Exam No.220%(Chapters 6-8,15,17)

Exam No.3.....20%(Chapters 9,10,11)

Programs/Quizzes/Lab assignments... 20%(every week)

Final Exam.....20%(Chapters 1-11,part of 15 and 17)

93-100%=A; 90-92%=A-; 87-89%=B+; 83-86%=B; 80- 82%=B-; 77-

89%=C+; 73-76%=C; 70-72%=C-;

No make-up exam/quiz will be given

No late project will be accepted

Your lowest quiz score will be discarded

ATTENDANCE

Regular lab and class attendance is expected. You are responsible for all announcements made in class. Test and quiz questions are based on your lecture notes.

DISHONESTY

A grade of ZERO will be assigned if academic dishonesty occurs either in exam, quiz or in programming projects. You may help each other on the debugging process of your programs, but the design and code is to be the sole work of the student submitting the project. In case of similarities, penalties will apply to all parties involved.

CALANDER

Holidays: September 7, labor day
 November 05, last day to withdraw
 November 26-27 (Thanksgiving)
 Final Exam: Monday December 14, 6:30-9:20

TENTATIVE CLASS SCHEDULE (subject to change)

Week No.	Topics	Chapter No.
1-5	Basic elements of C++; Input/Output If-else and switch statements; Loop structures Review and Exam No.1(chs.1-5)	1-5
6-8	Predefined functions; User defined function :members of <string>, <cctype>, and <stdlib> libraries. Overloading functions; Function templates; Recursive functions,	6-8, part of 15 and 17
10	Review and Exam No.2(chs.1-7,15,17)	
11-14	Arrays, Multidimensional arrays, Application of Arrays, Array of records	9-10
15	Exam No.3; Records	10,11
16	Final exam	Chs. 1-11, part of 15 and17







University of La Verne

COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM






Central Campus, Fall 2009

CMPS 368 PRINCIPLES OF COMPUTER NETWORKS

COURSE INFORMATION:

-  Units: 4.0 Credit Hours
-  Pre-Req.: Nch.
-  **Schedule Types:** Lecture & Laboratory
-  **Requirements:** Computer Science and Computer Engineering B.S.
Core Requirements
-  Class Location: Founders Hall 206
-  Course Time: Lecture, Lab: R: 6:30 – 9:40 p.m.

INSTRUCTOR INFORMATION:

-  Instructor: Dr. Jozef Goetz, Associate Professor
-  Office: Founders Hall 108 B
-  E-mail: JGoetz@ulv.edu
-  Phone: (909) 593-3511 x4803
-  Office Hours: W: 3:00 – 5:00 pm & by appointment

COURSE DESCRIPTION:

The course covers how networks work *on the inside*. Topics to be discussed include various standards and protocols associated with data network, review ISO/OSI and Internet models, multiplexing, data link control, switching techniques, LANs and WANs.

COURSE OBJECTIVES:

Upon course completion, you should understand the basic concepts of networks, understand the OSI model, understand the basics of computer networks.

TEXTBOOK:

REQUIRED:

- [1] Behrouz A Forouzan, DeAnza College, *Data Communications and Networking*, Fourth Edition, 2007, The McGraw-Hill Companies, ISBN: 978-0-07-296775-3 and ISBN 978-0-07-296775-7
- [2] Thomas P. Cavaiani, [IT Networking Labs](#), 2010, Print ISBN-10: 0-13-610738-9, Print ISBN-13: 978-0-13-610738-5, eText ISBN-10: 0-13-610740-0, eText ISBN-13: 978-0-13-610740-8.
- [3] S. M. Sarwar, R. Koretsky & S.A. Sarwar, *LINUX: The Texbook*, 1st Edition, Copyright 2002, Pearson Addison Wesley, ISBN: 0201725959.

☺Climate: The approach that we will use for this course takes the view that the instructor and students *work in a collaborative effort* that recognizes the uniqueness of each person. As such, we are all co-producers in learning. You should plan to work at least 5 hours per week outside of class.

✎ EVALUATION AND GRADING:

The course grade will be calculated as follows:

Lab and homework assignments:	45%
Midterm Exam:	25%
Final Exam:	<u>30%</u>
Total:	100%

Final course grades will be assigned as follows:

94 – 100 = A	90 – 93 = A-	87 – 89 = B+
84 – 86 = B	80 – 83 = B-	77 – 79 = C+
74 – 76 = C	70 – 73 = C-	67 – 69 = D+
64 – 66 = D	0 – 63 = F	

☞ NATURE OF ACTIVITIES IN THE CLASS:

🔔 Attendance and Participation: Class and lab participation is extremely important in this course. Students are required to attend all class sessions. Missing more than 1 lecture may affect the final grade. Missing 3 lectures guarantees an “F” grade. If you are absent from class, it is your responsibility to check on announcements made while you were absent.

✎ Homework and lab assignments: Lab and/or home exercise assignments will be assigned every week. Submit your homework at the beginning of the class on the assigned day (usually you will be given one week to turn in your homework). Type your homework assignments. All assignments must be labeled with your name, e-mail address, days and time, the semester (e.g. Fall 09), chapter number and exercise number. Bring the electronic and hard copies of your lab assignments. Submit all materials in a clear plastic binder with a firm attached CD-ROM/USB flash drive to your binder. This CD-ROM/USB flash drive should contain only the files for the current assignment.

🕒 Make-up and late assignments. No credit will be given for late homework assignments. Unless extraordinary circumstances can be documented, no assignments will be accepted after the beginning of class on the day the assignment is due. No assignments will be accepted after they have been handed back or reviewed in class.

✎ Midterm and Final Exams: All students are to take two exams to complete their course work and obtain a grade for the course. No make up exam will be given. Midterm and final exams will cover specified chapters (see schedule for dates and coverage). These exams are a combination of multiple choices questions, true/false questions, and exercises. The final exam is given according to the university schedule for the final exam week.

📁 Course material: All handouts, lecture notes and home assignments will be posted at <http://faculty.ulv.edu/~jgoetz/>. You will see a folder labeled **CMPS 368: Principles of**

[Computer Networks](#), and you will find all CMPS 368 documents there. You may copy them to your computer.

Others: Please don't use cell phones, e-mails, keyboards, browsers etc. during lectures unless the instructor asks you. No clicking keyboard while lecturing. All the above activities are very disruptive to others in class.

Tentative	Wk	Topics	Chapter to read
Sept 3	1	Syllabus, Introduction to Network, Protocols and Standards. Lab Exercises	[1]1
Sept 10	2	Network Models. Lab Exercises	[1]2
Sept 17	3	Client-Server Model: Socket Interface Lab Exercises	[1]24 3 rd ed.
Sept 24	4	Domain Name System - DNS Lab Exercises	[1]25
Oct 1	5	HTTP and WWW Lab Exercises	[1]27
Oct 8	6	Numbering Systems Lab Exercises	Appendix B
Oct 15	7	Data and Signals Lab Exercises	[1]3
Oct 22	8	Digital Transmission Midterm	above chapters
Oct 29	9	Digital and Analog Transmission Lab Exercises	[1]4, 5
Nov 5	10	Multiplexing and Spreading Transmission Lab Exercises	[1]6
Nov 12	11	Transmission Media – reading and quiz Circuit Switching and Telephone Network Lab Exercises	[1]7 [1]8
Nov 19	12	Data Link Control: Error Detection and Correction Lab Exercises	[1]10
Dec 2	13	Data Link Control Lab Exercises	[1]11
Dec 9	14	Network and Transport Layer Lab Exercises	[1]19, 23
Dec 16	15	Final Exam: Tuesday	above chapters

👉 **PLAGIARISM POLICY:**

A grade of “F” will be assigned for the course for any occurrence of the academic dishonesty either in exam, quiz or assignments. It is all right to ask someone else about how to solve a problem, but it is not all right to copy their code. Any cases of someone turning in work that is not originally theirs will be dealt with by assigning zeros to both parties involved. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy.

(See ULV catalog).

Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable.

**University of La Verne
Department of Computer Science and Engineering
January 2010**

COURSE CMPS-370; Seminar

GOALS Students will learn about issues that arise from computer technology and the Internet. This seminar has no technical prerequisite. Students will face a wide variety of issues as a member of a complex technological society, in both their professional and their personal lives.

INSTRUCTOR Ray Ahmadnia, Associate professor
Office: FH-107; Phone(909)593-3511 X4621
E-mail:mahmadnia@laverne.edu
Hours: W: 4:00-6:00

TEXT No text book is required

TOPICS Privacy; Censorship on the Global Net; Political Campaign Regulations in Cyberspace; Intellectual Property; Hacking, Scams and Forgery; Increasing Reliability and Safety; Professional Ethics

GRADING One (20 min) presentation...50%
One research paper..... 30%
Attendance and participation...20%

93-100%=A; 89-92%=A-; 85-88%=B+; 81-84%=B;
78-80=B-; 74-77%=C; 70-73%=C-;

ATTENDANCE We meet only four times, therefore your regular class attendance is expected. You are responsible for all announcements made in class.

TENTATIVE CLASS SCHEDULE (SUBJECT TO CHANGE)

<i>Week No.</i>	<i>Topics</i>
1	Privacy Video Surveillance Stolen and lost data Rights and Law Spam Posting and selling The global impact of censorship Censorship in other nations Political campaign Regulations in Cyberspace
2	Intellectual property Copyright law Copying and Sharing Search engines and Online Libraries Free Software Issues for software development Crime Hacking Security Digital forgery Whose laws rule the Web?
3	Work Getting a job Employee monitoring Location monitoring Evaluation and controlling technology Evaluation information on the Web Law, regulations, and market Are we too dependent on computers?
4	Professional Ethics and Responsibilities Ethical guidelines for Computer Professionals Protecting personal data Going public Copyright violation Conflict of Interest AI and sentencing criminals

**University of La Verne
Department of Computer Science
Spring 2010**

COURSE CMPS 371
 Assembly Language
 MTWT lecture: 12:00- 2:00, Lab: 2:00-3:45
 Prerequisite: CMPS-367

GOALS In order to write high-level languages such as C and C++ well, it is necessary to have some knowledge of assembly languages they translate into. The IBM PC Assembly language was chosen for this course because it is by far the most available platform for such a study. We will be running in a Windows window in which the old DOS environment is simulated, and writing all our programs in a 16-bit mode, through instructions with 32-bit address will be used. Registers, arithmetic and branching instructions, subprograms and Macros, and arrays will be covered.

INSTRUCTOR Ray Ahmadnia
 Office: FH-107; Phone: 593-3511 X4621;
 e-mail:mahmadnia@laverne.edu
 Hours: MTWT 11:00-12:00

TEXT Assembly Language Programming for the IBM PC family
 Third Edition by William B. Jones

TOPICS Chapters 1-10
 Assembler overview, I/O, Arithmetic, Comparing and
 Branching, Subprograms, Procedures, Writing Macros, Bit
 Operations, Arrays and their applications

GRADING Assignments(9).....40%
 Four Exams(Every Thursday).....60%

92-100%=A; 88-91%=A-; 85-87%=B+;

No make-up exam will be given.

At the conclusion of each class session assignments will be assigned. Late assignments sworth 0 pts.

CALENDAR

Monday 1/ 4	Tuesday 1/5	Wednesday 1/6	Thursday 1/7
Monday 1/ 11	Tuesday 1/12	Wednesday 1/13	Thursday 1/14
Monday 1/ 18	Tuesday 1/19	Wednesday 1/20	Thursday 1/21
Monday 1/ 25	Tuesday 1/26	Wednesday 1/27	Thursday 1/28

TENTATIVE CLASS SCHEDULE(SUBJECT TO CHANGE)

<i>Week No.</i>	<i>Topics</i>	<i>Chapter No.</i>
1	Assembler overview Macros for I/O Arithmetic Exam No.1	1-4
2	More about arithmetic Comparing and Branching -Translating loop structures from C++ into assembly -Translating switch statement from C++ into assembly Exam No.2	5
3	Subprograms Procedures Macros Bitwise operators in C++ Exam No.3	6,7,8
4	Bit Operations Shift operations Arrays Final Exam	9,10

UNIVERSITY OF LA VERNE
COMPUTER SCIENCE DEPARTMENT
CMPS 375: Systems Analysis and Design

General Information

SEMESTER: FALL 2009

CLASS: CMPS 375

PROFESSOR: Samuel K. Son

TIME: M 6:30-8:30 pm

OFFICE: Founders Hall 206

LAB: M 8:30 – 9:40 pm

E-MAIL: samuel.k.son@boeing.com

PHONE: (310) 347-8082

OFFICE HOURS: M 5:30- 6:30 p.m. & by appointment

Pre- and Co-requisites

It is assumed that the student has completed CMPS 390 or a basic course in organizations as information systems or equivalent. The student should understand the concepts of the systems development life cycle, general systems theory, and the classification of types of information systems.

We will address some basics that are covered in those courses, but students are strongly urged to take the enterprise modeling and database management courses since CMPS 375 is not designed to provide the necessary understanding of these areas.

Texts & Readings

Required:

Mark W. Maier, Eberhardt Rechtin. *The Art of Systems Architecting (3rd Edition)*. Boca Raton, London, New York, Washington, D.C.: CRC Press.

Stephen R. Covey. The 7 Habits of Highly Effective People. Free Press.

2. Outline

WEEK #	SESSION	TOPIC	SUMMARY ASSIGNMENT	PRESENTER
1	08/29/11	Extending the Architecting Paradigm	Ch. 1	
2	09/12/11	Heuristics as Tools	Ch. 2 <i>Paradigm & Principles</i>	Scott Esser
3	09/19/11	Builder-Architected Systems	Ch. 3 <i>The Seven Habits – An Overview</i>	Marla Guerrero
4	09/26/11	Manufacturing Systems	Ch. 4 <i>Habit 1</i>	Justin Olin
5	10/03/11	Social Systems	Ch. 5 <i>Habit 2</i>	Brent Serrano
6	10/10/11	Software and IT Systems	Ch. 6 <i>Habit 3</i>	Reema Aleid
7	10/17/11	Collaborative Systems	Ch. 7 <i>Habit 4</i>	Turki Alqahtani
8	10/24/11	Representation Models and System Architecting	Ch. 8 <i>Habit 5</i>	Nathan Coulombe
9	10/31/11	Design Progression in Systems Architecting	Ch. 9 <i>Habit 6</i>	Benjamin Galaz
10	11/07/11	Integrated Modeling Methodologies	Ch. 10 <i>Habit 7</i>	Abduirahman Al Dolaimi
11	11/14/11	Architecture Frameworks	Ch. 11	Samuel Mills-Daubney
12	11/21/11	Architecting in Business and Government	Ch. 12	Samuel Mills-Daubney
13	11/28/11	The Political Process & Systems Architecting	Ch. 13	Scott Esser
14	12/05/11	The Professionalization of Systems Architecting	Ch. 14	Benjamin Galaz
15	12/12/11	<i>Final Exam</i>		

Grading

1. Requirements

The formal assignments for the course are as follows

Attendance: Students are required to attend all classes.

Participation: This requirement is designed to stimulate students to participate in-class discussions as appropriate. Students will be requested to discuss their learning, concerns, and insights on the material covered in class.

Presentation: This exercise is design to encourage the students to prepare summary presentations during the semester.

Final Exam: There will be one final exam in this course to be held during the exam week at the end of the semester. It will cover all material in the textbook as well as material presented in lectures.

2. Grades

Each formal assignment will be given a score according to a specified grading scheme. Scores will be summed (where necessary), converted to a percentage, and weighted according to the following allocations: Weighted points will be summed, and then a course grade will be assigned based on this value, as follows:

1	Attendance			10%			
2	Participation			20%			
3	Presentation (material & skill)			50%			
4	Final Exam			20%			
Total				100%			
	Low %	High %	Grade		Low %	High %	Grade
	94	100	A		76	80	C+
	90	93	A-		71	75	C
	88	89	B+		61	70	C-
	84	87	B		0	60	D+
	81	83	B-				

Note: CRD/NCR grade option is not allowed in the major.





University of La Verne

COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM

Central Campus, Fall 2009



CMPS 378 C# Programming Using .NET

 COURSE INFORMATION:






-  Units: 4.0 Credit Hours
-  Pre-Req.: CMPS 301 Programming Concepts or instructor's approval
-  **Schedule Types:** Lecture & Laboratory
-  Requirements: Computer Science and Computer Engineering B.S.
Core Requirements for Internet Programming

Concentration

Prerequisites for E-Commerce Major.

-  Class Location: Founders Hall 207
-  Course Time: Lecture, Lab: T: 6:30 – 9:40 p.m.

 INSTRUCTOR INFORMATION:

-  Instructor: Dr. Jozef Goetz, Associate Professor
-  Office: Founders Hall 108 B/C
-  E-mail: JGoetz@laverne.edu
-  Phone: (909) 593-3511 x4803
-  Office Hours: M: 5:00 – 7:00 p.m. or by appointment

 COURSE DESCRIPTION:

C# is the world's fastest-growing and most marketable programming language. You will learn the fundamentals and concepts of Microsoft's .NET framework and C#. C# is the premier object oriented language in Microsoft's .NET framework as well as a general-purpose programming language. C# is simple, modern and type safe. C# is an open-source language that has been available on Windows, LINUX and MAC OS X so far.

C# is an event driven, object oriented, visual programming language.

Much cleaner than C++

More structured than Visual Basic

More powerful than Java for small and middle size applications

A fundamental language for the .NET Microsoft key technologies and Windows, Web Services and Distributed Applications.

The .NET framework and C# are used for building and running all kinds of contemporary software, including Web-based applications, smart client applications, mobile applications and XML Web service.

Topics that will be covered include: Overview of .NET technology and the role of C# programming, World Wide Web and C#, Visual Studio .NET, Control Structures, Methods,

Arrays, LINQ, Generic Collection, Object-Based Programming: Inheritance, Polymorphism, Exception Handling, Graphic User Interface.

👉 COURSE OBJECTIVES

Students enrolled in this class will be able to fulfill the following objectives:

Gain historical perspectives of the Internet and World Wide Web.

Learn and understand the .NET framework and C#.

Program in C# and employ many important capabilities of the .NET platform.

Gain hands-on experience by writing console and windows applications.

Demonstrate the ability to apply computer programming constructs to designing, writing and testing applications through successful completion of laboratory exercises and projects.

Gain hands-on learning via practical *exercises, and projects and exams*.

Continue their study of using C# to implement WEB applications and Web services.

👉 GENERAL LEARNING OUTCOMES:

Acquire understanding of basic concepts in Computer Science.

Communicate effectively both orally and in writing to their peers.

Acquire leadership skills and collaborate in team projects.

3. Demonstrate skills in analyzing problems before and during project assignments.

4. Conduct research to solve problems independently.

5. Obtain a sense of “urgency” to meet deadlines.

6. Be flexible to function in a variety of work environments.

7. Get a foundation for a future employment in industry related to concentration areas such as Internet Programming, Software, e-commerce and Information Science.

📖 REQUIRED TEXT:

Visual C# 2008 How to Program by Harvey M. Deitel, Paul J. Deitel, 3rd Edition, Pearson - Prentice Hall, 2009, ISBN: 013605322-X.

☺Climate: The approach that we will use for this course takes the view that the instructor and students *work in a collaborative effort* that recognizes the uniqueness of each person. As such, we are all co-producers in learning. You should plan to work at least 6 hours per week outside of class.

🔍 EVALUATION AND GRADING:

The course grade will be calculated as follows:

Programming assignments, home taken quiz and lab exercises:	50%
Midterm Exam:	25%
Final Exam:	<u>25%</u>
Total:	100%

Final course grades will be assigned as follows:

94 – 100 = A	90 – 93 = A-	87 – 89 = B+
84 – 86 = B	80 – 83 = B-	77 – 79 = C+
74 – 76 = C	70 – 73 = C-	67 – 69 = D+
64 – 66 = D	0 – 63 = F	

🌀 NATURE OF ACTIVITIES IN THE CLASS:

🔔 Attendance and Participation: Required and verified. Attendance and class participation are extremely important in this course. If you miss two consecutive classes or total three classes you will receive a grade of F. If you are absent from a midterm and have a valid excuse—an illness, a death in your family, illness or injury or another equally compelling reason—the weight of your final will be increased by the weight of the midterm. You must provide adequate and verifiable documentation. Without a valid excuse, you will receive a zero score for the midterm and the final's weight will remain unchanged. You should notify the instructor in advance of your absence from the scheduled course event. If you are absent from class, it is your responsibility to check on announcements made while you were absent. It is essential that you attend all lectures and labs to succeed in the course. You are expected to be prepared prior to entering class by reading all material covered at the last class meeting.

Class and home assignments are the **key** to your **success**. Don't expect to learn or have a good grade if you miss classes and/or home assignments. You will build your knowledge and skills based on the previous classes and home assignments. You cannot afford to miss any class meeting.

🔔 Timeliness: Arrive on time to class. Schedule your day such that you may manage contingencies (such traffic, doctor appointments, etc.) when they occur. The instructor maintains the discretion to mark you absent for all or part of the class in the event you fail to be timely and prompt.

✍️ Homework and class assignments: Home programming assignments will be assigned every other week and class programming assignments will be assigned more often than home assignments. The assignments will require you to design, code, and test programs. All assignments will be graded (on a scale from 0 to 2 after presenting the program to the instructor. Expect one to three quick questions to show your understanding of the code. Please be familiarized with all guidelines at http://faculty.ulv.edu/~jgoetz/classes/378_F09/Guidelines/including_Assign+submittals_guidlines.doc.

If the program is not fully functional, please include a readme.txt file that describes what does not work. Each assignment will be submitted in a clear plastic binder with a firm attached CD ROM/USB drive/ Secure Digital (SD) Memory Card to your binder.

They will require you to design, code, and test a small program. You must turn in:

A diagram or pseudocode – see DiagramExamples.doc

A well-commented source code with a hard copy

Sample at least four sets of your test cases (capture the screen) that show the successful execution of your program with appropriate test data

Listing of any test data files used as input to your program.

A printout of all source code and a source code with single executable program that corresponds to the source code must be submitted along with sample output printouts and a CD

ROM/USB/SD. This a CD ROM/USB/SD should contain only the project workspace files for the current assignment

● Make-up and late assignments. No credit will be given for late homework assignments. Assignments must be turned in on time. Unless extraordinary circumstances can be documented, no assignments will be accepted after the beginning of class on the day the assignment is due. No assignments will be accepted after they have been handed back or reviewed in class.

✎ Midterm and Final Exams: All students are to take two exams to complete their course work and obtain a grade for the course. There will be no make-ups for the midterm and final examinations. If you are absent for a midterm exam, you will receive a zero. A missed final will be dealt with according to University regulations on incompletes and withdrawals. Midterm and Final Exams will cover specified chapters (see schedule for dates and coverage). These exams are a combination of multiple choices questions, true/false questions, and writing two programs.

📁 Course material: All handouts, lecture notes and home assignments will be posted at <http://faculty.ulv.edu/~jgoetz/>. You will see a folder labeled **CMPS 378: C# Programming Using .NET**, and you will find all CMPS 378 documents there. You may copy them to your computer.

Others: Please don't use cell phones, e-mails, keyboards, browsers etc. during lectures unless the instructor asks you. No clicking keyboard while lecturing. All the above activities are very disruptive to others in class.

Patience and attention to detail are important to succeed in programming in C#.

Tentative schedule (subject to change):

Date	Wk	Topics	Chapter to read
Sept 1	1	Introduction to Computers, Internet, World Wide Web and C#. Overview of .NET technology and the role of C# programming. Dive Into Visual C# 2008	1 2
Sept 8	2	Introduction to C# Applications Lab Exercises	3
Sept 15	3	Intro to Classes and Objects Lab Exercises	4
Sept 22	4	GUI Concepts: Part 1 Control Structures: Part 1 Exercises	14 5
Sept 29	5	Control Structures: Part 1 Control Structures: Part 2 Lab Exercises	5 6
Oct 6	6	Control Structures: Part 2 Exception Handling Lab Exercises	6 13
Oct 13	7	Midterm Methods	above chapters7
Oct 20	8	Strings	18

		Lab Exercises	
Oct 27	9	Arrays Lab Exercises	8
Nov 3	10	Introduction to LINQ and Generic Collection	9
Nov 10	11	Classes and Objects Lab Exercises	10
Nov 17	12	Object-Oriented Programming: Inheritance Lab Exercises	11
Nov 24	13	Polymorphism, Interfaces and Operator Overloading Lab Exercises	12
Dec 1	14	GUI Concepts: Part 1, 2 Lab Exercises	14, 15
Dec 8	15	GUI Concepts: Part 2 Lab Exercises	15
Dec 15	16	Final Exam: Tuesday 6:30 pm	chapters above

👉 PLAGIARISM POLICY:

Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog).

University of La Verne

**Department of Computer Science
Fall 2009**

COURSE CMPS 385
 Data Structures
 Prerequisite: CMPS-367

GOALS The term *data structures* refers to the study of data and how to represent data objects within a program. The focus of this course is on advance topics such as linked list, stacks, queues, trees, searching and sorting methods.

INSTRUCTOR Ray Ahmadnia
 Office: FH-107; Phone: 593-3511 X4621;
 e-mail:ahmadnia@ulv.edu
 Hours: W 4:00-6:00

TEXT C++ programming, 3rd edition
 D.S. Malik

TOPICS Part I: 5 weeks
 Review C++, stack, queue, Prefix, postfix, Recursion
 Exam No.1
 Part II: 5 weeks
 Pointers, Linked list, Doubly Linked list, Circular linked list
 Exam No.2
 Part III: 5 weeks
 Trees, Searching and Sorting algorithms
 Final Exam(parts I-III)

GRADING Programs/Written assignments/Quizzes.....30%
 Two Midterms40%
 Final.....30%
 92-100%=A; 88-91%=A-; 85-87%=B+;

No make-up exam will be given.

At the conclusion of each class session a program will be assigned. Each program and the related quiz will be graded for 20 points each. Late programs worth 0 pts.

DISHONESTY A grade of ZERO will be assigned if academic dishonesty occurs either in exam or in programming assignments. Programming projects must be done individually. In case of similarities, penalties will apply to all parties involved

ATTENDANCE Regular class attendance is required. You are responsible for all announcements made in class. Test and quiz questions are based on the lecture notes. A 15-20 minutes quiz will be given at the beginning of each Friday class.

IMPORTANT DATES

Sep 07, 2009 Labor Day

Nov 05, 2009 Last day to withdraw

Nov 26, 2009 - Nov 27, 2009 Thanksgiving Holiday

Dec 16, 2009 Final exam

TENTATIVE CLASS SCHEDULE(SUBJECT TO CHANGE)

<i>Week No.</i>	<i>Topics</i>	<i>Chapter No.</i>
1	Review C++, Arrays, Array of records, Arrays and functions	6,7,8,9,10
2	Function templates, Recursive functions , Computing run-time	7,14, part of 16
3	Prefix, Infix, and Postfix expressions	Class notes
4	Review and Exam NO.1	
5,6	Classes, Stacks, Queues	11, class notes
7	Application of stacks and queues	Class notes and part of 16
8	Pointers and linked list	13,17
9	Linked list and stack Linked list and queue	17,18
10	Review and Exam NO.2	
11,12	Trees: Binary trees and Binary Search trees	20, class notes
13	AVL trees	Class notes
14,15	Sorting and Searching algorithms	19, class notes
16	Final exam	


University of La Verne

COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM


Main Campus, Spring 2010


COURSE INFORMATION:

 Title: CMPS/BUS 410: MANAGEMENT INFORMATION SYSTEMS


 Units: 4.0 Credit Hours

 Pre-Req.: ENG 111 or BUS 346 or MGMT 480. Minimum Grade of C-.

 Course Attributes: GESSc Economics, Lifelong Learning (UVLL)

 Requirements: BUS, e-commerce, and Computer Science Information Science concentration majors: this course is a required course for the major. Software, Internet Programming, and Engineering concentration: this course is an elective course.


 Class Location: Main Campus, FH 207

 Time: T, R 9:40 – 11:10AM





INSTRUCTOR INFORMATION:

 Instructor: Dr. Seta Whitby, Professor, Program Chairperson

 Office: FH 215

 E-mail: swhitby@laverne.edu

 Phone: (909) 593-3511 X4572

 Office Hours: Thursday 8:30-9:30am & by appointment



COURSE DESCRIPTION:

An introductory course aimed at the understanding and analysis of the flow of information within an organization. The basic tools and techniques needed for representing systems in subsequent courses are introduced. An organization theoretic approach is used to explore the impact of information processing requirements on organizational design and management process. Alternative models of organizational decision-making and their information requirements are discussed.



COURSE OBJECTIVES:

Students enrolled in this class will be able to fulfill the following program objectives:

Acquire basic concepts in Information Science.

Communicate effectively both orally and in writing to their peers.

Acquire leadership skills and Collaborate in team projects.

Acquire project management skills including data collection, time management.

Be prepared to do research and acquire problem solving skills for decision making.

Obtain a sense of “urgency” to meet deadlines.



General Education Lifelong Learning Outcomes:

Students enrolled in this class will be able to fulfill the following General Education Lifelong Learning Outcomes:

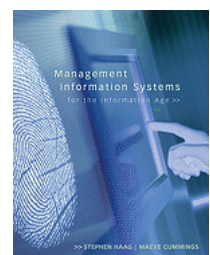
Demonstrate proficiency in skills that sustain lifelong learning, particularly the abilities to think both critically and responsibly and to access, evaluate, and integrate information.

Demonstrate the ability to determine and use the appropriate technology to support information search and discovery methods.





TEXTBOOK:

Haag, Cummings (2010), Management Information Systems for the Information Age, 8/e,
McGraw Hill, ISBN 0073376787



 CLASS CLIMATE:

 Communication: Please be consistent and type “410 F2F:” in the subject section of your e-mail messages. Moreover, please do not forget to sign (type) your name at the end of your e-mail messages.

 Class session: This course will be conducted as a set of workshops.

The role of *the instructor* in this environment will be: to establish a framework and put together a set of materials for exploration, to provide knowledge, opinions, and feedback about the process, and to provide guidance during the process of doing assignments.

The role of *the students* will be to: attend all class sessions, participate, do assignments, take exams, complete the research project, and present findings.

 PLAGIARISM POLICY:

Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog) Please see the instructor for any questions or clarifications of the above policy.


 EVALUATION AND GRADING:


Assessment	Total Points	Percent
Attendance <i>Individual</i> (5p.) 28 x 5	140	5%
Case Study <i>Team</i> (10 p. Ice breaker + 10 p. posting on DISCUSSION BOARD + 30 p. facilitating + 10 p. reflection posted on DISCUSSION BOARD)	60	10%
Participation on 9 Case Study <i>Individual</i> (30 p. max./case, 2 p./post)	270	10%
Homework Assignments <i>Individual</i> (Total of 9, 10 p. each)	90	10%
Research Project (<i>Team</i> = 30 p. Article 1,2, 3 + 10 p. PowerPoint + 30 p. oral presentation + 30 p. final project report)	100	20%
Quizzes <i>Individual</i> (total of 9 quizzes, 10 p. each)	90	10%
Midterm Exam #1 & Midterm Exam #2 <i>Individual</i> (100 p. each)	200	15%
Final Exam <i>Individual</i> (100 p.)	100	20%
Total:	1050	100%


95 – 100 = A, 90 – 94 = A-, 87 – 89 = B+, 84 – 86 = B,
 80 – 83 = B-, 77 – 79 = C+, 74 – 76 = C, 70 – 73 = C-,
 67 – 69 = D+, 64 – 66 = D, 0 – 63 = F


Note: CRD/NCR grade option is not allowed in the major. INC will be granted only if there was an emergency during the final exam.


 NATURE OF ACTIVITIES AND REQUIREMENTS:

 Attendance: *Individual effort.* Students are required to attend all class sessions. Students will earn 5 points for attending class. Students are required to e-mail or phone the instructor prior to missing a class. Leaving class early will be considered as missing class. Attending class late will be considered as missing class. Missing more than 1 lecture may affect the final grade. Missing 3 lectures guarantees an “F” grade.


 Closing Case Studies On the Virtual Chat: *Team effort.* All students are required to read the closing case studies at the end of each chapter and prepare for a critical thinking dialogue. Throughout the semester each team is required to Facilitate and Moderate one closing case studies in a VIRTUAL CHAT session. Please follow the procedure: First, the facilitating team will post the summary of their questions on the DISCUSSION BOARD on Tuesday at 6:00pm (10 p. for posting on time, 2 points penalty per day). Second, the facilitating team will do an ICE BREAKER exercise the first 10 minutes of the chat session to create the community and get to know each other (10 p. for ice breaker). Third, the facilitating team will take the responsibility of moderating the dialogue, discussing the case and its relevance to the chapter (30 p. facilitators). Fourth, at the end of the chat sessions, the facilitating team will post their Personal reflection and key learning points (10 p. for reflection). Fifth, the rest of the classmates will be prepared by reading the case in the book, reading the posted document on the DISCUSSION BOARD and participating. Please follow class norms and Netiquettes (2 p. /post, the individuals will receive full points when they post total of 15 (meaningful) postings per chat).


 Participation: *Individual effort.* Class participation is vital. As a part of your class participation grade, throughout the semester you will be making constructive comments to your classmates and posting your comments on the VIRTUAL CHATS.


 Homework assignments: *Individual effort.* Total of 9 Homework assignments. You will be reinforcing your learning of each chapter by answering the “SHORT-ANSWER QUESTIONS” at the end of each chapter. Please use Headers and Footers in every assignment you turn in (Look at the syllabus for a sample of the standard). Please use the DIGITAL DROP-BOX to submit your homework. See schedule for dates (10 p. each).

 Research Project: *Team effort.* Outside class research is a fundamental part of the learning process. You are to complete an outside class research project. No two teams may perform the same research project, so you must reserve your topic with me on a first-come, first-serve basis. During the last week of class, students will present their final findings. The research project should have at least 3 references per student. Students are required to summarize and critique 3 scholarly articles related to their project topic individually. Articles should be selected from academic journals. Your research paper should include the following: Cover sheet, Table of contents, Body of the research, References (minimum of 10 pages, double space, font 12 Times New Roman). Failure to turn in the research paper will result in an “F” grade.

TESTS AND EXAMS:

 Quizzes: *Individual effort.* A 10-minute timed Quiz will be given every Tuesday at 9:40AM sharp (see schedule for dates). The quiz will be posted on Blackboard every Tuesday at 9:39AM. The topic of the quiz is on the chapter discussed the previous lecture. These quizzes will be a combination of multiple choices, true/false. No makeup quiz will be given to students who missed their deadline or arrived late to class. (Recommended study sequence: read the chapter → study the lecture notes → do your homework → review your notes → take the quiz). Be careful the quiz is timed for 10 minutes, once your time has expired you cannot take it again and you will receive 0 for that quiz. (10 p. each).

 Midterm exams: *Individual effort.* All students are to take the 2 exams to complete their course work and obtain a grade for the course. No makeup exam will be given. Midterm Exams #1 and #2 are given during the semester and cover specified chapters and/or modules (see schedule for dates and coverage). These exams are combination of multiple choices and true/false. Midterm exams will be online (100 p. each).

 Final exam: *Individual effort.* The final exam (given according to the university schedule for final exam week) is cumulative. The final exam is a multiple choices and true/false. No makeup exam will be given. The final exam will be online (100 p.).

TENTATIVE WEEKLY PLAN

Date	Topics	Deadline	Chat sessions
1. 02/01/2010 02/04/2010	Introduction, Syllabus, Virtual Library, Blackboard set up & training	Pre-test Verify you have access to the Internet Organize Teams Myers Briggs Test	
2. 02/08/2010 02/11/2010	Chapter 1	Read Ch.1 Resume	Case Study 1
3. 02/15/2010 02/18/2010	Chapter 2	Quiz 1, Hw 1	Case Study 2
4. 02/22/2010 02/25/2010	Chapter 3	Quiz 2, Hw 2 Post Article 1	Case Study 3
5. 03/01/2010 03/04/2010	Chapter 4	Quiz 3, Hw 3	Case Study 4
6. 03/08/2010 03/11/2010	Review	Quiz 4, Hw 4 Midterm I (Ch.1-4)	
7. 03/15/2010 03/18/2010	Spring Break (No Class)		
8. 03/22/2010 03/25/2010	Chapter 5	Post Article 2	Case Study 5
9. 03/29/2010 04/01/2010	Chapter 6	Quiz 5, Hw 5	Case Study 6
10. 04/05/2010 04/08/2010	Chapter 7	Quiz 6, Hw6	Case Study 7
11. 04/12/2010 04/15/2010	Chapter 8	Quiz 7, Hw 7 Post Article 3	Case Study 8
12. 04/19/2010 04/22/2010	Chapter 9	Quiz 8, Hw 8	Case Study 9
13. 04/26/2010 04/29/2010	Review	Quiz 9, Hw 9 Midterm II (Ch.5-9)	
14. 05/03/2010 05/06/2010	Research draft		
15. 05/10/2010 05/13/2010	Presentations of Research Project		
16. 05/17/2010 05/20/2010	Presentations of Research Project		
17. 05/27/2010 10:00 – 1:00p.m.	Final Exam		

Sample of Cover sheet

UNIVERSITY OF LA VERNE

CMPS / BUS 410: Management Information Systems

Article #: 1
Author, Year, "Title",
Journal, Volume, Issue, Starting Page #, # of pages.

Prepared by
Your Name

Spring 2010
Instructor: Dr. Seta Whitby

Sample of Article

Summary:

Write two to three paragraphs summarizing the article in your own words.

Thesis:

Write down the theses of the article in one or two sentences.

Issues:

Discuss some of the issues mentioned in the article such as standardization, automation, efficiency, etc.

Critique:

Utilize your critical thinking skills to critique the article, the issues, and state your personal opinion about the subject.

Class Norms

- Start and end on time.
- If you have to miss class, e-mail or call instructor before class session.
- DONOT chew gum in class. NO hats or sunglasses in the classroom.
- NO multi-tasking during lectures (playing games or text messaging).
- Decisions by consensus.
- Address the issue, not the person.
- Ask clarifying questions at all time (do not assume).
- Come with an open mind and be flexible, Give honest feedback.
- Take time to reflect (Active listening).
- Have fun/ sense of humor (If one succeeds, we all succeed!!).

University of La Verne
Department of Computer Science and Engineering
Spring 2011

COURSE _____ CMPS-455, Compiler Design

Lecture and Lab: Friday 6:30-10:00, Room: FH-207

OBJECTIVES and GOALS This course describes the fundamental concepts of programming languages by discussing the design issues of the various languages. We briefly discuss a few of the areas of computer applications and their associated languages. We shall also show how tools can be developed and used to help construct a simple compiler to check the grammar of a given artificial language and then translate it into a C++ program.

OUTCOMES

Acquire basic concepts in software, engineering and information science
 Communicate effectively both orally and in writing to their peers
 Acquire leadership skills and collaborate in team project
 Be prepared to go to graduate schools
 Obtain a sense of “urgency” to meet deadlines
 Be flexible to function in a variety of work environments
 Demonstrate skills in analyzing problems before and during a project
 Be prepared to get jobs in industry related to concentration areas such as Computer Engineering, Computer Programming, and Web Computing

INSTRUCTOR Reza Ahmadnia

Office: FH-107; Phone (909)593-3511 X4621

E-mail: mahmadnia@laverne.edu

Hours: W:4:00-6:00, Friday: 4:30-6:00

TEXT

1. Thomas W. Parsons, *Introduction to Compiler Construction*
 W.H. Freeman and Company, 1992.(ISBN:0-7167-8261-8)
2. Robert W. Sebesta, *Concepts of Programming Languages*, 6th
 Edition, Addison Wesley, 2003(ISBN:0-321-19362-8)

TOPICS

Parsons(Chapters 1,2,3,4,5,7); Sebesta(Chapters: 1,2,5,6)
 Introduction to programming languages; Finite Automata; Pushdown Automata;
 Regular and non-regular grammars and languages; Lexical Analysis,
 Syntax Analysis; Code Generation

GRADING

Exam No.1	25%
Programming assignments.....	25%
Final project.....	30%
Final Exam.....	20%

All exams are closed book and closed notes. Grading Scale: 92-100%=A; 89-91%=A-; 85-88%=B+; 81-84=B; ...

ATTENDANCE Regular class attendance is expected. Exams will concentrate on materials discussed in class. You are responsible for all announcements made in class. Please do not let yourself fall behind. If you do, you will find yourself in trouble very quickly.

HOMEWORK At the conclusion of each topic, a program/written assignment will be given that will cover the topics discussed in class. No late assignment will be accepted. You have to turn in a hard copy of your program including complete documentations, and a copy of a sample run.

DISHONESTY Any student who cheats or attempt to cheat during an exam will receive a grade of ZERO for that exam. You may help each other on the debugging process of your programming projects, but the design and code is to be the sole work of the student submitting the project. In case of similarities, penalties will apply to all people involved.

IMPORTANT DATES

Holidays: Monday Feb 21: presidents day

March 14-20: Spring break

Final exam : Friday May 27, 6:30-9:30





TENTATIVE CLASS SCHEDULE

Weeks	Topics
1-5	Evaluations of programming languages; Alphabets; syntax diagram; BNF and EBNF; Parsing Finite Automata(FA); Deterministic (DFA) and non-deterministic (NDF) finite automata; State diagram and state tables; Grammars; Languages; Regular and no-regular languages; Converting NFA to DFA; Removing lambda; find the complement of languages.
6	Review and Exam No.1
7	Spring Break
8,9	The Chomsky Normal Form(CNF); Pushdown Automata; Top-down parser; Coding CFG
10-15	Predictive Parsers; Constructing the Predictive Parser Table; Intermediate Code Generation; Optimization
16	Final project presentation
17	Final Exam



University of La Verne
COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM
Central Campus, Spring 2010

CMPS 480 Distributed Internet Computing - 1618






 COURSE INFORMATION:

 Units:	4.0 Credit Hours
 Pre-Req.:	CMPS 378 C# Programming Using .NET or instructor's approval
 Schedule Types:	Lecture/Seminar
 Requirements:	Computer Science and Computer Engineering B.S. Core Requirements for Internet Programming

Concentration.

 Class Location:	Founders Hall 207
 Course Time:	Lecture, Lab: T: 6:30 – 9:40 p.m.

 INSTRUCTOR INFORMATION:

 Instructor:	Dr. Jozef Goetz, Associate Professor
 Office:	Founders Hall 108 B/C
 E-mail:	JGoetz@laverne.edu
 Phone:	(909) 593-3511 x4803
 Office Hours:	W: 5:00 – 7:00 p.m. or by appointment

 COURSE DESCRIPTION:

You will learn the fundamentals and concepts of Microsoft's .NET framework, C#, LINQ (Language Integrated Language), Windows Presentation Foundation (WPF) and Windows Communication Foundation (WCF) Web Services, ASP.NET 3.5 and ASP.NET AJAX. C# is the premier object oriented language in Microsoft's .NET framework as well as a general-purpose programming language. C# is the world's fastest-growing and most marketable programming language. The .NET platform enables developers to create robust, scalable web-based applications.

The .NET framework and C# are used for building and running all kinds of contemporary software, including database driven Web-based applications, smart client applications, mobile applications and XML Web service.

Topics that will be covered include: Object-Based Programming: Inheritance, Polymorphism, Graphical User Interfaces with Windows Presentation Foundation (WPF) and Extensible Application Markup Language (XAML), Extensible Markup Language (XML), Language Integrated Query (LINQ) to XML and SQL, ASP.NET and ASP.NET Ajax, Windows Communication Foundation (WCF) and Web Services.

 COURSE OBJECTIVES

Students enrolled in this class will be able to fulfill the following objectives:
Understand the object oriented paradigm.

Learn and understand GUI with WPF and XAML.

Use Language Integrated Query to XML to retrieve and manipulate data from XML documents.

Use Language Integrated Query to SQL to retrieve and manipulate data from a database.

Understand Web-application development using ASP.NET.

Gain hands-on experience by using databases in web applications.

Understand how to use WCF web services with Windows applications and Web applications.

Demonstrate the ability to apply computer programming constructs to designing, writing and testing applications through successful completion of laboratory exercises and projects.

Gain hands-on learning via practical *exercises, and projects and exams*.

GENERAL LEARNING OUTCOMES:

Acquire understanding of basic concepts in Computer Science.

Communicate effectively both orally and in writing to their peers.

Acquire leadership skills and collaborate in team projects.

3. Demonstrate skills in analyzing problems before and during project assignments.

4. Conduct research to solve problems independently.

5. Obtain a sense of “urgency” to meet deadlines.

6. Be flexible to function in a variety of work environments.

7. Get a foundation for a future employment in industry related to concentration areas such as Internet Programming, Software, e-commerce and Information Science.

REQUIRED TEXT:

Visual C# 2008 How to Program by Harvey M. Deitel, Paul J. Deitel, 3rd Edition, Pearson - Prentice Hall, 2009, ISBN: 013605322-X.

☺Climate: The approach that we will use for this course takes the view that the instructor and students *work in a collaborative effort* that recognizes the uniqueness of each person. As such, we are all co-producers in learning. You should plan to work at least 6 - 10 hours per week outside of class. Patience and attention to detail are important to succeed in any programming class.

EVALUATION AND GRADING:


The course grade will be calculated as follows:

Programming assignments, home taken quiz and lab exercises:	50%
Midterm Exam:	25%
Final Exam:	<u>25%</u>
Total:	100%


Final course grades will be assigned as follows:


94 – 100 = A	90 – 93 = A-	87 – 89 = B+
84 – 86 = B	80 – 83 = B-	77 – 79 = C+
74 – 76 = C	70 – 73 = C-	67 – 69 = D+
64 – 66 = D	0 - 63 = F	

NATURE OF ACTIVITES IN THE CLASS:

 Attendance and Participation: Required and verified. Attendance and class participation are extremely important in this course. If you miss two consecutive classes or total three classes you will receive a grade of F. If you are absent from a midterm and have a valid excuse—an illness, a death in your family, illness or injury or another equally compelling reason—the weight of your final will be increased by the weight of the midterm. You must provide adequate and verifiable documentation. Without a valid excuse, you will receive a zero score for the midterm and the final's weight will remain unchanged. You should notify the instructor in advance of your absence from the scheduled course event. If you are absent from class, it is your responsibility to check on announcements made while you were absent. It is essential that you attend all lectures and labs to succeed in the course. You are expected to be prepared prior to entering class by reading all material covered at the last class meeting.

Class and home assignments are the **key** to your **success**. Don't expect to learn or have a good grade if you miss classes and/or home assignments. You will build your knowledge and skills based on the previous classes and home assignments. You cannot afford to miss any class meeting.

 Timeliness: Arrive on time to class. Schedule your day such that you may manage contingencies (such traffic, doctor appointments, etc.) when they occur. The instructor maintains the discretion to mark you absent for all or part of the class in the event you fail to be timely and prompt.

 Homework and class assignments: Home programming assignments will be assigned every other week and class programming assignments will be assigned more often than home assignments. The assignments will require you to design, code, and test programs. All assignments will be graded (on a scale from 0 to 2 after presenting the program to the instructor. Expect one to three quick questions to show your understanding of the code. Please be familiarized with all guidelines at http://faculty.laverne.edu/~jgoetz/classes/480_S10/Guidelines/incluing Assign+submittals_guidlines.doc.

If the program is not fully functional, please include a readme.txt file that describes what does not work. Each assignment will be submitted in a clear plastic binder with a firm attached CD ROM or USB drive to your binder.

They will require you to design, code, and test a small program. You must turn in:

A diagram or pseudocode – see DiagramExamples.doc

A well-commented source code with a hard copy

Sample at least four sets of your test cases (capture the screen) that show the successful execution of your program with appropriate test data

Listing of any test data files used as input to your program.

A printout of all source code and a source code with single executable program that corresponds to the source code must be submitted along with sample output printouts and a CD ROM or USB. The CD ROM or USB should contain only the project workspace files for the current assignment

● Make-up and late assignments. No credit will be given for late homework assignments. Assignments must be turned in on time. Unless extraordinary circumstances can be documented, no assignments will be accepted after the beginning of class on the day the assignment is due. No assignments will be accepted after they have been handed back or reviewed in class.

✎ Midterm and Final Exams: All students are to take two exams to complete their course work and obtain a grade for the course. There will be no make-ups for the midterm and final examinations. If you are absent for a midterm exam, you will receive a zero. A missed final will be dealt with according to University regulations on incompletes and withdrawals. Midterm and Final Exams will cover specified chapters (see schedule for dates and coverage). These exams are a combination of multiple choices questions, true/false questions, and writing two programs.

📁 Course material: All handouts, lecture notes and home assignments will be posted at <http://faculty.laverne.edu/~jgoetz/>. You will see a folder labeled **CMPS 480: Distributed Internet Computing**, and you will find all CMPS 480 documents there. You may copy them to your computer.

Others: Please don't use cell phones, e-mails, keyboards, browsers etc. during lectures unless the instructor asks you. No clicking keyboard while lecturing. Please don't leave the class meeting during lectures. All the above activities are very disruptive to others in class.

Tentative schedule (subject to change):

Date	Week No.	Topic	Reading Chapter
Feb 2	1	Syllabus and class requirements. GUI with Windows Forms Lab Exercises	15
Feb 9	2	Object-Oriented Programming: Inheritance Lab Exercises	11
Feb 16	3	Polymorphism, Interfaces and Operator Overloading Lab Exercises	12
Feb 23	4	Graphical User Interfaces with Windows Presentation Foundation (WPF) and XAML Lab Exercises	16
March 2	5	Windows Presentation Foundation (WPF) Graphics and Multimedia Lab Exercises	17
March 9	6	Strings, Characters and Regular Expressions Lab Exercises	18
March 16		Spring Break	

March 23	7	Midterm Lab Exercises	above chapters
March 30	8	Extensible Markup Language (XML) and LINQ to XML Lab Exercises	20
April 6	9	Databases, LINQ to SQL Lab Exercises	21
April 13	10	ASP.NET and ASP.NET Ajax Lab Exercises	22
April 20	11	ASP.NET and ASP.NET Ajax Lab Exercises	22
April 27	12	ASP.NET and ASP.NET Ajax Lab Exercises	22
May 4	13	Web Services and Windows Communication Foundation (WCF) Lab Exercises	23
May 11	14	Web Services and Windows Communication Foundation (WCF) Lab Exercises	23
May 18	15	Microsoft® Silverlight™ and Rich Internet Applications Lab Exercises	24
May 25	16	Final: Tuesday	above chapters

PLAGIARISM POLICY:







Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog).

University of La Verne






COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM
Central Campus, Spring 2010

CMPS 490 Database Management Systems - 1619

 COURSE INFORMATION:

-  Units: 4.0 Credit Hours
-  Pre-Req.: CMPS 375 Systems Analysis and Design, minimum grade of C-
-  **Schedule Types:** Lecture / Laboratory
-  Requirements: Core Requirements for E-commerce B.S.
 Computer Science and Computer Engineering B.S.:
 Core Requirements for Information Concentration,
 Software Concentration and Internet Programming Concentration.
-  Class Location: Founders Hall 206
-  Course Time: Lecture/Lab: Thursdays: 6:30 – 9:40 p.m.

 INSTRUCTOR INFORMATION:

-  Instructor: Dr. Jozef Goetz, Associate Professor
-  Office: Founders Hall 108 B
-  E-mail: JGoetz@laverne.edu
-  Phone: (909) 593-3511 x4803
-  Office Hours: M: 3:00 – 5:00 p.m. or by appointment

 COURSE DESCRIPTION AND OBJECTIVES

This course is designed to introduce students to the foundations of database systems, focusing on basic design, analysis, and implementation of computerized database systems. Topics include relational data models, data modeling, Entity Relationship Model, database design, normalization and integrity constraints and query processing. Tools: Access 2007, SQL Server 2008 and 2005, Erwin and Visio.

 COURSE OBJECTIVES

The objective of this course is to introduce the student to basic issues in the design, development, and implementation of databases. Students will demonstrate the ability to use knowledge of DBMS to design and implement databases and get experience with SQL language queries through completion of laboratory and home exercises, projects, and exams.

Students enrolled in this class will be able to fulfill the following objectives:

- To understand the nature and characteristics of databases.
- To gain a general understanding of tables and relationships.
- To define the term *database management system (DBMS)* and describe the functions of a DBMS.
- To define and understand database design.
- To be able to use and manage Access 2007 and SQL Server 2008.
- To understand the SQL SELECT/FROM/WHERE framework as the basis for database queries.
- To be able to write queries in SQL to retrieve data from table(s).

- To be able to identify functional dependencies, determinants, and dependent attributes.
- To identify primary, candidate, and composite keys.
- To be able to identify possible insertion, deletion, and update anomalies in a relation.
- To be able to normalize tables into BCNF and 4NF normal forms.
- To be able to identify multivalued dependencies.
- To understand normalization and denormalization.
- To understand the two-phase data modeling/database design process.
- To understand the purpose of the data modeling process.
- To understand entity-relationship (E-R) diagrams.
- To be able to use CA Erwin Data Modeler tool.
- To be able to determine entities, attributes, and relationships.
- To be able to determine minimum and maximum cardinalities.
- To understand how to transform data models into database designs.
- To be able to create and manage table structures using SQL statements.

GENERAL LEARNING OUTCOMES:

- Acquire understanding of basic concepts in Computer Science.
- Communicate effectively both orally and in writing to their peers.
- Acquire leadership skills and collaborate in team projects.
- 3. Demonstrate skills in analyzing problems before and during project assignments.
- 4. Conduct research to solve problems independently.
- 5. Obtain a sense of “urgency” to meet deadlines.
- 6. Be flexible to function in a variety of work environments.
- 7. Get a foundation for a future employment in industry related to concentration areas such as Internet Programming, Software, e-commerce and Information Science.

REQUIRED TEXT:

[1] David M. Kroenke, David Auer, *Database Processing: Fundamentals, Design, and Implementation*, 11th Edition, Prentice Hall, 2010, ISBN-10: 0132302675, ISBN-13: 9780132302678.

Database Processing reflects a new teaching method that gets students straight to the point with its thorough and modern presentation of database processing fundamentals.

☺Climate: The approach that we will use for this course takes the view that the instructor and students *work in a collaborative effort* that recognizes the uniqueness of each person. As such, we are all co-producers in learning. You should plan to work at least 5 - 10 hours per week outside of class. Patience and attention to detail are important to succeed in class.

EVALUATION AND GRADING:

The course grade will be calculated as follows:


Lab and home assignments	25%
Presentation	05%
Final project	20%
Quizzes	10%

Midterm Exam	20%
Final Exam	20%
TOTAL	100%


Final course grades will be assigned as follows:


95 – 100 = A, 90 – 94 = A-, 87 – 89 = B+,
 84 – 86 = B, 80 – 83 = B-, 77 – 79 = C+,
 74 – 76 = C, 70 – 73 = C-, 67 – 69 = D+,
 64 – 66 = D, 0 - 63 = F


NATURE OF ACTIVITIES IN THE CLASS:

 Attendance and Participation: Required and verified. Attendance and class participation are extremely important in this course. If you miss two consecutive classes or total three classes you will receive a grade of F. If you are absent from a midterm and have a valid excuse—an illness, a death in your family, illness or injury or another equally compelling reason—the weight of your final will be increased by the weight of the midterm. You must provide adequate and verifiable documentation. Without a valid excuse, you will receive a zero score for the midterm and the final’s weight will remain unchanged. You should notify the instructor in advance of your absence from the scheduled course event. If you are absent from class, it is your responsibility to check on announcements made while you were absent. It is essential that you attend all lectures and labs to succeed in the course. You are expected to be prepared prior to entering class by reading all material covered at the last class meeting.

Class and home assignments are the **key** to your **success**. Don’t expect to learn or have a good grade if you miss classes and/or home assignments. You will build your knowledge and skills based on the previous classes and home assignments. You cannot afford to miss any class meeting.

 Timeliness: Arrive on time to class. Schedule your day such that you may manage contingencies (such traffic, doctor appointments, etc.) when they occur. The instructor maintains the discretion to mark you absent for all or part of the class in the event you fail to be timely and prompt.

 Homework and lab assignments: Home and lab assignments will be assigned almost every week. You will be given a week to turn in your assignment. All assignments will be graded (on a scale from 0 to 2 and from 0 to 3 points for more complex assignments). Please be familiarized with all guidelines at http://faculty.laverne.edu/~jgoetz/classes/490_S10/Guidelines/ in order to submit your assignments. Each assignment will be submitted in a clear plastic binder with all screenshots.

 Lab: The purpose of this assignment is to reinforce the student’s understanding of the chapters. Peer collaboration is encouraged in this course. Students will be working in teams of two to answer the section titled “Project Questions” at the end of each chapter. The teams will start working on their lab assignments during the lab session. Sometimes team members will be

called on to present problem solutions during class.

⑩ Quizzes: At the start of every other class meeting, there will be a 10--15 minute short quiz covering material from lecture, lab, the text and assigned readings. The Summary and Review Questions in the book provide a good review for the quizzes. Please attend class regularly and keep up with course material. There will be no make-ups, and no extra time will be given if you arrive late. However, the equivalent of one quiz with the lowest grade will be dropped.

📁 Database Project: Students will complete a database project for a small retail store throughout the semester. The student can submit his/her own project related to different domain. The student must hand in (a) a project proposal, (b) an interim report, (c) oral presentation and (d) a final report.

Document Guidelines: Your project should include a coversheet, all details related to the database development process, and the project implementation. The project documentation must be typed on 8 1/2 by 11 white paper, use 12p standard fonts Times New Roman and line spacing 1.5. The pages should be stapled in the upper left corner and should have a page number. Please submit it in a clear plastic binder with a firm attached CD ROM or USB drive. See details at http://faculty.laverne.edu/~jgoetz/classes/490_S10/Guidelines/ see 1_Project Submittals.doc. You need to turn in your final project according to the description found in 1_Project Submittals.doc.

Grading: The project proposal will not receive a grade, but must be submitted; otherwise no other project reports will be accepted. The interim report is worth 5% of the course grade; the presentation is worth 5%; and the final report is worth 15% of your final course grade.

● Make-up and late assignments. No credit will be given for late homework assignments. Assignments must be turned in on time. Unless extraordinary circumstances can be documented, no assignments will be accepted after the beginning of class on the day the assignment is due. No assignments will be accepted after they have been handed back or reviewed in class.

📁 Midterm and Final Exams: All students are to take two exams to complete their course work and obtain a grade for the course. There will be no make-ups for the midterm and final examinations. If you are absent for a midterm exam, you will receive a zero. A missed final will be dealt with according to University regulations on incompletes and withdrawals. Midterm and Final Exams are given during the semester and cover specified chapters (see schedule for dates and coverage). These exams are combination of multiple choices, true/false, and fill in the blank, and short answer essay questions. Midterm (20%) and final (20%) exams will be in hard copy.

📁 Course material: All handouts, lecture notes and home assignments will be posted at <http://faculty.laverne.edu/~jgoetz/>. You will see a folder labeled 490, and all CMPS 490 documents should be in it. You can then copy them to your computer.

Others: Please don't use cell phones, e-mails, keyboards, browsers etc. during lectures unless the instructor asks you. No clicking keyboard while lecturing. Please don't leave the class meeting during lectures. All the above activities are very disruptive to others in class.

Tentative schedule (subject to change):

Date	Week No.	Topic	Reading Chapter	Assignments
Feb 4	1	Syllabus. Intro to Course. Introduction to Database Processing Lab Exercises	1	
Feb 11	2	Intro to Microsoft Access Intro to Structured Query Language Lab Exercises	App A 2	
Feb 18	3	Managing Databases with SQL Server 2008 Intro to Structured Query Language Lab Exercises	10 2	
Feb 25	4	Relational Model and Normalization Lab Exercises	3	
March 4	5	Database Design Using Normalization Lab Exercises	4	
March 11	6	Data Modeling with the (ERM) Entity-Relationship Model Lab Exercises	5	
March 18		Spring Break		
March 25	7	Midterm Managing Databases with SQL Server 2008	10	above chapters
April 1	8	Data Modeling with the (ERM) Entity-Relationship Model Lab Exercises	5	
April 8	9	Transforming Data Models into Database Designs Lab Exercises	6	
April 15	10	Transforming Data Models into Database Designs Lab Exercises	6	Project proposal submission
April 22	11	SQL for Database Construction and Application Processing Lab Exercises	7	
April 29	12	SQL for Database Construction and Application Processing Lab Exercises	7	Project updates - phase 2
May 6	13	Database Redesign Lab Exercises	8	Project updates - phase 3
May 13	14	Managing Multiuser Databases	9	Project updates

		Lab Exercises		- phase 4
May 20	15	Project presentation – show all your db components		Project submission and presentation
May 27	16	Final 6:30 pm		

👉 **PLAGIARISM POLICY:**

A grade of “F” will be assigned in the course for any occurrence of the academic dishonesty either in exam, quiz or assignments. It is all right to ask someone else about how to solve a problem, but it is not all right to copy their code. Any cases of someone turning in work that is not originally theirs will be dealt with by assigning zeros to both parties involved. Each student is responsible for performing academic tasks in such a way that honesty is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following standards of integrity: 1) All tests, term papers, oral and written assignments, and recitations are to be the work of the student presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the explicit citation of the source; use of the exact wording requires “quotation” format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The dean may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog).

9.4. Appendix D: Class Enrollments (Fall 2005 - May 2010)

5 year Class Enrollment Number with Faculty excluding Directed Study					
F = Fall S = Spring J = January SU = Summer					
Semester / Faculty / Enrollment. PT Faculty are highlighted					
Course	2005 – 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 – 2010
CMPN 220	F / Whitby / 8	F / Whitby / 5	F / Whitby / 9	F / Whitby / 11	F / Whitby / 11 S / Whitby / 1
CMPN 280	S / Whitby / 8	S / Whitby / 5	S / Whitby / 8	S / Whitby / 8	S / Whitby / 11
CMPS 200 / BUS 200	F / Liu / 3 S / Liu / 8		F / Whitby / 6 S / Whitby / 5	F / Whitby / 12 S / Whitby / 12	F / Whitby / 12 S / Whitby / 22
CMPS 200 / BUS 200				F / Whitby / 15 S / Whitby / 13	F / Whitby / 24 S / Whitby / 24
CMPS 301 / MATH 301	F / Ahmadnia / 6 S / Ahmadnia / 12	F / Ahmadnia / 5 S / Ahmadnia / 6	F / Ahmadnia / 11 S / Ahmadnia / 10	F / Ahmadnia / 15 S / Ahmadnia / 17	F / Ahmadnia / 19 S / Ahmadnia / 16
CMPS 302					F / Ahmadnia / 1 S / Ahmadnia / 1
CMPS 318 / ECBU 318	F / Mortagy / 11	S / Goetz / 13	J / Mortagy / 6 S / Goetz / 11	F / Goetz / 18	F / Goetz / 18
CMPS 319				S / Goetz / 12	S / Goetz / 9
CMPS 362 / MATH 362			F / Ahmadnia / 7		
CMPS 367 / MATH 367	F / Ahmadnia / 15 S / Ahmadnia / 9	F / Ahmadnia / 11 S / Goetz / 3 SU / Ahmadnia / 1	S / Ahmadnia / 9	F / Ahmadnia / 4 S / Ahmadnia / 7	F / Ahmadnia / 12 S / Ahmadnia / 12
CMPS 368	F / Goetz / 14	F / Goetz / 12	F / Goetz / 9	F / Goetz / 8	F / Goetz / 11

5 year Class Enrollment Number with Faculty excluding Directed Study					
F = Fall S = Spring J = January SU = Summer					
Semester / Faculty / Enrollment. PT Faculty are highlighted					
Course	2005 – 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 – 2010
CMPS 369	S / Goetz / 3	S / Goetz / 6	S / Goetz / 4	S / Goetz / 5	F / Goetz / 1
CMPS 370 (1)	J / Son / 10	J / Son / 10 S/Ahmadnia/ 1	J/Ahmadnia/ 10	J / Son / 14	J / Son / 13
CMPS 371			S/Ahmadnia/ 1		J/Ahmadnia/ 10
CMPS 375	F / Son/ 11	F / Son / 10	F / Whitby / 9 S / Whitby / 1		F / Son / 8
CMPS 377	J / Goetz / 6	J / Goetz / 6			
CMPS 378		F / Goetz / 3	F / Goetz / 6	F / Goetz / 3	F / Goetz / 13
CMPS 379				F/Ahmadnia/ 1 S/Ahmadnia/ 1	
CMPS 385	F/Ahmadnia/ 4 S/Ahmadnia/ 8	F/Ahmadnia/ 8 S/Ahmadnia/ 5	S/Ahmadnia/ 1	F/Ahmadnia/ 7	F/Ahmadnia/ 9
CMPS 392 / ECBU 375	S / Son / 6	S / Son / 8		S / Son / 11	
CMPS 399			S/Ahmadnia/ 2		
CMPS 410 / BUS 410	F / Whitby / 22 S / Whitby / 27	F / Whitby / 26 S / Whitby / 25	F / Whitby / 34 S / Whitby / 19	F / Whitby / 20 S / Whitby / 20	F / Whitby / 16 S / Whitby / 22
CMPS 410 / BUS 410 Online	F / Whitby / 24 S / Whitby / 22	F / Whitby / 23 S / Whitby / 25	F / Whitby / 28 S / Whitby / 22	F / Whitby / 27 S / Whitby / 23	F / Whitby / 23 S / Whitby / 22

5 year Class Enrollment Number with Faculty excluding Directed Study					
F = Fall S = Spring J = January SU = Summer					
Semester / Faculty / Enrollment. PT Faculty are highlighted					
Course	2005 – 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 – 2010
CMPS 451			F/Ahmadnia/ 2		F/Ahmadnia/ 1
CMPS 454	F/Ahmadnia/ 3				
CMPS 455		F/Ahmadnia/ 4	F/Ahmadnia/ 4		S/Ahmadnia/ 9
CMPS 460		J/Ahmadnia/ 1	F / Goetz / 6	S/Ahmadnia/ 6	
CMPS 463	F / Goetz. / 2		S/Ahmadnia/ 1		
CMPS 471	F/Ahmadnia/ 1 S / Goetz / 2	F/Ahmadnia/ 2 F / Whitby / 1 J / Whitby / 2 S/Ahmadnia/ 1 S / Whitby / 1	F/Ahmadnia/ 3 F / Whitby / 1 J / Whitby / 1 S / Whitby / 4	F/Ahmadnia/ 1 S / Goetz / 2 S / Whitby / 2	F / Goetz / 1 J / Whitby / 1 SU / Whitby / 1
CMPS 480	S / Goetz / 6				S / Goetz 8
CMPS 490	S / Freibott / 13	S / Freibott / 11	S / Goetz / 11	S / Goetz / 8	S / Goetz / 16
CMPS 499	F/Ahmadnia/ 4 F / Whitby / 2 J / Whitby / 1 S / Goetz / 12	F/Ahmadnia/ 2 F / Whitby / 2 S/Ahmadnia/ 2 S / Whitby / 2 SU / Whitby / 1	F/Ahmadnia/ 2 F / Whitby / 1 J/Ahmadnia/ 1 S / Ahmadnia/ 3 S / Goetz / 1 S / Whitby / 3	F/Ahmadnia/ 3 F / Whitby / 3 J / Mortagy / 1 S/Ahmadnia/ 1 S / Goetz / 2 S / Whitby / 2	S / Goetz / 1 S / Ahmadnia/ 1 S / Whitby / 3

9.5. Appendix E: Summary Statistics of Course Enrollments

Computer Science Total Enrollment Headcount					
	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010
Total Annual Headcount Taught by FT Faculty on Load	158	143	168	169	212
Total Headcount Taught by FT faculty overload	55	48	70	102	137
Total Headcount Taught by Adjunct Faculty	62	39	6	26	21

Average Class Size					
	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010
Total Annual Headcount Taught by FT Faculty on Load	9.9	8.9	10.5	10.6	13.3
Total Headcount Taught by FT faculty overload	13.8	24.0	14.0	25.5	27.4
Total Headcount Taught by Adjunct Faculty	8.9	9.8	6.0	8.7	10.5

Number of Directed Study, Internship, and Senior Projects						
	2005 - 2006	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	Total
Directed Study: 220, 302, 367, 369, 370, 371, 375, 379, 385, 399, 451, 460, 463		3	8	2	5	18
CMPS 471: Internship	1	7	9	5	3	25
CMPS 499: Senior Project	7	9	11	11	5	43
Grand Total:	8	19	28	18	13	86

Grand Total Class Enrollment Statistics																							
Computer Science Program		2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total	Ave / class
Total Program Enrollment		Cr	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S		
MATH 327	Discrete Math	4			12				12				7				6					37	9.3
CMPN 220	Digital Logic Systems	4	8				5				9				11				11		1	45	7.5
CMPN 220L	Dig. Logic Lab	0	8				5				9				11				11		1	45	7.5
CMPN 280	Computer Org. Lab	4			8				5				8				8				11	40	8.0
CMPN 280L	Computer Org. Lab	0			8				5				8				8				11	40	8.0
CMPS 200 / BUS 200	Info. Technology	2	3		8						6		5		27		25		36		46	156	19.5
CMPS 301 / MATH 301	Prog. Concepts	4	6		12		5		6		11		10		15		17		19		16	117	11.7
CMPS 302	Digital Society	4																	1		1	2	1.0
CMPS 318 / ECBU 318	Pub. on the Web I	4	11						13			6	11		18				18			77	12.8
CMPS 319	Pub. on the Web II	4															12				9	21	10.5
CMPS 362 / MATH 362	Numerical Algorithms	4									7											7	7.0
CMPS 367 / MATH 367	Obj.Oriented Lan. C++	4	15		9		11		3	1			9		4		7		12		12	83	8.3
CMPS 368	Prin. of Comp. Net.	4	14				12				9				8				11			54	10.8
CMPS 369	Local Area Networks	4			3				6				4				5		1			19	3.8
CMPS 370	Seminar	1		10				10	1			10				14					13	58	9.7
CMPS 371	Assembly Language	4											1								10	11	5.5
CMPS 375	Sys. An. & Design	4	11				10				9		1						8			39	7.8
CMPS 377	Visual Basic.NET	4		6				6														12	6.0
CMPS 378	C# Prog Using	4					3				6				3				13			25	6.3

Grand Total Class Enrollment Statistics																							
Computer Science Program		2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total	Ave / class
Total Program Enrollment	Cr	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S		
	.NET																						
CMPS 379	Java	4													1		1						
CMPS 385	Data Structures	4	4		8	8		5				1		7				9					
CMPS 392 / ECBU 375	Project Management	4			6			8									11						
CMPS 399	Independent Study	4										2											
CMPS 410 / BUS 410	MIS	4	22		27	26		25		34		19		20		20		16		22			
CMPS 410 / BUS 410	MIS Online	4	24		22	23		25		28		22		27		23		23		22			
CMPS 451	Artificial Intelligence	4								2								1					
CMPS 454	Automata Theory	4	3																				
CMPS 455	Compiler Design	4				4				4										9			
CMPS 460	Operating Systems	4				1				6						6							
CMPS 463	Computer Graphics	4	2									1											
CMPS 471	Internship	1	1		2	3	2	2		4	1	4		1		4		1	1		1		
CMPS 480	Distrib. Inter. Comp.	4			6																8		
CMPS 490	DBMS	4			13			11				11				8					16		
CMPS 499	Senior Project	4	6	1	12	4		4	1	3	1	7		6	1	5					5		
Total Enrollment:			138	17	156	0	120	18	131	2	147	18	131	0	159	15	166	0	191	24	190	1	1624
Average Class Size:			9.2	5.7	10.4		8.6	6.0	8.7	#	9.8	4.5	7.3		11.4	7.5	10.4		11.9	8.0	12.7	#	
Total Annual Enrollment:			311				271				296				340				406				1624
Annual Average:			9.4				8.0				8.0				10.6				11.6				9.5
Count Annual # of Courses:			33				34				37				32				35				171

Class Enrollment Statistics Full Time Load																								
Computer Science Program		2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total	Ave /class	
Full Time Load		Cr	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S		
CMPN 220	Digital Logic Systems	4	8				5				9				11				11				44	8.8
CMPN 220L	Dig. Logic Lab	0	8				5				9				11				11				44	8.8
CMPN 280	Computer Organization	4			8				5				8				8				11		40	8.0
CMPN 280L	Computer Org. Lab	0			8				5				8				8				11		40	8.0
CMPS 301	Programming Concepts	4	6		12		5		6		11		10		15		17		19		16		117	11.7
CMPS 318	Publish on the Web I	4							13				11		18				18				60	15.0
CMPS 319	Publish on the Web II	4															12				9		21	10.5
CMPS 362	Numerical Algorithms	4									7												7	7.0
CMPS 367	Obj Orien Lan C++	4	15		9		11		3			9		4		7			12		12		82	9.1
CMPS 368	Prin of Comp Network	4	14				12				9			8					11				54	10.8
CMPS 369	Local Area Net.	4			3				6				4				5						18	4.5
CMPS 370	Seminar	1									10												10	10.0
CMPS 377	Visual Basic.NET	4						6															6	6.0
CMPS 378	C# Prog Using .NET	4					3				6			3					13				25	6.3
CMPS 385	Data Structures	4	4		8		8		5					7					9				41	6.8
CMPS 410	MIS	4	22		27		26		25		34		19		20		20		16		22		231	23.1
CMPS 455	Compiler Design	4					4				4										9		17	5.7
CMPS 460	Operating Systems	4									6						6						12	6.0
CMPS 463	Computer Graphics	4	2																				2	2.0

Class Enrollment Statistics Full Time Load																								
Computer Science Program		2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total	Ave	
Full Time Load		Cr	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	l	/class
CMPS 471	Internship	4			2																		2	2.0
CMPS 480	Distrib Inter Comp	4			6																8		14	7.0
CMPS 490	DBMS	4									11				8						16		35	11.7
CMPS 499	Senior Project	4			12																		12	12.0
Total Enrollment:			79	0	95	0	79	6	68	0	95	10	80	0	97	0	91	0	120	0	114	0	934	
Average Class Size:			9.9		9.5		8.8	6.0	8.5		10.6	##	10.0		10.8		10.1		13.3		12.7			
Total Annual Enrollment:			174				153				185				188				234				934	
Annual Average:			9.7				8.5				10.3				10.4				13.0				10.4	
FT Count Annual # of Courses:			18				18				18				18				18					

Class Enrollment Statistics Full Time Overload																								
Computer Science Program		2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total	Ave /class	
Full Time Overload	Cr	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S			
MATH 327	Discrete Math	4			12			12				7				6						37	9.3	
CMPS 200	Info. Technology	2								6		5		27		25		36			46	145	24.2	
CMPS 371	Assembly Lang	4																	10			10	10.0	
CMPS 375	Sys Anal & Des	4								9												9	9.0	
CMPS 377	Visual Basic.NET	4		6																		6	6.0	
CMPS 410	MIS Online	4	24		22	23		25		28		22		27		23		23		22		239	23.9	
CMPS 454	Automata Theory	4	3																			3	3.0	
Total Enrollment:			27	6	34	0	23	0	37	0	43	0	34	0	54	0	54	0	59	10	68	0	449	
Average Class Size:			13.5	6.0	17.0		23.0		18.5		14.3		11.3		27.0		18.0		29.5	10.0	34.0			
Total Annual Enrollment:			67				60				77				108				137				449	
Annual Average:			13.4				20.0				12.8				21.6				27.4				18.7	
FT Count Annual # of Courses:			5				3				6				5				5				24	

Class Enrollment Statistics Directed Study, Internship, Senior Projects																							
Computer Science Program			2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total
Directed Studies, Internships, & Senior Projects		Cr	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	
CMPN 220	Digital Logic	4																			1		1
CMPN 220L	Dig. Logic Lab	0																			1		1
CMPS 302	Digital Society	4																	1		1		2
CMPS 367	Obj. Orient. C++	4							1														1
CMPS 369	LAN	4																	1				1
CMPS 370	Seminar	1						1															1
CMPS 371	Assembly Lan.	4											1										1
CMPS 375	Sys Anal & Des.	4											1										1
CMPS 379	Java	4													1		1						2
CMPS 385	Data Structures	4											1										1
CMPS 399	Independent Study	4											2										2
CMPS 451	AI	4								2											1		3
CMPS 460	Operating Systems	4					1																1
CMPS 463	Comp. Graphics	4											1										1
CMPS 471	Internship	1	1				3	2	2		4	1	4		1		4		1	1		1	25
CMPS 499	Senior Project	4	6	1			4		4	1	3	1	7		6		5				5		43
Total Headcount Enrollment:			7	1	0	0	8	2	7	2	9	2	17	0	8	0	10	0	4	1	8	1	87
Total Annual D.S.Enrollment:			0				3				8				2				6				19
Total Annual 471 Enrollment:			1				7				9				5				3				25
Total Annual 499 Enrollment:			7				9				11				11				5				43
Grand Total Annual Enrollment:			8				19				28				18				14				87
FT Count Annual # of Courses:			3				9				12				6				10				40

Class Enrollment Statistics Adjunct Faculty																								
Computer Science Program		2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total	Ave /class	
Adjunct Faculty	Cr	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S			
CMPS 200	Info. Tech.	2	3		8																	11	5.5	
CMPS 318	Pub on the Web I	4	11								6											17	8.5	
CMPS 370	Seminar	1		10			10								14					13		47	11.8	
CMPS 375	Sys. Anal & Des.	4	11			10												8				29	9.7	
CMPS 392	Project Mgmt	4		6				8								11						25	8.3	
CMPS 490	DBMS	4		13				11														24	12.0	
CMPS 499	Senior Project	4													1							1	1.0	
Total Enrollment:			25	10	27	0	10	10	19	0	0	6	0	0	0	15	11	0	8	13	0	0	154	
Average Class Size:			8.3	10.0	9.0		10.0	10.0	9.5			6.0				7.5	11.0		8.0	13.0			22.0	9.3
Total Annual Enrollment:			62				39				6				26				21				154	
Annual Average:			8.9				9.8				6.0				8.7				10.5				9.1	
PT Count Annual # of Courses:			7				4				1				3				2				17	

Class Enrollment Statistics																					
Computer Science Program	2005 - 2006				2006 - 2007				2007 - 2008				2008 - 2009				2009 - 2010				Total
Grand Total	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	F	J	S	S	
Total Enrollment for all classes	138	17	156	0	120	18	131	2	147	18	131	0	159	15	166	0	191	24	190	1	1624
Average Class size	9.2	5.7	10.4		8.6	6.0	8.7	##	9.8	4.5	7.3		11.4	7.5	10.4		11.9	8.0	12.7	#	
Total Enrollment by Year	311				271				296				340				406				1624
Average Class Size by Year	9.3				7.8				8.0				11.1				11.6				9.5
Total Annual # courses Taught	33				34				37				32				35				171
FTE Faculty (# of crs per year/6)	5.5				5.7				6.2				5.3				5.8				
% taught by FT Faculty on Load	55%				53%				49%				56%				51%				
% taught by FT Faculty overload	15%				9%				16%				16%				14%				
% taught by FT D.S./ 471 / 499	9%				26%				32%				19%				29%				
% taught by PT Faculty	21%				12%				3%				9%				6%				

9.6. Appendix F: Adjunct Faculty Survey Instrument



COMPUTER SCIENCE AND COMPUTER ENGINEERING PROGRAM

Knowledge – Service - Vision

Adjunct Faculty Survey

Date: _____

The purpose of this survey is to obtain your impressions and opinions about how well the Computer Science program is supporting you and how well the students are attaining the program learning outcomes. Please answer all questions as frankly as possible. You may skip questions you do not wish to answer. I appreciate your cooperation.

Demographic Questions:

1. Gender: Female Male
2. Ethnic Background: _____
3. Current adjunct faculty status / title: _____
4. Including this year, how many years have you been teaching for La Verne: _____
5. Do you use online resources for teaching? Yes No

Issues and Perceptions (please use the back, if need be)

13. What do you **like** about teaching for La Verne?
 - a. Smallness, friendliness, campus atmosphere, fairness among faculty
 - b. Small school, warm, and friendly
 - c. Small campus, great administrators
 - d. Small classes, interaction with department chair
 - e. Interested students
 - f. Comment: _____
14. What do you **dislike** about teaching for La Verne?
 - a. No health benefits
 - b. No problems
 - c. Not enough parking at times, air conditioning is not well in some parts of the building
 - d. Comment: _____
15. How would you describe the support you receive from faculty colleagues, including chairs?
 - a. Very good, including syllabi, old exams, resources, supplies, coverage of class,

<ul style="list-style-type: none"> practicing exams b. Excellent, quick, and helpful c. Timely and always responsive d. Very good, very helpful, chair easily accessible e. Comment: _____
<p>16. How would you describe the support you receive from administration?</p> <ul style="list-style-type: none"> a. Slow to fix copier, quick to fix computer b. Same as #3 c. Excellent, quick responses, friendly d. Frequent / good communication, training for part time faculty e. Comment: _____
<p>17. What aspects of the support you personally receive are you</p> <ul style="list-style-type: none"> a. Most happy with? <ul style="list-style-type: none"> i. Communication from chair, sharing with colleagues, friendliness of colleagues ii. Quick and friendly iii. Always responsive to my requests iv. Attention, quick response v. Comment: _____ b. Least happy with? <ul style="list-style-type: none"> i. Maybe better response if lower levels had more authority ii. Computers in some buildings have log-ins that have changed and unable to get access on these computers, and some don't work with some printers iii. Comment: _____
<p>18. What kind of support would you like to receive that you do not receive now?</p> <ul style="list-style-type: none"> a. Online resources b. Receive enough support c. Administrative: set system so computers print directly to copier d. Comment: _____
<p>19. Would you like to be involved when your program conducts program reviews or self studies? If so, how?</p> <ul style="list-style-type: none"> a. Yes, consult on all aspects, allow to review and add comments to final reports b. Sure, not sure c. No d. Sure, however, I am needed and asked e. Comment: _____
<p>20. How would you describe the campus climate of the University of La Verne?</p> <ul style="list-style-type: none"> a. Small campus, pleasant environment b. Very good small campus atmosphere c. Friendly and charming d. Friendly and helpful e. Comment: _____
<p>21. What do you think you can do to help students attain higher levels of learning outcomes?</p> <ul style="list-style-type: none"> a. More training and discussion before term b. More collaborative work c. Assign projects and more group work in the classroom

d. Encourage more collaboration
e. Do more group work, more oral / written expressions
f. Comment: _____
22. What do you think students can do to attain higher levels of learning outcomes?
a. Ask more questions, think about reasonableness of answer, applications to life
b. Improve discipline, persistence, learn from mistakes
c. Read the book, work together outside the classroom, maybe tutor in the subject
d. Study more, work together outside of class, and use LEC and library resources
e. Comment: _____
23. In your opinion to what extent do students in your classes develop the following attributes and / or abilities? (Circle one response per line)
a. Acquire basic concepts in engineering, information science, internet programming, and software
Somewhat Adequate High Degree Not at all N/A
b. Communicate effectively both orally and in writing to their peers
Somewhat Adequate High Degree Not at all N/A
c. Acquire leadership skills and collaborate in team projects
Somewhat Adequate High Degree Not at all N/A
d. Demonstrate skills in analyzing problems before and during a project
Somewhat Adequate High Degree Not at all N/A
e. Acquire project management skills including data collection, time management and self-teach new application
Somewhat Adequate High Degree Not at all N/A
f. Conduct research to solve problems independently
Somewhat Adequate High Degree Not at all N/A
g. Be prepared to go to graduate schools

	Somewhat	Adequate	High Degree	Not at all	N/A
h. Obtain a sense of “urgency” to meet deadlines					
	Somewhat	Adequate	High Degree	Not at all	N/A
i. Be flexible to function in a variety of work environments					
	Somewhat	Adequate	High Degree	Not at all	N/A
j. Be prepared to get jobs in industry related to concentration areas such as Computer Engineering, Information Science, Internet Programming, and Software Engineering					
	Somewhat	Adequate	High Degree	Not at all	N/A
Comments: _____					

9.7. Appendix G: Faculty CVs

Ray Ahmadnia, M.S.

Associate Professor of Computer Science

Summary

- Broad experienced with both academia and industry
- Experienced in both Computer Science and Mathematics
- Served as graduate Master' Project advisor at California State University – Fullerton and more than 29 Senior Projects at the University of La Verne
- Served as the chair of the undergraduate curriculum committee at CSU-Fullerton
- Served in four different committees at the University of La Verne

Education

- 1972 National University of Iran. B.S. in Mathematic
1976 University of New Mexico, M.A. in Mathematics
1982 University of Nebraska-Lincoln, M.S. in Applied mathematics

Teaching Experience

- 1982-1984 University of Minnesota, Full-time
1984-1989 California State University-Fullerton, Full-time
1989-1988 California State University-Dominguez Hills, Full-time
1988-present University of Laverne, Full-time

Courses Taught

- Languages: Pascal, PL/I, C, C++, C#, Java, Visual Basic, Lisp, Prolog, HTML; assembly languages for IBM-360 , 370, and PC; Assembly language for VAX and Macintosh machines
- Computer Science Courses:Data Structures; Compiler Design, Artificial Intelligence , File processing; Database; Algorithm and Design; Web Design; Computer Graphics; and Programming Languages
- Mathematics Courses: Numerical Analysis; Probability and Statistics; Calculus I-III; Discrete Mathematics

Professional Memberships

- Association for Computing Institute for Electrical and Electronics Engineers (IEEE)
- Mathematical Association of America

Books Reviewed

1. C++1, Exploring Problem-Solving and Program Design
West publishing Company
2. Assembly Language Programming
Scott/Jones Inc. Publishers

3. Java Programming McGraw-Hill Inc.

Consulting

- Helped the programmers of the *Yoshizuka Company* (a Japanese company selling sewing machines to countries all over the world.) to translate their current software which was written 10 years ago in VB that was run on OS/2 operating system to the new version of VB that could be run on Windows environment.
- Consult a private contractor to debug a VB project
- Worked with the programmer of the *BP & Associate Inc.* on creating a custom program to run their AutoCAD workstation (we used GCLISP , a Lisp Programming language)
- Worked with *M.F.G. Precision Inc.* company to modify their existing Postscript for Mastercam.
- Worked with an employees of the *Los Angeles County Sanitation District* to write a Personnel Training Program for controlling their data using VB.
- Worked with an employee of the *Northrop Grumman* on DSP (Defense Support Program). They have a program that checks the raw data and convert it into a readable format. Our project was to produce a summary report that could be used to determine the percentage of up time, problematic sources of telemetry data, patterns in telemetry degradation, and other issues related to the quality of the data.
- *Printrak International Inc.* was using C programming language to implement customer specific interface to legacy systems. This program has to be compiled in their specific environments and had operating system dependencies. Our project was to rewrite the program (in Java) to be able to move to various operating systems without additional code changes.
- Worked (2003-2004) with *Department of Mechanical Engineering* at the California State University Fullerton on two different projects. The latest project was on the development of Embedded and Microprocessor based Electromechanical Systems.

Jozef Goetz Ph.D.

Math/Physics/ Computer Science Department
University of La Verne, La Verne, CA 91750
jgoetz@laverne.edu

POSITIONS

University of La Verne, La Verne, USA

2011 – pres. Full Professor, Math, Physics and Computer Science Department

- extensive teaching experience, scholarly activity and service to the department, university and international and world conferences

2005 – 2011 Associate Professor, Math, Physics and Computer Science Department

- extensive teaching experience, scholarly activity and service to the department, university and international and world conferences

California State University, Fullerton, USA

2000 – 2009 Faculty Member, Department of Computer Science

- extensive teaching experience, scholarly activity and service to the department

Wroclaw University of Technology, Poland

Associate Professor - Department of Computer Science and Information Systems

- extensive teaching experience, scholarly activity and service to the department and college

Assistant Professor - Technical Cybernetics Institute of Polytechnic,

- extensive teaching experience, researcher and service to the department and college

Fujitsu Business Communication Systems, US

Senior Software Developer Engineer - Anaheim, CA

- extensive object oriented development experience in client/server environment

Evaluation Engineer - Anaheim, CA

- client/server system, UNIX, Novell environment

Software Developer - Chicago, IL

- development experience in UNIX, Boerne Shell and C

EDUCATION

Certified in *Intelligent Systems Engineering* at University of California, Irvine, 1995.

Ph.D. in Computer Science with **Honors** from Wroclaw University of Technology, Poland .

Dissertation Title: *Optimal Resources Allocation and Operations Scheduling Problems Solution for Computer Systems*

M.S. degree in Computer Science, B.S. equivalent in Electronics and Computer Science, Wroclaw University of Technology, Poland.

HONORS AND AWARDS

- Outstanding Performance Award for making the IntelliCenter product a success, FUJITSU, 1997.
- Ten University President's awards for scientific research and cooperation with industry.
- Two Dean's awards for teaching.
- Silver Cross of Merit from the State Minister of Communication in 1986.
- **Outstanding Ph.D.** dissertation, State Ministry of Science, Higher Education and Technology Award.

GRANTS

- *Complex Dynamical Systems*, Fletcher Jones Grant (2010-2013).
- Applied for a CSUF *Faculty Development Center* Grant (March, 2003).

- *Intercampus Computer Networks*, Polish Government Grant.
- *Multi-user University Computer System*, Polish Government Grant.
- *Standard Interface Switching*, Polish Industrial Grant.

PROJECTS AND THESES SUPERVISED

University of La Verne, La Verne, USA

Supervised **21 senior** projects since 2005.

- In 2010 Michael Halbert received an award for his senior project Noyce Scholarship Tracking System which supports the Robert NOYCE Teacher Scholarship Program.
- Introduced to research project with lectures and lab activities within STEM Summer Camp, July 5-12, 2010.
- Supervised building hand-coded Websites projects within STEM Summer Camp, July 12-16, 2010.
- Was Faculty Camp Research Mentor for student projects, STEM Summer Camp 2010, June 12 – 16, 2010

California State University, Fullerton, US

Supervised the following master's projects that resulted later in publications or presentations at conferences:

- Reao, E. *Validating E-Commerce Solutions*, Computer Science and Information Systems, published by ATINER, ISBN: 960-88672-3-1, 2005, 221- 236.
- Feng Y., *Developing and validating XML Web services within distributed and heterogeneous environment*, Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003, Wroclaw University of Technology Press, ISBN: 83-7085-721-3, September 2003, 108-115.
- Cao H., *Evaluation On 3G wireless device application running under J2ME versus BREW*, Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003, September 2003. Wroclaw University of Technology Press ISBN: 83-7085-721-3, September 2003, 146-153.

Wroclaw University of Technology, Poland

Supervised **theses** of over dozen master's students, the following of which resulted in publications:

- Le Tu Q.H., Model of Concurrent Processes Synchronization with Unreliable Resources, *Systems-Analysis-Modeling-Simulation*, No 7, 1989, 539-543.
- Agbo E., Software for Teaching of Petri Nets, *Papers of Telecommunication Institute of Wroclaw Technical University*, No 60, Software in Education, 1988, 30-33.
- Makuchowski M., *Heuristic Methods for General Problem of Resources Allocation and Operation Scheduling*, *Development in Cybernetics, Sci. Quarterly of Polish Cybernetical Society*, No 3, 1985, 21-35.

TEACHING EXPERIENCE

University of La Verne, La Verne, US

- In charge of the following 14 courses: CMPS 318, 319, 367, 368, 369, 370, 377, 378, 460, 463, 471, 480, 490, 499 (all are 4 unit courses with labs except CMPS 370, 471 and 499).
- I have proposed, designed, developed and **implemented four new courses** (CMPS 319, 320, 378, 480) in order to update the Computer Science program to cutting edge technology.

Spring 2011	CMPS 319 - Publishing on the Web II CMPS 320 - Internet Applications CMPS 480 - Distributed Internet Computing CMPS 499 - Senior Seminar/Project
January 2011	CMPS 370 - Seminar
Fall 2010	CMPS 318 - Publishing on the Web I

	CMPS 368 - Principles of Computer Networks CMPS 378 - C# Programming Using .NET CMPS 499 - Senior Seminar/Project
Spring 2010	CMPS 319 - Publishing on the Web II CMPS 480 - Distributed Internet Computing CMPS 490 - Database Management Systems
January 2010	CMPS 499 - Senior Seminar/Project
Fall 2009	CMPS 318 - Publishing on the Web I CMPS 368 - Principles of Computer Networks CMPS 369 - Directed Study CMPS 378 - C# Programming Using .NET CMPS 471 - Internship CMPS 499 - Senior Seminar/Project
Spring 2009	CMPS 319 - Publishing on the Web II CMPS 369 - Local Computer Networks CMPS 471 - Internship CMPS 490 - Database Management Systems CMPS 499 - Senior Seminar/Project
Fall 2008	CMPS 318 - Publishing on the Web I CMPS 368 - Principles of Computer Networks CMPS 378 - C# Programming Using .NET
Spring 2008	CMPS 318 - Publishing on the Web I CMPS 369 - Local Computer Networks CMPS 490 - Database Management Systems CMPS 499 - Senior Seminar/Project
Fall 2007	CMPS 368 - Principles of Computer Networks CMPS 378 - C# Programming Using .NET CMPS 460 - Operating Systems
Spring 2007	CMPS 318 - Publishing on the Web I CMPS 367 - Object Oriented Language C++ CMPS 369 - Local Computer Networks
January 2007	CMPS 377 - Visual Basic.NET
Fall 2006	CMPS 368 - Principles of Computer Networks CMPS 378 - C# Programming Using .NET
Spring 2006	CMPS 369 - Local Computer Networks CMPS 471 - Internship CMPS 480 - Distributed & Web Computing CMPS 499 - Senior Seminar/Project
January 2006	CMPS 377 - Visual Basic.NET
Fall 2005	CMPS 368 - Principles of Computer Networks CMPS 463 - Computer Graphics

California State University, Fullerton, US

In charge of the following courses:

- CPSC 121 - Programming Concepts with C++
- CPSC 131 - Data Structure Concepts
- CPSC 223J - Java Programming
- CPSC 223N - C# Programming
- CPSC 253U - Workshop in UNIX
- CPSC 341 - Client/Server Systems with Power Builder Lab.
- CPSC 351 - Operating System Concepts
- CPSC 457 - Computer Communications
- CPSC 901 - Programming Concepts & Data Structures

CPSC 906 - Operating Systems
 CPSC 589 - Seminar in Computer Science
 CPSC 597 - Master's Project

Use of technology in Computer Science Education

- Created extensive a class platform at the University of La Verne with all syllabi, guidelines, lecture notes, assignments, book source code and the links pertaining to all aspects of classes.
- Created numerous presentations for all lectures complementing available materials from the publisher.
- Extensively use the following tools and technologies: Web 2.0, blogs, Google Apps, Google Sites, Google Analytics, FTP, Telnet, CS5 Adobe Macromedia, Adobe Acrobat, Notepad++, EditPlus 3, XHTML, CSS, JavaScript, AJAX, MySql, Apache, Ubuntu 10.10, PHP, C#, Windows 7, ASP.NET, LINQ, WPF, Adobe CS5, WinSCP, WS_FTP Pro, Wireshark, SQL Server 2008, CA ERwin Data Modeler v.7.3, Visual Studio 2010, Microsoft Office 2007: Access, Excel, Word, PowerPoint and Add-ons for Mozilla Firefox: Web Developer, FireFTP, Firebug.
- Implemented online instruction using *Blackboard* for Seminar in Computer Science (CPSC589), Fall 02.

Wroclaw University of Technology, Poland

- Project leader for the design, development of educational Petri Nets software.
- Developed courses on Petri Nets Theory and its applications as well as graph and network algorithms.
- In charge of the following courses: software engineering, Petri nets theory and its applications, graph and network algorithms, elements of computational complexity, design and analysis algorithms, machine scheduling problems, computer logic, Pascal, Fortran, Basic, and labs on Turbo Pascal, PDP 11 and Z80 Assembler - at Wroclaw University of Technology.

PUBLICATIONS

Authored or co-authored more than 30 [peer refereed articles](#).

2003 - 2010 publications:

1. *Using Petri Nets to Introduce Multithreading Concepts in C#*, volume: Strategic Advantage of Computing Information Systems in Enterprise Management, Athens Institute for Education and Research, **ISBN: 978-960-6672-93-4, 2010**, pp 45-60.
2. *WEBCRM Application Generator, Proceedings of the 2007 International Conference on Internet Computing, World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'07)*, Las Vegas, USA, **ISBN: 1-60132-044-2, 2007**, pp 29-35.
3. *E-Commerce Technology Comparison: ASP.NET vs. Ajax*, Current Computing Developments in E-Commerce, Security, HCI, DB, Collaborative and Cooperative Systems, published by ATINER, **ISBN: 960-6672-07-7, 2006**, pp 471- 488.
4. *E-Learning: Personalization and Collaboration Solution*, Current Computing Developments in E-Commerce, Security, HCI, DB, Collaborative and Cooperative Systems, published by ATINER, **ISBN: 960-6672-07-7, 2006**, pp 303-320.
5. *Intelligent On-line Advising with Expert System Shell*, in Reeves, T., Yamashita, S., (Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, AACE , October 13-17, **2006**, Honolulu, Hawaii, USA, pp 687-694.
6. *Using Petri Nets to Introduce Deadlock Concepts*, Computer Science and Information Systems, published by ATINER, **ISBN: 960-88672-3-1, 2005**, 351-366.
7. *Validating E-Commerce Solutions*, Computer Science and Information Systems, published by ATINER, **ISBN: 960-88672-3-1, 2005**, 221- 236.
8. *Online Examinations with Expert System Shells*, in Richards, G. (Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, AACE , Chesapeake, Vancouver BC, Canada, **2005**, 844-849.

9. *Developing and validating XML Web services within distributed and heterogeneous environment, Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003*, Wroclaw University of Technology Press. September 2003, 108-115.
10. *Evaluation On 3G wireless device application running under J2ME versus BREW, Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003*, September 2003. Wroclaw University of Technology Press. September 2003, 146-153.

RECENT TALKS AT CONFERENCES

- *Using Petri Nets to Introduce Multithreading Concepts in C#, 5th International Conference on Computer Science & Information Systems, Athens, Greece 2009.*
- *WEBCRM Application Generator, World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'07), Las Vegas, USA 2007.*
- *Intelligent On-line Advising with Expert System Shell, Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, . AACE , October 13-17, 2006, Honolulu, Hawaii, USA.*
- *E-Commerce Technology Comparison: ASP.NET vs. Ajax, 2nd International Conference on Computer Science & Information Systems, Athens, Greece 2006.*
- *E-Learning: Personalization and Collaboration Solution, 2nd International Conference on Computer Science & Information Systems, Athens, Greece 2006.*
- *Online Examinations with Expert System Shells, in Richards, G. (Ed.), Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, AACE , Chesapeake, Vancouver BC, Canada, 2005.*
- *Using Petri Nets to Introduce Deadlock Concepts, International Conference on Computer Science & Information Systems, Greece 2005.*
- *Validating E-Commerce Solutions, International Conference on Computer Science & Information Systems, Greece 2005.*
- *Developing and validating XML Web services within distributed and heterogeneous environment, Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003, Wroclaw University of Technology Press. September 2003, 108-115.*
- *Evaluation On 3G wireless device application running under J2ME versus BREW, Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003, September 2003. Wroclaw University of Technology Press. September 2003, 146-153.*

SELECTED INVITED TALKS

- *Petri Nets as a Tool for Teaching Computer Science Concepts, , Faculty Lecture Series, University of La Verne, presentation schedule day: January 10, 2011.*
- *Using Petri Nets to Introduce Deadlock Concept, University of La Verne, 2005.*
- *Using Petri Nets to Introduce Synchronization and Deadlock Concepts, California State University, Dominguez Hills, 10/2004.*
- *Modeling Concurrent Processes Using Petri Nets, California State University, Fullerton, 05/2004.*
- *Information Systems Applications and Technology, ISAT 2003, Poland, 2003.*
- *Impact of graduate Seminar in Computer Science at CSUF on curriculum, Polytechnic University, Wroclaw, Poland, 2002.*
- *Resource Allocation of Concurrent Systems Using Petri Nets, IBM Watson Research Center in Yorktown Heights, NY, 1998.*
- *Java and Strategic Internet Call Center technology, Fujitsu Business Communication Systems (Anaheim, CA), 1997.*
- *Modeling of Parallel Systems Using Petri Nets, Computer Science Department, University of California, Riverside, 1994.*
- *Expert Systems and Applications, Fujitsu Business Communication Systems (Anaheim, CA), 1992.*

RESEARCH EXPERIENCE

- Analytics and Data Mining, 2010.
- Modeling multithreading using Petri Nets, 2008-9.
- WEB CRM, 2007.
- ASP.NET vs. Ajax, 2006.
- E-Learning: Personalization and Collaboration Solution, 2005.
- Using Petri Nets to Teach Deadlock Concepts, 2005
- Validating E-Commerce Solutions, 2004.
- WEB Services (J2EE, .NET), 3G wireless applications, WEB development, XML, e-commerce, Client/Server systems (2001-2003).
- Researched software engineering, C#, Java, operating systems, resource allocation, and operation scheduling using Petri nets.
- Educational Petri Nets Software. Consulted on modeling river overflow warning systems with Petri nets.
- Team member of the 1st Universities Computer Network in
 1. Developed PDP 11 computer network node on PDP 11. Developed PDP 11 computer network node on PDP 11.
 2. Designed, built and debugged X.25 for the computer network using PDP-11 Assembler.
- **Doctoral dissertation:** *Optimal Resources Allocation and Operations Scheduling Problems Solution for Computer Systems*. Used disjunctive graphs for optimization operating system problems according to many criteria (minimum of completeness, lateness, weight sum of tardiness etc.) in deterministic conditions under constrained resources. Solved these problems using a branch and bound method with mixed strategy of moving in the tree of solutions. Designed branching, choice, and elimination rules. Used lower and upper bounds for which derived the best formulae in class. Presented a model of computer system with the original formulation and solution of the above problems.

SERVICE TO THE PROFESSION

World Congress and International Conferences, US and Europe

- 2008 – 2010 Served as a **reviewer** for the *World Congress in Computer Science, Computer Engineering, and Applied Computing, US*
- [WORLDCOMP'08](#), [WORLDCOMP'09](#), [WORLDCOMP'10](#).
- 2009 Served as a [session chair](#) at the *5th International Conference on Computer Science & Information Systems, Athens, Greece, July 27-30, 2009*.
- 2009 Served as a [Scientific Committee member](#) for the *International Scientific Committee of the International Conference of COMPUTING in Engineering, Science and Informatics- ICC2009*.
- 2009 Served as a **reviewer** and a [program committee](#) member for [the 4th IFIP TC2 Central and Eastern European Conference on Software Engineering Techniques CEE-SET 2009](#).
- 2009 Served on the [program committee](#) for the *International Multiconference on Computer Science and Information Technology of Information Technology and Applications – [Business Intelligence BI'09](#), Poland*.
- 2008 Provided a technical **review** of a proposal on the *BuddyCast PopCoins Machine* (\$161,000 total project budget) received by the *Maryland Industrial Partnerships Program*, <http://www.mips.umd.edu>.
- 2008 Served as a **reviewer** for the *Informatica Journal of Computing and Informatics, Slovenia*, <http://www.informatica.si/>.
- 2007 – 2008 Served as a **reviewer** and a program committee member for the *International Multiconference on Computer Science and Information Technology*,
[2007 Principles of Information Technology and Applications PITA'07](#),
[2008 Principles of Information Technology and Applications PITA'08](#)

- 2006 Served as a **reviewer** and was on the [program committee](#) for the *First International Multiconference on Computer Science and Information Technology – FIMCSIT'06*, Poland.

University of La Verne, La Verne 2005 – 2010

(1) Member of Computer Science and Computer Engineering Program Committee:

responsibility for the following areas:

- (a) Computer Science major and minor concentrations and the Internet Programming concentration.
- (b) New Curriculum Development Proposal, Implementation and in charge of:
 - o CMPS 319 - Publishing on the Web II
 - o CMPS 319L - Publishing on the Web II Lab
 - o CMPS 320 - Internet Applications
 - o CMPS 378 - C# Programming Using .NET
 - o CMPS 378L - C# Programming Using .NET Lab
 - o CMPS 480L - Distributed & Web Computing Lab
- (c) Modification of the following courses:
 - o CMPS 318 - Publishing on the Web I
 - o CMPS 368 - Principles of Computer Networks
 - o CMPS 377 - Visual Basic.NET
 - o CMPS 463 - Computer Graphics
 - o and updating the following guideline files of
 - o CMPS 499 - Senior Seminar/Project:
Evaluation forms.doc, Proposal_Outline.doc, Presentation_Outline.doc,
Final_Report_Template.doc and new Weekly_Report_Sample.doc.
- (d) Selection of the textbooks for the following courses: CMPS 318, 319, 320, 368, 369, 377, 378, 460, 463, 480.
- (e) Introducing CMPS 318 Publishing on the Web I, CMPS 319 Publishing on the Web II as courses with LIFELONG LEARNING (UVLL) and INTERDISCIPLINARY (INTD) attributes, and CMPS 320 Internet Applications with a LIFELONG LEARNING (UVLL) attribute.
- (f) Preparation of the Senior Seminar/Project manual for CMPS 370 with an over 400 page document containing description of about 200 topics, links, bibliography, examples of projects.
- (g) Participation in the senior project review process as a member of a program committee.
- (h) Preparation of course advertisements for CMPS 378 C# Programming Using .NET and CMPS 480 Distributed & Web Computing sent to over 200 local businesses.
- (i) Creating the LINUX lab to the Computer Science Department and it used as part of CMPS 368 Principles of Computer Networks and CMPS 460 Operating Systems.
- (j) Creating Resource Center for the Computer Science Department Web site and maintain a part of the Computer Science Department Web site.
- (k) Coordinating the set up of student Computer Club (2008/9).
- (l) Coordinating the set up of FH206 and FH207 lab.
- (m) Introducing and initially coordinating of the MSDN Academic Alliance program at ULV: as a result Computer Science students have free access to download from http://msdn07.e-academy.com/ulv_cs, cutting edge technology applications/programs of Microsoft from our university site.
- (n) *Organizing a CMPS 368 Class Trip to a great event, Vinton Cerf, Vice president and chief Internet evangelist of Google, Inc., Tracking the Internet into the 21st Century, Distinctive Voices@The Beckman Center, Irvine, September 16, 2008.*
- (o) *Organizing a field trip for Computer Science students to Jet Propulsion Laboratory at the 2009 Open House, Pasadena, May 3, 2009, 9:30-4 pm.*

(p) *Organized a field trip for my advisees and Computer Science students to the Los Angeles County Fair, September 24 2009.*

- (2) Advising ranged from course selection and academic load to career and personal advising Computer Science and Computer Engineering students with a concentration in Internet Programming and students majoring in E-commerce.
 - (a) *Mentor advising for High School Student: James Van Voorhis (2008/2009).*
- (3) Member of Faculty Technology Committee (2010 – 2013).
- (4) Member of College of Arts and Sciences Faculty Professional Support Committee (2009 – 2012).
- (5) Member of University-wide Faculty Professional Support Committee (2009 – 2012).
- (6) Member of (UGAP) Undergraduate Academic Policies Committee (2010 - pres).
- (7) Member of Retreat Committee (2008 – pres).
- (8) Member of Faculty Financial Aid Committee at the university level (2006 – 2009).
- (9) Member of Arts and Science College Teaching and Technology Committee (2005 – 2006).
- (10) Member of Faculty Assembly (2005 – pres).
- (11) Member of Arts and Science College (2005 – pres).
- (12) Member of Natural Science Division (2005 – pres).
- (13) Member of Computer Science (2005 – pres).
- (14) Member of American Association of University Professors (2009 – present).

California State University, Fullerton

- 2005** Course Coordinator: CPSC 223N C# Programming using .NET.
- 2005** The Eighth CSU Regional Symposium on University Teaching, Pomona, April 2, 2005.
- 2004** New Curriculum Development Proposal, Implementation and in charge of C# Programming using .NET,
4th Annual Computing Curriculum Workshop, San Diego, CA, May 23, 04.
- 2002 - 03** Course Coordinator: CPSC 223J Java Programming, CPSC 341 Client/Server Systems
Instructional Resource Committee member, Executive Committee member.
- 2002** Weekly student advising
Computer Science, Engineering, Mathematics Scholarship Committee (CSEMS) member.

Wroclaw University of Technology, Poland

- 1987-88** Chairman of the Petri Nets seminar
- 1982-85** Member of the Advisory Committee on Research and Teaching; frequently served on curriculum committees; student mentor

Polish Cybernetics Society

- 1987 - 1988** Expert consultant to the Society
- 1980 - 1988** Chairman of the Wroclaw Section of the Society

Membership

- 2008 – pres.** [American Association of University Professors](#), AAUP
- 2007 – 2009** Strathmore's Who's Who
- 2006 – 2008** Who's Who in Sciences
- 2006 - pres.** IASA International Association Software Architecture
- 2003 – pres.** IEEE Computer Society
- 2003 – pres.** Orange County C# Users Group
Orange County Visual Basic Users Group
Southern California .NET Developers Group
- 1998** International Who's Who of Information Technology, 1998 Edition

1997 IEEE Computer Society
 1995 Orange County ACM Chapter

1981: Member of the independent, self-governing trade union 'NSZZ Solidarność'. Solidarity was the first non-[Communist](#)-controlled trade union in a [Warsaw Pact](#) country. In the 1980s it constituted a broad anti-bureaucratic [social movement](#). By the end of August a Solidarity-led coalition government was formed and in December 1990 Wałęsa was elected [President of Poland](#).

WORKSHOPS/EVENTS AND LECTURES/SEMINARS ACTIVITIES

2011 On Campus (University of La Verne) as of May 15, 2011

1. *Semi Annual Senior Computer Science Project Presentations*, University of La Verne, FH 207, May 11, 2011.
2. Drs. Jason Neidleman, Issam Ghazzawi, Yousef Daneshbod and Yehia Mortagy on “*Democracy in the Middle East? Hopes and Challenges*,” at 11:30 am on Thursday, April 28 in the President’s Dining Room.
3. Jonathan Reed, “*Pseudo-science and Biblical Archaeology: Scholars and the Media*”, PDR, April 18, 2011.
4. Robert F. Kennedy, Jr., *Our Environmental Destiny*, Ann & Steve Morgan Auditorium, April 14, 2011.
5. Faculty *Book Day 2011*, Ann & Steve Morgan Auditorium, March 29, 2011, 11:10 – 12:40pm.
6. Susan Elrod: the executive director of Project Kaleidoscope, *Trends in university-level science education and in particular in learning environment*, PDR, February 4, 2011, 12:00 – 2:00 pm.
7. **My talk**, *Petri Nets as a Tool for Teaching Computer Science Concepts*, Faculty Lecture Series, University of La Verne, January 10, 2011.

2011 Off Campus as of May 15, 2011

8. Reza Madani, *Windows Phone 7 Unleashed*: This deep dive event is lecture and hands on lab. **Microsoft**: 3 Park Plaza, Suite 1600 Irvine, CA, Saturday, May 07, 2011, 9:00 AM - 9:00 PM.
9. *COSMOS – THE REAL POETRY, LECTURE BY POLISH-AMERICAN SCIENTISTS and ENGINEERS, NASA Jet Propulsion Laboratory, Pasadena*, Saturday, March 26, 2011, 6 p.m:
 - o ARTUR BARTOSZ CHMIELEWSKI (Manager, Solar Systems Exploration); - "Modjeska in Space, so what do space scientists think about our poetry, music, literature and ... hamburgers"
 - o DAVID LEHMAN (GRAIL Project Manager) - "To the Moon - an Overview of the GRAIL Project"
 - o WITOLD SOKOLOWSKI (Materials Scientist/Technologist, Materials, Mechanical Systems Division) - "Smart materials from spacecraft to furniture applications"
 - o MAREK TUSZYNSKI (Engineer, Autonomous Systems Division)- "Mars Science Laboratory (MSL) Mission Overview and Video"
 - o ANDREW Z. DOWEN (Program Manager, Interplanetary Network Directorate) - "NASA/JPL adds New Instruments to its Cosmic Orchestra".
10. CSUF Academic Technology Day, California State University, Fullerton, February 15, 2011, 9:00 am - 4:30 pm

Attended the following sessions:

10:30-11:30	<i>Photoshop and Illustrator – new CS 5 features</i> Trainer from Adobe Inc.	PLS 299
11:30-12:20	<i>Research Tools: Tips and Tricks</i> Dorota Huizinga	TSU Pavilion C
12:30-1:30	<i>Open Houses and Tours</i> Faculty Development Center	PLS 44
1:00-2:30	<i>Creating Amazing Content in Indesign and Flash</i>	PLS 299

Trainer from Adobe, Inc.

11. Southern California Code Camp, California State University, Fullerton, January 29-30, 2011.
Attended the following three sessions (each session is 1h 15 min) on Sunday, January 30, 2011:
 - June Clarke, *How to Start Using Google Web Toolkit (GWT)*.
 - Mandeep Singh, iPhone Apps in C# w/Monotouch.
 - John Kuhn, *Developing a Windows Service Framework*.
12. *La Verne University Faculty Retreat: Four Colleges, One Mission, One University*, UCLA Lake Arrowhead Conference Center, Lake Arrowhead, January 14-15, 2011.

2010 On Campus (University of La Verne)

1. John Bartelt, In Search of the Missing Link (between lecture and technology in the classroom), President's Dining Room, November 29, 2010. I actively participated in discussion.
2. Ian Lising, *Across the House: The Art and Science of World Universities Championship Debating*, President's Dining Room, November 22, 2010. I actively participated in discussion.
3. Greg Dewey: Provost, Network Theory in Biology, President's Dining Room, November 8, 2010. I actively participated in discussion.
4. William Taber: Jet Propulsion Laboratory, The Mathematics of Software Bugs, La Fetra Lecture Hall, October 27, 2010, 4 pm. I actively participated in discussion.
5. Paul Alvarez, Professor of Movement & Sports Science, Universiade 2010, Belgrade, Serbia: A Photographic Essay of My Experiences, Presidents Dining Room, September 20, 2010, 12:03 - 1p.m.
6. ACADA President Jayne Drake and Past President Nancy King, DW33, *Building the Framework: Advising as a Teaching and Learning Process*, CBPM 142, September 16, 2010, 11:00 – 12:30 pm.
7. **Presented** Introduction to Research Projects, STEM Summer Camp, July 7, 2010, 12:30 – 3:30 p.m.
8. **Provided** lecture/lab activities at the STEM Summer Camp, July 9, 2010.
9. **Was** a Faculty Camp Research Mentor for STEM Summer Camp 2010, June 12 – 16, 2010, 12:30-5:30 p.m.
10. Dr. Clayton-Pedersen: Vice President for Education and Institutional Renewal, *Making Excellence Inclusive: Using High-Impact Practices to Achieve Essential Learning Outcomes*, June 2, 2010, 8:30-3:00 pm.
11. *2010 Natural Sciences Division retreat*, Howell Board Room, May 1, 2010, 8:30am - 4:00pm.
12. *Semi Annual Senior Computer Science Project Presentations*, University of La Verne, FH 206, May 7, 2008.
13. Cathy Irwin, John Bartelt, *Student-centered instructional design creativity in Blackboard for web-enhanced, hybrid, and online courses*, Presidents Dining Room, March 26, 2010.

2010 Off Campus (strictly professional seminars/workshops)

14. Windows Phone 7 Developer Launch: Jump Start Your Mobile Development, Event ID: 1032458834, Hilton Orange County, 3050 Bristol St, Costa Mesa CA, September 29, 2010.
Attended the following sessions:
 - Session 3: Supercharge Your Windows Phone 7 Apps with Microsoft Silverlight
 - Session 4: Step Up Your Game with Windows Phone 7 and XNA
 - Session 6: The Power of the Cloud: Exploring Windows Phone 7 Services.
15. Daniel Egan – Microsoft Developer Evangelist, *Introduction to Windows Phone 7*, SoCal IASA chapter meeting, Rancho Santiago Community College District, 2323 N. Broadway, Santa Ana, CA, August 19, 2010.
16. Southern California Code Camp Code Camp, UCSD Extension La Jolla Campus, UCSD Extension Campus, La Jolla, 9600 North Torrey Pines Rd. June 26-27, 2010.
Attended the following seven sessions (each session is 1 h 15 min) on Sunday, June 27, 2009:
 - [Paul Sheriff](#), *The Flexible List Box in WPF*, r. 129, 12:30 pm - 1:45 pm.
 - Steve Evans, *Should Your Application Run in the Cloud?* r. 101, 1:45 pm – 3 pm.
 - David Barkol, *What's new in ASP.NET 4.0*, r.127, 3 pm – 4.15 pm.

17. *SAS Programming Essentials for Educators PART I*, California State University LA5-349, Long Beach, CA June 21, 2010.
18. *Accessing and Assaying Prepared Data*, California State University, Long Beach, CA June 22, 2010.
19. *Introduction to Predictive Modeling: Decision Tree, Regressions, Neural Networks*, California State University, Long Beach, CA June 23, 2010.
20. *Model Assessment and Model Implementation*, California State University, Long Beach, CA June 24, 2010.
21. *Introduction to Pattern Discovery and Ensemble Models*, California State University, Long Beach, CA June 25, 2010.
22. Southern California Code Camp, California State University, Fullerton, January 30-31, 2010.
Attended the following three sessions (each session is 1h 15 min) on Saturday, January 30, 2010:
 - Woody Pewiit, [Windows Phone](#), r. H110, 12:15 – 1:30 pm.
 - Paul Sheriff, [Build Unit Tests the Easy Way with VS.NET 2008](#), r. H110, 1:30 – 2:45 pm.
 - Paul Sheriff, [Fundamentals of Data Binding in WPF](#), r.H110, 2:45 pm -> half session.
23. Xtine Burrough, [Tweets, YouTube, Facebook, Photoshop – Embracing New Tech in the Classroom](#), *Teaching with Technology Faculty Showcase 2010*, California State University, PLN-303, Fullerton, January 21, 2010, 1:10 pm - 2:20 pm.
24. Katherine Kantardjief, *Web 2.0 Tools for the Classroom*, *Teaching with Technology Faculty Showcase 2010*, California State University, PLN-303, Fullerton, January 21, 2010, 1:10 pm - 2:20 pm.

2009 On Campus (University of La Verne)

1. **Tested** with Harvey Good and Ben Wishner NOYCE STEM SCHOLARSHIP TRACKING application to find any problems, December 22 at 1:00 – 3:30 p.m. in the Natural Science Meeting Room (152A).
2. Discussion on procedures how and where to implement and deploy NOYCE STEM SCHOLARSHIP TRACKING SYSTEM, December 16, 17 at 3:00 p.m. in the Natural Science Meeting Room (152A)
 - a. I asked my Internet Programming student to create the NOYCE STEM SCHOLARSHIP TRACKING SYSTEM Web Application, as a senior project, for the Biology department at the University of La Verne.
3. Glenn Gamst, Chris Liang, Aghop Der-Karabetian, *Developing the Handbook of Multicultural Measures*, Faculty Lecture Series, Presidents Dining Roo, December 7, 2009, 12:00 pm.
4. *Semi Annual Senior Computer Science Project Presentations*, University of La Verne, FH 206, December 2, 2009, 3:30 - 5:00 p.m.
5. *Faculty Research and Professional Activity Day*, Wilson Library, October 29, 2009.
6. *The debate on whether Amnesty Should be Granted to Illegal Immigrants*, President's Dining Room, October 22, 2009.
7. Craig Bauling, *An overview of Mathematica 7 for Education*, La Fetra, September 16, 2009.
8. *Semi Annual Senior Computer Science Project Presentations*, University of La Verne, FH 206, May 6, 2009, 4:00 - 6:00 p.m.
9. *Faculty Book Day 2009*, University of La Verne, Wilson Library Foyer, April 24, 2009.
 - Jackie Allen, ed., *Empowering the 21st Century Professional School Counselor*
 - Karen Brunschwig and Maria Montoya, *Hijas olvidadas: Two Contemporary Plays by Hispanic Women Writers*
 - Bill Cook, *The Rape of Palestine: Hope Destroyed, Justice Denied* and *The Chronicles of Nefaria*
 - Richard Gelm, *How American Politics Works: Philosophy, Pragmatism, Personality and Profit*
 - Cathy Irwin, *Twice Orphaned: Voices from the Children's Village of Manzanar*
 - Jeffrey Kahan, ed., *Pericles*
 - Larry Machi and Brenda McEvoy, *The Literature Review: 6 Steps to Success*
 - Kevin Marshall, *The Economics of Antitrust Injury and Firm-Specific Damages*
 - Jack W. Meek, Goktug Morcol, Lorraine Hoyt, and Ulf Zimmerman, Eds., *Business Improvement Districts: Research, Theories, and Controversies*
 - Peggy Redman and Terry Deal, *Reviving the Soul of Teaching: Balancing Metrics and Magic*.

10. Robert Chu, *Acupuncture, Diet and Nutrition*, The ULV Athletic Training Education Program, Sports Science and Athletics Pavilion (SSAP) B203, University of La Verne, La Verne, March 11, 2009.
11. Robert A. Schultz: Woodbury University, *Information Technology and the Ethics of Globalization*, University of La Verne, FH 207, February 23, 2009.
12. Presented a short tutorial to *Clouding Computing*, Natural Science Division Meeting, University of La Verne, February 06, 2009.
13. Robert Chu, *Acupuncture, Diet and Nutrition*, The ULV Athletic Training Education Program, Sports Science and Athletics Pavilion (SSAP) B203, University of La Verne, La Verne, March 11, 2009.

2009 Off Campus

14. Senthia Sivabalan, Buddhism: tools for living, PIE Club, Riverside, Saturday, October 17, 2009, 7 – 9 pm.
15. Paul Sheriff, MSDN Events: Fundamentals of WPF Windows Presentation Foundation, Los Angeles, August 24, 2009, 1 – 5 pm.
16. 5th Annual International Conference on Computer Science & Information Systems, Athens Institute for Education and Research, Athens, Greece, 25-28 July 2009.
 - **Attended** two day sessions
 - Gave a presentation => http://www.atiner.gr/docs/2009AAAPROGRAM_COM.htm
 - Served as a session chair => http://www.atiner.gr/docs/2009AAAPROGRAM_COM.htm.
17. Southern California Code Camp Code Camp is at the UCSD Extension La Jolla Campus, UCSD Extension Campus, La Jolla, 9600 North Torrey Pines Rd. June 27-28, 2009.
Attended the following seven sessions (each session is 1h 15 min) on Saturday, June 27, 2009:
 - Bret Stateham, *SQL Server Express Edition for the Hobbyist, Student & Professional*.
 - Thomas Mueller, *LEGO Mindstorms Robotics*.
 - Scott Varcoe & Joe Seymour, *Windows 7, Jumplists, and the taskbar*.
 - David McCarter, *Building Rich & Interactive Web Applications with ASP.NET AJAX*.
 - Rob Bagby, *PHP & Microsoft Demothon (It's all about the love)*.
18. Andrew Karcher: president of .Net User Group, *SQL Server 2008 Full Text Search and Performace Point Server*, 1900 S. State College Boulevard, Suite 100, Anaheim, CA, June 3, 2009, 6:30 – 9:00pm.
19. Lance Lillie from Microsoft, *Virtualization*, QuickStart, 16815 Von Karman Ave, Suite 100, Irvine, CA, June 1, 2009, 6:30 – 8:30pm.
20. *Microsoft MSDN Events Unleashed: Best of MIX:*
 - *What's New in Silverlight 3*
 - *Building Web Applications with Windows Azure*
 - *MVC (Model-View-Controller) 1.0 vs ASP.NET Webforms*, 3 park Plaza, Suite 1800, Irvine, CA, May 28, 2009, 2 pm – 5 pm.
21. Anju Kapoor, *The incredible India - a country of contradictions*, PIE Club, Loma Linda, May 16, 2009.
22. Daniel N. Egan: Microsoft Developer Evangelist, *ASP.Net 4.0 and C# 4.0*, Microsoft San Diego office, April 08, 2009, 2 pm - 5 pm.
23. TechEd 2009, *Technology in Education Conference & Exposition*, Ontario Convention Center, Ontario, CA, March 22-25, 2009.
 Attended three sessions as follows:
 - David Sconduto: Glendale College, *LAB 817 FREE – You tube, Itunes, & Google Docs. Save Time & Stimulate*, Room 103, 12:45 – 1:45 pm.
 - Yehia Mortagy, Seta Boghikian-WhitbyMortagy: University of La Verne, *CS 635 Student Profile as a Critical Success Factor in Online Courses*, Room 107C, 2:00 – 3:00 pm.
 - Shin Liu: Rio Hondo College, *CS 645 Database Management Application with Visual Basic 2008 ADO .NET*, Room 107C, 3:15 – 4:15 pm.
 See how this real world collaborative project integrates Visual Studio 2008 and Microsoft Access 2007 to create a useful database management.

24. Halina Przymusinska: Prof. of CalPoly Pomona, *Artificial Intelligence - between fiction and reality*, Anaheim Hills, February 21, 2009.
25. *La Verne University Faculty Retreat*, UCLA Lake Arrowhead Conference Center, Lake Arrowhead, January 15, 2009.
26. Adnan Masood: *Distributed Systems Architect, Developing Services in the Azure Clouds*, QuickStart Technologies, Irvine, CA, January 13, 2009.

2008 On Campus (University of La Verne)

1. Donna Bentley, *Keeping up with the Changes: Web 2.0 and Information Literacy in Universities*, Faculty Research Lecture, University of La Verne, PDA, December 16, 2008, noon – 1 pm.
2. Cheri Black, *WebCAPP individual advising training session*, University of La Verne, December 17, 2008, 3– 4 pm.
3. *Semi Annual Senior Computer Science Project Presentations*, University of La Verne, FH 206, December 10, 2008.
4. *The Focus group for evaluating the “WebCAPP” program for online*. University of La Verne, PDA, October 15, 2008, 10 – 11:15 am.
5. *Faculty Research and Professional Activity Day*, University of La Verne, November 11, 2008.
6. *First Annual Teaching Celebration and Poster Session*, University of La Verne, PDR, September 25, 2008, 2 – 4 p.m.
7. Colleen Maloney-Hinds, *Lecture demonstration to faculty and students, ULV Faculty Interview*, The Movement and Sports Science Department, University of La Verne, La Verne, CA, May 20, 2008.
8. *Semi Annual Senior Computer Science Project Presentations*, University of La Verne, FH 206, May 7, 2008.
9. John Huffman, *Neurolinguistic Programming (NLP) and the Healing Arts*, The ULV Athletic Training Education Program, Sports Science and Athletics Pavilion (SSAP) B203, University of La Verne, La Verne, March 11, 2008.
10. Robert Chu, *Strategies for Optimal Health*, The ULV Athletic Training Education Program, Sports Science and Athletics Pavilion (SSAP) B203, University of La Verne, La Verne, March 07, 2008.
11. Yousef Daneshbod, *From Droplets to DNA: Mathematical Models in Microfluidics*, Interview talk, University of La Verne, La Verne, February 25, 2008.
12. Julius Walecki, *Firm Location and Regional Development. What Businesses and Government Need to Learn about Economic and Geographic Spaces*, University of La Verne, La Verne, February 12, 2008.

2008 Off Campus

13. Vinton Cerf, Vice president and chief Internet evangelist of Google, Inc., *Tracking the Internet into the 21st Century*, Distinctive Voices@The Beckman Center, Irvine, September 16, 2008.
 14. My trip with Computer Science students (class CMPS) 368 to The Beckman Center, Irvine: Vinton Cerf, Vice president and chief Internet evangelist of Google, Inc., *Tracking the Internet into the 21st Century*, Distinctive Voices@The Beckman Center, Irvine.
 15. Susan Gaitan, *Camtasia: Create Podcasts and Record On-Screen Movements to Create Video Tutorials*, California State University, Fullerton, August 12, 2008, 10:00– 12:00 pm.
 16. *Software as a Service (SaaS) Fact, Fiction, and What You Should Know Before You Buy*, EDT Ziff Davis Enterprise eSeminars, Thursday, August 7, 2008 at 1:00 PM.
 17. Susan Gaitan, *Respondus: Easily Create and Upload Quizzes, Tests, and Surveys to Blackboard*, California State University, Fullerton, August 5, 10 – 12pm, 2008.
 18. Brian Webb, *LINQ to SQL*, QuickStart Technologies, 16815 Von Karman Avenue, Irvine, CA, June 10, 2008.
 19. TechEd 2008, *Technology in Education Conference & Exposition*, Ontario Convention Center, Ontario, CA, April 13-16, 2008.
- Attended three hands-on lab sessions as follows:
- *Wacom Tablet 101 with Photoshop CS*, Ken Reese, Field Sales Manager, Wacom, Technology Corporation.
 - *Your Hands on Adobe Acrobat Professional 8*, Dr. Virginia Hetrick, Principal Consultant & Training Manager, EJuice InK.

- *ILLUSTRATOR CS3*, Hilda Baitoo, Faculty, North Orange County Community College District, CA.
- 20. Mickey Williams, *Top-Ten Upcoming Architecture-Changing Technologies*, Rancho Santiago Community College District, 2323 N. Broadway, Santa Ana, CA, March 20, 2008.
- 21. *Microsoft 2008 Launch Wave Global Kick-off Event*, Los Angeles, CA, February 27, 2008, 10:30 am – 5 pm. Los Angeles was the kickoff of over 200 worldwide events celebrating the launch of Windows Server 2008, Visual Studio 2008 and SQL Server 2008.
- 22. Southern California Code Camp (the main focus on .NET technology), California State University, Fullerton, January 27-28, 2008.
Attended the following seven sessions (each session is 1h 15 min) on Saturday, January 27, 2008:
 - Paul Sheriff, *Data Controls in ASP.NET 3.5*.
 - Paul Sheriff, *XML LINQing in the Real World*.
 - Paul Sheriff, *Testing .NET Apps for the Real World*.
 - Lynn Langit, *Data Mining using Excel 2007*.
 - Sunday, January 28, 2008
 - David McCarter, *Building Rich & Interactive Web Applications with ASP.NET AJAX Part 1*.
 - Mark Rosenberg, *First Look VS2008*.
 - Calvin Schrottenboer, *Introduction to Silverlight*.
- 23. *Teaching with Technology Showcase 2008*, California State University, Fullerton, January 17, 2008, 9:00 am - 4:30 pm
Attended the following sessions:
 - *Teaching Critical Thinking and Visual Literacy through Hypermedia: Gender and Religion in the Conquest of Mexico*, Nancy Fitch (HIST)
 - *What is MERLOT 2.0 – Reusing the Online Work of Others – Legally!*, Sorel Reisman, CSU MERLOT Managing Director
 - *Exploring Possibilities: Podcasting is Not Just for Lectures*, Lynda Randall (EDSC)
 - *Creating Voice Over PowerPoint & Adding Audio Clips*, Marsha Orr (NURS)
 - *Teaching Quantitative Courses with Technology*, John Lawrence (ISDS) spent last 20 min.

2007

1. *Semi Annual Senior Computer Science Project Presentations*, **University of La Verne**, FH 206, December 10, 2007.
2. *MSDN Power Series* – attended the following sessions:
 - *A New Paradigm for Data Development with Web Based Data Services*.
 - *Building Rich, Dynamic Web Experiences with Microsoft Silverlight, ASP.NET and ASP.NET*.
 - *AJAX Building Rich, Dynamic Web Experiences with Microsoft Silverlight, ASP.NET and ASP.NET AJAX*.
 - *ArcReady - “Software Plus Services” (S+S) Distilled*.
Theater - Edwards Irvine Spectrum 21 & IMAX, Irvine, CA, December 04, 2007, 11 am -3 pm.
3. Faculty *Research and Professional Activity Day*, **University of La Verne**, November 8, 2007.
4. *Advising support in CS and E-commerce*, **University of La Verne**, CA July 31, 2007, 9:20 – 11 am.
5. *Academic Advising Training*, **University of La Verne**, CA, July 26, 2007.
6. *2007 Spring Commencement Ceremonies*, **University of La Verne**, LA Verne, CA, May 2008.
7. *2007 International Conference on Internet Computing, World Congress* in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'07), Las Vegas, USA, June 25 – 28, 2007
 - Attended four day sessions
 - Gave a presentation => <http://www.world-academy-of-science.org/worldcomp07/ws/program/icm28>
8. Brian Noyes, *Windows Presentation Foundation (WPF) Architecture*, Rancho Santiago Community College District, 2323 N. Broadway, Santa Ana, July 19, 2007.

9. *Understanding SOA*, Rancho Santiago Community College District, 2323 N. Broadway, Santa Ana, July 19, 2007.
10. Michalewicz Zbigniew, *Puzzle-based Learning*, Wroclaw Polytechnic University, Wroclaw, **Poland**, June-05, 2007.
11. Tim Benbow, *Macromedia*, Calstate University, Fullerton, July 12, 2007.
12. *Semi Annual Senior Computer Science Project Presentations*, **University of La Verne**, FH 206, May 2, 2007.
13. *TechEd 2007 Conference*, the 12th Annual Technology in Education Conference & Exposition, March 26 - 28, 2007, Ontario Convention Center, Ontario, CA.
Attended in two hands-on sessions and two special keynote presentations “*Emerging Learning Environments*” by John Couch and “*From Molecules to Bits: The Digital Renaissance*”.
14. Microsoft Across America TechNet & MSDN Events, *Windows Vista™ operating system and the 2007 Microsoft® Office system*, Los Angeles, CA, February 27, 2007, 1-5 pm.
15. University of **La Verne Faculty Retreat**, The Double Tree Hotel, February 2, 2007.
16. *Southern California Code Camp* (the main focus on .NET technology), Calstate University, Fullerton, January 27-28, 2007. Attended fourth sessions.
17. Part Time Faculty Workshop, **University of La Verne**, 2006/7.

2006

1. Faculty *Research and Professional Activity Day*, **University of La Verne**, November 16, 2008.
2. Half-day Microsoft Event, Get Connected with the .NET Framework 2.0 and Visual Studio® 2005 (and Beyond), Garden Grove, CA September 19, 2006.
3. Bernard Wong, *Windows Presentation Foundation and the Expression Interactive Designer*, Wonderware Company Headquarters, Lake Forest, CA , August 8, 2006.
4. *Academic Advising Training*, University of **La Verne**, CA, July 26, 2006.
5. Scott Stanfield, *The Ultimate Demo: Everything ASP.NET 2.0*, Wonderware Company Headquarters, Lake Forest, CA , July 19, 2006.
6. John Miller, *.NET 3.0 Entity Framework*, SoCal .NET Architecture, Santa Ana, Rancho Santiago Community College District, CA , July 18, 2006.
7. 2th Annual International Conference on Computer Science & Information Systems, Athens Institute for Education and Research, Athens, Greece, 19-21 June 2006
 - o Attended two day sessions
 - o Gave two presentations.
8. TechEd 2006 Conference, Pasadena, CA, March 27, 06.
9. Kevin McNeish, *.NET Masters Lecture Series*, Five .NET Presentations, Los Angeles, CA, March 25, 06.
10. ULV Main Campus, *Main Strategic Planning Retreat*, **La Verne University**, March 15, 2006.
11. Adam Kolawa, CEO and president of Parasoft, *Software Error Prevention*, Calstate University, Fullerton, March 8, 2006.
12. Southern California Code Camp (the main focus on .NET technology), Calstate University, Fullerton, January 21-22, 2006. Attended **eight** sessions.

2005

1. Faculty *Research and Professional Activity Day*, **University of La Verne**, November 8, 2005.
2. *Orange County VB.NET User Group (OCVBUG) meeting*, Carl Franklin and Richard Campbell, .NET Rocks! VS 2005 , Long Beach, November 4, 2005.
3. *OC C# meeting*, Mark Miller, Coding with Extreme Efficiency in Visual Studio .NET , Orange, CA, Oct 19, 2005.
4. *Indigo Road Show*, Orange Coast College, Costa Mesa, CA, August 17, 2005.
5. *SoCal.NET Architecture*, Round table discussion on current architecture issues in organizations today, Santa Ana, CA, July 21, 2005.
6. *SoCal.NET Technical Summit*, Long Beach, CA, May 7, 2005.
7. *The Eighth CSU Regional Symposium on University Teaching*, Pomona, CA, April 2, 2005.

2004 Loma Linda University, California:

1. Data Mining Training for Educators:
2. *Applying Data Mining Techniques Using Enterprise Miner Software*
3. *Predictive Modeling Using Enterprise Miner Software*

Microsoft, California:

1. *Microsoft Academic Days in Silicon Valley*, Mountain View, October 28-31, 04.
2. *Day of Whidbey Conference*, August 07, 2004.
3. *4th Annual Computing Curriculum Workshop*, San Diego, CA, May 23, 2004.

2003 The Orange County IEEE Computer Society:

1. *Coast Open Source Software Technology Symposium on LAMP: Linux, Apache, MySQL, Perl, Python and PHP*, Newport Beach, CA, Oct 18, 2003.

California State University, Fullerton:

1. *Active Learning and Classroom Communication*; Computer Care for Educators.
2. *Advanced Dreamweaver MX; Introduction to Flash MX.*
3. *Getting Started with Blackboard 5; Building a Course Site with Blackboard 5.*
4. *Introduction to Tegrity; Introduction to Microsoft Producer.*
5. *Web Page Development.*

2002 California State Polytechnic University, Pomona:

1. Programming Concepts and Object-Oriented Programming (3 CEU).
2. Java Fundamentals (3 CEU).

University of California, Irvine:

2001 Active Server Pages (1 CEU).

1997 Object Oriented Programming using Java (3 units).
WIN32 Development using Windows NT (3.2 CEU).

1996 Intensive C++ (3.2 CEU), Object Oriented Analysis and Design (2.3 CEU).

1995 Completed the Certificate Program in Intelligent Systems Engineering at UCI, Irvine,
Microsoft Windows Programming using PowerBuilder (3 units).

1994 Object Oriented Analysis and Design (3 units).

1993 Introduction to Neural Networks (3 units), PBX's and Switching Systems, (4 units).

1992 Principles of Expert System Design (3 units), UNIX Network Programming.

INDUSTRIAL EXPERIENCE**Senior Software Engineer - Fujitsu Business Communication Systems, Anaheim, CA**

2000–2001 Worked on the concept of the WEB enabled Call Center using Active Server Pages. Developed a real time Network CMS System in the Client/Server/PBX environment. Developed, coded and tested the Network Configuration, Customization of Configuration, Privileges of Supervisor, Dynamic Routing and ANI features using PowerBuilder 7.0 and SQL2000.

1995–1999 Developed a real time Client/Server ACD IntelliCenter system (Fujitsu's award-winning IntelliCenter management package). Designed from ground up using object oriented design approach; coded and tested a client GUI, database interface to ORACLE and MS SQL database server and message exchange to application server using a PowerBuilder object oriented tool. Developed, coded and tested the Supervisor and Agent Desktops. Deployed the Supervisor and Agent Desktop (16 and 32 bit applications) using Power Builder utilities. Participated in Computer Telephony, Power Builder, CASE tools seminars and Powersoft Conference '98.

- 1997** Developed the Website prototype for the Call Center reports using Data Window plug-in technology; wrote Java application and applets. Presented a proposal to the Fujitsu Business Communication Systems p resident on WEB Technology, WEB Information Center, WEB Call Center Strategy and Java. Recommended a solution to the WEB Call Center .
- 1994-1995** Developed a Client/Server based Call Center system. Developed a server writing a UNIX script, C code and using TCP/IP. Participated in Object Oriented Developers Association meeting series on CASE tools, OO Programming and methods. Designed a system using a Rational Rose/C++ object oriented CASE tool. Participated in Object Oriented Design and Programming in C++ meetings at the University of California , Irvine .
- 1991-1994** Evaluated Client/Server Computer Telephony Integration components: client workstations-Novell Server-Unix Server-PBX. Evaluated Fujitsu Telephony Server, Novel Telephony Server, F9600 PBX driver, features of the F9600 PBX and CTI applications: Phonetastic, Dial by Name, Call Forward and ACD/MIS. Explored problems, recommended solutions and prepared concise technical reports. Reviewed basic and functional designs for client/server applications. Designed, coded the Troubleshooting Expert System for the PBX application. Participated in Computer Network, Next Object, Windows NT, Client/Server Distributed Development conferences and seminars.

Fujitsu Business Communication Systems, Northlake, Illinois

- 1989-91** Designed, coded in C, tested features of the Automatic Call Distribution/Management Information System (ACD/MIS) in the real time environment under UNIX.

Languages: English, Polish, Russian; **Citizenship:** United States

Seta Boghikian-Whitby, Ed.D.

Home Address

379 Spinks Canyon Rd.
Duarte Mesa, CA 91010
Comp. Eng.
(626) 599-2207

Office Address

University of La Verne
Computer Science &
1950 Third Street
La Verne, CA 91750
swhitby@laverne.edu

EDUCATION

- 2003 Ed.D. in Organizational Leadership, **University of La Verne, La Verne, CA.**
Dissertation: "To Take or Not To Take? The Future Of Distance Learning: A Quasi-Experiment Comparison Of The Effectiveness Of Internet-Based Distance Learning Versus Face-To-Face Classroom"
- 1995 – 1999 **Claremont Graduate University, Claremont, CA.**
Completed coursework in Management of Information Systems.
- 1995 M.S. in Management Information Systems, **Claremont Graduate University, Claremont, CA.**
- 1988 MS in Computer Education, **University of La Verne, La Verne, CA.**
- 1985 BS in Computer Science and Computer Engineering, **University of La Verne, La Verne, CA.**
- 1993 Certified in "Novell Education (CNE): NetWare v3.11: System Manager"
- 1993 Certificate, "Novell Education (CNE): NetWare v3.11: Advanced System Manager"
- 1988 Certified in "MC68000 Microprocessor", Motorola
- 1988 Certified in "MC68020 Microprocessor", Motorola

PROFESSIONAL EXPERIENCE

- 2007 - Present Professor of Computer Science and Computer Engineering, Program Chairperson, **University of La Verne, La Verne, CA**
- 2001 - 2007 Associate Professor of Computer Science and Computer Engineering, Program Chairperson, **University of La Verne, La Verne, CA.**
-Founded e-commerce major
-Introduced Microsoft Certified System Engineer (MCSE) Certification
-Introduced Information Science Concentration
- 1988 - 2001 Assistant Professor of Computer Science and Engineering, Program Chairperson
University of La Verne, La Verne, CA
-Performed academic advising
-Taught minimum of 6 courses per year.
-Involved in the governance structure of the University.
-Scheduled courses including hiring qualified adjunct faculty members.

- 1988-1992 Assistant to the Dean, AAIC (American Armenian International College)
University of La Verne, La Verne, CA
-Research and Development: Designed and developed software applications for requesting departments.
-Reports: Generated numerous quarterly Dean's reports.
-Developed: Computerized the students' records for AAIC as well as other departments such as Admissions, Dean's office, and President's office of AAIC.
-Other Projects: Developed other projects for the Human Resources, Purchasing, and Psychology department at the University of La Verne. Wrote programs to generate statistical reports for large surveys.
- 1987-1988 Manager, Academic Computing and Engineering Laboratory, AAIC
University of La Verne, La Verne, CA
-Taught six courses per year.
-Organized and conducted training sessions for the staff and the faculty of AAIC.
- 1984-1987 Assistant to the Chairman, Engineering Department, AAIC
University of La Verne, La Verne, CA
-Taught six courses per year.
-Performed academic advising to 147 students.
-Analyzed and Installed new software application packages.
- 1986 – 2000 System's Analyst, **Soft Language Inc., Van Nuys, CA**
-Installed new software applications for small corporations.
-Trained end users on new applications
-Analyzed existing systems and made proper recommendations
-Developed various new programs to calculate statistical reports

TEACHING EXPERIENCE

Courses taught and *developed*:

GNST 100: First Year Experience
CMPS 100: Introduction to Personal Computers
CMPS 110: Introduction to Computer Science and Computer Engineering
CMPN 220: Digital Logic
CMPN 280: Computer Organization
CMPS 200: Information Technology
CMPS 302: Computers in Society
CMPS 318: Publishing on the Web
CMPS 368: Principles of Networks
CMPS 369: Local Area Networks
CMPS 370: Seminar
CMPS 375: Systems Analysis and Design
CMPS 392: Project Management

CMPS 410: *Management of Information Systems*
 CMPS 490: *Database Management Systems*
 CMPS 471: Internship
 CMPS 499: Senior Project

PROFESSIONAL SERVICE

- 2009 Member of the Board of Editorial Review of Informing Science + Information Technology Education (InSITE).
- 2009 Member of the Editorial Review Board of International Journal of Web Based Learning and Teaching Technologies (IJWLTT).
- 2008 Member of the Editorial Review Board of IGI Global Development Editor publishing company.
- 2007 Member of the Board of Editorial Review of Informing Science + Information Technology Education (InSITE).
- 2006 - Present Collaborated with Business School faculty implementing Enterprise Resource Planning (ERP) system for use in case studies curriculum
- 2006 Co-organized Association of Computing Machinery SIGMIS-CPR Conference 2006 in Pomona, California
- 2004 - Present Co-principal Investigator of Computer Science Engineering and Mathematics (CSEM) – National Science Foundation (NSF) grant
- 2003 Raised the student enrollment in the Computer Science program from 29 students in 1993 to 178 students.
- 1996 Organized the High Tech Expo booth at the Pomona County Fair to recruit prospective students for ULV
- 1988-2003 Developed an automated advising database
- 1997 Analyzed and developed an automated inventory control for the maintenance department at the Claremont Graduate University and the University of La Verne, CA
- 1992 Developed University of La Verne Employee's Roster for Human Resources
- 1988-1992 Computerized students records for AAIC (Before Banner)
- 1988-1992 Generated Dean's student analysis reports

SCHOLARLY CONTRIBUTIONS

- 2009 **Refereed Book Publications**
 Dr. Eugenia M. W. Ng., 2009, "Comparative Blended Learning Practices and Environments", IGI Global Publication, Chapter 5.
- 2008 **Refereed Conference Proceedings**
 Informing Science + Information Technology Education (InSITE), "The Effect of Student Background in Virtual Learning – Longitudinal Study", Varna, Bulgaria
- 2007 **Refereed Journal Publications**

- TECHNOLOGY. KNOWLEDGE . SOCIETY The Technology Conference (CFPEIAE07), “An Instrument to Measure The Adoption and Utilization of ICT in SME in Developing Nations”, Cambridge, England
- 2005 **Refereed Journal Publications**
European and Mediterranean Conference on Information Systems (EMCIS), “The Utilization of ICT in Small and Medium Size Enterprises in Developing Countries Starting in Egypt A Research In Progress Paper”, Egypt
- 2004 **Refereed Conference Proceedings**
Academy of Business Administration (ABA) “Integrating Principles of Good Practices in Internet-Based Distance Education to Measure the Effectiveness of Distance Education”, London.

PRESENTATION AND WORKSHOPS

- 2009 Tech-Ed “The Effect of Student Background on the Learning Outcome in Different Class Format— A Longitudinal Study.” California.
- 2008 Tech-Ed “Critical Success Features of online courses.” California.
- 2007 Tech-Ed “Improve The Utilization Of Information Communication Technology (ICT) In Small and Medium Size Enterprises (SME) In Developing Nations?” Ca.
- 2006 Tech-Ed “e-learning: Is Distance Education for Everyone, Research in Progress?” California.
- 2005 Tech-Ed “e-learning: What do Students Dislike about e-learning?” California.
- 2004 Tech-Ed “A Quasi-Experiment: Impact of Good Teaching Principles in Online and Traditional Classrooms”, California
- 2003 Tech-Ed “To Teach Or Not To Teach? A Quasi-Experiment Comparison of the Effectiveness Good Practices”, California

ACADEMIC HONORS AND AWARDS

- 2003 Valedictorian, Doctorate of Education
- 1984 Valedictorian, Bachelor of Science
- 1984 Graduated as “Magna Cum Laude” and Departmental Honor
- 1984 President’s scholarship recipient
- 1982-84 Dean’s Honor list

PROFESSIONAL AFFILIATIONS

InSITE (Informing Science Institute)
IEEE (Institute of Electrical and Electronics Engineers) Computer Society
ACM (Association of Computing Machinery)
CACM (Communications of Association of Computing Machinery)
AIS (Association of Information Science)
TDWI (The Data Warehousing Institute)

LANGUAGES

Fluent in English, Armenian, and Arabic in the writing and spoken forms, together with a working knowledge of French.

Rosine B. Saghian
1400 Gorgen Ln.
Upland, CA 91784

Tel: (909)982-0353
rsaghian@laverne.edu

Objective

Obtain a challenging position as a Oracle Database Administrator.

Education

MBA with concentration in Information Technology
University of La Verne, La Verne, CA 1999
BS in Computer Science and Engineering
University of La Verne, La Verne, CA 1984

Summary Of Qualifications

- Oracle 9i, 10g, 11g database administration. Oracle Application Server 10g Administration.
- SQL*Plus, PL/SQL, C, C++, Java, HTML, XML, SQL-Loader.
- UNIX Systems, VI, Microsoft Office Suite.
- ITIL V3 Certified.
- Superior communication, presentation, analytical and problem solving skills. Work well with all levels of business.

Professional Experience

University of La Verne, La Verne, CA

Database Administrator 2010 - Present

Responsibilities include data modeling, data administration, database design, performance tuning, backup & recovery, and system security. Plan, schedule, implement and test upgrades, installations and migrations for major applications and databases. Work closely with the business areas to understand the requirements and to write complex SQL queries. Develop cron jobs.

Assistant DBA 2002 – 2010

Assisted in database design, restructuring and maintenance. Administered the databases security. Created Unix Shell scripts to automate database operations. Developed custom tables, PL/SQL packages and functions. Implemented database refresh using full EXPORT/IMPORT. Planned & performed Banner upgrades. Administered ODS, and monitored the nightly refreshes.

Programmer Analyst 1999 – 2002

Provide overall technical support for Viking development application system, and Resource25/ Schedule25 scheduling application systems. Duties include new software development; general navigation training; data integrity; security roles and access; system interfaces; software implementation, upgrades and maintenance; data manipulation and reporting.

Administrative Assistant 1997 – 1999

Assisted in managing the Computer Science & Engineering program. Provided academic advising for the students. Supervised work-study students. Contributed a wide range of clerical support and consulting services for the Computer Science faculty and students.

EM International, Vernon, CA

Office Manager

1985 – 1994

Supervised staff of eight in the administration of Payroll, Sales, Accounting, Billing, Shipping, Purchasing, Customer Service, Mail Order and Data Processing. Assisted in hiring and training office employees. Verified orders, processed changes, generated bills, and rectified problems. Planned and implemented a fully automated inventory system. Bid and negotiated on government contracts. Performed code and procedure review according to government specifications. Conducted Quality Assurance surveys, provided technical assistance to field personnel and planned inspections.

Samuel K. Son

28101 Ridgethorne Court, Rancho Palos Verdes, CA 90275
(562) 982-2209 (office), (310) 347-8082 (cell), samuel.k.son@boeing.com

QUALIFICATIONS

25 years of broad and deep analytical skills, highly motivated team player, process application capabilities, and pro-active in executing Systems Engineering.

EXPERIENCE SUMMARY

Led Avionics & Flight Controls Team in Systems Engineering (SE). Managed C-17 Avionics & Flight Controls projects in a cost and schedule effective manner to satisfy customers. Improved SE processes to achieve the Capability Maturity Model Integration (CMMI) Level 5. Instructed more than 2,000 managers and engineers in the principles and practices of SE in the Boeing C-17 Program and the Moscow Boeing Design Center (MBDC) in Russia. Assessed Systems Engineering Best Practices (SEBP) for the C-17 Program, the C-17 Globemaster III Sustainment Partnership (GSP) Program, the B-1B Program, and the A-160T Unmanned Aerial Vehicle Program.

WORK EXPERIENCE

The Boeing Company, Long Beach, California

Chief Systems Engineer, C-17 GSP Program (2007 to present)

- ◆ Defined the C-17 GSP requirements architecture and integrated system elements within the architecture.
- ◆ Developed SE processes to define support requirements, to influence product design, and to deliver logistics products and services.
- ◆ Accomplished SE infrastructure improvements by developing SE Management Plan (SEMP) and providing SE and Risk, Issue & Opportunity (RIO) Management training.
- ◆ Provided insight into SE implementation, conducted SEBP Self Assessment with program personnel, and developed SE improvement plans.
- ◆ Assessed SEBP Validation for the B-1B Program and SEBP Assist for the A-160T Unmanned Aerial Vehicle Program.

Project Manager/Team Leader, C-17 Systems Engineering (1997 to 2007)

- ◆ Assessed SE activities of the C-17 Producibility Enhancement/ Performance Improvement (PE/PI) and Production Contracts for Contractor Performance Assessment Reporting (CPAR) Review to consistently provide quality, on-time products and services that conform to contractual requirements.
- ◆ Assessed SEBP Self Assessment and supported Program Management Best Practices (PMBP) for the C-17 Program as a SE Subject Matter Expert (SME).
- ◆ Consulted the MBDC personnel in Russia in SE fundamentals and developed the SE Manual for three years.
- ◆ Developed 2-hour SE Overview Training package and instructed more than 1,300 managers and engineers in the principles and practices of SE in the C-17 Program.
- ◆ Managed all the C-17 Avionics and Flight Controls projects to meet the C-17 program goal of 100% compliance with SE Processes with the Boeing common tools.
- ◆ Integrated project scope, schedule, budget, and actual costs, measured work accomplishment to the baseline plan, traced cost and performance, and forecasted future performance requirements in Earned Value Management System (EVMS) as Control Account Manager (CAM).

Team Leader, Propulsion & Systems Analysis, C-17 N/EAT Program (1995 to 1997)

- ◆ Performed propulsion systems analyses in support of performance improvements.
- ◆ Developed the Failure Mode, Effects, and Criticality Analyses (FMECAs) for the C-17 Nacelle, Thrust Reverser Actuation, and Cooling Systems.
- ◆ Performed reliability & maintainability analyses for nacelle acquisition cost and life cycle cost reduction.
- ◆ Managed functional and physical interface requirements between the C-17 Engine and other interfacing systems.

Team Leader, Wing Systems Integration, Boeing 717 Program (1994 to 1995)

- ◆ Coordinated with foreign country partners, MD-Canada and Hyundai Space & Aircraft Company for the B-717 wing design and manufacturing.
- ◆ Managed physical and functional interface requirements for wing development.
- ◆ Developed an Integrated Master Plan & Schedule (IMP/IMS) to coordinate the Fuel, Hydraulic, Electrical, and Environmental Systems.

Systems Engineer, Systems Engineering Analysis, C-17 Program (1985 to 1994)

- ◆ Developed FMECAs for Propulsion, Fuel, Hydraulic, and Landing Gear Systems.
- ◆ Performed reliability tests, qualification tests, nonstandard parts approval request reviews, and Mission Completion Success Probability (MCSP) analyses to support system verification and validation.
- ◆ Evaluated Air Force System Command Form 258, Air Force G081 Data System Form 349, and assigned failures back into the Failure Reporting and Corrective Action System (FRACAS) during C-17 Flight Test and Initial Squadron Operations.

HONORS & CERTIFICATES

- ◆ 2007 Excellence In Teaching Award of University of La Verne based upon student evaluations of 600 faculty members
- ◆ 2006 IDS Long Beach Spirit of Quality Award
- ◆ C-17 Nacelle/Engine Quality Improvement Award in 1996
- ◆ Outstanding Performance on C-17 Reliability Engineering Analysis Award in 1987

EDUCATION

Claremont Graduate University
M.S. & Ph.D. Study in Information Systems and Technology

University of Southern California
M.S. in Systems Engineering and Management

California State University, Long Beach
B.S. in Mechanical Engineering

Bethany Theological Seminary
Ph.D. in Religion

Publications & Presentations

- ◆ The Joint Partnership between Program Management and Systems Engineering on Support System Program, San Diego, California, October 23, 2007

- ◆ Understanding the Joint Partnership between Program Management and Systems Engineering, San Diego, California, October 25, 2006
- ◆ Understanding the Joint Partnership between Six Sigma and Systems Engineering, Long Beach, California, June 20, 2006
- ◆ Published *Cosmos Bloomed From Chaos*, April 30, 2002, Seoul, Korea
- ◆ Published *The Universe and Existentialism*, April 20, 2009, Seoul, Korea

EXTRACURRICULAR ACTIVITIES

- ◆ Adjunct Professor (2001 - present), University of La Verne, taught undergraduate level courses; Systems Engineering, Systems Analysis & Design, and Project Management
- ◆ Korean-American Aerospace Scientists Association (KASA), President, 1997 – 2005
- ◆ National Defense Industrial Association (NDIA), Member
- ◆ International Council on Systems Engineering (INCOSE), Member

Nick Van Der Wende289 E. Mariposa St.
Altadena Ca, 91001

Phone (909)560-4618

Email:

Nick.B.VanDerWende@jpl.nasa.gov

Professional Experience	<p>2003 – Present Jet Propulsion Laboratories –NASA, Pasadena, CA Lead Information Technologist General JPL Experience: Section 376 IT and Process Lead Project Manager small to medium size projects, including general internal consulting Division/Section representation to the OCIO office and Internal Business Systems divisions</p> <p>IT Project Management 2009 -2010 Division representative for new Kronos timekeeping application rollout Develop Division IT and Process improvement proposals Coordinate user system and reporting requirements Coordinate with Oracle Functional Experts in Oracle WIP and Project Accounting 2008-2010 Lead team in the integration of initial implementation of the Infor eAM module at JPL Developed requirements and future business requirements with Group manager and consultants Developed high level architecture for integration to the Oracle ERP system Assisted in the development of new business processes Lead for Infor eAM enhancements and integration changes 2007-2008 Lead team of functional experts, business analysts, programmers and consultants for Oracle Discrete Manufacturing organization consolidation Developed and managed requirements, schedule, resources and process improvements Reported to and interfaced with upper management across multiple directorates</p> <p>Business Integration 2010 Flight wire and connector 2009-2011 Cryogenics Business: Delivery and distribution of Bulk tanks, cylinders and dewars Developed process integration with new supplier and assisted with the closeout of the old supplier Analyzed and developed new business process for integration into Oracle eAM Module Managed full physical inventory Integrated business process with current JPL delivery system Lead webpage development, Training activities, and supported reporting development 2006-2007 Inventory Integration: 4 separate inventory models and commodity groups Mapped current and developed new inventory business processes for increased efficiency Managed full physical inventory to improve inventory accuracy Facilitated cross training of employees Lead development of web store front with interface to the Oracle Inventory Module Reduced overhead costs by 60% Developed financial and inventory management reports</p> <p>IT Project Functional Representative & Residual Hardware Management 2003-2006 JPL Oracle Discrete Manufacturing Installation iPICS Implementation Team Specified Oracle Inventory module setup requirements to meet JPL business processes and participated in business process improvement initiatives Developed and lead end to end Oracle Inventory module training Lead Oracle Inventory integrated Oracle Inventory Module website application Including: web transactions, real time reporting, friendly front end, shopping cart ability Maintained detail project schedule and plans for developers and consultants Developed design and Discover reporting requirements Lead integrated scanner solution for Oracle Inventory and Fixed Asset modules</p>
-------------------------	---

	<p>Developed specifications for Oracle Inventory Module Scanning solution Lead testing, integration and implementation 2003-2006 Residual Hardware Management Successfully closed out of project inventory from MER, LTPMF, SIRTf and SPITZER Developed web based shipper for MER and SPITZER hardware closeout from the Kennedy Space Center back to JPL as well as assisting with logistics Assist in managing ~ \$250 Million dollars of inventory including flight hardware Delivered millions of dollars of hardware to projects for reutilization Lab wide process and requirement development and implementation for residual hardware in the areas of finance and material management Developed Web applications for inventory management and inventory integration</p>
Employment Experience	<p>2002 – 2003 Jet Propulsion Laboratory –NASA Pasadena, CA Internship Light Hardware Logistics Program Process Engineering/Workflow Design Customer Service Lead Data Analysis Designed Pyrotechnic Online Inventory Management System Manage \$140 million Inventory of Flight/Non-Flight Hardware</p>
Education	<p>2003 University of La Verne (ULV) La Verne, CA M.B.A. (Emph. Information Technology) 2001 University of La Verne (ULV) La Verne, CA B.S. Computer Science (Emph. Programming) Summa Cum Laude, Honors Society, Honors Program Graduate</p>
Teaching	<p>University of La Verne (Adjunct Professor) Fall 2010 Information Technology CMPS/BUS 200 course, 2 units</p>
Professional Presentation	<p>"Web Based Oracle Inventory Middleware & Application for Increased Efficiency & Customer Usability ", Oracle Independent Users Group (IOUG) 2007, white paper and presentation</p>
Skills	<p>Oracle ERP Application Training: Inventory, BOM, WIP, Engineering eAM, and Quality Modules. Exposure to Acquisitions, Project Accounting, Fixed Assets, Property Manager, and Human Resources</p> <p>Technical Experience with: Discoverer 4i, SQL queries, Oracle MetaLink, JPL Data Extractor, JPL NBS ERP Toolset, Infor eAM Module, Microsoft Office (PPT, Word, Access, Excel)</p>

9.8. Appendix H: Recent Faculty Presentations and Grants

Jozef Goetz, Ph.D.

Associate Professor of Computer Science

Mathematics, Physics, and Computer Science Department

RECENT PUBLICATIONS

1. *Using Petri Nets to Introduce Multithreading Concepts in C#*, Strategic Advantage of Computing Information Systems in Enterprise Management, Athens Institute for Education and Research, ISBN: 978-960-6672-93-4, 2010, 45-60.
2. *WEBCRM Application Generator, Proceedings of the 2007 International Conference on Internet Computing*, World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'07), Las Vegas, USA, ISBN: 1-60132-044-2, **2007**, pp 29-35.
3. *E-Commerce Technology Comparison: ASP.NET vs. Ajax*, Current Computing Developments in E-Commerce, Security, HCI, DB, Collaborative and Cooperative Systems, published by ATINER, ISBN: 960-6672-07-7, 2006, 471- 488.
4. *E-Learning: Personalization and Collaboration Solution*, Current Computing Developments in E-Commerce, Security, HCI, DB, Collaborative and Cooperative Systems, published by ATINER, ISBN: 960-6672-07-7, 2006, 303-320.
5. *Intelligent On-line Advising with Expert System Shell*, in Reeves,T., Yamashita, S.,(Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, AACE , October 13-17, 2006, Honolulu, Hawaii, USA, pp 687-694.
6. *Using Petri Nets to Introduce Deadlock Concepts*, *Computer Science and Information Systems*, published by ATINER, ISBN: 960-88672-3-1, 2005, 351-366.
7. *Validating E-Commerce Solutions*, *Computer Science and Information Systems*, published by ATINER, ISBN: 960-88672-3-1, 2005, 221- 236.
8. *Online Examinations with Expert System Shells*, in Richards, G. (Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education,. AACE , Chesapeake, Vancouver BC, Canada, Oct 24-28, 2005, 844-849.
9. *Developing and validating XML Web services within distributed and heterogeneous environment*, *Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003*, published by Wroclaw University of Technology Press. September 2003, 108-115.

10. *Evaluation On 3G wireless device application running under J2ME versus BREW, Proc. of the 24th International Scientific School on Information Systems Applications and Technology ISAT 2003*, September 2003, published by Wroclaw University of Technology Press. September 2003, 146-153.

RECENT PRESENTATIONS

1. Petri Nets as a Tool for Teaching Computer Science Concepts, *Faculty Lecture Series, University of La Verne, presentation schedule day: January 10, 2011.*
2. Using Petri Nets to Introduce Multithreading Concepts in C#, *5th International Conference on Computer Science & Information Systems*, Athens, Greece 2009.
3. WEBCRM Application Generator, *World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'07)*, Las Vegas, USA 2007.
4. E-Commerce Technology Comparison: ASP.NET vs. Ajax, *2nd International Conference on Computer Science & Information Systems*, Athens, Greece 2006.
5. E-Learning: Personalization and Collaboration Solution, *2nd International Conference on Computer Science & Information Systems*, Athens, Greece 2006.
6. Using Petri Nets to Introduce Deadlock Concepts, *International Conference on Computer Science & Information Systems*, Greece 2005.
7. Validating E-Commerce Solutions, *International Conference on Computer Science & Information Systems*, Greece 2005.
8. Using Petri Nets to Introduce Deadlock Concept, *University of La Verne*, 2005.

CO-GRANTS

Complex Dynamical Systems, *Fletcher Jones Grant*, 2010-2013.

RECENT PAPER REVIEWS

Service-learning and Active-learning: an Experience-based Comparison, *for World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'10)*, 2010.

Simulation and Performance Analysis of Distributed Internet Systems Using TCPN, by Slawomir Samolej and Tomasz Rak, *for International Journal of Computing and Informatics, Informatica 29*, 2009.

Channel Access Comparison of IEEE 802.11-2007 and IEEE 802.15.4-2006, *for World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'09)*, 2009.

A New Approach to Overcoming the Cold-Start Problem Experienced by Domain-Novice Researchers, *for World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'09)*, 2009.

Extreme Learning: A Self-Directed, Hands-On Educational Method For Graduate Courses, *for World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'09)*, 2009.

Performance Analysis of Interactive Internet Systems for a Class of Systems with Dynamically Changing Offers, by Tomasz Rak and Jan Werewka, *for IFIP'09 Central and Eastern European Conference on Software Engineering Technique*, 2009.

Applying of Smart Technologies: Evaluation of Effectiveness, by Zane Bicevska, *for IFIP'09 Central and Eastern European Conference on Software Engineering Technique*, 2009.

BuddyCast PopCoins Machine (\$161,000 total project budget), Reviewing a Maryland University partnership research project proposal for the *Maryland Industrial Partnerships Program*, 2008.

On the Design and Implementation of a System Integrating Outlook Mobile Services with the Short Message Service, *for World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'08)*, 2008.

A mathematical Formula for the Search Engine Ranking Efficiency Evaluation Tool S.E.R.E.E.T, by *Moiez Tapia, Miroslav Kubat and Wade S. Alhalabi*, *for World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'08)*, 2008.

HEAPINGS: From Concept to Simulations, *for World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'08)*, 2008.

Distributed Internet Systems Modeling Using TCPNs, by Tomasz Rak and Slawomir Samolej, *for the International Conference on Principles of Information Technology and Applications (PITA'08), 2008.*

The Impact of Market, Political/Regulatory and Infrastructural Factors on the Level of Readiness and the Use of ICT by the Individuals, by Mario Jadrić, Željko Garača, Marko Hell, *for the International Conference on Principles of Information Technology and Applications (PITA'08), 2008.*

Performance of Index trees on Flash Memory, *for the International Conference on Principles of Information Technology and Applications (PITA'07), 2007.*

Federated Method Invocation with Exertions, *for the International Conference on Principles of Information Technology and Applications (PITA'07), 2007.*

Monitoring services in Service Oriented Architecture, *for the International Conference on Principles of Information Technology and Applications (PITA'07), 2007.*

Network Security Framework, *for the International Conference on Principles of Information Technology and Applications (PITA'06), 2006.*

Reducing the Overhead Cost in Fixed & Low Mobility AODV Based MANETs, *for the International Conference on Principles of Information Technology and Applications (PITA'06), 2006.*

Seta Boghikian-Whitby, Ed.D.

Professor of Computer Science

Mathematics, Physics, and Computer Science Department

BOOK CHAPTERS

“Comparative Blended Learning Practices and Environments”, in Dr. Eugenia M. W. Ng., ed., IGI Global Publication (2009).

“An Instrument to Measure The Adoption and Utilization of ICT in SME in Developing Nations”, in TECHNOLOGY. KNOWLEDGE. SOCIETY The Technology Conference (CFPEIAE07), Cambridge, England (2007).

PUBLICATIONS

“A Longitudinal Comparative Study of Student Perceptions in Online Education”, Interdisciplinary Journal of e-Learning and Learning Objects (IJELLO), Volume 6, (2010)

“The Utilization of ICT in Small and Medium Size Enterprises in Developing Countries Starting in Egypt A Research In Progress Paper,” European and Mediterranean Conference on Information Systems (EMCIS), Egypt (2005)

CONFERENCE PROCEEDINGS

“A Longitudinal Comparative Study of Student Perceptions in Online Education,” Informing Science + Information Technology Education (InSITE), Casino, Italy (2010)

“The Effect of Student Background in Virtual Learning – Longitudinal Study,” *Informing Science + Information Technology Education (InSITE)*, Varna, Bulgaria (2008)

“Integrating Principles of Good Practices in Internet-Based Distance Education to Measure the Effectiveness of Distance Education”, *Academy of Business Administration (ABA)* London (2004).

PRESENTATIONS

2009 Tech-Ed “The Effect of Student Background on the Learning Outcome in Different Class Format— A Longitudinal Study.” California.

2008 Tech-Ed “Critical Success Features of online courses.” California.

2007 Tech-Ed “Improve The Utilization Of Information Communication Technology (ICT) In Small and Medium Size Enterprises (SME) In Developing Nations?” California.

2006 Tech-Ed “e-learning: Is Distance Education for Everyone, Research in Progress?” California.

2005 Tech-Ed “e-learning: What do Students Dislike about e-learning?” California.

2004 Tech-Ed “A Quasi-Experiment: Impact of Good Teaching Principles in Online and Traditional Classrooms”, California

2003 Tech-Ed “To Teach Or Not To Teach? A Quasi-Experiment Comparison of the Effectiveness Good Practices”, California

GRANTS

2009 – 2014, National Science Foundation: Robert Noyce Teacher Scholarship Program, Recruiting, Preparing and Retaining Diverse Science and Mathematics Teachers: The La Verne Noyce Teacher Scholars Program \$900K, (C. Brousard, P.I.; Y. Danshbod, V. Preisler, M. Madhuri, D. Nasmyth and H. Good, co-P).The Computer Science program faculty participated in the implementation of the program.

NSP – CSEMS grant for \$400,000 to fund scholarships for students in mathematics and computer science, 2004 – 2008 (extended to 2008 – 2009, and again to 2009 – 2010); Xiaoyan Liu, P.I.; Michael Frantz, Seta Whitby, co-P.I.'s.

9.9. Appendix I: Internship Records 2005 - 2011

Appendix F represents a list of the students signed up for Internship, the term they signed for, the organization they worked at with company address, the number of hours they worked, an indication if the supervisor filled out an evaluation form at the end of the internship, a hard copy of the student's journal, their final report, and the faculty member who supervised the student.

Internship Records from 2005 - 2011									
Ray Ahmandia (RA), Jozef Goetz (JG) Seta Whitby (SW)									
#	Student's Name	Term	Firm Name	Address	Sup Eval	No. of Hours	Journal	Report	Faculty
1	B., T.	Fall 2007	OIT department at the Univ. of La Verne	Joanne Ashcroft University Of La Verne 1950 Third Street La Verne, CA 91750	Yes	8 Weeks * 16 hrs = 128	Yes	Yes	RA
2	B., P.	Sp 2008	Office of Information Technology	1950 3 rd street La Verne, CA 91750 (909) 593-3511 X 4130	Yes	15 weeks * 20 h = 300			SW
3	C., E.	Sp 2006	Furniture Central	http://www.furniturecentral.com/ (909)948-1450	No	40h	Yes	Yes	JG
4	F., B.	Fall 2008	U.S. Army	Jose E. Capo-Aponte U.S. Army Aero-medical Research Lab	Yes	50 hours	Yes	Yes	RA
5	F., J.	Sp 2009	Chuck E. Cheese	17069 Valley Blvd.- Ste. D Fontana,CA92335	Yes	15 weeks * 8 h = 120 h	Yes	Yes	JG
6	G., G.	Spring 2008	Center for Teaching & Learning	1950 3 rd street La Verne, CA 91750 (909) 593-3511 X 4069	Yes	13 weeks * 10 h = 130 h			SW
7	H., M.	Sp 2009	Independent Community Resources Inc	319 N. San Dimas Ave Unit B San Dimas, CA 91773	Yes	6 weeks * 24 h = 144h	Yes	Yes	JG

Internship Records from 2005 - 2011 Ray Ahmandia (RA), Jozef Goetz (JG) Seta Whitby (SW)									
#	Student's Name	Term	Firm Name	Address	Sup Eval	No. of Hours	Journal	Report	Fclty
				909-599-3184 Ext 230					
8	H., T.	Sp 2011							SW
9	I., O.	Sp 2011	Union Bank	1980 Saturn St Monterey Park, CA	Yes	12 weeks * 8 h = 96 h	Yes	Yes	SW
10	M., C.	Sp 2008	Office of Information Technology	1950 3 rd street La Verne, CA 91750 (909) 593-3511 X 4130	Yes	15 weeks * 9 h = 135			SW
11	O., A.	Sp 2009	Children are our Future	19110 Merion Dr. Northridge, CA 91326 (818) 363-7154	No	15 weeks * 3 h = 45 h			SW
12	P., J.	Jan-2011	Surado CRM solution	Paul Nguyen Research Park 588 Technology Court Suite 200. Riverside, CA. 92507	Yes	40 h.	Yes	Yes	RA
13	P., C.	Sp 2006	Hollis Computer Corporation	Hollis Computer Corp. Rancho Cucamonga, CA 91730 (909) 483-0042	Yes	15 weeks * 40 h = 600 h	Yes	Yes	JG
14	P., V.	Fall 2007	Symbolic Action	11601 Wilshire Blvd. # 750 Los Angeles, CA 90025	No	15 weeks * 20 h = 300			SW
15	R., M.	Fall 2008	Future Concepts	675 West Terrace Dr., La Verne, 91750 (909) 593-6705 X 2047		40 hours			SW

Internship Records from 2005 - 2011 Ray Ahmandia (RA), Jozef Goetz (JG) Seta Whitby (SW)									
#	Student's Name	Term	Firm Name	Address	Sup Eval	No. of Hours	Journal	Report	Fcty
16	R., J.	Fall 2009	Northrop Grumman	1111 W. 3rd Street Azusa, CA 91702 (626) 812-1000	Yes	10 weeks * 40 h = 400h	Yes	Yes	JG
17	R., R.	Jan 2011							SW
18	S., M.	Jan 2011							SW
19	S., E.	Sp 2008	Office of Information Technology	1950 3 rd street La Verne, CA 91750 (909) 593-3511 X 4130		15 weeks * 20 h = 300			SW
20	S., S.	Fall 2007	Ternica / ITG	9600 Center Aver Suite 110 Rancho Cucamonga, CA 91730 (909) 985-0405	Yes	15 weeks * 15 h = 225			SW

9.10. Appendix J: Internship Forms

Below are samples of the Internship Cover form, Internship Sign up form, Internship Supervisor Evaluation form,



COMPUTER SCIENCE AND COMPUTER ENGINEERING PROGRAM

Dr. Seta Whitby, Professor and Program Chairperson
 University of La Verne
 1950 3rd Street
 La Verne, CA 91750
 909-593-3511, ext. 4572
 swhitby@laverne.edu

Internship Cover Form Contact Information	
Internship Position	
Company Name:	
Phone:	
Address:	
City:	
Contact Person:	
Supervisor for Internship:	
Company Description	
Brief company description:	
Skills and Requirements	
Days and hours intern can work: <input type="checkbox"/> Mons. <input type="checkbox"/> Weds. <input type="checkbox"/> Thurs. <input type="checkbox"/> Fri. <input type="checkbox"/> Sat.	
Hours: _____	
Length of Internship: _____	
Skills needed by the intern: <input type="checkbox"/> C++ <input type="checkbox"/> Java <input type="checkbox"/> Other _____	
What type of training will be required for the position:	
Number of intern positions available: _____	
Is it a paid or unpaid position: <input type="checkbox"/> Paid <input type="checkbox"/> Unpaid	
Likelihood of future employment: <input type="checkbox"/> VeryHigh <input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> VeryLow	



COMPUTER SCIENCE AND COMPUTER ENGINEERING PROGRAM

Dr. Seta Whitby, Professor and Program Chairperson
University of La Verne
1950 3rd Street
La Verne, CA 91750
909-593-3511, ext. 4572
swhitby@laverne.edu

University of La Verne

Internship Sign up Form

Please fill out the following form and either send it directly to my address or put it in a sealed envelope and give it to the student. Your Cooperation is greatly appreciated.

- ❖ Company name _____
- ❖ Company Address _____
- ❖ Supervisor's Name _____
- ❖ Supervisor's Phone Number _____
- ❖ Supervisor's e-mail Address _____
- ❖ Student name _____
- ❖ Student's Phone number _____
- ❖ Student's e-mail address _____
- ❖ Average number of hours work per week _____
- ❖ Student job title _____
- ❖ Job Description _____

Student's Signature and date

Supervisor's Signature and date

Program Chair's approval signature and Date



COMPUTER SCIENCE AND COMPUTER ENGINEERING PROGRAM

Dr. Seta Whitby, Professor and Program Chairperson
University of La Verne
1950 3rd Street
La Verne, CA 91750
909-593-3511, ext. 4572
swhitby@laverne.edu

University of La Verne

Internship Supervisor Evaluation Form

Please fill out the following form and either send it directly to my address or put it in a sealed envelope and give it to the student. Your Cooperation is greatly appreciated.

1. Company name _____
2. Your name _____
3. Student name _____
4. Student job title _____
5. Average number of hours worked per week _____
6. Length of time in the current job assignment _____
7. Please describe your overall assessment of this student's job performance _____
8. How would you rate this student's job performance?
9. Outstanding Good Average Fair Poor
10. In comparison with other internship students whom you have known, how would you rate this student?
11. Outstanding Good Average Fair Poor
12. To what degree do you believe this student has been prepared by the University of La Verne, in the area of Computer Science, to perform the duties required by their position? Please explain.

Supervisor's Signature _____

9.11. Appendix K: Sample of Comprehensive Exam

University of La Verne

Department of Computer Science and Engineering

Spring 2010 , Exit Exam

Your Name..... ,

LastFirst Mid Init.Signature

Your ULV ID Number.....

Today's Date

Degree concentration: Engineering[] Information Science [], Internet Programming []

Software []

Data Structures:
Discrete Math:
Comp. Organizations
Database
Compiler Design

Data Structure and Programming

1. Given the following tree. Show the out put of each of the following algorithms

7

^Inorder traversal.....

10 9 Preorder traversal

/\\Postorder traversal.....

515 11

/ \

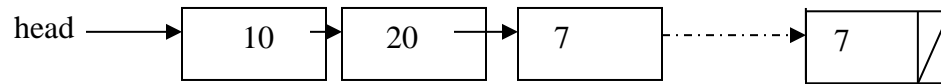
38

2. Evaluate the following expressions:

a. $*+23*5-62$

b. $352+3-*$

3. Given the following linked list



and declarations:

```
struct node { int info; node* next }
```

Write program segments to do the following

<p>a. Delete the last node</p>	<p>b. Insert 100 before the node whose info is 50</p>
--------------------------------	---

4. Trace the following recursive function and show what is printed.

```
void f( int n)
```

```
{ Calling statement: f( 5 );
```

```
if( n >= 2 )
```

```

{
f( n - 1 );
cout<< n;
f( n-2);
}
}

```

Compiler Design

6. True or False(circle your answers)

$a(b + a)^2$ true/false

$a(ba)^2c(ab)^2a$ true/false

$111100e11*01*0$ true/false

$(a*b)^2a^2 = a^2(ba^2)^2$ true/false

$a(aa)^2(\lambda+a)b + b = a^2b$ true/false

7. What is the language of this CFG?

$\langle S \rangle \rightarrow a\langle A \rangle$

$\langle A \rangle \rightarrow a\langle A \rangle | b\langle B \rangle$

$\langle B \rangle \rightarrow b\langle B \rangle | \lambda$

8. Find a Context Free Grammar for the following language

$L = \{ a^m b^n c^p \mid p = 2m + n, m = 0, 1, 2, \dots, n = 1, 2, 3, \dots \}$

Discrete Mathematics

9. Find the big-oh estimates of the following

i. $f(n) = (n+2)^3(n-1)^2 + (2n+3)^4$

ii.

```
for( int i=1; i< n ; ++i)
{
for( int j=1; j<= m; ++j)
cout<<i+j;
}
```

iii. $(n+1)^6 \log(n^3+2) + (n-1)(2n+1)(n+3)^3/4$

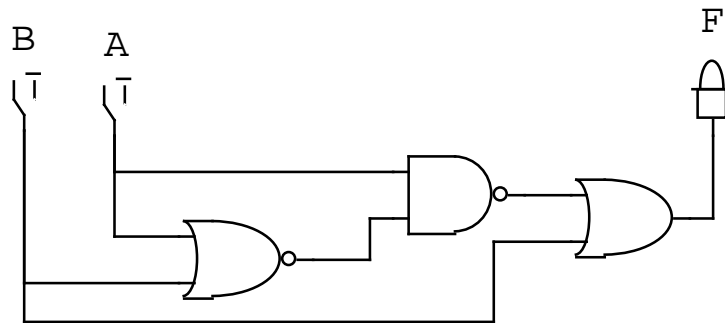
10. Solve the following recurrence relation problem

$$a_n + 4a_{n-1} + 4a_{n-2} = 0; a_0=0, a_1=1$$

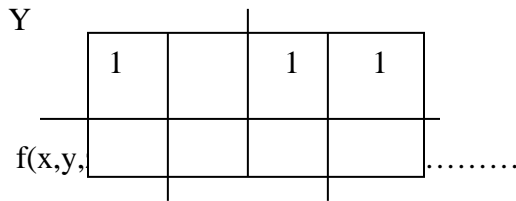
11. Suppose that 14 students get an A on the first exam, and 18 get an A on the second exam . If 22 students received an A on either the first exam or the second exam, how many students received an A on both exams?

Computer Organization

12. Redraw a circuit for the simplest form of function f



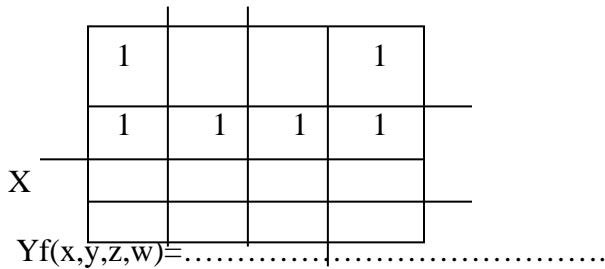
12. Write a the simplest form of function f that represents each of the following K- maps



X

Z

Z



W

Database

13. Give the following database tables.

STUDENT(ID, NAME, AGE) ;CLASS(NAME, SUBJECT);

Explain what each query is doing:

i. SELECTNAME
 FROMSTUDENT

 WHEREAGE IN (SELECTMAX(AGE)

 FROM STUDENT);

.....
.....

ii. SELECTAGE
 FROMSTUDENT, CLASS

 WHERE NAME IN (SELECTNAME

 FROMCLASS

 WHERE SUBJECT ="Math";

.....
.....

iii. Write queries for the following
 a. Display the name of all teenagerb. Whose ID number is 1234
 students

That's all, please turn in your papers. Thank you

9.12. Appendix L: Titles and Abstracts of Recent Senior Projects

Fall 2009

A., N.: INFORMATION SCIENCE

– Purchase Order Form

Abstract: The purpose of this project is to eliminate the trouble of having to file purchase orders and work orders into desk drawers or losing paperwork in all, it contains office work order numbers, purchase order numbers, dates, vendor information, and note fields.. When the process of a purchase is to fill out manual paperwork and file it all in separate paperwork documentation, the misplacement of them is too easy and it also becomes difficult to keep track of each purchase. To accomplish the objective the following methodology was used: Access 2007. Using the Access 2007 style, creating a form that entails everything needed to keep track of one order from start to finish was made much easier. Using this form, ordering products from a complete computer to a simple thumb drive will be much easier to keep track of than before. The project was successful for the reason being that it gets rid of the clutter of paperwork for each product ordered and training will not be a hassle.

H., M.: INTERNET PROGRAMMING

– Noyce Scholarship Tracking System

Abstract: The purpose of the project is to design a database driven web application in support of the Robert NOYCE Teacher Scholarship Program. The Scholarship is provided by the University of La Verne. ULV will host this web application on their servers. The website can be updated and maintained by the authorized faculty and staff at ULV. After registering online, students will be able to login to the system, apply for the scholarship, and keep track of all requirements they still need to fulfill. To accomplish this goal, the following tools and components were used: CS4 Adobe Dreamweaver, WAMP5 (Windows, Apache, MySQL, PHP) server, and PHP My Admin. The web application was tested successfully in the following browsers: Explorer 7, Mozilla 3, Google Chrome 3, and Safari 4.

M., C. E.: INFORMATION SCIENCE

– CPA Recruitment Application

Abstract: The Sororities on the University of La Verne campus engage in a yearly recruitment effort in order to strengthen the numbers of their respective organizations. For years it has been a paper application process. This project aimed to change that by creating an online version of the same form. Thus improving the information process and saving paper.

Spring 2010

P., B.: INFORMATION SCIENCE

– College Reading and Learning Association Database System

Abstract: The Learning Enhancement Center (LEC) at the University of La Verne offers free tutoring services and technical support to students in every program offered at this institution. The department employs three full-time staff members as well as 15 student workers and over 20 student and adjunct faculty as tutors each semester. The LEC works with the College Reading and Learning Association (CRLA) to award certificates of achievement to qualified student tutors. The purpose of the project was to develop a system that will store all CRLA related tutor data accurately and securely. The database system shall provide an easily readable report on tutor's training and tutoring hours so the LEC staff will have a more efficient process for awarding CRLA certifications to student tutors.

Fall 2010

M., L.: INFORMATION SCIENCE CONCENTRATION

– Enterprise Telecommunications Upgrade: A Case Study

Abstract: The purpose of this project is to show how a telephone system upgrade was decided upon and implemented while also setting a new standard for the school district. It involves a conversion from analog trunks to digital lines and a move to Voice over IP telephone systems. This project will demonstrate the manner in which phone problems were corrected and show how 389 users were trained on the new system.

R., J.: Internet Programming Concentration

– The Hollywood Parent Website Using A Content Management System

Abstract: The purpose of the project was to design and create a website for a non-profit organization that focuses on helping individuals with their endeavors and the various problems they may face in the entertainment industry. A content management system was implemented in order to allow the client to easily create and manage content. In addition to providing users with information and advice on how to handle themselves in the entertainment industry, the website will provide the users a means of communication with others who are involved in the entertainment industry. The website was created using Joomla!, Notepad++, and GIMP. The languages used to create this website were XHTML, CSS, PHP, and JavaScript.

9.13. Appendix M: Senior Project Presentation Evaluation Form



COMPUTER SCIENCE AND COMPUTER ENGINEERING PROGRAM

Knowledge – Service - Vision

Senior Project Presentation Evaluation

Name of Presenter: _____ Date: _____

Senior Project Title: _____

Please circle only one of the following: 1 = poor, 2 = Fair, 3 = Good, 4 = Excellent, N/A = Not applicable	Evaluation				
	1	2	3	4	N/A
1. Introduction (self introduction and source of the idea)	1	2	3	4	N/A
2. The Abstract (brief and comprehensive summary of the project)	1	2	3	4	N/A
3. Purpose statement of the project or research question	1	2	3	4	N/A
4. Research and reference literature review about project	1	2	3	4	N/A
5. Conceptualization and rationale of the project	1	2	3	4	N/A
6. Description of the method and procedures used	1	2	3	4	N/A
7. Presentation of system analysis and design	1	2	3	4	N/A
8. Project demonstration	1	2	3	4	N/A
9. Discussion and implication of the project	1	2	3	4	N/A
10. Organization of the presentation (notes, sequence, pacing)	1	2	3	4	N/A
11. Relation to audience (Quality of the spoken voice, eye contact)	1	2	3	4	N/A
12. Professional quality of audio visual material	1	2	3	4	N/A
13. Response to questions	1	2	3	4	N/A
14. Professional attire	1	2	3	4	N/A
Comments:					

9.14. Appendix N: Senior Exit Survey Form



COMPUTER SCIENCE AND COMPUTER ENGINEERING PROGRAM
Knowledge – Service - Vision

Senior Exit Questionnaire

1. Date Completed: _____
2. Expected semester of graduation: _____
3. Gender: _____
4. Are you CAPA student? Yes / No
5. Number of years at ULV? _____
6. Started ULV as: Freshman Transfer
7. Plans to continue education (circle your answers):
 - a. No plan at this time
 - b. Currently working and no plan for a graduate degree
 - c. Have been accepted into a graduate program
 - d. Definite plan to go to graduate school
8. Would you recommend this program to others? Yes / No
 Comments: _____
9. Are you currently working in a job that is related to your field? Yes / No

10. Instructions: Please indicate below the degree to which you are satisfied with different aspects of the Computers science program

	Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory	Not Applicable
a. Faculty respect for students					
b. Faculty availability					
c. Advisement					
d. Variety of courses					
e. Quality of the program					
f. Quality of instructions					
g. Scheduling of courses					
h. Hands on experience					
i. Class size					
j. Class environments					
k. Preparation for career					
l. Developing problem solving skills					
m. Developing self confidence					
n. Met the goals I came to achieve					
o. My accomplishments in this program					
p. Program use of feedback from students					

11. What do you consider to be the challenges of the computer science program?

12. What do you consider to be the strength of computer science program?

9.15. Appendix O: Computer Science Alumni Letter & Survey Form

Below is a sample of the mail merge letter and survey sent to 66 Alumni.

Dear «First_Name»:

We hope that you are in good health and are reaping the rewards of your education. Some exciting events are occurring for the Computer Science and Computer Engineering Program. We are in the process of conducting a self-study of the computer science programs as part of the regular program review cycle with an eye towards possible ABET accreditation in the near future.

The self-study is intended to identify strengths and challenges of the program, as well as opportunities for expansion and improvement. Part of the self-study process involves getting feedback from alumni concerning their experiences before and after graduation, current positions in the field, and how well the university prepared them for the work force and for graduate studies.

Enclosed you will find a survey, self-addressed stamped envelope to return the survey. The survey will take about 10 minutes of your time to complete. Please note that this survey is voluntary, strictly confidential, and is for research purposes only. Your name will not be connected to your responses. You may skip questions and you may discontinue at any point. Regardless, please do send it in.

Thank you again for taking the time to be part of this exciting process for our program!

Sincerely,

Seta Whitby, Ed.D.
Professor and Program Chairperson
Computer Science and Computer Engineering Program
University of La Verne
1950 3rd street
La Verne, CA 91750
(909) 593-3511 X 4572
swhitby@laverne.edu



COMPUTER SCIENCE AND COMPUTER ENGINEERING

Dr. Seta Whitby, Professor and Program Chairperson
University of La Verne
1950 3rd Street
La Verne, CA 91750
909-593-3511, ext. 4572
swhitby@laverne.edu

University of La Verne

Alumni Survey

Please tell us about yourself:

1. Which school or college did you attend?
 - College of Arts and Sciences
 - College of Business & Global Studies
2. Which campus/center did you attend?
 - Central Campus; La Verne
 - Central Campus; CAPA (Campus Accelerated Program for Adults)
3. Which of the following was your concentration?
 - Engineering
 - Information Science
 - Internet Programming
 - Software
4. Did you have a minor?
 - No.
 - Yes, please specify: _____
5. What year did you graduate from ULV?
 - 19__ __
 - 20__ __
6. What was your status upon entry to ULV?
 - Freshman
 - Transfer
7. What is your gender?
 - Male
 - Female
8. What is your ethnic background?
 - Caucasian
 - African American
 - Asian
 - Hispanic
 - Other:
Specify _____

Further Education and Employment after ULV

9. Did you pursue further education after attending ULV?
- Yes
 - No (go to question 17)
10. Did you attend graduate/professional school after attending ULV?
- Yes
 - No
11. When did you attend?
- Within 6 months after graduating from ULV?
 - More than 6 months?
 - But less than a year after graduating from ULV?
 - More than a year?
 - But less than 2 years after graduating from ULV?
 - More than 2 years?
 - But less than 3 years after graduating from ULV?
 - More than 3 years?
 - After graduating from ULV?
12. Please specify the name of the degree or certificate program:
- _____
13. Please specify the name of the School or Institution:
- _____
14. How well did the education you received at ULV prepare you for graduate/professional school?
- Poor preparation
 - Fair preparation
 - Good preparation
 - Excellent preparation
 - Not applicable
15. How well were you prepared for graduate/professional school compared to your peers from other universities?
- Less prepared than most
 - Equally prepared
 - Better prepared than most
 - No basis for comparison
 - Not applicable

16. What is the highest degree that you have obtained?
- Bachelor's Degree
 - Master's Degree
 - Doctoral Degree
17. Are you currently employed in a job related to your major?
- Yes, Please indicate your job title: _____
 - No, Please indicate your job title: _____
18. Did you find employment after graduation from ULV?
- Within 6 months?
 - More than 6 months, but less than a year later?
 - More than a year, but less than 2 years later?
 - More than 2 years, but less than 3 years later?
 - More than 3 years later?
 - Was employed at time of graduation
19. How well were you prepared for your career compared to your peers from other universities?
- Less prepared than most
 - Equally prepared
 - Better prepared than most
 - No basis for comparison
20. With all other things being equal, if you had to go to college all over again, what would you have done?
- Gone to the University of La Verne
 - Gone to another private college or university
 - Gone to a state college
 - Not gone to college
21. If you would not have gone to the University of La Verne, please explain. _____
-

	Very Well	Somewhat Well	Not Well
22. How well did ULV prepare you to acquire basic concepts in software engineering and information technology?			
23. How well did ULV prepare you to get jobs in industry related to your concentration areas? (CE, IS, IP, & CS)			
24. How well did ULV prepare you to analyze problems before and during a project?			
25. How did ULV prepare you to do research and problem solve independently.			
26. How well did ULV prepare you to manage projects (time management, and self teach new applications)?			
27. How well did ULV prepare you to be flexible to function in a variety of jobs?			
28. How well did ULV prepare you for the time demands of industry (meeting deadlines)?			
29. Were you happy with the existing technology in the department? <input type="checkbox"/> Yes <input type="checkbox"/> No			
30. Did you feel the supportive requirements helped you in your major? <input type="checkbox"/> Yes <input type="checkbox"/> No			
31. Did the pre-requisite courses help you in your major? <input type="checkbox"/> Yes <input type="checkbox"/> No			
32. Were you satisfied with the theory presented in your major? <input type="checkbox"/> Yes <input type="checkbox"/> No			
33. Were you satisfied with the hands on labs in your major? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Your Academic Experience

The following questions concern your quality of academic experiences, while at the University of La Verne, in various competency areas. Please indicate each competency about the quality of preparation you received at University of La Verne.

	Excellent	Good	Fair	Poor
Communication Skills-The ability to express ideas and concepts				
1. Oral				
2. Written				
3. Electronic (e.g. e-mail)				
4. Presentation to a large group				
Computer Skills				
5. Word Processing				
6. Spreadsheet				
7. Database				
8. Internet				
Analytical Skills				
9. Thinking Creatively				
10. Reading Comprehension				
11. Ability to Link Ideas to Practice				
12. Research (Ability to Find Information)				
13. Quantitative Reasoning				
14. Qualitative Reasoning				
Work Environment Skills				
15. Teamwork				
16. Leadership Skills				
17. Benefiting From Feedback				
18. Understanding of Ethical Issues				
Sensitivity to Cultural and Environmental Issues				
19. Awareness of Issues of Cultural Diversity				
20. Understanding Environmental Issues				
21. Community Service				

The following questions concern the quality of your experiences at ULV compared to your current peers (co-workers, students, etc).Please indicate each competency, how your preparation compares to your peers.

	Better Prepared	Equally Prepared	Less Prepared
Communication Skills-The ability to express ideas and concepts			
22. Oral			
23. Written			
24. Electronic (e.g. e-mail)			
25. Presentation to a large group			
Computer Skills			
26. Word Processing			
27. Spreadsheet			
28. Database			
29. Internet			
Analytical Skills			
30. Thinking Creatively			
31. Reading Comprehension			
32. Ability to Link Ideas to Practice			
33. Research (Ability to Find Information)			
34. Quantitative Reasoning			
35. Qualitative Reasoning			
Work Environment Skills			
36. Teamwork			
37. Leadership Skills			
38. Benefiting From Feedback			
Sensitivity to Cultural and Environmental Issues			
39. Understanding of Ethical Issues			
40. Awareness of Issues of Cultural Diversity			
41. Understanding of Environmental Issues			

42. Community Service

- Poor
- Fair
- Good
- Excellent

9.16. Appendix P: Electronic Parts Inventory