Los Angeles Community College District

COURSE OUTLINE

(Replaces PNCR and Course Outline)

Section I: BASIC COURSE INFORMATION

OUTLINE STATUS: New Course, 2005-2006

1. **COLLEGE:** **Southwest**

2. **SUBJECT (DISCIPLINE) NAME**[1]: Computer Science and Information Technology
   (40 characters, no abbreviations

3. **COURSE NUMBER:** 623

4. **COURSE TITLE:** CIWA Networking Fundamentals

5. **UNITS:** 3

6. **CATALOG COURSE DESCRIPTION --** Provide a description of the course, including an overview of the topics covered:

   This is the third in a series of three courses for the CIW (Certified Internet Webmaster) Internet skills certification program. This course presents fundamental networking concepts and practices. Topics include network architecture and standards, network types, protocols, Internet servers, TCP/IP, and security.

   Note: This course is endorsed by the International Webmasters Association (IWA) and the Association of Internet Professionals (AIP).

7. **CLASS SCHEDULE COURSE DESCRIPTION --** Provide a brief description of the course, including an overview of the topics covered:

8. **INITIAL COLLEGE APPROVAL DATE:** **10/19/04**

9. **UPDATES** (check all applicable boxes):

   - ☐ **Content** **Last Update:**
   - ☐ **Objectives** **Last Update:**
   - ☐ **College Specific Course Attributes/Data Elements** **Last Update:**
   - ☐ **Districtwide Course Attributes/Data Elements** **Last Update:**
   - ☐ **Other** (describe) **Last Update:**

[1] Underlined course attributes are the same for the course throughout the LACCD; all other course attributes are college specific.

10. CLASS HOURS:

	"Standard Hours" per Week (based on 18 weeks)	Total Hours per Term (hrs per week x 18)	Units
Lecture:	2	36	2
Lab/activity (w/ homework):	2	36	1
Lab/activity (w/o homework):	0	0	0
Total:	4	72	3

Note: The Carnegie Rule and Title 5, section 55002 sets forth the following minimum standards: 1 unit = 1 hour lecture per week, 2 hours homework per week; **OR** 2 hours per week of lab with homework; **OR** 3 hours of lab per week without homework. The hours per week are based on a standard 18-week calendar. Lecture also includes discussion and/or demonstration hours, laboratory includes activity and/or studio hours.

11. PREREQUISITES, COREQUISITES, ADVISORIES ON RECOMMENDED PREPARATION, and LIMITATION ON ENROLLMENT

Note: The LACCD's *Policy on Prerequisites, Corequisites and Advisories* requires that the curriculum committee take a separate action verifying that a course's prerequisite, corequisite or advisory is an "appropriate and rational measure of a student's readiness to enter the course or program" and that the prerequisite, corequisite or advisory meets the level of scrutiny delineated in the policy.

ENTRY SKILLS FOR COURSES WITH PREREQUISITES:

1. Distinguish between LANs, MANs, and WANs.
2. Construct a web page.
3. Identify the components of a Web page and Web site.
4. Compare and contrast HTML, XHTM, DHTML, and XML.
5. Identify and distinguish between JavaScript and other scripting languages.

. Prerequisites: Yes (If Yes, complete information below)

Subject	Number	Course Title	Units	Validation Approval Date (official use only)
CO SCI	622	CIWA Web Page Authoring Fundamentals	3	10/19/2004

. Corequisite: None (If Yes, complete information below)

Subject	Number	Course Title	Units	Validation Approval Date (official use only)

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. Advisories: None (If Yes, complete information below)

Subject	Number	Course Title	Units	Validation Approval Date (official use only)

12. REPETITIONS -- Number of times course may be repeated for credit (three maximum): (see: Section V, #9)

13. OTHER LIMITATIONS ON ENROLLMENT (see Title 5, Section 58106 and Board Rule 6803 for policy on allowable limitations. Other appropriate statutory or regulatory requirements may also apply):

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SECTION II: COURSE CONTENT AND OBJECTIVES

1. COURSE CONTENT AND OBJECTIVES:

COURSE CONTENT AND SCOPE –**Lecture:** If applicable**,** outline the topics included in the lecture portion of the course *(Outline reflects course description, all topics covered in class).*	Hours per topic	COURSE OBJECTIVES - **Lecture** (*If applicable)*: upon successful completion of this course, the student will be able to… *(Use action verbs – see Bloom's Taxonomy below for "action verbs requiring cognitive outcomes.")*
1 Introduction to Networking 1.1 Networks Defined and Evolution 1.2 Operating System Families 1.3 Client/Server Model 1.4 Web-based Networking 1.5 Networking Categories 1.6 Network Topologies 1.7 Network Operating Systems	3 hrs.	1) Discuss networking concepts and practices. 2) Identify networking architectures and discuss networking standards.
2 Networking Protocols 2.1 OSI Reference Model 2.2 Packets & Packet Switching 2.3 Major Networking Protocols 2.4 Choosing and Combining Protocols	3 hrs.	3) Differentiate between the types of networks in use today.
3 LANs and WANs 3.1 Local Area Networks (LANs) 3.2 Wide Area Networks (WANs) 3.3 Metropolitan Area Networks (MANs) 3.4 Network Access Points (NAPs) 3.5 Common Network Components 3.6 Transmission Media and Types 3.7 IEEE LAN Standards 3.8 T-Carrier and E-Carrier Systems	6 hrs.	4) Identify and discuss characteristics of various types of network protocols 5) Identify the various types of network servers.
4 TCP/IP Suite & Internet Addressing 4.1 Internet Architecture 4.2 Requests for Comments (RFCs) 4.3 Internet Protocols 4.4 Routing Protocols 4.5 Port Numbers 4.6 Internet Addressing 4.7 IP Addressing Rules 4.8 Reserved IP Addressing 4.9 Subnet Masks	6 hrs.	6) Define TCP/IP and design a typical TCP/IP protocol stack. 7) Assess the network security threats, attacks, and counter-measures in a typical LAN, WAN or MAN environment. **STUDENT LEARNING OUTCOMES:** As a result of this learning experience, a student can: 1. Articulate two networking standards for an industry current network architecture. 2. Construct a hypothetical network and select a network server based on the needs of a selected client. 3. Assign port numbers for system users in a TCP/IP routing protocol.
5 Internetworking Servers 5.1 The Role of Servers 5.2 HTTP Server Essentials 5.3 Proxy, Caching, Mail, Mailing List, Media, DNS, FTP, News, Certificate, Directory, Catalog, and Transaction Servers 5.4 Mirrored Servers 5.5 Popular Server Products	3 hrs.	
6 Server-Side Scripting and Database Connectivity 6.1 Introduction to Scripting 6.2 Client-side and Server-side Scripting 6.3 HTTP Gateways 6.4 Common Gateway Interface (CGI) 6.5 CGI Alternatives	9 hrs.	

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7 Network Security Essentials 7.1 Security Threats and Attacks 7.2 Viruses and the Hacker Process 7.3 Intrusion-Detection 7.4 Software Authentication Encryption Country-Specific Encryption Standards Network-level Protocols and Encryption Virtual Private Networks (VPN) 7.5 Secure Sockets Layer (SSL) 7.6 Digital Certificates 7.7 Firewalls, Packet Filters, Proxy Servers, and Firewall Topology		
Total **lecture** hours*	**36hrs**	

COURSE CONTENT AND SCOPE -- **Laboratory:** If applicable, outline the topics included in the laboratory portion of the course *(Outline reflects course description, all topics covered in class).*	Hours per topic	COURSE OBJECTIVES - **Laboratory** (*If applicable)*: Upon successful completion of this course, the student will be able to… *(Use action verbs – see Bloom's Taxonomy below for "action verbs requiring cognitive outcomes.")*[2]
1 Networking Protocols Labs 1.1 Binding network protocols to a NIC	3hrs	1) Identify networking architectures and discuss networking standards.
2 TCP/IP Suite & Internet Addressing Labs 2.1 Reconfiguring computer with a reserved IP address 2.2 Testing connectivity using the ping command 2.3 Identifying IP configuration & hardware address information	12hrs	2) Define TCP/IP and design a typical TCP/IP protocol stack.
3 Internetworking Servers Labs 3.1 Creating a file server	3hrs	3) Identify the various types of network servers.
4 Server-Side Scripting & Database Connectivity Labs 4.1 Writing a CGI script program	3hrs	4) Assess the network security threats, attacks, and counter-measures in a typical LAN, WAN or MAN environment.
5 Network Security Essentials Labs 5.1 Changing default Windows file attributes 5.2 Applying symmetric-key encryption 5.3 Viewing keys in an SSL session	15hrs	STUDENT LEARNING OUTCOMES: As a result of this learning experience, a student can: 1. Choose appropriate test to run for connectivity. 2. Select a counter measure to address a LAN security threat.
Total **lab** hours*	36hrs	

*Total lecture and laboratory hours (which includes the final examination) must equal totals on page 1.

[2] In general "activity" courses or portions of courses are classified a "laboratory."

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Bloom's Taxonomy

SIMPLE SKILLS <<----------->> COMPLEX SKILLS					
			Critical Thinking		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
define repeat record list recall name relate underline	translate restate discuss describe recognize explain express identify locate report review tell	interpret apply employ use demonstrate dramatize practice illustrate operate schedule shop sketch	distinguish analyze differentiate appraise calculate experiment test compare contrast criticize diagram inspect debate inventory question relate solve examine categorize	compose plan propose design formulate arrange assemble collect construct create set up organize prepare	judge appraise evaluate rate compare value revise score select choose assess estimate measure

2. REQUIRED TEXTS:

Provide a representative list of textbooks and other required reading; include author, title and date of publication:

CIWA Approved Courseware
CIWA Internet Fundamentals: Academic Student Guide
CIWA Foundation Series, 2003

3. SUPPLEMENTARY READINGS:

Reading assignments may include, but are not limited to the following:

Typical reading assignments might be:
Using online networking news services, look up and investigate the major Internet protocols such as Hypertext Transfer Protocol (HTTP), e-mail, File Transfer Protocol (FTP), and newsgroups.

4. WRITING ASSIGNMENTS:

Title 5, section 55002 requires grades to be "based on demonstrated proficiency in subject matter and the ability to demonstrate that proficiency, at least in part, by means of essays or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students." Writing assignments in this course may include, but are not limited to the following:

Typical writing assignments might be to describe the differences between the Internet, intranets, and extranets.

5. REPRESENTATIVE OUTSIDE ASSIGNMENTS:

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Out of class assignments may include, but are not limited to the following:

Typical outside assignments might be to set up a .NET e-mail account for yourself on a Web-based e-mail system to communicate with your instructor, fellow classmates, and other .NET users.

6. REPRESENTATIVE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING:

Title 5, section 55002(a) requires that a degree-applicable course have a level of rigor that includes "critical thinking and the understanding and application of concepts determined by the curriculum committee to be at college level". Critical thinking may include, but is not limited to analysis, synthesis, and evaluation. Provide examples of assignments that demonstrate critical thinking.

Typical assignments might be to identify, compare, and contrast plug-ins and viewers, including RealNetworks RealPlayer, Macromedia Shockwave and Flash players, Apple Quick Time, and Adobe Acrobat Reader.

7. METHODS OF EVALUATION:

Title 5, section 55002 requires grades to be "based on demonstrated proficiency in subject matter and the ability to demonstrate that proficiency, at least in part, by means of essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students." Methods of evaluation may include, but are not limited to the following (please note that evaluation should measure the outcomes detailed "Course Objectives" at the beginning of Section II):

Lesson specific quizzes (Unit Tests), Written Reports, Problem-solving Exercises, Interactive Computer Assignments, Oral Presentations, Class Participation

8. METHODS OF INSTRUCTION:

Methods of instruction may include, but are not limited to the following:

- ☒ Lecture
- ☒ Discussion
- ☒ Laboratory
- ☒ Activity
- ☐ Field Experience
- ☐ Independent Study
- ☒ Other (explain)

One-on-one conferences with instructor (in person and online), Audiovisual examples, Guest speakers

9. SUPPLIES:

List the supplies the student must provide.

Approximately two 3-1/2 high-density diskettes and a ZIP disk or USB portable disk.

10. COMPUTER COMPETENCY:

If applicable, explain how computer competency is included in the course.

The entire course deals with literacy of computer concepts.

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11. INFORMATION COMPETENCY:

Information competency is the ability to find, evaluate use, and communicate information in all its various formats. It combines aspects of library literacy, research methods and technological literacy. Information competency includes consideration of the ethical and legal implications and requires the application of both critical thinking and communications skills. If applicable, explain how information competency is included in the course.

Assignments require accessing information both traditionally and online.

12. DIVERSITY:

If applicable, explain how diversity (e.g., cultural, gender, etc.) is included in the course.

The very nature of technology crosses all cultures and demographics.

13. SCANS COMPETENCIES (required for all courses with vocational TOP Codes; recommended for all courses)**:**

SCANS (**S**ecretary's **C**ommission on **N**ecessary **S**kills) are skills the Department of Labor identified, in consultation with business and industry leaders, which reflect the skills necessary for success in the workplace. Check the appropriate boxes to indicate the areas where students will develop the following skills (please note that all SCANS competencies do not apply to all courses):

RESOURCES

☐ **Managing Time:** Selecting relevant goal-related activities, ranking them in order of importance, allocating time to activities, and understanding, preparing and following schedules.

☐ **Managing Money:** Using or preparing budgets, including making cost and revenue forecasts; keeping detailed records to track budget performance, and making appropriate adjustments.

☐ **Managing Material and Facility Resources:** Acquiring, storing, allocating, and distributing materials, supplies, parts, equipment, space or final products in order to make the best use of them.

INTERPERSONAL

☒ **Participating as Member of a Team:** Working cooperatively with others and contributing to group's efforts with ideas, suggestions and effort.

☒ **Teaching Others New Skills:** Helping others learn needed knowledge and skills.

☒ **Exercising Leadership:** Communicating thoughts, feelings, and ideas to justify a position, encouraging, persuading, convincing or otherwise motivating an individual or group, including responsibly challenging existing procedures, policies or authority.

☐ **Negotiating:** Working toward agreement that may involve exchanging specific resources or resolving divergent interests.

☒ **Working with Cultural Diversity:** Working well with men and women and with people from a variety of ethnic, social, or educational backgrounds.

INFORMATION

☒ **Acquiring and Evaluating Information:** Identifying a need for data, obtaining the data from existing sources or creating them, and evaluating their relevance and accuracy.

☒ **Organizing and Maintaining Information:** Organizing, processing and maintaining written or computerized records and other forms of information in a systematic fashion.

☒ **Interpreting and Communicating Information:** Selecting and analyzing information and communicating the results of others, using oral, written, graphic, pictorial, or multimedia methods.

☒ **Using Computers to Process Information:** Employing computers to acquire, organize, analyze and communicate information.

SYSTEMS

☒ **Understanding Systems:** Knowing how social, organizational and technological systems work and operating effectively with them.

☐ **Monitoring and Correcting Performance:** Distinguishing trends, predicting impacts of actions on system operations, diagnosing deviations in the functioning of a system/organization, and taking necessary steps to correct performance.

☐ **Improving or Designs Systems:** Making suggestions to modify existing systems in order to improve the quality of products or services and developing new or alternative systems.

TECHNOLOGY

☒ **Selecting Technology:** Judging which sets of procedures, tools or machines, including computers and their programs, will produce the desired results.

☒ **Applying Technology to Tasks:** Understanding overall intent and proper procedures for setting up and operating machines, including computers and their reprogramming systems.

☐ **Maintaining and Troubleshooting Equipment:** Preventing, identifying, or solving problems with equipment, including computers and other technologies.

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Section III: RELATIONSHIP TO COLLEGE PROGRAMS

1. THIS COURSE WILL BE AN APPROVED REQUIREMENT FOR AN APPROVED ASSOCIATE DEGREE OR CERTIFICATE PROGRAM: Yes

a. If yes, the course will be a "restricted" elective portion of the "approved program" listed on the State Chancellor's Inventory of Approved Programs (approved programs can be found on the State Chancellor's Office website at http://misweb.cccco.edu/esed/webproginv/prod/invmenu.htm

Computer Science Information Technology (Program ID: 02866)

NOTE: In order for a course to be approved as a requirement for an associate degree or certificate program, the program must be listed on the State Chancellor's Office *Inventory of Approved Programs* AND the course must be listed in the college catalog as either a requirement or an elective for the program. If course is not part of an approved program at the college adopting the course, it will be considered to be a "stand-alone" course, and is subject to the State Chancellor's approval criteria. The college must complete and submit the Chancellor's Office "APPLICATION FOR APPROVAL OF CREDIT" form. Certain courses are granted "blanket approval" by the State Chancellor's Office and do not require separate approval. See the Chancellor's Office *Program and Course Approval Handbook* for details. LACCD Skills **Certificates are not State approved programs** and are not listed on the Chancellor's Office *Inventory of Approved Programs*.

2. GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE STATUS:

a. Area requested: None Approval date:

If applicable, provide an explanation of how the course meets the General Education parameters for one of the five general education areas – *Natural Sciences, Social and Behavioral Sciences, Humanities, Language and Rationality, Health and Physical Education* -- contained in Board Rule 6201.14 -General Education Requirements.
http://marlin.laccd.edu/district/BoardRules_AdmRegs/boardrules.htm

a. 2nd Area requested: None Approval date:

If applicable, provide an explanation of how the course meets General Education parameters for an additional general education area – *Natural Sciences, Social and Behavioral Sciences, Humanities, Language and Rationality, Health and Physical Education* -- contained in Board Rule 6201.14 - General Education Requirements.http://marlin.laccd.edu/district/BoardRules_AdmRegs/boardrules.htm

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Section IV: ARTICULATION INFORMATION

(Complete in consultation with College Articulation Officer)

1. TRANSFER STATUS:

a. Transferable to the University of California: ____

b. UC approval date:

c. Transferable to the California State University: Yes

d. College approval date: 10/19/2004

2. GENERAL EDUCATION FOR TRANSFER:

IGETC Certification:

a. Area requested: None
b. Date requested:
c. IGETC approval date:

If applicable, provide an explanation of how the course meets the appropriate General Education parameters, as defined in IGETC Certification Guidelines.

CSU Certification:

a. Area requested: None
b. Date requested:
c. CSU approval date:

If applicable, provide an explanation of how the course meets the appropriate General Education parameters, as defined in CSU Certification Guidelines.

a. 2nd Area requested: None
b. Date requested:
c. IGETC approval date:

If applicable, provide an explanation of how the course meets the appropriate General Education parameters, as defined in IGETC Certification Guidelines.

a. 2nd Area requested: None
b. Date requested:
c. CSU approval date:

If applicable, provide an explanation of how the course meets the appropriate General Education parameters, as defined in CSU Certification Guidelines.

3. MAJOR REQUIREMENT FOR TRANSFER – Will this course be articulated to meet lower division major requirements? YES

List college/university and the majors:

College/University	Major(s)
CSULA	Computer Science

CAN NUMBER: **CAN SEQUENCE NUMBER:**

CAN Approval -- Date requested: Date approved**:**

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Section V: SUPPLEMENTAL COURSE INFORMATION

1. **DEPARTMENT/DIVISION NAME: Business**

2. **DEPARTMENT/DIVISON CODE: 03**

3. **SUBJECT CODE** -- 3 characters, assigned by District Office: **213** (existing subject codes are available on the LACCD web site at http://www.laccd.edu/curriculum/directory-programs-courses/index.htm

4. **SUBJECT ABBREVIATION** -- 7 characters, assigned by District Office: **CO SCI**

5. **SPC CODE** -- 3 characters, assigned by District Office:

6. **ABBREVIATION FOR TRANSCRIPTS** -- 20 characters, assigned by District Office: **CO SCI**

7. **DEGREE CREDIT:** Indicate whether the course meet the "standards for approval" for degree credit course set forth in Title 5, section 55002(a)(2), which requires the course to have a degree of intensity, difficulty, and vocabulary that the curriculum committee has determined to be at the college level :
   This courses is Degree Applicable

8. **CREDIT/NO CREDIT GRADING:** No

9. **REPETITIONS** -- Number of times course may be repeated for credit (three maximum): 0

   How does the repetition of this course meet Title 5, section 58161 requirements? A course may be repeatable when, "course content differs each time it is offered, and that the student who repeats it is gaining an expanded educational experience for one of the following reasons: (A) Skills or proficiencies are enhanced by supervised repetition and practice within class periods; or (B) Active participatory experience in individual study or group assignments is the basic means by which learning objectives are obtained."

10. **PRIOR TO TRANSFERABLE LEVEL –** This course attribute applies to ***English***, ***writing***, ***ESL***, ***reading*** and ***mathematics*** courses ONLY. If applicable, indicate how many levels below the transferable level this course should be placed: Not applicable

11. **CREDIT BASIC SKILLS --** Title 5, section 55502(d) defines basic skills as "courses in reading, writing, computation, and English as a Second Language, which are designated as non-degree credit courses pursuant to Title 5, section 55002(b)." No If Yes, course must be non-degree applicable.

12. **CROSS REFERENCE** -- Is this course listed as equivalent in content to existing College/District courses in another discipline? No

    If Yes, list courses (documentation of cross-discipline agreement must be provided):

13. **COURSE SPECIFICALLY DESIGNED FOR STUDENTS WITH DISABILITIES --** Title 5, section 56029 allows a course to be repeatble when continuing success of the students with disabililties is dependent on additional repetitions of a specific class. Is this course designated as an "approved special class" for students with disabilities? No

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If yes, provide an explanation of how this course meets the requirements of Title 5, section 56029.

14. COOPERATIVE EDUCATION STATUS -- Title 5, section 55252 allows for two types of Cooperative Education: 1) General Work Experience Education -- i.e., supervised employment, which is intended to assist students in acquiring desirable work habits, attitudes and career awareness, which need not be related to the students' educational goals; or 2) Occupational Work Experience Education -- i.e., supervised employment, extending classroom based occupational learning at an on-the-job learning station, which is related to the students' educational or occupational goal. Is this course part of the college's approved cooperative work experience education program? No

15. COURSE CLASSIFICATION: Occupational

Note: A course's Classification, TOP Code and SAM code must be aligned – e.g., Courses with an "Occupational" Course Classification must have an "Occupational" TOP Code **and** a SAM Code of A, B, C, or D; courses that do not have an "Occupational" Course Classification cannot have an Occupational TOP Code **and** must have an "E" SAM Code. Courses coded as "basic skills" in #11 should be coded "Adult and Secondary Basic Skills."

16. TOP CODE – (6 digits XXXX.XX) 0704.00

Course content should match discipline description in Taxonomy of Programs found at www.cccco.edu/cccco/esed/curric/curriculum.htm.

17. SAM CODE (**S**tudent **A**ccountability **M**odel): C – Clearly Occupational

SAM Codes (see CCC Chancellor's Office *Student Accountability Model Operations Manual*, 1984) should be assigned as follows:

Priority "A" – Apprenticeship: Courses designed for an indentured apprentice must have the approval of the State of California, Department of Industrial Relations Department, Division of Apprenticeship Standards.

Priority "B" – **Advanced Occupational:** Courses taken by students in the advanced stages of their occupational programs. Courses should be offered in one specific occupational area only. Priority letter "B" should be assigned sparingly; in most cases, no more than two courses in any one program should be labeled "B." "B"-level courses must have Priority "C" prerequisites in the same program area.

Priority "C" – Clearly Occupational: Courses generally taken by students in the middle stages of their programs should have a difficulty level sufficient to detract "drop-ins." Courses may be offered in several occupational programs within a broad area. The "C" priority, however, should also be used for courses within a specific program area when the criteria for "B" classification are not met. A "C"-level course should provide the student with entry-level job skills.

Priority "D" -- Possibly Occupational: "D" courses are those taken by students in the beginning stages of their occupational programs. The "D" priority can also be used for service (or survey) courses for other occupational programs.

Priority "E" -- Non-occupational.

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SECTION VI: APPROVAL STATUS

1. APPROVAL STATUS:

a. ☒ New Course **10/19/2004**	. Board Approval Date:	. Effective Semester: **Fall 2006**
b. ☐ Addition of Existing District Course	. College Approval Date:	. Effective Semester:
c. ☐ Course Change*	. College Approval Date:	. Effective Semester:
d. ☐ Outline Update	. College Approval Date:	

* Changes to a course require the completion of a "Course Change Request" form and approval by the college's Curriculum Committee. In some cases districtwide approval is also required; see, Administrative Regulation E-65, section 3(c) for details.

SECTION VII: APPROVAL INFORMATION FOR NEW OR ADDED COURSES

(complete in consultation with Department Chair and the appropriate Academic Administrator)

1. ORIGINATOR: James Hicks

2. DEPARTMENT: Business

3. IF THIS IS A NEW COURSE, INDICATE HOW THE COLLEGE PLANS TO MEET THE EXPENSE OF THIS COURSE:

☐ By additional funds. Describe:

☒ By deleting courses from the college catalog and course database. List specific courses to be deleted:

CoSci 606, 609, 613, 614, 645

☒ By deleting sections of existing courses. List courses and number of sections to be deleted:

First year: **CoSci 601** Second year: **CoSci 601** Third year: **CoSci 601**

☒By rotating sections of existing courses. List courses and number of sections to be rotated, as well as the semesters in which they will be offered:

CoSci 621 and 622

4. IMPACT -- Will this course directly impact other course offerings and/or associate degree or certificate programs on campus?

No (If yes, briefly explain how)

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5. METHOD OF SUPPORT -- Indicate how the college plans to support the proposed course:

Additional staff -- List additional staff needed:

Existing staff

Classroom -- List classroom type needed:

TEC 230 and TEC 290

Equipment -- List new equipment needed and indicate funding source for any new equipment:

New computers for TEC 290 (already upgraded)

Supplies- List supplies and indicate dollar value:

No additional supplies needed.

Library/Learning Resources- The course initiator shall consult with the College Librarian and review the college library, book, periodical, and electronic resource collections relevant to this course. List additional titles and resources to be considered for purchase as funding permits:

Textbook placed in library as reference text; no additional resources needed.

6. APPROPRIATENESS TO MISSION—Describe how the objectives of the proposed course are consistent with the mission of the community colleges as established by the Legislature in the Education Code. The course should also be congruent with the mission statement of the local college and district.

This course offers students an opportunity to learn industry-wide recognized skills that "promote technical and lifelong learning programs" and "provides occupational and technical education for business, industry, and public services."

7. NEED—Demonstrate the need for the course that meets the stated objectives, at this time, and in the region.

The National Workforce Center for Emerging Technologies (NWCET) developed the only nationally recognized and validated IT skills standards. This training does not exist within a 75-mile radius of LA Southwest.
The CO SCI Advisory Board requested it; mini-grant received to implement it.
Request from students for new occupational programs in emerging technology noted in each student survey.

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LOS ANGELES COMMUNITY COLLEGE DISTRICT
COURSE STANDARDS AND CRITERIA

Subject: **CO SCI** Number: **623** Course Title: **CIWA Networking Fundamentals**

Using the Official Course Outline, please determine whether or not the above listed credit course meets the following standards and criteria required in Title V, Part VI of the California Administrative Code, and which has been designated as appropriate to the Associate Degree. Place a (X) in the appropriate box.

CRITERIA AND STANDARDS Section 55002	RATING CRITERION MET	NOT MET
Is recommended by the responsible college officials, and the academic senate or other appropriate faculty body as meeting the requirements of this subsection and has been approved by the local district governing board as a course meeting the needs of the students for admission.	**X**	
Is taught by a credentialed instructor in the discipline.	**X**	
Is offered as described in an outline in official college files. That the outline shall specify the unit value, scope, objectives, content in terms of a specific body of knowledge, appropriate reading and writing assignments, outside of class assignments, instructional methodology and methods of evaluation for determining whether the stated objectives have been met by students.	**X**	
Is taught in accordance with a set of instructional objectives common to all students.	**X**	
Provides for measurement of students performance in terms of the stated course objectives and culminates in a formal recorded grade based upon uniform standards in accordance with Section 55578 of Title 5, which is permanently recorded as an evaluation of student performance; bases grades on demonstrated proficiency in subject matter determined by multiple measurement for evaluation; and has examinations, including essays and/or, where appropriate, uses appropriate symbol systems and/or skills demonstrations by students.	**X**	
Grants units of credit based upon a specified relationship between the number of lecture and/or laboratory hours or performance criteria specified in the course outline; and requires a minimum of three hours of work per week including class time for each unit of credit, prorated for short-term, lab and activity courses.	**X**	
Treats subject matter with a scope and intensity which requires students to study independently outside of class time.	**X**	
Requires, when appropriate, entrance skills and consequent prerequisites for the course before students are enrolled	**X**	
Requires the ability to think critically and to understand and apply concepts in order to participate in the course.	**X**	
Requires learning skills and a vocabulary appropriate for a college course.	**X**	
Requires the use of college level educational materials.	**X**	

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CERTIFICATION AND RECOMMENDATION

☒ **This course meets Title 5 requirements for Associate Degree applicable college credit towards an Associate of Arts Degree.**
☐ **This course meets Title 5 requirements but does not satisfy the requirements for an Associate Degree applicable course.**

We certify that the information and answers above properly represent this course.

James E. Hicks	**04/27/2006**
Originator	Date
James King / Lernik Saakian	**05/02/2006**
Department/Cluster Chairperson	Date
Linda Larson Singer	**05/02/2006**
Articulation Officer	Date
Linda Brady	**05/09/2006**
Librarian	**Date**
Vincent Jackson	**05/09/2006**
Dean (if applicable)	Date
Linda Larson-Singer	**05/02/2006**
Curriculum Committee Chairperson	Date
Reggie Morris	**05/09/2006**
Academic Senate President	Date
Leige Henderson	**05/10/2006**
Vice President, Academic Affairs	Date
Audre Levy	**06/22/2006**
College President	Date

Approved 12/13/02
Revised 5/28/2004

CONTENT REVIEW FOR PREREQUISITE VALIDATION

Target Course & Number, Title: CO SCI 623: CIWA Networking Fundamentals

(Course to which pre/corequisite/advisory applies)

Check Applicable Box	
	☒ Prerequisite: CO SCI 622
	☐ Corequisite:
	☐ Advisory:

A. **Target Course Entry Skills: Course & Number, Title: CO SCI 623 – CIWA Networking Fundamentals**
(For prerequisites/corequisites, list specific skills and/or knowledge necessary for students to succeed in the target class. For advisories, list skills/knowledge which will enrich or deepen the student's knowledge obtained from the course but without which the student may still succeed in the course. Attach additional sheet if necessary. NUMBER EACH SKILL.)

1. Distinguish between LANs, MANs, and WANs.
2. Construct a web page.
3. Identify the components of a Web page and Web site.
4. Compare and contrast HTML, XHTM, DHTML, and XML.
5. Identify and distinguish between JavaScript and other scripting languages.

B. **Exit Skills Provided By Prerequisite/Corequisite/Advisory Course or Assessment:**
Course & Number, Title: CO SCI 622 – CIWA Web Page Authoring Fundamentals
(List specific skills and/or knowledge that are the outcome of the prerequisite/corequisite/advisory course or assessment. For courses already in the curriculum, these should be present in the course objectives in the course outline. Attach additional sheet if necessary. NUMBER EACH SKILL.)

1) Describe the mechanics of Web page creation and other aspects of Web Authoring.
2) Assess the advantages and disadvantages of developing Web pages with text editors and GUI editors.
3) Use HTML to create Web pages containing text, tags, graphics, hyperlinks, tables, forms, frames, and Cascading Style Sheets (CSS).
4) Evaluate the applicability of using XHTML, JavaScript, DHTML & DOM to Web page development

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CONTENT REVIEW SKILLS MATRIX FOR PREREQUISITE VALIDATION
CO SCI 623—CIWA Networking Fundamentals
Entering Skills of Target Course

CO SCI 622
CIWA Web Page Authoring Fundamentals
Exit Skills of Prerequisite Course

	1	2	3	4	5						
1		x	x		x						
2		x									
3		x	x	x							
4	x	x		x	x						
5											

Comments:
(Include justification for assessments, health and safety, or non-course prerequisites)

Validation requires at least one match of each target course entry skill with at least one exit skill of the prerequisite course(s).
Was validation achieved? _X_ YES; ___ NO

PARTICIPANTS IN CONTENT REVIEW:
(Signatories should include instructors for both exit and entering skills courses.)

Name: _____Title: _____ Initial: _____ Date: _____

Name: _____ Title: _____ Initial: _____ Date: _____

Name: _____Title: _____ Initial: _____ Date: _____

CERTIFIED BY:

James E. Hicks	05/08/2006
Initiator	Date
James/King / Lernik Saakian	05/02/2006
Department Chairperson	Date
Linda Larson-Singer	05/02/2006
Curriculum Chairperson	Date

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