ACADEMIC PROGRAM REVIEW

COMPUTER SCIENCE INFORMATION SYSTEMS DEPARTMENT

SPRING 2007

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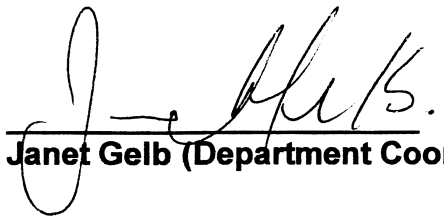
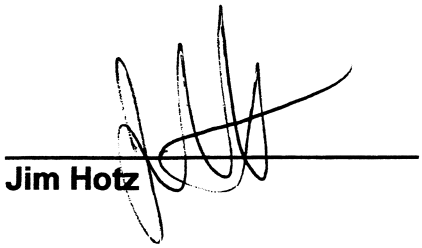
Program Review
CSIS Department
Sign-off Sheet



Janet Gelb (Department Coordinator)

Diane Mayne-Stafford



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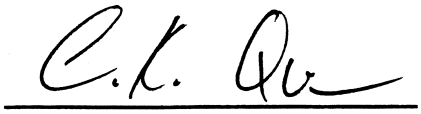
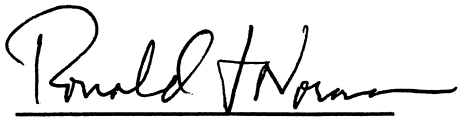


Clifton Quinn



Dr Ronald Norman

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CSIS Department
Program Review 2006

Section 1 – Overview

1.1 Concise History. Introduce the self-study with a brief department/program history. Describe any unique characteristics, concerns or trends affecting the program and any significant changes or needs anticipated in the next three years. These may include items such as increases or decreases in number of full-time and adjunct faculty, sections offered, and growth or decline of the department/program. Remember that this is a broad general assessment versus the more detailed responses and recommendations covered in the following emphasis areas (1 page maximum).

General Description. The Computer Science and Information Systems Program offers a variety of computer related courses that prepare a student for a career in this rapidly changing and high-demand area. There are four related, but distinct areas of emphasis designed to provide corresponding job entry skills. These are: 1. Computer Programming, 2. Small Computer Specialist, 3. Web Master, and 4. Local Area Network Support Specialist. Each area of emphasis can lead to an Associate degree or to a Certificate of Achievement.

Even now, we are modifying the content and method of instruction in these areas of emphasis.

> In Computer Programming, we are presenting more hybrid and/or online course offerings (CSIS-115, 119, 293, 296, 276).
>
> Small Computer Specialist now has a dedicated lab with hardware (complete systems with swappable disk drives) to support development of systems.
>
> Web Master has been completely redesigned and re-titled "Web Development". New courses have been developed and the content brought in-line with needs of industry and the changing face of development on the web.
>
> Local Area Network Support courses have been redesigned and all courses in the emphasis are now offered online.

In addition to providing courses in the above areas of emphasis, the department is cooperating with other divisions and departments at Grossmont College in order to provide cross listed or team taught courses that assist not only in the infusion of computer skills into those other areas of discipline, but also to introduce those students to computers in more detail. We continue to work with BOT to identify candidate courses. Recently, we developed a course in conjunction with the Business department with an emphasis on added content in "marketing a business through the Internet" and

continue the collaboration with the AOJ department and their forensics program with the cross listing of a computer forensics course.

Unfortunately, the cross-discipline MultiMedia program mentioned in the previous Program Review document appears today to be dead. Multimedia student enrollment from Media Comm, Music, Art has been declining and little follow through with "content" courses leading to the capstone "technology" course. Instead, as mentioned below under Concerns/Trends, those departments have been developing their own courses with computer content.

Vision and Mission. In a Strategic Planning Meeting held on 4/21/06, members of the department developed the following vision and mission statements: See minutes and documentation of Strategic planning meeting, tab 2)

> Vision Statement: Students in the Grossmont/Cuyamaca Community College District CSIS Department shall have access to high quality technology based instruction in the use of computers for the purposes of transfer, career enhancement, and/or personal development.
>
> Mission Statement: The CSIS Department will provide quality education to students based on a comprehensive, relevant curriculum that provides students with the ability to transfer, enter the workforce, and/or promote life-long learning.

Concerns/Trends within the department. Major concerns that exist within the department today are:

1. The drop in IT (Information Technology) enrollment nationwide both at four year universities and community colleges. The "Dot-Com Bust" of 2001 has had a major impact on that enrollment Paralleling with this drop in computer related jobs, and as mentioned in numerous ACM (Association of Computing Machinery) articles, is the apparent perception on the part of perspective students that IT is no longer the field of choice when it comes to salary, job availability, and/or challenging work.
2. Duplication of courses and/or course content by other divisions and departments here at Grossmont College that result in a reduction in course enrollment. (Photoshop, Dreamweaver, Web Development, Video editing) Enrollment in all the departments concerned would have benefited by a collaborative effort in the development of these courses.
3. Development of full offering programs (CIS and CS) at Cuyamaca College that mirror Grossmont offerings and also result in a reduction in course enrollment. We continue to work collaboratively with the CIS/CS department at Cuyamaca College in order to offer these duplicated courses that traditionally have low enrollment only once per year at each of the colleges so that students will hopefully not have to deal with cancelled courses and be able to continue with their educational goals and completion of their degrees and certificates.

Challenges. As an outgrowth of the concerns mentioned above, the biggest challenge facing the department today is to increase enrollment. As best we can determine, this challenge is brought about not by anything the department has or has not done but by

the factors mentioned above – factors that are largely out of our control. We are responding to this challenge, and this document and related attachments describe how we are doing that. (A good document to review is the "Computer Science Information Systems (CSIS) Department" study prepared by the Waiwitlikhit/Vivatpatanakul" team of SDSU Master of business administration students – tab 3.)

In addition, another somewhat related challenge is to identify and attract highly skilled adjunct faculty on the cutting edge of the new technologies we will be addressing. There is competition for these folks among the colleges in the area as well as a need to offer attractive remuneration and benefit incentives. United Faculty is working to address these needs, and we expect to be able to attract more highly skilled instructors who are presently working in the industry.

Changes/Needs Over the Next Three Years. How well we meet our challenges will determine our exact needs over the next three years. Our current number of full-time faculty should be sufficient. Increasing student enrollment will require the identification and hiring of highly skilled adjunct faculty with the required skill sets. Full-time faculty will require training/education funds to be set aside and identified in a "hard" budget line-item to enhance and/or acquire new skills. We have sufficient facilities to meet increased enrollment. As technology needs change, we will require the purchase of new classroom software and hardware and possible server hardware. (see Strategic Planning minutes Tab 2)

1.2 Department/Program Goals. Appendix 1 contains the most recent Educational Master Plan for the department/program. Make comments on the following:

- **Goals that have been met**
- **Actions take to achieve goals and objectives**
- **Obstacles**
- **How/why have goals changed?**

The following table indicates goals that have been met, activities/actions that are in process, as well as the obstacles currently existing.

High Level Goals	Goal Met?	Goal not met	Ongoing goal	Actions or Obstacles
Provide curriculum that is up-to-date and prepares students for industry demand occupations.	Y		Y	• Two new labs brought on-line for instruction. • Hired a new full-time faculty member with published works, contacts within the industry, and other local universities. • Need to identify

				and hire more adjunct faculty with current skills. • Need faculty with current industry skills. • Unable to generate acceptance of a computer based GE course. • Participate in SD4C meetings
Provide technology that reflects industry standards.	Y		Y	• Revise/rename Web Master emphasis to Web Development emphasis. • Develop a Web App Development mini-certificate. • Develop a Database certificate • Continue to regularly update facilities per the ICS rollover plan. • Need to apply for grant industry money
Expand modes of instruction (e.g., distance education) and learning (e.g., learning communities)	Y		Y	• Programming courses (C++, Java) offered on-line. • Those and others offered in hybrid mode. • Regularly add new on-line courses • Network Support courses offered online. Utilize a publisher supplied tool (West Net). • Now a Regional Training Center for West Net.

				• Now a Novell Training Center offering training in Suse Linux and Novell Netware.
Update facilities and infrastructure to accommodate the up-to-date curriculum.	Y	N	Y	• Dedicated hardware and networking lab provided and used for instruction. • Need expanded lab facilities to accommodate computer general education requirement course if ever developed. • Classroom servers upgraded. • Network infrastructure (servers, hubs etc) needs to be upgraded before we can expand Internet/Web based classes in particular to meet GE requirement. • Strong support from the distract IS department for continuing to maintain 5 state of the art computer labs.
Provide opportunities to faculty to upgrade their skills to match current and future standards.	Y	N	Y	• Need to provide faculty with additional paid release time as part of Load. • Need larger numbers of full-time and adjunct faculty in order to provide complete coverage for those who are at

				training. • Each full-time faculty member develops training plan to be implemented as funds become available Spr '07

Note that as in previous program review, goals and/or their associated activities are always ongoing. With the changing face of IT, a goal is never met but is instead always in a state of "being" met. New and/or modified curriculum is always being developed, new methods of instruction (hybrid, online) are being applied to existing offerings, faculty is continually undergoing education through conferences, seminars, or other course offerings. However, with declining department enrollments all activities are now dedicated to reversing that trend and increasing enrollments.

1.3 Implementation of Past Program Review Recommendations. Appendix 2 contains the most recent Program Review Committee recommendations for the department/program. Describe changes that have been made in the department/program in response to recommendations from the last review.

- **Describe changes made to Department/Program in response to recommendations**

The recommendations and our actions are as follows:

1. Re-establish an active advisory committee. See section 1.4 below for a more complete discussion of the Region 10 BAC – the SD4C Advisory Committee. LEDI is no longer in existence, and our actions seem to have met this recommendation very well.
2. Develop greater cooperation with departments to develop coursework that is relevant to multiple disciplines. We continue to cooperate well with departments that have a genuine interest in developing such coursework. BOT, Business, and AOJ are our best cooperators rather than competitors.
3. Develop a proposal for computer literacy to meet GE requirements. We have done extensive research (statewide) and talked to administration, faculty, and committee members here on campus in an attempt to identify a course that fits into a specific GE area and that is acceptable in terms of units, content, and skills.
4. Add one full-time faculty position. The number of full-time faculty members in the department is currently 6. We are currently at "full-strength". At one time, the hiring freeze put a stop to filling a position vacated when a member left the college. When the freeze was lifted, we were successful in attracting and hiring a very well qualified individual – doctorate in Computer Science, a published author in the field of Software Engineering, a skilled educator with experience at the university and

college level. We feel that we have done well. The new member reduces some of the pressure in finding qualified, part-time faculty in his area of expertise, but new areas of expertise are "coming online" as we develop new curriculum and course content to keep up with the pace of technology.

5. Coordinate with IS and ICS to provide infrastructure and human resources. To date, we have been able to meet our needs. IS and ICS have done a good job of supporting us given their staff and budget constraints. As an example of these constraints, the lead technician responsible for installation and some maintenance of our labs is continually being given new responsibilities. When the colleges acquired and installed a number of Macintosh computers, he was tagged with the responsibility of provisioning and maintaining those systems. We need a new staff person reporting directly to department personnel for all of their job tasking. If we are to bring new servers, operating systems, and applications to the classroom we need additional support personnel that are dedicated to the department.
6. Update course outlines. We continue to update all course outlines. Of the list presented in 2001, we have updated the following:

   112, 114, 115, 119, 132, 134, 136, 140, 141, 151 A-D, 155, 160, 165, 172, 174 A-D, 175 A-D, 176, 177 A-D, 220, 270, 274 A-D, 275 A-D, 280, 281, 282, 296, and 297.

   The remainder of the courses in the 2001 list (178, 184, 284, etc.) are not currently being offered, and will be updated as we identify new content to offer to our students.

1.4 Advisory Committee Recommendation. Some disciplines such as ESL and vocational programs are required to have advisory committees. Answer this question if this is applicable to your department/program.

- **Summarize principal recommendations of advisory committee since last Program Review**
- **Describe actions taken to respond to those recommendations**
- **Date of last meeting**
- **Frequency of meetings**
- **Organizations represented**

Some time ago, the department recognized the problem inherent in all of the San Diego County community colleges in Region 10 developing advisory committees from a limited pool of industry representatives. There would not be enough industry personnel with enough time to contribute to all community colleges. As a result, Grossmont and other community colleges, in cooperation with SDSU created the SD4C advisory consortium. SD4C is an acronym for "San Diego Community College Computer Consortium". This is a group of Computer Information Systems, Computer Science and Business faculty from community colleges and universities throughout San Diego

county. SD4C started about 10 or 12 years ago with SDSU wanting to inform the community colleges of upcoming changes in their business and computer science offerings. Janet Gelb and Jim Hotz joined the initial members from Mesa College, City College and SDSU to discuss issues that might affect the student's ability to transfer to the 4 year universities. Each year this group has grown with all of the San Diego county community colleges and USIU, SDSU, USD and UCSD having representation. This group meets twice a year to discuss major issues of concern to all. Each meeting is held at a different campus. This also provides each of us an opportunity to tour the facilities of other colleges and acquire ideas that may benefit our students. The discussions have expanded from curricula issues to student problems, transfer issues, instructional issues, lab setups, equipment purchases and for the first time this year to the collaborative hiring of adjunct faculty. These meetings are very informative, interactive and exciting. All college faculty get an excellent chance to learn what is happening at other institutions, form bonds with colleagues, as well as establish collegial relationships. In our field of study, changes are occurring at such a rapid pace that this type of collegiality and discussion is a very welcome event.

Principal recommendations of the committee have typically dealt with the desirability, advisability, and/or problems associated with the introduction of different software and hardware packages. This together with industry requirements and recommendations, have been of most value as we plan our curriculum. As an example, at one of the meetings last year (Spr. 06) attendees (to include the majority of full-time Grossmont faculty) addressed the issue of Vista and Office 2007. These are the latest operating system and office suite products available from Microsoft, and all attendees were very interested in learning the position and plans of industry.

The introduction of those software packages into instruction is going to require investment and training in not only the software itself, but the supporting hardware platforms. Example – in order to utilize all the features and abilities of the products, Microsoft recommends a fast processor, at least 2 gigabytes of RAM, a large and fast hard disk, and a powerful graphics adapter card. Grossmont will need to make significant expenditures in order to fully implement these systems. Full-time and part-time faculty will need time to train and become familiar with the products.

All attendees were interested to learn that industry didn't have any great desires and/or immediate plans to implement the software in their own workplaces. They too face the same cost problems. As a result, we have decided the department can take a somewhat slower migration path, where the systems will be brought on-line in a phased manner.

SECTION 2 – CURRICULUM, ACADEMIC STANDARDS, AND SUPPORT SERVICES

In Appendix 3, Catalog Descriptions, insert copies of your catalog descriptions from the most recent college catalog (see "Course of Instruction" section). If your program has an Associate Degree program, include the relevant pages from the catalog (see "Associate Degree" section).

See Appendix 3

To complete Appendix 4 Course Status, review your course outlines and complete the form in the appendix to reflect currency of the courses, offerings, and alignment status.

2.1 **Review all course outlines and comment on where your department/program is in the process of maintaining currency. Verify that the course outlines reflect the writing, reading, and problem-solving skills, quantitative reasoning, and critical thinking across the department/program's curriculum.**

All of these skills are infused into courses offered. However, the course outlines of a number of classes need to be updated to reflect industry changes. With constant changes in the IT industry the CSIS department is constantly writing new curriculum to reflect the new technology and required skills to support that technology. It is for this reason that it has been extremely difficult to constantly update our old course outlines while writing new curriculum to support the changes taking place in business and industry.

2.2 Describe how your department makes decisions related to the following:

- **Identification of student learning outcomes**
- **Methods to demonstrate achievement of these learning outcomes**

Explain how your department uses this information for course and program improvement.

The department has identified the Student Learning Outcomes (SLOs) for the CSIS 110, Principles of Information Systems. This is the department's gateway course and is required by all our majors. This course is articulated with SDSU's IDS 180 course which is a required course in the core curriculum for the Information Systems major. As a starting point all faculty including the adjunct faculty met at a professional development meeting to develop the SLOs for this course. A draft of the outcomes was distributed among the entire faculty teaching this course.

Consensus was reached quickly and the objectives necessary to achieve these outcomes were incorporated in the syllabi.

Determining the SLOs for the remaining courses, programs and department is listed in the recommendations in section 8.

2.3 **Explain how the department/program maintains academic standards, integrity and consistency to assure that current curriculum adequately meets students' needs (e.g., general education, prerequisites, job-specific training, transfer). Explain how the department/program ensures that all instructors teach to the official course outline.**

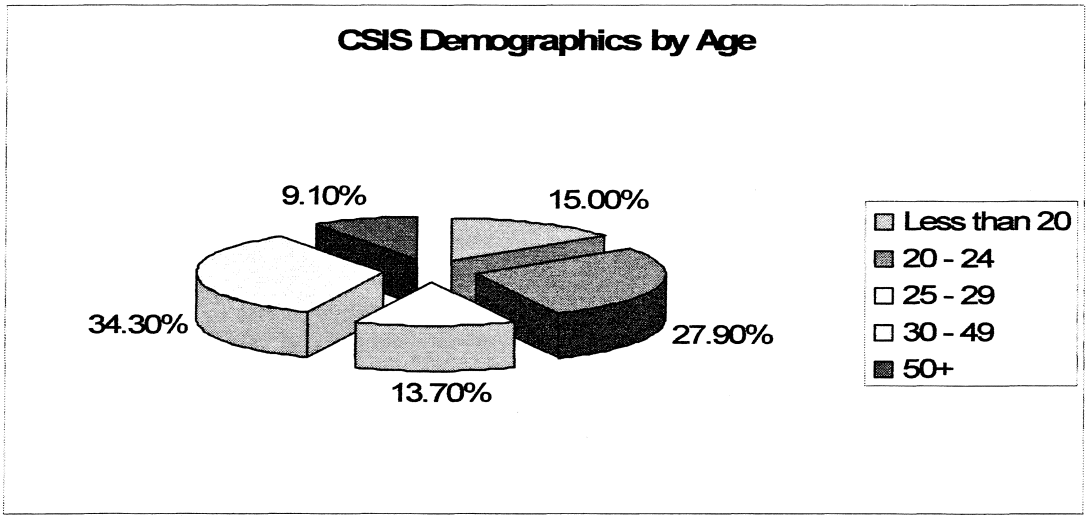
The department maintains academic standards with peer reviews, department meetings with both fulltime and adjunct faculty, and one-on-one and group discussions, participation in the SD4C regional consortium meetings. In the areas where there are multiple sections instructors meet on a regular basis to discuss the content of the course.

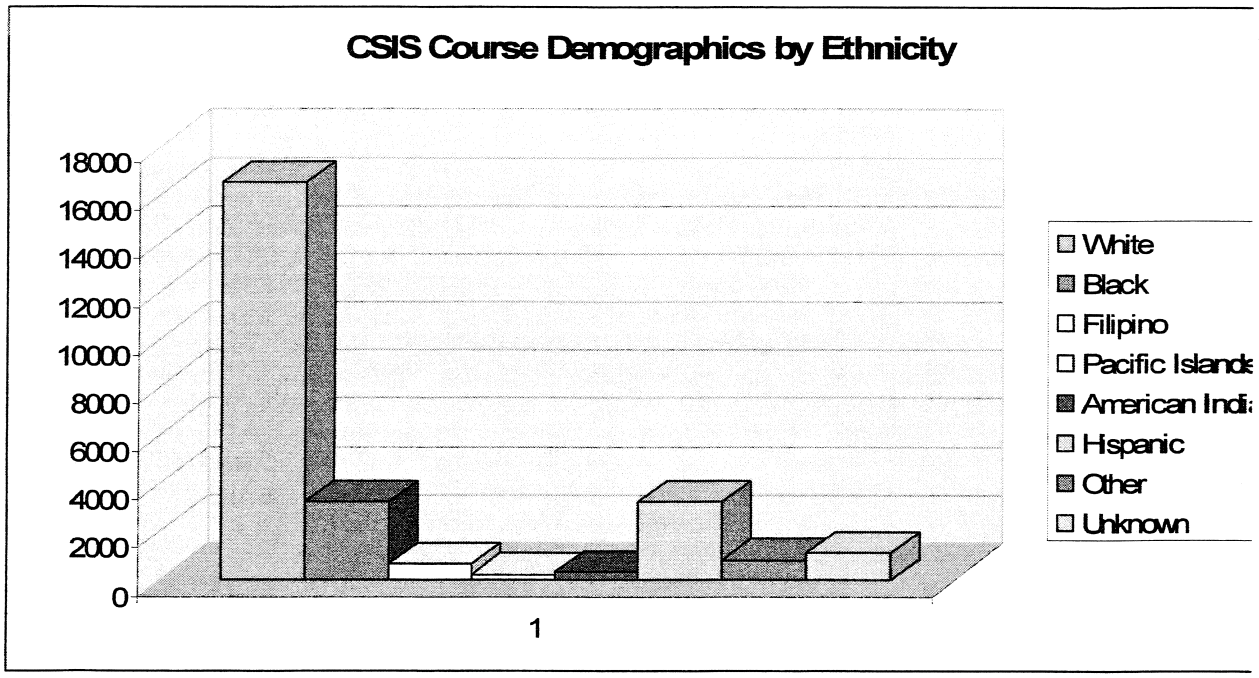
2.4 **Using Appendix 5, Grade Distribution Summary Report, comment on retention and grading variability figures. Discuss any specific courses that have unusual retention patterns or grading variances.**

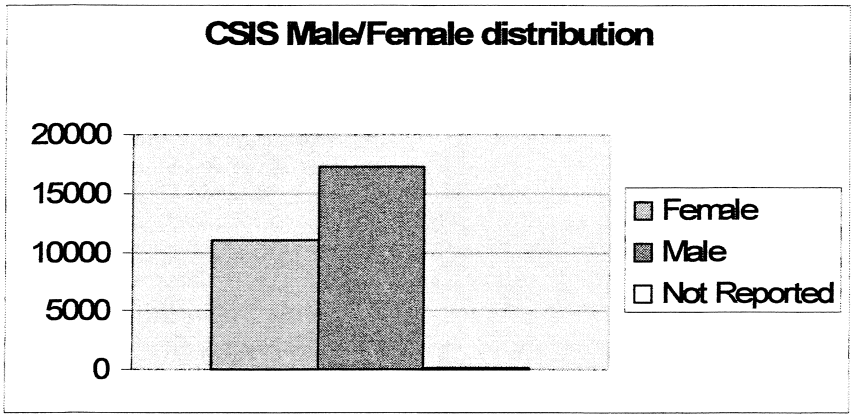
To figure retention percentages, subtract the "W's" from the total enrollment and divide that number by the total enrollment.

Many of the more advanced programming courses are now attracting more 4 year university students and working adults. The higher grades and fewer withdrawals are reflected in the statistics as these students are better prepared by having the prerequisite skills for the course.

Our online course offerings reflect withdrawal rates similar to those seen in other online courses across the campus. It is the department's policy to ensure that the same rigor and standards are maintained in all online and hybrid courses. It seems that the perception of most of these online students is that online classes are easier and require less of a commitment.







As indicated in the graphs above the CSIS department continues to have a higher number of males vs females enrolled in our courses. The department has tried various methods to recruit more female students but to no avail. We also attract a larger number of older adult re-entry students who are returning to college to upgrade their skills for job promotion and to keep current with the skills required for the IT industry.

2.5 **Describe strategies employed to ensure consistency in grading in multiple section courses (e.g., mastery level assessment, writing rubrics, departmental determination of core areas which must be taught).**

Variances occur due to differences in philosophy about the difficulty of the courses. But, the reasons for the variations in some of the courses are unknown as the department tries to encourage instructors teaching the same course to meet on a regular basis in order to share ideas. An ongoing process by all faculty of sharing classroom techniques that enhance student success is encouraged. All multiple sections are required to use the same text thus maintaining course continuity.

2.6 **Describe how your department/program encourages students to extend learning outside of the formal classroom.**

- Individual homework and term papers
- Group projects
- Research assignments using the resources in the LRC
- Internet research
- Student-to-student and student-to-instructor email exchanges
- Internships in industry

2.7 **Describe and give rationale for any new courses or programs you are developing or have developed since the last program review. How have current issues (environmental, societal, ethical, political, technological) been reflected in your curriculum?**

Web Development has replaced Web Publishing due to the environmental, societal, ethical, political, and technological changes which have occurred in San Diego. New courses have been developed and the content brought in-line with needs of industry and the changing face of development on the web.

The department is presently developing a database program to replace the program previously offered by LEDI. The CSIS department is responding to the latest job statistics which indicate that there is a need in industry for database administrators.

2.8 In Appendix 4, Course Status, list the courses in the department/program that are duplicated at Cuyamaca College and identify their alignment status. Comment on courses which have not been aligned and describe the plans for alignment.

Although the CIS/CS departments at Cuyamaca College offering many similar courses to those offered at Grossmont the numbers do not align and it would take a very complex and time consuming process to align all these courses. It is for this reason that the two departments have developed a "crosswalk" for students which is included in both colleges' catalogs. (See Equivalent course list in appendix 4)

Innovation/Special Projects/Community Involvement

2.9 Describe instructional innovations and/or special projects undertaken by the department/program or individual faculty members, including the use of technology.

- The CSIS department has long realized that there are many students who need an alternative to the single semester, 3 or 4-unit lecture/lab course. We have long believed that there are many students who would benefit greatly by the provision of hybrid and online courses.
- The faculty has lengthy discussions about offering and developing a course in alternate modes of instruction prior to the scheduling of these courses. All courses must have been offered for a number of times as an in classroom course prior to be offered online.

  Development of and instruction in the following on-line or hybrid courses has taken place over the past few years–

  CSIS 110, 115C, 165, 296. - Jim Hotz
  CSIS 112 – Ronald Norman
  CSIS 113, 276 – Diane Mayne-Stafford.
  CSIS 119, 293 – Mike Qualls
  CSIS 134 – Clifton Quinn
  CSIS 110, 142, 143 – Janet Gelb
  CSIS 144, 145 – Paul Seeger
  CSIS 146 – Ron Lycan
  CSIS 151 D – Don Dean
  CSIS 172, 173, 174 and 175 – Fred Kellenberger
- A partnership with Novell Corp has been developed by Janet Gelb and Diane Mayne-Stafford. Through this agreement, Grossmont College has become a training partner for current Networking technology and Suse Linux operating systems. With Course Technology Publishers providing the text materials and Novell Corp providing the curriculum and Grossmont College providing the instructors and classroom space, Grossmont's CSIS department has moved into the forefront in the San Diego area in teaching a wide range of industry-specific courses. See http://www.novell.com/partners/training/academic/

2.10 With the interest and needs of the community in mind, describe any outreach or community activities initiated by the department/program.

- A partnership with Novell Corp has been implemented. Through this agreement, Grossmont College has become a training partner for current Networking technology and Suse Linux operating systems. With Course Technology Publishers providing the text materials and Novell Corp providing the curriculum and Grossmont College providing the instructors and classroom space, Grossmont's CSIS department has moved into the forefront in the San Diego area in teaching a wide range of industry-specific courses.

2.11 **Provide specific examples of departmental or individual efforts aimed at encouraging students to become actively engaged in the learning process.**

Our faculty are confronted with a rapidly changing instructional environment and student body. As increasing numbers of individuals seek a college degree as the means for gaining entrance to a more sophisticated workforce, and as changing technologies and social relationships demand the development of critical thinking and computing skills, the CSIS faculty member has found traditional teaching methods and instructional settings to be inadequate. Progress in serving students' educational needs with available resources requires commitment to teaching and to ensuring greater linkages between faculty teaching and the workforce. Innovation and change in teaching strategies have been encouraged. All faculty and teaching staff must have access to resources designed to enhance faculty development in the area of teaching. All CSIS instructors have been asked to seek the following goals:

1. Students should be able to perform complex tasks; explore subtlety; discern patterns, coherence, and significance; undertake intellectually demanding computational reasoning.
2. Students should be able to undertake independent work, and be open to developing develop new ideas.
3. Students should possess an advanced level of critical sophistication; knowledge and skills needed for further study.
4. Students should be able to read and understand technically-based materials; contribute effectively to group efforts; and communicate computers clearly in ways appropriate to career goals.

2.12 **Explain the department/program's relationship to others on campus (e.g., fulfill prerequisites for other general education programs, cross-listing, interdisciplinary course offerings, learning communities.)**

- CSIS and BOT continue to work collaboratively to cross list Microsoft Office courses and other introductory courses that are offered in the Flex Lab
- Currently, the CSIS courses do not qualify as General Education courses. This may be changing in the future as computer literacy skills become a graduation requirement.
- Primarily due to the fact that CSIS 110 meets the Business major requirement at SDSU, we are continuing to fill all CSIS 110 courses we offer.
- Students from many different academic areas come to take CSIS courses for a variety of reasons. Some are looking to simply get an elementary comfort level with computers and the Internet, where others come to gain skills in a specific area, such as Web Mastery, Programming, Multimedia, Database, Internet techniques, Presentation Graphics, Network Technology, and more

- The CSIS department continues to offer an interdisciplinary multimedia certificate with the Media Communication, Art and Music departments. CSIS has made every effort to continue to work with these departments to create new courses in order to maintain currency in the field.
- Development of new additional courses to keep pace with the changes of the industry for the new Web Development program.
- The CSIS department is currently collaborating with the AOJ and Business departments to develop new cross listed courses in Internet marketing, Computer Forensics and an introductory course in PC Hardware.

Campus Resources

2.13 **Indicate what the department/program has done to formalize links with the following college support services:**

- Learning Assistance Centers (Biology Learning Center, English Writing and Reading Centers, Math Study Center, Tutoring Center) Technology Mall, Instructional Media (upstairs in the Library Technology Resource Center)

- Diane Mayne-Stafford is currently the chair of ICC and meets regularly with members of ICS (Instructional Computing Services) and Information Systems.
- Janet Gelb makes regular presentations to Counselors each semester.
- Janet Gelb has worked with the Tutoring Center to identify qualified CSIS tutors.
- Consultations with the Transfer/Articulation Officer are conducted on an as needed basis.
- New text books are added on a regular basis to the LRC short term reserve list for student use.
- As it becoming more and more difficult to support the technology used in the CSIS department, the support services at the college are less able to support our students.

2.14 Evaluate and provide a summary of the current status of library resources related to the department/program. Use the subject-specialist librarian assigned to your department/program to assist in the evaluation. Consider books, periodicals and online resources.

New text books are added on a regular basis to the LRC short term reserve list for student use.

2.15 **Describe the working relationship between the department/program and the Counseling Department in terms of exchanging specific and current information about your department/program that counselors can use to help students develop education plans and make career decisions.**

- New brochures are being developed for each of the CSIS programs for use by the counselors. These will be available before the end of the Spring semester 2007.
- Janet Gelb conducts presentations to the counseling department each semester as the curriculum tends to change very rapidly. These presentations enable the counselors to more fully explain to students the structure, sequence, and content of our courses and curricula.

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2.16 Comment on the results of the student survey, Appendix 6, regarding campus resources

The CSIS department currently monitors and manages 5 high-end labs in the 500 building. With a long standing agreement with the Instructional Computing Services these labs are "rolled over" every 3 years so that the department has the ability to teach any new application software available. During the interim period between these rollovers the department upgrades memory, hardware components and storage as needed. The survey suggests that students are satisfied with the status of these labs.

The larger campus resources are still not able to support all of the software and hardware required by CSIS courses. The department continues to support the Tech Mall with 5 licenses of any software application needed by the students so that students can make use of the computer facilities when there are no open labs hours in the CSIS labs.

Articulation

2.17 ist courses that have been formally articulated with high schools. Describe any articulation and collaboration efforts with K-12 schools.

Janet Gelb is working closely with the Grossmont Union High school District to develop further articulation agreements for several new courses. We currently have an articulation agreements for the CSIS 172 and 190 classes.

2.18 **fter reviewing ASSIST.ORG and the Grossmont College articulation website, please identify if there are any area of concern or additional needs your department has about articulation with four year institutions. Please describe how the department/program ensures that articulations with key four-year universities are current.**

The department works closely with the college articulation officer to maintain current articulation agreements with the 4 year institutions.

2.19 Describe the status of articulation with the CSU and UC systems as well as with regional private universities and other entities. Describe how the program ensures that transferable courses are current and articulate with four-year institutions.

UCSD: CSIS 293 and 297

SDSU: CSIS 110, 159, 165, 190, 293, and 296

In progress: CSIS 297, Intermediate Java
Constant course updating and meetings and discussions with faculty at both Universities keep us aligned.

The majority of the CSIS departments courses allow the students general transfer credit to SDSU with the CSIS 110 Principles of, being fully aligned with IDS 180 course.

- The following list of courses transfers to CSU as general Transfer credit:
  CSIS 100 Basic Keyboarding
  CSIS 110 Principles of Information Systems
  CSIS 112 Windows Operating Systems
  CSIS 113 Introduction to Unix
  CSIS 114 Small computer Systems
  CSIS 115 ABCD .Net Programming Using Visual Basic/C#
  CSIS 116 Digital Peripherals
  CSIS 119 Program Design and Development
  CSIS 120 Comprehensive Word Level 1
  CSIS 121 Comprehensive Word Level 2
  CSIS 122 Comprehensive Word Level 3
  CSIS 123 Comprehensive Excel Level 1
  CSIS 124 Comprehensive Excel Level 2
  CSIS 125 Comprehensive Excel Level 4
  CSIS 126 Comprehensive Access Level 1
  CSIS 127 Comprehensive Access Level 2
  CSIS 128 Comprehensive Access Level 3
  CSIS 129 Comprehensive PowerPoint Level 1
  CSIS 130 Comprehensive PowerPoint Level 2
  CSIS 131 Comprehensive PowerPoint Level 3
  CSIS 132 Exploring the Internet
  CSIS 134 Web Publishing 1
  CSIS 135 Javascript Programming
  CSIS 136 Web Publishing 2
  CSIS 137 Web Animation
  CSIS 138 Web Publishing 3
  CSIS 139 Introduction to Perl with CGI Applications
  CSIS 140 Introduction to LAN Management
  CSIS 141 Network Analysis and system Integration
  CSIS 142 Introduction to Networking

CSIS 143 Introduction to LAN
CSIS 144 Introduction to WAN
CSIS 145 Introduction to TCP/IP
CSIS 146 Network Security
CSIS 151ABCD Introduction to Computer Graphics
CSIS 155 Intermediate Programming in Basic
CSIS 159 Introduction to Educational Technology
CSIS 160 Introduction to Video Game Development
CSIS 165 Microcomputer Assembly Language
CSIS 172 Introduction to Microcomputer Applications
CSIS 173 ABCD Computer Word Processing
CSIS 174 ABCD Computer Database Packages
CSIS 175 ABCD Computer Electronic Spreadsheet Packages
CSIS 176 Computerized Accounting Applications
CSIS 177 ABCD Presentation Graphics
CSIS 180 Fundamentals of Database Design
CSIS 190 Digital Multimedia I
CSIS 195 Video Editing on the PC
CSIS 196 Interactive Multimedia Authoring
CSIS 213 Intermediate Unix
CSIS 217 Web Graphics 1
CSIS 218 Web Graphics 2
CSIS 219 Web Graphics 3
CSIS 220 Systems Design and Analysis
CSIS 230 Desktop Publishing
CSIS 247 Internetworking Devices and Concepts
CSI 248 Processes and Protocols
CSIS 249 Network Analysis and Design
CSIS 251 ABCD Intermediate Computer Graphics
CSIS 270 Advanced Computer Programming
CSIS 274 ABCD Advanced Database Packages
CSIS 275 ABCD Advanced Electronic Spreadsheet Packages
CSIS 276 Introduction to SQL
CSIS 280 Job Search Assistance
CSIS 281 Directed Work Experience
CSIS 282 Directed Work Experience
CSIS 293 Introduction to Java Programming
CSIS 294 Intermediate Java Programming
CSIS 296 Programming with C++
CSIS 297 Intermediate C++ Programming

- The following list of courses transfers to UC as general Transfer credit:
  CSIS 110 Principles of Information Systems
  CSIS 115 ABCD .Net Programming Using Visual Basic/C#
  CSIS 119 Program Design and Development
  CSIS 155 Intermediate Programming in Basic
  CSIS 165 Microcomputer Assembly Language
  CSIS 190 Digital Multimedia I
  CSIS 270 Advanced Computer Programming
  CSIS 293 Introduction to Java Programming
  CSIS 294 Intermediate Java Programming

CSIS 296 Programming with C++
CSIS 297 Intermediate C++ Programming

The CSIS department continues to work closely with Grossmont College's articulation officer to align courses with both SDSU and CU.

SECTION 3 - STUDENT ACCESS AND SUCCESS

3.1 **In addition to the innovations listed in 2.11 describe specific ways the department has adjusted or developed curriculum to foster student success (e.g., addition of pre-collegiate introduction courses, bridge courses, variable unit courses, on-line courses, honors courses, web enhanced learning).**

CSIS provides course specific tutoring within the CSIS department specifically to foster student success. During the 2005-2006 academic years CSIS has been able to staff about 17 hours per week of open lab tutoring. The schedule depends upon CSIS labs and a trained, qualified tutor being available. CSIS would like to expand this service but is limited by funding, and space availability. During these sessions students taking CSIS courses can finish up their lab assignments from the regular classes with the help of an experienced tutor.

CSIS continues to work with the BOT department to cross-list some lower level application classes offered in the Flex lab.

CSIS is now able to offer a wide range of classes in an online format, thus making the courses available to students who might not otherwise be able to attend an on-campus class at a scheduled time. These include CSIS 110, Principles of Information Systems; CSIS 113, Introduction to UNIX; CSIS 119, Program Design and Development; CSIS 134, Web Publishing I; CSIS 151D, Introduction to Computer Graphics; CSIS 293, Introduction to Java Programming; and CSIS 296 Introduction to C++ Programming. Also, the Microsoft Application classes are all offered on the web.

In addition, most of the Networking Certificate Classes are offered in either an online format or a hybrid format that allows the students to come on campus for practical work on network technology, but to complete the rest of the content online.

CSIS has recently been including hybrid classes in the schedule. These classes have on-campus meetings, but also have an online component. This reduces the number of meetings or the time spent on campus and is a benefit for the working student who does not have much time to spend attending on-campus classes. These classes include CSIS 110, CSIS 112, CSIS 115 (Net programming using ASP), CSIS 134 (Web Publishing 1), CSIS 165 (Assembly Programming), CSIS 276 (Introduction to SQL), CSIS 293 (Introduction to Java Programming), CSIS 296 (Introduction to C++ Programming), and several of the networking classes.

3.2 **Analyze appendix 7, Statistical Data: Outcomes profile, and comment on strategies utilized to address the needs of the various cohort groups. Provide specific strategies that have been used to meet the different needs of your students (e.g. re-entry, academically under prepared, working, disabled,**

limited English)

- Online and hybrid classes are a benefit to working and disabled students (see 3.1)
- CSIS tutoring helps academically under prepared students and those with limited English (See 3.1)
- Referrals to BOT open-entry classes and to the SETL lab help academically under prepared students and those with limited English skills
- Disabled access in the CSIS labs (computer equipment, hardware and software, desk and chair access)
- As the population becomes more technologically sophisticated new courses will be developed to reflect the new technology. This sophistication is an advantage when we offer classes in the online and hybrid formats.
- CSIS is in the process of completely reworking the Web master program as a result of the current job market and the maturing of the World Wide Web to reflect the current needs of students. Other programs will be reviewed to insure that they are filling the needs of the job market.

3.3 **If state or federal licensing/registration examinations govern the program, please comment on student success.**

Not Applicable

3.4 **Discuss strategies and/or activities which have been, can be, or will be used to promote/publicize the courses/department/program. Include activities your faculty have implemented to provide closer connections to primary, secondary and post secondary schools. Consider campus/district resources that have been useful. Using the Student Survey, comment on how students learned of this program.**

- CSIS has participated in a College Day in cooperation with local High schools.
- Janet Gelb is participating in many outreach activities with San Diego County High Schools. This has included bringing groups of students to the campus for tours of our facilities.
- CSIS is currently rewriting brochures for each of our programs, that can be used in promotional activities.
- The Digital Multimedia 1 and 2 classes have developed a DVD about the CSIS department that can be handed out at promotional events and also put on the web.
- The CSIS web site is updated on a continuing basis.
- The CSIS program has an internship requirement for all graduating students. The students are required to enroll in this course in their last semester of study. Student build and develop relationships with local

businesses thought the internship/job search process.

3.5 **Referring to Appendix 7, Statistical Data, Outcomes profiles, Appendix 8, Efficiency Report and Appendix 5, Grade Distribution Summary Report, comment on <u>emerging trends</u> of course completion, success, retention, and enrollments.**

CSIS has traditionally occupied a large number of seats per annum but due to the downturn in the economy we have seen a lower enrollment in many of our courses as well as a lower number of courses offered per semester. This has had a negative effect on efficiency of CSIS offerings, probably due to economies of scale. However, recently the job market seems to be stabilized and even recovering and correspondingly, the CSIS enrollments and efficiency recovered slightly in the first half of 2006.
Similarly, course completion, success and retention were fairly stable until the enrollment decline that started in 2003-2004, but have dropped along with the enrollment. We expect that the enrollment will start to increase in 2007 and expect to see these figures increase along with the enrollment.

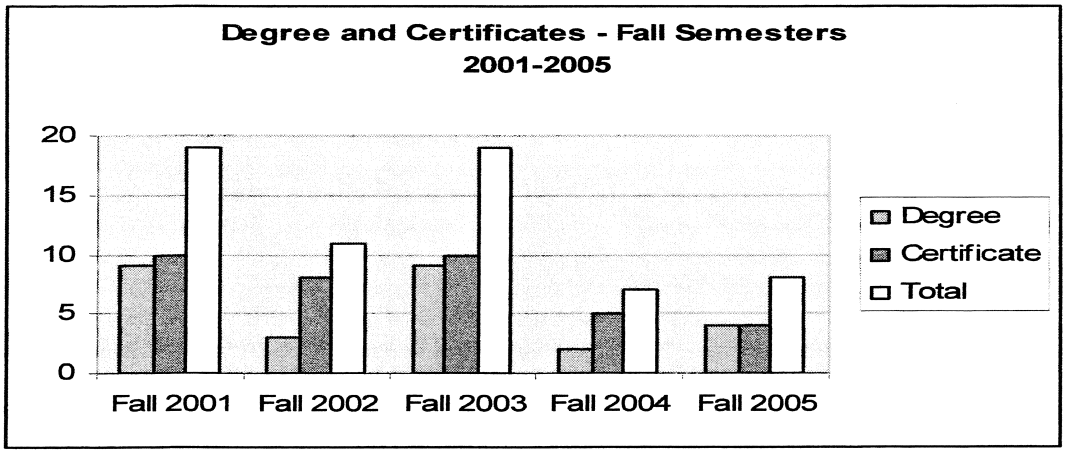
CSIS instructors notice that students need to complete their programs in as short a time as possible and this leads them to enroll in classes without having the recommended preparations. These students are having great difficulty succeeding in the classes. Many students enroll in classes with some industry experience but not necessarily the prerequisite skills required for the class.

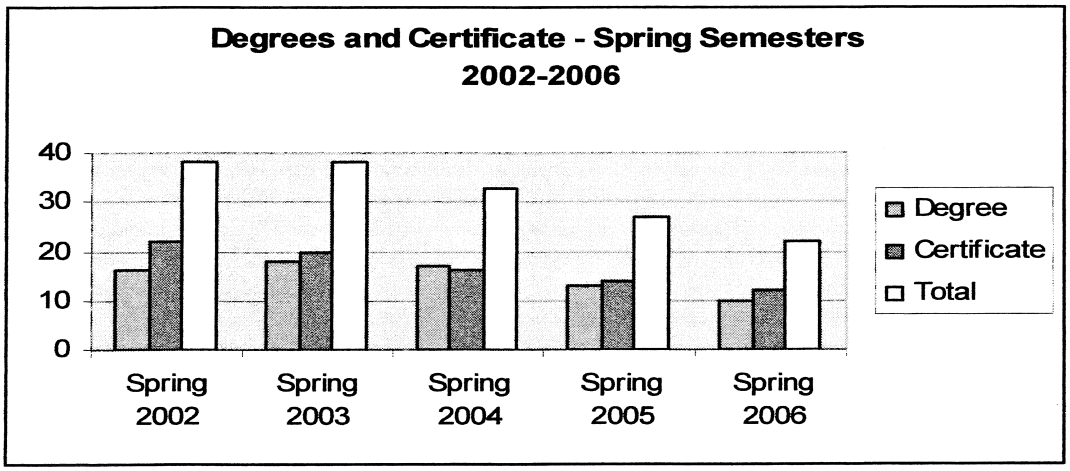
3.6 **Referring to Appendix 9 if the department/program offers a major or certificate in the college catalog, comment on the trends regarding number of students who earn these degrees and/or certificates.**

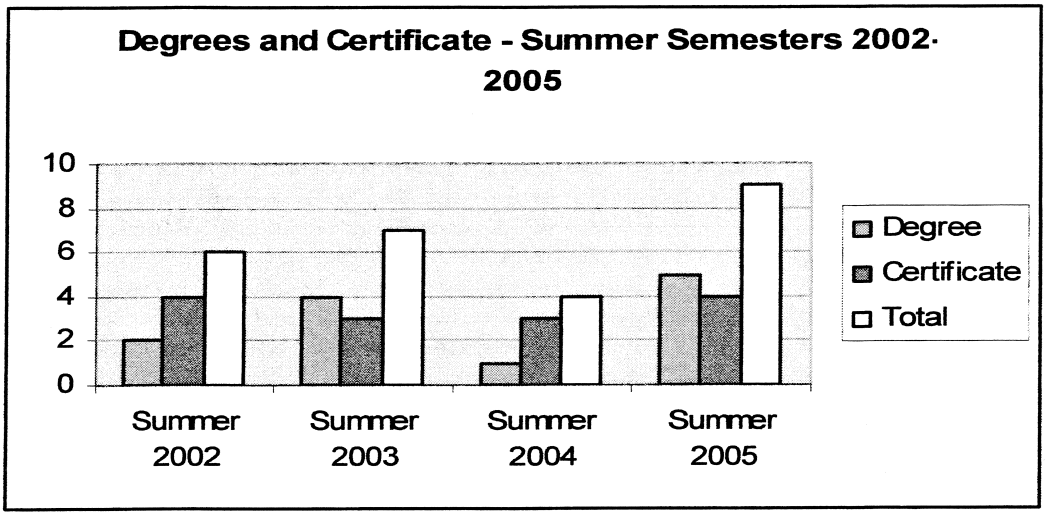
The department currently offers four degree/certificate area of emphasis programs: Small Computer Software Specialist, Computer Programming, Webmaster, and Local Area Network Support Specialists.

The trend for the last three years has been towards fewer students in all the CSIS programs. CSIS is responding by updating the Webmaster program to a new program, Web Development and by re-working the Local Area Network Support Specialists program with updated courses and content.

We have recently seen a trend towards more students enrolling in the programming courses, but this seems to be related more towards individual course articulation agreements with the CSU system than to the program as a whole.


Degree and Certificates - Fall Semesters 2001-2005
20
15
10
5
0
Fall 2001
Fall 2002
Fall 2003
Fall 2004
Fall 2005
Degree
Certificate
Total


Degrees and Certificate - Spring Semesters 2002-2006
40
30
20
10
0
Spring 2002
Spring 2003
Spring 2004
Spring 2005
Spring 2006
Degree
Certificate
Total


Degrees and Certificate - Summer Semesters 2002-2005
10
8
6
4
2
0
Summer 2002
Summer 2003
Summer 2004
Summer 2005
Degree
Certificate
Total

SECTION 4 – DEVELOPMENT OF HUMAN RESOURCES

In Appendix 10, complete Conference, Workshops, Staff Development and Sabbaticals forms.

4.1 Describe how participation in activities listed in Appendix 10 have resulted in improvement in curriculum and instruction.

- One of the "opportunities" that education provides is the challenge of being a life-long learner. Software changes and updates are almost automatic in this industry, mandating a continual awareness of what is new in the "field". In order to facilitate the constant updating of information and skills, the CSIS department in the past was able to set aside funding for attendance at conferences and workshops. The benefit of attending these various functions extends beyond the acquisition of new software skills. It provides the vehicle for observation of programs elsewhere, as well as the chance to plan for new programs to meet the needs of future students.
- Constant reading of current literature, including an enormous number of periodicals is required.
- Four of our six full-time faculty members have performed one-semester sabbatical projects from which we bring new skills learned into our classrooms. These sabbaticals each had an Industry based component where the faculty member was required to perform a number of hours job shadowing. This time was very valuable to the department with the development of new courses and potential new programs.

With regards to updating on the curriculum, the CSIS department is very open-minded to new ideas contributed by the entire faculty. The rise of the multimedia program is an excellent example of how a future need was anticipated by a senior member of the department, who inspired others to assist in curriculum design and implementation. The multimedia program eventually became an interdepartmental entity of its own, creating opportunities for students in four different departments to integrate their own field of interest like music, art, video, or programming into the new emphasis

Discussion on program changes, new courses, and new modes of instruction are a subject of regular department meetings and retreats. The IT industry is a fast paced, ever changing environment so constant change and new course development is required on a regular basis.

In regards to curriculum, many times we request the assistance of adjunct faculty who are expert in their particular field in order to create the most current and state-of-the-art course outlines.

CSIS holds at least one meeting each semester with the CIS department at Cuyamaca College. Joint concerns and new technologies are discussed.

Individual faculty returning from conferences and workshops incorporate their newly acquired knowledge directly into their classes and into new course and program development.

Faculty are actively involved with the SD4C where all the community colleges represented in region 10, SDSU, UCSD, SDSU – San Marcos, Alliant University, USD and National University meet twice a year to discuss curriculum issues, articulation and course development.

4.2 Forecast your staff development needs both within and outside of the institution.

Along with the constant change which has occurred in our field and continues to occur, there is a great need for staff development, particularly from outside our institution.

As in the past, we hope that faculty will continue to be able to attend one or more of the large industry conferences held each year that directly address the needs of CSIS. These include, among others:

1. TechEd Conference on Information Technology
2. The League for Innovation in the Community College Conference in Information Technology
3. Handson workshops provided by Publishing companies
4. others that occur both locally and afar.

The CSIS department has also found that the textbook publishers have been providing very useful and relevant seminars and we will continue to take advantage of these free opportunities. Over the years these "publisher conferences" have proven to be of great value, as we get to see what is being created specifically for students, as well as providing an opportunity for us to provide feedback to the book publishers.

Another very worthwhile event that occurs in San Diego every semester has been the SD4C, "San Diego Community College Computer Committee". At this meeting, we bring together members of the computer faculty from all the Community Colleges in the San Diego area, as well as faculty from SDSU, UCSD, USD, National University and others. Our goal is to update ourselves with what other schools in the area are doing and to keep abreast of changes. This is an invaluable occurrence.

4.3 Describe how the members of the department/program are helping to shape the direction of the college (e.g., writing grants, serving on college/district committees, task forces, Academic Senate representation, etc.).

We feel that, for the most part, we are a very active participant in a variety of college activities. Members of the CSIS department have served on a great deal of committees, as you will see below. We interface regularly with the Information Systems department to formulate campus computer decisions, we lead committees, we teach classes during the Professional Development "Flex week" and we believe we are actively engaged.

- Our department has been a leader in the introduction of both online and "hybrid" classes.

- The Distance Education Committee is currently chaired by a CSIS member: Diane Mayne-Stafford.

- Students are currently demanding that classes meet their individual needs of time, location, and learning styles. Since staff development activities include instruction in learning styles, course delivery, and cultural diversity, these principles become integral to developing and implementing both online and in class curriculum. Each member of the full-time faculty in the CSIS department has taught at least one completely online class or hybrid class.

- We have recently worked with a variety of departments to have classes cross-listed. Since many departments see a need for the inclusion of computer skills, we have been working closely and productively with:

- AOJ – to create Computer Forensics and PC Fundamentals classes

- BOT to create a variety of classes which can be taken in the "open-entry open-exit" format.

- BUSiness to create courses which are cross-listed, such as the Introduction to Databases course

- BUSiness to co-create a new series of courses in Internet Marketing

CSIS faculty have participated in the following campus committees, among others:

- Faculty Academic Senate
- Distance Learning Committee
- Faculty Hiring
- Tenure Review
- Instructional Computing (ICC)
- Professional Development
- FTES Taskforce
- Standards and Procedures Taskforce
- Budget & Planning
- Curriculum
- Scholarship
- International Student
- Chairs and Coordinators
- Facilities
- Joint Multimedia development
- CSIS/Computer Training Advisory
- Equipment and Technology
- Program and Budget
- Instructional Computing Advisory Council
- New Technology Planning Taskforce

As part of our current task, to both market the needs for our department's services, as well as to provide the students at Grossmont College the ability to enhance their 'real-world' skills, we are working to introduce a General Education "Computer Literacy" course. We feel that this is a much-needed course here at Grossmont College and that it truly is needed by many of our existing and future students.

4.4 Describe how the members of the department/program contribute to the community beyond the college, locally, statewide, nationally.

- Interaction with IT professionals around the US
- Attend national and international conferences
- Participate in local users groups
- Diane Mayne-Stafford is the computer science lead faculty representative at the state-wide IMPAC group
- Members of leading national professional association for the advancement of technology.

4.5 Describe how decisions are made in your department/program.

The CSIS department meets regularly to attend to the multitude of issues that arise in an active department. Departmental decisions are generally accomplished by first discussion, then by a vote of the full-time faculty; however, all adjuncts are invited to give their opinions in order to maintain a diverse range of ideas.

When decisions involve auxiliary departments, assigning task forces to facilitate the interdepartmental interaction and planning emphasizes collegiality. There are two 4 hour meetings annually that involve both part-time and full-time faculty. These are used to elicit the opinions and knowledge of all faculty.

As a department, we are regular users of "email" as a manner to keep our adjunct current with what the full-time faculty are focusing on, and that is a manner in which we share information as a department. The usage of email by all of our faculty has reduced the amount of face-to-face meetings needed and makes them more efficient as well.

4.6 Describe how computer resources, such as the Internet, department and faculty web pages, and email are used by faculty in the department/program.

This department teaches how to use computer resources and it is thus incumbent on the CSIS faculty to utilize them as well.
The CSIS department is highly dependent on the Internet for essential departmental activities such as communication between full and part time faculty, for curriculum planning and for course supplementation. In addition, the Internet is the mandatory vehicle for many of the CSIS courses themselves, which teach how to create professional Web based systems using HTML and

JAVA programming concepts, ASP, JavaScript and much, much more. The Internet has become such an important tool in the CSIS department that it is inconceivable that our classes could be run successfully without its electronic presence in our classrooms.

Our online and hybrid courses, along with many of our traditional face-to-face courses utilize the Internet for the purposes of communication, dissemination of documents, and dissemination of grades.

A great many of our courses are delivered utilizing the industry standard software tools of Blackboard and Web CT.

Many of our faculty have professional-quality web pages making student access to information more convenient which we believe helps our students tremendously.

4.7 If your department/program has hiring equivalencies, explain the rationale and comment on alignment with Cuyamaca. Please list equivalencies in Appendix 11.

A major challenge in our department in the area of "equivalencies" is that we are very different than many other departments. In the field of Computer Science and Information Systems, we may find that someone is excellent in the area of Computer Programming, or Networking, Web Design, etc.... and yet not be current and skilled in another area, also in our field.

Someone skilled with Image Editing software may not be able to teach Programming, and vice versa, for example. Hence, it is very difficult to establish department equivalencies.

Janet Gelb is currently working with a small sub group of the senate to develop a process for departments to successfully have course by course equivalencies vs departmental equivalencies so that we can maintain a pool of highly qualified adjunct instructors.

4.8 List and describe the duties of classified staff, work study and student workers who are directly responsible to the department/program.

Currently, we have one full-time classified staff. We feel that this position is of critical importance in the CSIS department being able to effectively teach its classes.

During a typical semester, the CSIS department employs four to five part-time student "Lab Aides" who provide a host of support services. These part-time workers serve both in large class environments as well as in our open labs sessions.

Some of the services these student workers perform include:

- assisting in solving hardware issues

- often as a first solution to software problems in a host of areas, such as the Microsoft office tools, Windows, Internet Explorer and others
- assisting students to understand the assignments, if necessary
- helping to locate more in-depth support when needed
- showing how to log-in to the computer screens
- assisting users with notebook computers to connect wirelessly
- keeping an eye on valuable equipment
- loading paper into the printers
- cleaning the whiteboards
- arranging the chairs neatly
- maintaining order, if necessary, in open lab sessions
- and a host of day-to-day activities

(See Appendix 11 for job descriptions of the full-time CSIS classified staff and fulltime faculty.)

4.9 Discuss staffing factors that influence the effectiveness of the program. Does your department/program need to decrease, maintain, or increase the number of full-time faculty? Support your response with enrollment trends, future outlook for your department/program and any information related to changes in the economy, business or human services needs. Include discussion of part-time vs. full-time ratios and dependence on overloads.

At the present moment, due to the skills and talent we have on our staff, as well as taking into account the anticipated demand, we feel that our current ratio of adjuncts to fulltime faculty is adequate. The one area where we have a specific need is in being able to attract and retain highly qualified adjunct staff for classes as the need arises.

There is one area where some help would enhance our program and increase enrollments. In the past there was no need for the CSIS department to market our classes to graduating high school students and reentry adults. The IT industry was vibrant with many high paying jobs available to our graduates. This is not currently the position so the area of "marketing" has become a necessary part of the future growth of the CSIS department.
The state of California has set a goal of having 75% of the course units taught by full-time faculty. Over the past few years, we have moved much closer to meeting that goal. In a large part, that was accomplished by the fact that the statewide enrollment in CS classes has taken a decline.

We are very aware and appreciative of the excellent caliber of adjunct faculty we have managed to attract. These individuals come from the actual day-to-day world of state-of-the-art computing. We would be hard-pressed to replace our adjunct faculty if they were to depart. While saying that, we do attempt to remain in contact with professionals in order to replace faculty one-by-one as they eventually do leave.

At present, we believe that we have an adequate ratio of full-time to part-time faculty.

As can be seen through Efficiency Report in Appendix 8, the CSIS Department has seen a decline in enrollment each semester since Fall 2000, until now. This trend has reversed itself last year. From Fall 2005 to Spring 2006, we have seen our first INCREASE in WSCH in over six years. We are very happy to see this and we hope it will continue.

SECTION 5 – SCHEDULING EFFECTIVENESS AND ROOM UTILIZATION

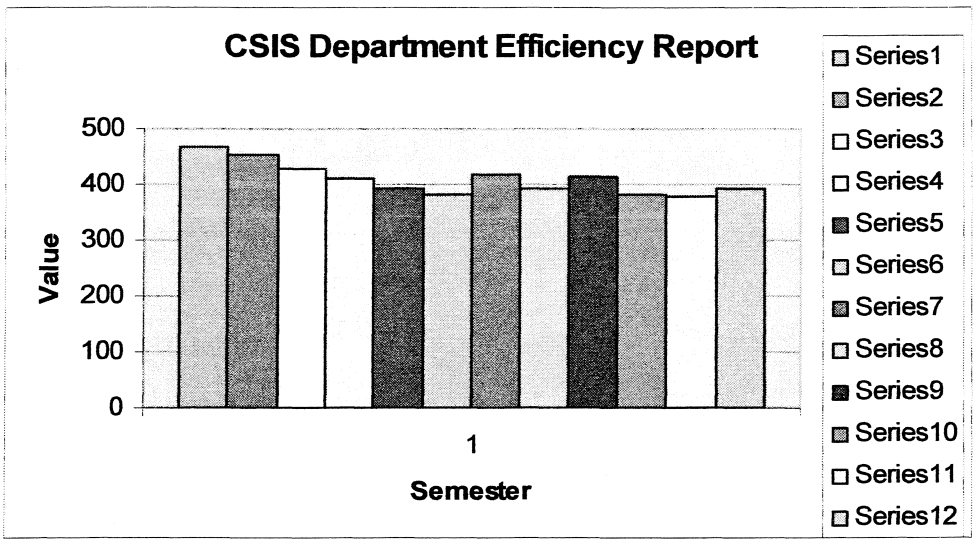
Refer to Appendix 7 for efficiency. Enrollment will come from Data on Demand;
Appendix 5 has the sections and class sizes. Appendix 12 shows % of max.

5.1 Using Appendices 7 and 8, comment on student success figures since the last program review. How does this compare to the campus-wide figures?

According to Appendix 8, Grossmont College Weekly Student Contact Hours (WSCH) Report, the CSIS program appears to be inconsistent with the overall WSCH for the college. While the college has maintained a fairly consistent WSCH over the last six years – ranging from 331,089 in 2000/01 to 343,512 in 2005/06 with intervening years being slightly higher than these endpoints – the CSIS department's WSCH has been on a steady decline from 15,580 in 2000/01 to 8,846 in 2005/06.

Given the events surrounding September 11(9/11) as well as the dot-com bust in 2000/01 and the huge US economic dip that ensued, it is understandable and explainable that computer technology course and program demand would decline. These factors are the main contributors to the steady decline and not more localized issues such as the quality of the CSIS faculty, courses, schedules, or availability of technology*. There is good news, however, in that the US Government's Bureau of Labor is predicting that 8 of the top 10 jobs most in demand over the next five years will be computer technology related which should account for a gradual up tick in the CSIS WSCH. That, coupled with significant technology advances in both hardware and software, will cause the existing labor pool to seek courses to remain current in computer technology and will send the appropriate message to high school graduates interested in computer technology. During the Fall semester of 2004 the Leadership and Economic Development Database program lost its funding. As a result of the closure of that program the CSIS department's WSCH indicated a further drop as all classes taught in the program were CSIS FTES generated and scheduled classes.

- The reader is directed to the December 2006 CSIS student survey results and High School Counselor survey results report. This report was independently prepared by a student team from San Diego State University's BA-795 Project Capstone course which is a culminating experience for students about to graduate with an MBA degree.
- CSIS WSCH Report Chart

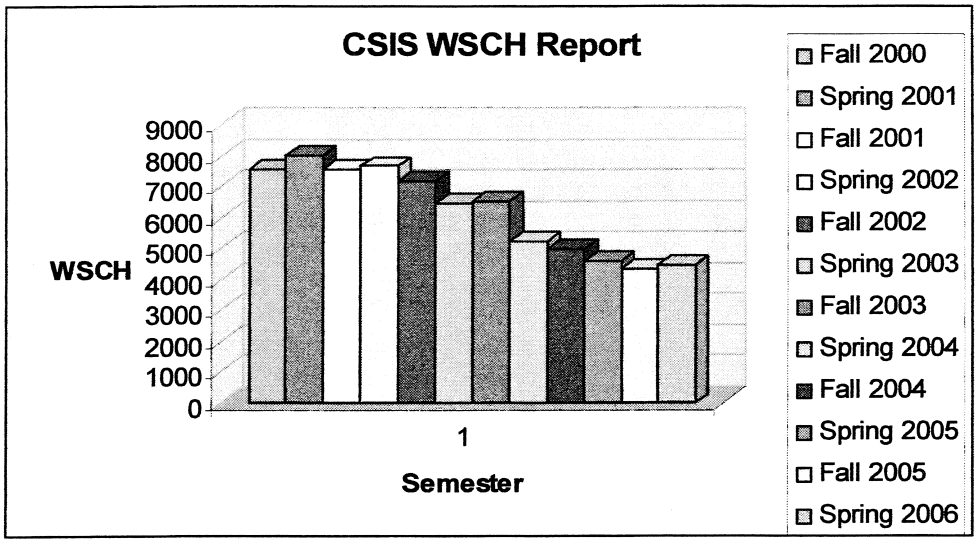


5.2 Analyze and comment on any trends in enrollment, numbers of sections offered, average class size and efficiency.

Rooms 530, 531 and 532 are fully utilized with courses and open lab schedules. Scheduling maintenance time for computers, monitors, printers, and software during the week is quite difficult between the hours of 7:30am and 10pm and even during the day on Saturday. It is also impossible to add additional classes in these rooms without deleting a current class. As a result CSIS are utilizing other rooms on campus such as 530, 531, 532, 533, 534, 535A and 551A. Many other departments ie Psychology, English, Administration of Justice, Foreign languages, Nursing and ROP are now using 533 and 534 for lab classes that cannot be accommodated in their own areas. The Welcome Back program also uses 532 on both Saturdays and Sundays during both the fall and spring semesters.

CSIS enrollment trends were pointed out in section 5.1; however, we anticipate a gradual increase in enrollment over the duration of this program review period. The number of course sections has stabilized during the last academic year and additional sections will be introduced when demand warrants it. Average class size has also declined since 2000/01 but it too has stabilized above the district cutoff point for offering a section.

According to Appendix 12's Grossmont College Efficiency (Earned WSCH/FTEF) Report by Semester, the CSIS department has experienced a 20% decline from Fall 2000 to Fall 2005 and a 13% decline from Spring 2001 to Spring 2006. Individual CSIS course efficiency for Spring 2006 ranges from a high of 112% of max to a low of 32% of max.



5.3 Comment on any sections that are historically under-enrolled and discuss strategies that might increase enrollment.

Any under-enrolled classes have either been cancelled, changed to a different time, or are protected (required by the major and offered only once a year). The following courses are required for a degree and are offered only once a year:

- CSIS 155 Intermediate Programming in Basic
- CSIS 165 Microcomputer Assembly Language Programming
- CSIS 220 Systems Design and Analysis
- CSIS 294 Intermediate Java
- CSIS 276 Introduction to SQL
- CSIS 297 Intermediate C Programming
- CSIS 280 Job Search
- CSIS 218 and CSIS 282 Work Experience

5.4 Comment on the adequacy of facilities (e.g., does the room size and configuration fit the teaching strategies?) and equipment for meeting instructional needs.

The number of CSIS classrooms/labs and the availability of advanced platforms and (wireless) networking tools are inadequate to support growth or innovation within the department's ever evolving curriculum.

The sophisticated software demands placed on personal computing platforms, such as those in our computer classrooms (530, 531, 532), poses a major challenge for CSIS to upgrade this equipment every 12 to 18 months maximum. For example, Microsoft has just released Windows Vista (replacement for Windows XP Operating System) with minimum computer memory requirements of 1GB and 1.5GB to perform reasonably well. Our computers have 1GB. Vista's new graphical user interface – Aero Glass – requires accelerated graphics cards to effectively utilize it, and the computers do not have such a card installed in them – From the Microsoft Website: Support for DirectX 9 graphics with a WDDM driver, 128 MB of graphics memory (minimum), Pixel Shader 2.0 and 32 bits per pixel. Microsoft has

also just released is Office 2007 family of products – Word, Excel, Powerpoint, Access, Outlook – and these are more sophisticated and computing resource demanding than their predecessor Office 2003 also.

The more advanced courses, either on Windows platforms or on Unix/Linux platforms, require the latest in software development tools such as Microsoft's Visual Studio Team System 2007, Eclipse 3.x, Adobe PhotoShop and Dreamweaver, Gaming software, Security software, database software, etc. In addition these computers need sophisticated networking capabilities including wireless WiFi.

We have the faculty talent and passion; we just need the technology to keep up with industry demands/needs.

5.5 How does room availability affect your enrollment?

Each of our CSIS courses requires a hands-on component, either via a scheduled lab or devoted classroom time to demonstrations and student participation. As such, we rely almost entirely on our computer-equipped classrooms located in rooms 530, 31, 32, 33 and 34.

The current enrollment figures can be accommodated by the number of computer-equipped classrooms and their availability throughout the day. What is a more pressing problem than room availability is the state of the computer-equipment in these classrooms.

Microsoft has just released Windows Vista, a replacement for Windows XP Operating System, along with Office 2007, a replacement for Office 2003. Both of these software packages demand additional hardware requirements beyond what our current computers accommodate thus causing us to wait one or two years before moving our students to these important software products – rather than being an academic leader in offering courses utilizing these software packages, we will more than likely be a laggard which could negatively affect enrollment.

5.6 Discuss alternatives your department/program has explored including off-site offerings.

The CSIS department faculty have explored many course offering options including day, evening, once a week, hybrid (part on ground and part on line), online, on ground, and Saturdays. In addition we have considered offsite locations such as one of the east county gaming casinos, a retirement or other community center, and high school. Sufficient demand for off-site course(s) has to be determined prior to establishing a course(s) at a particular off-site location, so demand first, and then establish the course(s) offsite.

5.7 Comment on the results of the Student Survey, Appendix 6, focusing on class times and facilities.

Question 6a is "The classrooms for this program are clean and in good repair." The survey results indicate that over 95% of the 303 respondents strongly agreed or agreed with this statement.

Question 6b is "The classroom equipment is maintained and up-to-date." The survey results indicate that about 95% of the 303 respondents strongly agreed or agreed with this statement.

Question 6c is "The computer technology used in the classroom is up-to-date." The survey results indicate that over 94% of the 303 respondents strongly agreed or agreed with this statement.

Question 7 is "How satisfied are you with the availability of courses in this department?" The survey results indicate that about 92% of the 303 respondents are very satisfied, satisfied, or neutral with respect to course availability.

Question 8a is "What would be your preferred start time(s) for courses to be offered (Weekdays)." The survey results indicate that about 57% prefer 9am to 3pm start times, 26% prefer 4pm or later start times, and 19% prefer early mornings (7am).

Question 8b is "What would be your preferred start time(s) for courses to be offered (Saturdays)." The survey results indicate that about 45% would not attend courses on Saturday; 25% indicated 9am to 3pm start times, and 14% prefer early mornings (7am).

Question 8c is "What would be your preferred start time(s) for courses to be offered (Sundays)." The survey results indicate that about 62% would not attend courses on Sunday; 14% indicated 9am to 3pm start times, and 9% prefer early mornings (7am).

SECTION 6 – FISCAL PROFILE

6.1 Using Appendix 12, Subject WSCH Analysis Report: comment on trends reflected in the column "Earned WSCH/FTE(F)" for your overall department/program, and for specific courses over a five year period.

The trend has indicated a downturn though 2005 as a result of the downturn in the IT job market but there seems to be a leveling off in 2006 with a slow rise predicted in 2007.

As a result of the closure of the LEDI program during the fall/spring of 2004-05, the CSIS WSCH numbers were negatively affected. The CSIS department traditionally benefited over the years from the LEDI student enrollments and the grant money awarded to that program.

For more information on IT Job placement see the IT Salary Guide for 2006 as released by Robert Half Technology

6.2 Using Appendix 14, Fiscal Data: Outcomes Profile: analyze and comment on

Earned WSCH/FTEF and Cost/FTES of the department/program.

Average WSCH/FTEF for Grossmont College over the last five years was approximately between 412 and 493 while the WSCH/FTEF ratio CSIS classes for the years Fall 2000 through Spring 2006 was 392 to 469. During the 2004-05 academic year the LEDI database administrator program closed, as funding was no longer was available. This is clearly seen by the large drop of WCSH and FTES as indicated appendix 14. The data also shows that the WSCH/FTES ratio has dropped over this period due to the drop in job opportunities in the IT industry.

6.3 If the department/program receives any outside financial support or subsidy, list those sources and the amount. Describe how the additional resources are used and how they relate to the regular college budget.

The CSIS department continues to receive Vatea funds of between $22,000 and $30,000 annually
These funds support:

1. CSIS tutors required in the classroom for our entry level classes, CSIS 110 and 105. The regular college budget that CSIS receives would not allow CSIS to provide the current high quality tutoring that our CSIS students need. The one consistent request from CSIS students is for more open labs and more tutors. We cannot over-emphasize how important this service is to the success of our students.
2. Provide CSIS with funds to purchase new software and upgrade existing applications so that we can teach state-of-the-art software applications as required by business and industry
3. Provide limited funds to support training, workshops and conference for the faculty.
4. Supplies for labs

SECTION 7 – SUMMARY

7.1 Summarize department/program strengths and weaknesses in terms of:

• teaching and learning

Strengths:

Strong faculty who are:;

1. Involved in curriculum development
2. Stay abreast of IT changes in business and industry
3. Interested in developing new ideas to enhance teaching and learning
4. Diversity of skills among the staff
5. Extensive network of industry contacts
6. Strong adjunct instructors who are currently working in industry
7. quality tutoring staff
8. Willing to learn new skills in order to deliver the highest quality learning environment
9. Adjunct faculty who work in the industry

Weaknesses:

1. Limited funds for training
2. Longer rollover time for lab equipment resulting in not being able to keep up with the rapid changes in technology
3. Limited sections due to lower enrollment

• student access and success

Strengths:

1. Develop more online and hybrid courses
2. Flexible class schedule meeting the needs of both adult re-entry student and the traditional fulltime college student
3. Large variety of course covering a variety of programming languages, software applications, operating systems and networking concepts.
4. Excellent comprehensive curriculum
5. High quality instruction and tutoring opportunities for students
6. Offers industry based internship opportunities
7. Students taking courses reflect a wide range of ethnic diversity and age groups

Weaknesses:

1. Lower enrollment resulting in courses being offered only once a year versus every semester.
2. No longer a clear path to employment
3. Attract fewer females

• development of human resources

Strengths;

1. Strong technical support staff - lab specialist and tutors
2. Faculty are well educated and continue to upgrade their skills by attending workshops, training and conferences
3. Continue to support students with strong tutoring staff in both open labs and in the classroom.

Weaknesses:

1. An inability to attract highly qualified faculty as we are unable to compete with the salaries paid by business and industry.

• fiscal stability

Strengths:

1. A budget allowing the department to remain current with the new software and hardware
2. Development of industry partnerships to obtain donations of equipment for use in the labs.

Weaknesses:

1. Limited training funds for faculty
2. The prospects of employment for our student in the IT job market has decreased.
3. Need better marketing plan to attract more students

See Strategic plan summary.

SECTION 8 – CONCLUSIONS AND RECOMMENDATIONS

8.1 Make a rank-ordered list of department/program recommendations. These recommendations should be clearly based on the information included in Sections 1 through 7. Do not limit recommendations to only those dealing with resources.

1. Continue to provide curriculum that is up-to-date and prepares students for industry demand occupations. In order to do this we will need to update current courses and add new courses on an annual basis.
2. We need to provide technology that reflects industry standards and support the new curriculum by upgrading and expanding computer classrooms and lab facilities with new state-of-the art equipment that meets industry standards.
3. More funds to support faculty training and more funds to support faculty equipment for research and development in new technologies.
4. A stronger and more effective collaboration between other departments on campus in the development of cross discipline courses.
5. Improved marketing of the department. A stronger support from the college/district marketing department to assist in the marketing of the CSIS program to potential students with a potential result of higher enrollments.
6. Develop a computer literacy GE course
7. Build further articulation agreements with the local high schools and 4 year institutions.
8. Provide additional technical support for CSIS faculty and students by hiring an additional network administrator
9. Continue to collaborate with the CIS department at Cuyamaca College to align new courses.

GROSSMONT COLLEGE

CSIS DEPARTMENT STRATEGIC PLANNING RETREAT

APRIL 21, 2006

PART I

CSIS

VISION:

High quality technology instruction for transfer, career, and personal development to meet the needs of our students

CSIS

MISSION STATEMENT:

The CSIS Department will provide quality education to students based on a comprehensive, relevant curriculum that provides students with the ability to transfer, enter the workforce, promote and maintain life-long learning.

CSIS

Strengths:

Excellent professional reputation.
Faculty dedicated to students.
Excellent campus support.
Diversity of skills among staff.
Opportunity to develop innovative new courses and programs.
Excellent facilities/up-to-date equipment
Excellent support specialist.
Effective mix of online, hybrid and on-site courses.
Comprehensive curriculum.
Diverse student population.
Quality tutoring staff.
Solid history/legacy on which to build.
Creative, adaptable, collaborative instructional staff.
Dedicated, committed department chair.
Extensive network of contacts in the community.
Collegiality across San Diego County: UC, CSU, private & CCs.
Strong adjuncts from industry.
Strong faculty technical support.

CSIS

WEAKNESSES:

Low enrollments.

Students don't see a clear path from our programs to employment.

Lack of connection between internship program and the job search class.

Funding/Professional development opportunities.

Lack of effective marketing.

Changing demographics.

Enhance teamwork among team members.

Improve communication and dissemination of information.

Team to consider more involvement in committees as individuals choose.

More face-to-face communication.

Under-prepared students.

Inability to recruit and retain adjunct faculty with up-to-date, cutting-edge skills.

Low salaries for adjuncts.

Need mechanism to understand student and industry needs.

CSIS

OPPORTUNITIES:

Increase enrollments:

- **Creation of focus groups (students, industry folks).**
- **Build strategic partnerships with industry.**
- **Marketing.**
- **Create innovative curriculum – certificate programs, courses.**
- **Graduation requirements.**
- **Change semester format.**
- **Comprehensive exam or**
- **Required course integrating all skills.**
- **College GE course in computer technology (computer literacy).**

Build internal partnerships

Collaborative effort with other Vocational Ed departments to develop internship programs.

Curriculum/course scheduling/alignment/coordination.

Tracking students who have left campus.

CSIS

CHALLENGES:

Curriculum committee.

Misperception of job market by students.

Marketing.

CSU moving CSIS 110 to upper division.

Development of effective means of collaborating w/ fine arts & other departments.

Resistance to change across all departments.

Maintain high level of skills of faculty.

Under-prepared and over-committed students.

Staffing – Full-time/part-time facult ratios.

Non-competitive salaries.

Microsoft upgrades creates need to upgrade hardware.

Transition plan.

Need for support staff.

PART II

CSIS
THREE YEAR PLAN

GOALS:

Increase enrollment.

Place students into jobs.

Professional development.

OBJECTIVES: Increase Enrollments

ACTION	PERSON	DUE DATE
Identify our student population – target for Marketing.		Immediately.
Build articulation agreements.		2006 - 2009
Marketing internal/external.		ASAP – No later than July 2006
Build focus groups to ID industry & student needs.		Immediately – By May 31, 2006. Curriculum - submission in by Sept.
Create annual program.		2006 - 2009

OBJECTIVES: Place Students in Jobs

ACTION	PERSON	DUE DATE
Build an internship plan		ASAP – No later than July 2006
Strategic partnership with industry.		2006 - 2009
Build tracking system for where students go when they leave CSIS.		By 2009

OBJECTIVES: Professional Development

ACTION	PERSON	DUE DATE
Submission of individual Personal development plan	everyone	Feb 15, 2007

OBJECTIVES (Continued)

ACTION	PERSON	DUE DATE

CSIS Strategic Planning Retreat
April 21, 2006
Mission Trails Regional Park
Meeting Summary

Present: Pam Amor, Diane Mayne-Stafford, Cliff Quinn, Jim Hotz, Ronald Norman, Janet Gelb, Fred Allen, Mike Qualls & Donald Crain

Recorder: Anita Carrillo

Introductions – Pam welcomed everyone for coming to the retreat and explained that the main goal of the retreat is to create a 3-year Strategic plan for the CSIS Department. She asked everyone to go around the table and say something positive about themselves by giving a one-word description and say something about themselves that most people may not know.

Diane Mayne-Stafford – Positive; she tries to see the positive in things and situations. She has two dogs.
Cliff Quinn – He is an Eternal optimist. He is on sabbatical and is an avid fisherman, but has been too busy to fish.
Ron Norman – He is Encouraging. He is a grandfather with three grandsons one granddaughter.
Jim Hotz – He is Hopeful to build a consensus on a good direction. He rides motorcycles.
Janet Gelb – She is a Cheerleader. She is also a grandmother to one grandson and she is a foreigner.
Fred Allen – He is a Facilitator. He loves being in the classroom; this is his third semester teaching a class. He feels it is important to look at programs and evaluate to protect them.
Mike Qualls – He is a Positive Optimist and dislikes labels. He is a logical person and has lived in SD since 1969. He is also a fly fisherman.
Don Crain – He is a Diplomat. He also enjoys Geology, Geometry, Astronomy, and has recently sold photos to a gallery in Tucson.

Pam distributed an agenda and played a short video. "Celebrate What's Right with the World." Pam commented on the film and said it was refreshing and encouraging.

Short Break

Team Strengths:

Dynamic	Cheerleader
Optimistic	Facilitative
Encouraging	Positive Optimist
Hopeful	Logical
Diplomatic	

Team Agreements:

- Focus on future
- Be optimistic
- Collaborative
- Supportive
- Open & Honest

Stay focused
Innovative
Withhold judgment
Have fun

Handout – CSIS Strategic Plan Template

The handout is a tool to build the 3-yr Strategic Plan. Pam explained that the purpose of the Strategic Plan is so that there is a document to justify a rationale of why you may want to add personnel/faculty. This plan will be integrated into the Educational Plan and Technology Plan. This is the department plan.

Pam facilitated ideas in creating a Vision Statement, which is (broad and global) & a Mission Statement, which is (more focused.)

Vision Statement – High quality technology instruction for transfer, career, and personal development to meet the needs of our students. (Draft)

Mission Statement – The CSIS Department will provide quality education to students based on a comprehensive, relevant curriculum that provides students with the ability to transfer, enter the workforce and promote life-long learning.

SWOT's – Strengths, Weaknesses, Opportunities, Threats/Challenges

Strengths:

- Excellent, professional reputation
- Faculty dedicated to students.
- Excellent campus support
- Diversity of skills among staff
- Environment open to innovative programs
- Excellent facilities/up-to-date
- Excellent support specialist
- Excellent comprehensive curriculum
- Diverse student population.
- Solid history/legacy to build upon
- Quality tutoring staff
- Dedicated, hardworking department chair
- Extensive network of contacts in the community
- Collegiality across SD County such as SDSU, CSU, CC & Private
- Strong adjuncts from industry
- Unlimited opportunity to develop courses
- Effective mix of classes
- Strong technical support for faculty

Pam encouraged everyone to try and distance themselves from the issues, and to look at external & internal weaknesses. Try not to take things personally.

Weaknesses:

- Low enrollments
- No clear path into employment

- Lack of connection between internship program and job search class.
- Funding for Professional Development Opportunities
- Lack of effective marketing
- Changing demographics
- Enhanced teamwork among team members
- Improve communication & dissemination of information
- More involvement in college committees as time allows
- More face-to-face communication
- Need a mechanism to understand student & industry needs
- More sharing of duties among team members
- Under prepared students
- Inability to recruit and retain adjunct faculty with up-to-date, cutting edge skills
- Low salaries for adjunct & full time faculty

Concerns:

- We do have face-to-face communication
- Spinning wheels on what we've tried to do for the past 12 years w/o success

Lunch break

Pam stated that this document belongs to the department. This document is never final and should be revisited periodically for updates.

Opportunities:

- Creation of focus groups (students/industry folks)
- Build strategic partnerships w/industry
- Marketing
- Create innovative curriculum – certificate programs &/or courses
- Campus-wide graduation requirements – Comprehensive exam (considerations)
- College GE course in Computer Tech (Computer Literacy) and (Programming)
- Change semester format to accelerated format
- Build internal partnerships or cross-listed courses
- Collaborative effort with other Vocational Education departments to develop internship programs
- Follow up with past students. Tracking those students who have left campus
- Curriculum courses scheduling alignment/coordination

Challenges/Threats:

- Curriculum Committee
- Misperception of the job market among students
- Marketing
- CSU moving CSIS 110 to upper division
- Development of effective collaborating with Fine Arts & other departments on campus
- Microsoft – upgrades software/hardware frequently, creates a need to upgrade hardware
- Resistance to change across all departments

- Maintaining a high level of training/skills among faculty
- Over-committed students
- Staffing of full-time/part-time faculty ratios
- Non-competitive salaries
- Range of ages in each dept. needed
- Need for support staff

Identification of Goals for next 3 years:

- Increase enrollments
- Place students in jobs
- Professional Development

Goal I –

Objective: Increase enrollments

Action Plan:	Due Dates:
• Marketing – Internal/External Create a department brochure, talk with Andrea Garzanelli to create a website.	Immediately
• Build articulation agreements	2006-2009
• Identify target population and target for marketing. If industry, then what do they want. What level of courses are needed.	ASAP No later than July 2006
• Bring in focus group to identify student needs & industry needs.	Immediately (Curriculum submission in by May 31, 2006)
• Create annual program	2006-2009

Goal II –

Objective: Place students in jobs

Action Plan:	Due Date
• Build a dept. internship plan; bring in focus groups	ASAP No later than July 2006 (Needs to be in place for next year)
• Strategic Partnership w/industry	2006-2009
• Build tracking system for where students go when they leave CSIS	By 2009

Goal III –

Objective: Professional Development

Action Plan:	Due Date
• Submission of individual personal development plan for everyone	(Feb. 15, 2007) Spring semester

There was more discussion on getting more people involved from outside organizations.

Janet Gelb suggested having a department curriculum meeting the week after finals week and everyone agreed.

Pam thanked everyone for coming and participating in the retreat and said it was a very positive experience.

Comments from Kamol and Sanisa on December 14, 2006

Student survey

- Most students (70%) coming to Grossmont College want to transfer to a 4-year university, while only 11% want to complete a certificate program. This 11% points out an important issue. Comparing to 42-50% of entire US college student market who want to complete the certificate, Grossmont College can attract only about 11% of those students. In addition, if we compare CSIS with other computer departments from other community colleges in San Diego, CSIS offers very few programs for students. Therefore, CSIS could, if possible, increase the certificate programs currently offered.
- There is a big gender gap among students especially those who are CSIS majors (84% male, 16% female)
- Since CSIS offers so many courses, it would be a good idea if CSIS could create new certificate programs by combining many related courses.
- Even though Grossmont College is the closest community college to SDSU, CSIS offers very few courses that can be transferred to the university.
- Most students choose to major in CSIS because they personally like CSIS and computer-related courses. Those who choose not to major in CSIS are often because they lack knowledge about CSIS and they don't think jobs in the CSIS field are interesting.
- The student survey results show that recommendations from high school and Grossmont counselors "don't affect their decisions" in choosing to major in CSIS, even though students do go to counselors and ask for some information. But still, we think always keeping counselors informed about CSIS: new programs, courses, etc, would be one way to help generate interest among students especially those who have not decided their majors.
- Speaking of student satisfactions, students are very satisfies with both CSIS and Grossmont College in general. The rated scores for both are above 4.0. However, most students are not satisfied with the parking!
- In conclusion, the decreasing in enrollment problem is not about the quality of both Grossmont college and CSIS department but it's about student preferences themselves. Students' perception has changed over time and many of them lack knowledge about computer sciences so it's important to always communicate and keep them informed why CSIS is interesting.

Counselor survey

- High school counselors think that the main reason why the CSIS enrollment is decreasing is because most high school students have no idea about CSIS and they have bad perceptions about courses and jobs.
- This result shows the correlation with those students who choose "not" to major in CSIS (They lack knowledge about CSIS.). Therefore, providing them with more information regarding courses info (CS courses are not that difficult), programs, job market opportunities/trends might at least help get students' attention especially those who still haven't decided what major or direction they will go to.
- CSIS faculty "open session" at local high schools is one of the most effective ways to reach high school students.
- Even though, high school counselors are willing to discuss about CSIS to students, they seem to lack of general knowledge and understanding in this field.
- CSIS should make the information available and easier to get, since the survey shows just above average score on this topic.

General comment

- Even though GC CSIS website looks nice compare to those of other colleges (esp. Miramar, Mesa and City colleges), it would be a good idea if CSIS could make the website more interesting (since many CS majored students just go directly to the CSIS website to find the information).

Recommendations

- Communicate/provide more understanding
- Keep both high school and college counselors informed about CSIS.
- Go directly to high school students (not high school counselors) and have the open session at high schools located around Grossmont College.
- Change brochure and hand them out directly to high school students. Make the brochure look better and change the color!
- Provide more programs (especially certificate programs) and increase transferable courses (esp. those transferable to SDSU)
- Improve website quality. Try to make it a one-stop-shop for students

1. **Does your school offer any introductory Computer Science (CS) courses?**
   - ○ Yes
   - ○ No

2. **If "yes" to (1) above, what percentage of students are enrolled in an introductory Computer Science course?**
   - ○ 0-10%
   - ○ 11-20%
   - ○ 21-50%
   - ○ 51-70%
   - ○ more than 70%
   - ○ do not know

3. **What percentage of students in your high school consult with high school counselors about their college majors and future career?**
   - ○ 0-10%
   - ○ 11-20%
   - ○ 21-50%
   - ○ 51-70%
   - ○ more than 70%
   - ○ do not know

4. **Please respond to the following:**

	Strongly Disagree	1	2	3	4	5	**Strongly Agree**
I find it easy to get information about CSIS courses at Grossmont College.		○	○	○	○	○	
I have a general knowledge/understanding of the field of Information Technology and Computer Science.		○	○	○	○	○	
I find it easy to describe computer science--both as a college major and a future career - to my students.		○	○	○	○	○	
I would be interested in and willing to discuss how CSIS program can be useful to students.		○	○	○	○	○	

5. **In your opinion, to what extent are/were each of the following a cause of decreasing enrollment in the Computer Science and Information System (CSIS) department at Grossmont College.**

	Very Unlikely	1	2	3	4	5	**Very Likely**
Students never took computer-related courses in high school	O	O	O	O	O		
Students think that Computer Science (CS) courses are too difficult	O	O	O	O	O		
Students think that CS is just for geeks	O	O	O	O	O		
Students think that CS is just for men	O	O	O	O	O		
Students do not think that there are good jobs in the CS field	O	O	O	O	O		
Students think that CS jobs are undesirable/uninteresting	O	O	O	O	O		
Lack support from high school	O	O	O	O	O		
Lack support from friends	O	O	O	O	O		
Lack support from family members	O	O	O	O	O		
Lack of knowledge about CSIS department	O	O	O	O	O		
Difficulty in transferring CSIS courses to a 4-year university/college	O	O	O	O	O		
Others (Please specify) _____ _____ _____ _____ _____ _____							

6. **Please share any ideas you have regarding how more students could be introduced to Computer Science and Information Technology as a possible college major.**

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

7. **In your opinion, to what extent are/were each of the following would be effective strategy/tool to reach high school students and encourage them to enroll in the CSIS department at Grossmont College?**

	Very Unlikely to be effective	1	2	3	4	5	**Very Likely to be effective**
Internet		O	O	O	O	O	
Brochures		O	O	O	O	O	
TV ads		O	O	O	O	O	
Radios		O	O	O	O	O	
Magazines		O	O	O	O	O	
CSIS open session at high school		O	O	O	O	O	
Education events		O	O	O	O	O	
High school counselors suggestion/recommendation		O	O	O	O	O	

GROSSMONT COLLEGE

Computer Science Information Systems (CSIS) Department

Prepared By

Kamolchai Waiwitlikhit
Sanisa Vivatpatanakul

Fall 2006

Presented in partial fulfillment of the requirements for the
Masters of Business Administration Degree
Graduate School of Business Administration
San Diego State University

Don Sciglimpaglia, Ph.D.	Massoud M. Saghafi, Ph.D

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Key findings – Overall Student Survey

Figure 1: Educational Goals

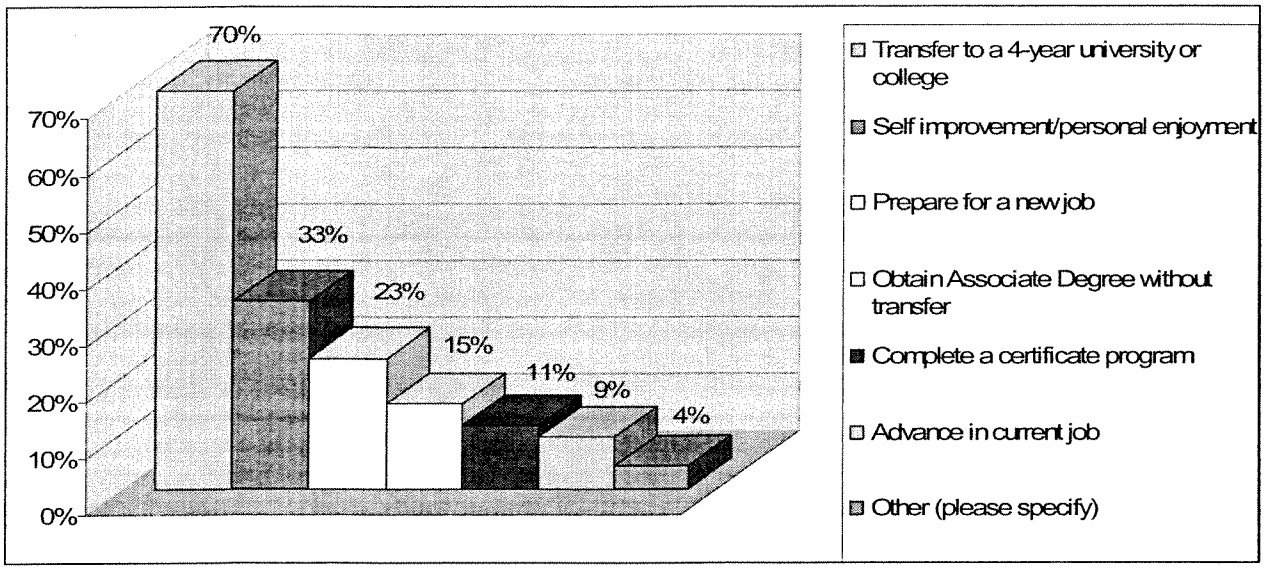


Figure 2: All Students – Major

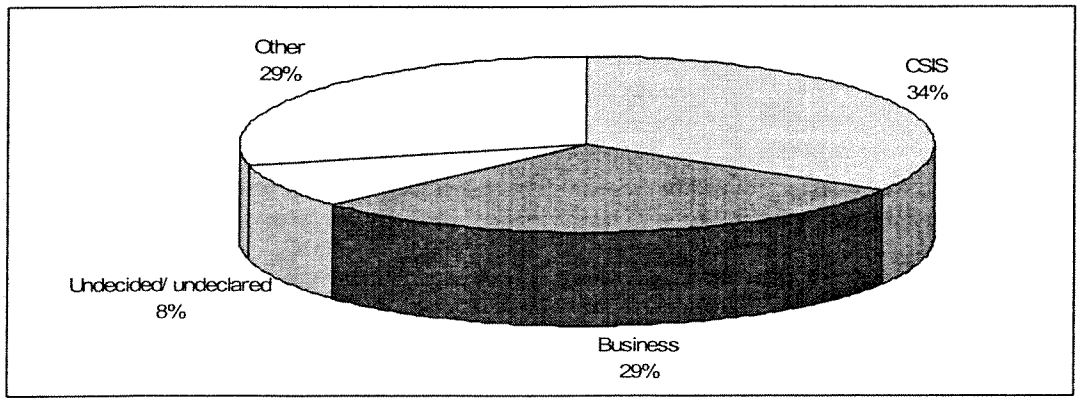


Figure 3: Male Students - Major

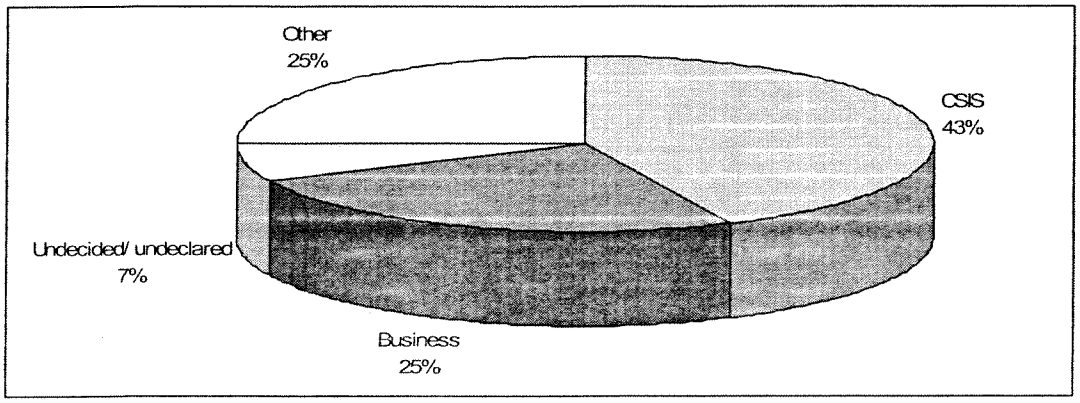


Figure 4: Female Students - Major

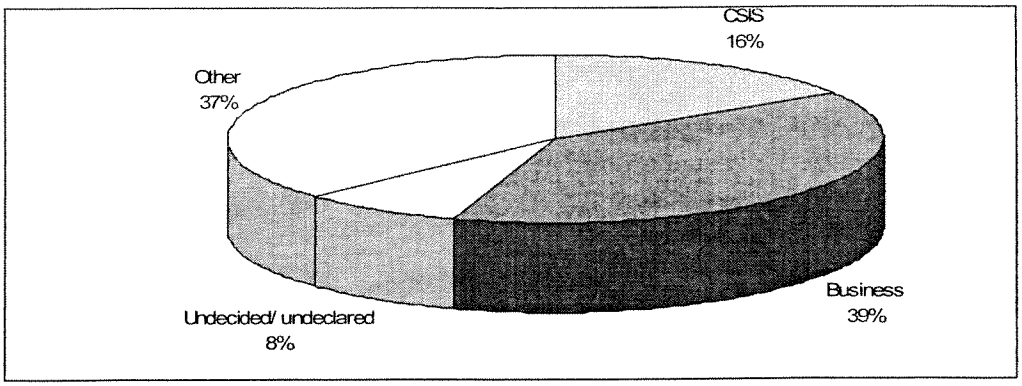


Table 1: Reason for choosing the CSIS major

(1 = Not at all important to 5 = Very important)	*Average*	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*
I like Computer Science & Information Systems (CSIS)	4.7	97%	1%
Interesting classes provided by CSIS	4.2	84%	5%
To get a new career	3.9	69%	13%
Good academic reputation of the CSIS department at Grossmont College	3.6	54%	14%
Ease to transfer to desired university	3.4	52%	24%
To advance in a current career	3.2	46%	31%
Brochure or other information from CSIS department	2.4	27%	56%
Suggestion from a teacher/school counselor	2.4	26%	56%
Suggestion from a family member	2.3	15%	49%
Suggestion from a friend	2.3	16%	52%
Suggestion from a Grossmont or other college counselor	2.2	18%	61%

Table 2: Reason for not choosing the CSIS major

	Yes
Lack of knowledge about the CSIS department	36%
I think that CS jobs are undesirable/uninteresting	25%
I think that Computer Science & Information Systems (CS) courses are too difficult	22%
I never took computer course(s) in high school	20%
Lack support from high school teacher/ counselor	19%
Lack support from family member	15%
Lack support from friend	12%
I do not think that there are good jobs in the CS field	12%
I think that CS is only for "geeks"	8%
The CSIS department at Grossmont college doesn't have a good academic reputation	6%
I think that CS is just for men not for women	1%

Table 3: Top Factors in choosing Grossmont College

(1 = Not at all important to 5 = Very important)	*Average*	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*
The program/courses available at Grossmont College	4.2	79%	5%
How close Grossmont College is to my house	3.7	61%	17%
The academic reputation of Grossmont College	3.6	61%	14%
Financial assistance was available for me	2.7	32%	49%
Recommended by a friend	2.4	27%	52%
Brochure or other information from Grossmont College	2.4	23%	53%
Recommended by a family member	2.3	22%	53%
Recommended by a Grossmont or other college counselor	2.0	17%	64%
Recommended by a high school teacher/counselor	2.0	12%	69%

Table 4: Student Satisfaction regarding Grossmont College

(1 = Very dissatisfied to 5 = Very satisfied)	*Average*	*Top 2 box (Satisfied)*	*Bottom 2 box (Dissatisfied)*	*No experience*
Grossmont College overall	4.2	87%	2%	N/A
Transfer credit assistance	3.8	61%	6%	41%
Career counseling and advising	3.7	50%	8%	40%
Academic advising/ planning	3.7	43%	9%	20%
Parking	2.7	17%	44%	10%

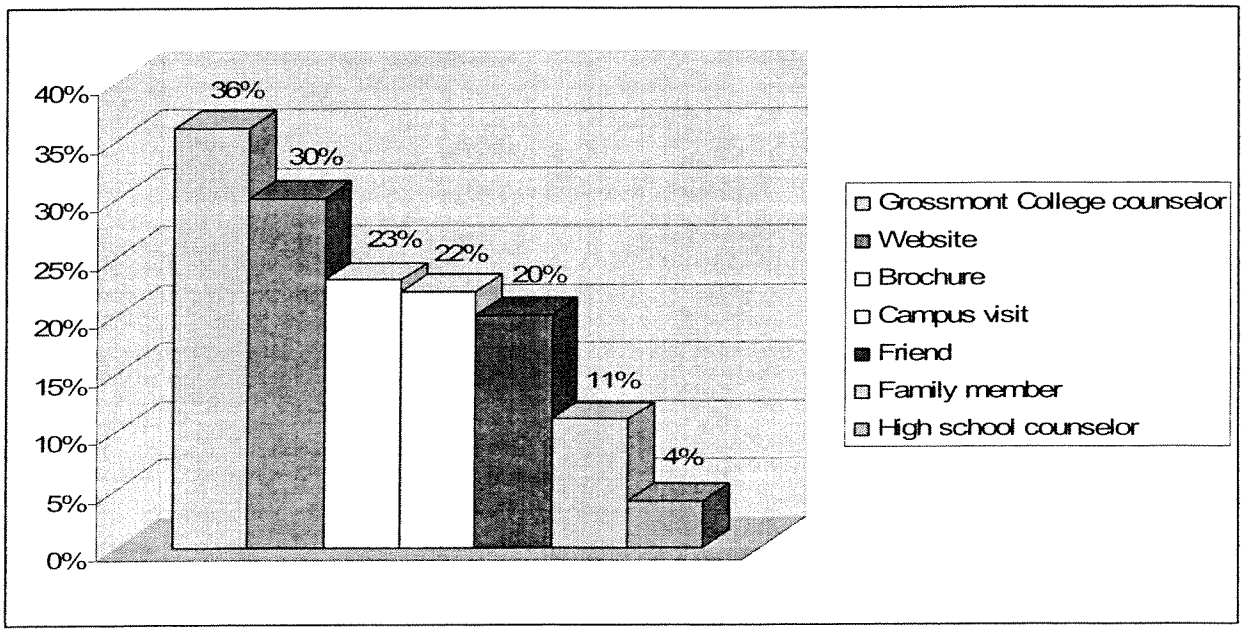
Table 5: Student Opinions regarding CSIS instructors

(1 =Not Very to 5 = Very)	*Average*	*Top 2 box (Very)*	*Bottom 2 box (Not Very)*
Helpful	4.2	81%	6%
Available	4.1	77%	6%
Sympathetic	4.0	71%	9%

Table 6: Student Satisfaction regarding the CSIS department

(1 = Very dissatisfied to 5 = Very satisfied)	*Average*	*Top 2 box (Satisfied)*	*Bottom 2 box (Dissatisfied)*	*No experience*
Computer lab/classroom equipment	4.5	89%	2%	3%
Class size	4.3	85%	4%	0%
Fairness of grading	4.2	79%	6%	2%
CSIS department overall	4.1	78%	2%	N/A
Quality of teaching	4.1	78%	7%	0%
Course content	4.1	77%	5%	0%
Class schedule	4.0	74%	8%	1%
Textbooks/learning materials	4.0	73%	8%	0%
Availability of courses	3.8	65%	11%	1%

Figure 5: How students learn about the CSIS department at Grossmont College



Key Findings - CSIS VS Non-CSIS Students

Table 7: Educational Goal (CSIS VS Non-CSIS)

	CSIS Students Response Percent	*NON CSIS Students Response Percent*
Transfer to a 4-year university or college	55%	77%
Self improvement/personal enjoyment	38%	30%
Prepare for a new job	30%	20%
Obtain Associate Degree without transfer	29%	9%
Complete a certificate program	18%	7%
Advance in current job	14%	6%
Other (please specify)	3%	5%

Table 8 : Gender

	CSIS Students Response Percent	*NON CSIS Students Response Percent*
Male	84%	56%
Female	16%	44%

Table 9: Top Factors in choosing Grossmont College (CSIS VS Non-CSIS)

(1 = Not at all important to 5 = Very important)	*CSIS Students*			*NON CSIS Students*		
	Average	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*	*Average*	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*
The program/courses available at Grossmont College	4.2	79%	6%	4.2	80%	4%
The academic reputation of Grossmont College	3.7	66%	18%	3.7	59%	12%
How close Grossmont College is to my house	3.6	62%	19%	3.8	59%	16%
Financial assistance was available for me	2.8	39%	43%	2.6	29%	52%
Recommended by a friend	2.5	26%	48%	2.4	27%	54%
Brochure or other information from Grossmont College	2.5	26%	49%	2.4	22%	55%
Recommended by a family member	2.4	23%	57%	2.3	23%	57%
Recommended by a high school teacher/counselor	2.0	17%	70%	1.9	11%	69%
Recommended by a Grossmont or other college counselor	2.0	13%	69%	2.1	20%	62%

Table 10: **Student Satisfaction regarding Grossmont College (CSIS VS Non-CSIS)**

(1 = Not at all important to 5 = Very important)	*CSIS Students*			*NON CSIS Students*		
	Average	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*	*Average*	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*
Grossmont College overall	4.3	91%	3%	4.2	84%	2%
Academic advising/ planning	3.9	73%	8%	3.7	61%	13%
Transfer credit assistance	3.8	69%	11%	3.8	62%	9%
Career counseling and advising	3.6	56%	15%	3.7	57%	10%
Parking	2.6	35%	52%	2.7	31%	46%

Table 11: **Student Satisfaction regarding the CSIS department (CSIS VS Non-CSIS)**

(1 = Not at all important to 5 = Very important)	*CSIS Students*			*NON CSIS Students*		
	Average	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*	*Average*	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*
Computer lab/classroom equipment	4.6	96%	0%	4.4	90%	3%
Class size	4.3	85%	4%	4.3	84%	3%
Course content	4.3	88%	1%	3.9	71%	8%
CSIS department overall	4.2	88%	1%	4.0	73%	3%
Quality of teaching	4.2	80%	8%	4.1	77%	6%
Textbooks/learning materials	4.1	80%	8%	3.9	71%	8%
Fairness of grading	4.1	78%	9%	4.2	82%	4%
Class schedule	4.1	77%	5%	4.0	72%	10%
Availability of courses	3.5	52%	17%	3.9	73%	8%

Table 12: Student Opinions regarding CSIS instructors (CSIS VS Non-CSIS)

(1 = Not at all important to 5 = Very important)	*CSIS Students*			*NON CSIS Students*		
	Average	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*	*Average*	*Top 2 box (Important)*	*Bottom 2 box (Not Important)*
Helpful	4.2	85%	5%	4.1	82%	7%
Sympathetic	4.1	73%	9%	3.9	70%	8%
Available	4.0	72%	8%	4.1	80%	4%

Table 13: How students learn about CSIS department (CSIS VS Non-CSIS)

	CSIS Students Response Percent	*NON CSIS Students Response Percent*
Website	47%	22%
Campus visit	40%	13%
Brochure	30%	19%
Friend	27%	17%
Grossmont College counselor	25%	42%
Family member	11%	10%
High school counselor	4%	4%
High school faculty or instructor	1%	2%

Counselor Survey Summary

Key findings - Counselor Survey

Figure 6: Percentage of high schools that offer introductory Computer Science (CS) courses

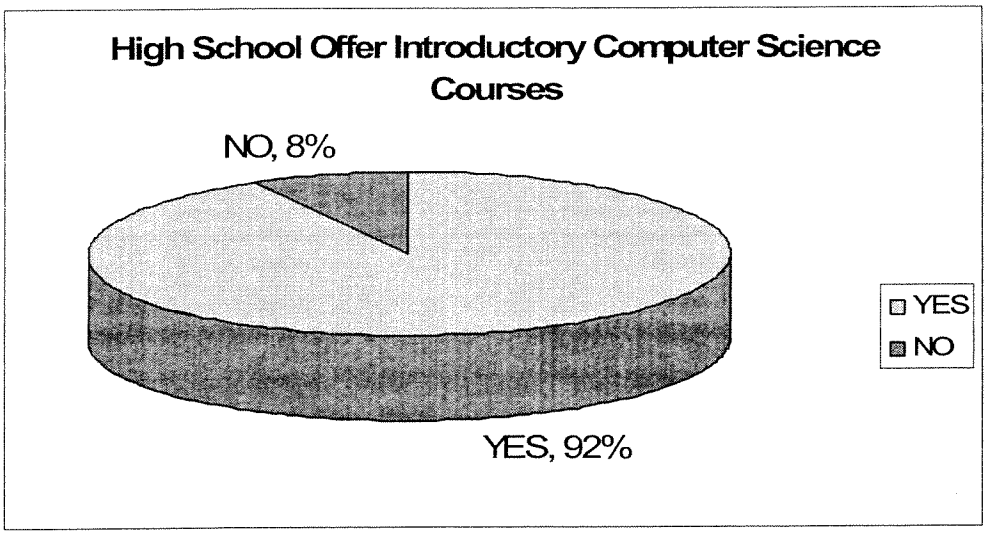


Table 14: Percentage of high school students enrolling in an introductory CS course

	Response Percent	*Response Total*
0-10%	25%	3
11-20%	25%	3
21-50%	8%	1
51-70%	0%	0
More than 70%	25%	3
Do not know	17%	2
Total Respondent		12

Table 15: High school students consulting with high school counselors about their college majors and future career

	Response Percent	*Response Total*
0-10%	15%	2
11-20%	15%	2
21-50%	23%	3
51-70%	15%	2
More than 70%	30%	4
Do not know	0%	0
Total Respondent		13

Table 16: Top factors of decreasing enrollment in the Computer Science and Information System (CSIS) department at Grossmont College

	Average	Top 2 box (Likely)	Bottom 2 box (Unlikely)
Lack of knowledge about CSIS department	4.5	92%	0%
Students think that Computer Science (CS) courses are too difficult	3.8	84%	16%
Students think that CS jobs are undesirable/uninteresting	3.7	59%	0%
Students think that CS is just for geeks	3.6	62%	8%
Students think that CS is just for men	3.5	48%	16%
Difficulty in transferring CSIS courses to a 4-year university/college	2.7	20%	30%
Lack support from high school	2.7	20%	40%
Lack support from friends	2.6	9%	36%
Lack support from family members	2.5	18%	45%
Students do not think that there are good jobs in the CS field	2.2	8%	58%
Students never took computer-related courses in high school	2.1	17%	75%

Other counselors' opinions regarding a cause of decreasing enrollment in the CSIS department at Grossmont College.

- It is difficult to find and retain teachers in an area that pays well on the outside.
- It is important to articulate courses to the college.
- The programs are expensive to support and are limited to the # of computers available.
- Very little availability in intermediate or advanced level computer courses on our campus (only have a one semester tech fund class).

Counselors' ideas regarding how more students could be introduced to CS and IT as a possible college major

- Have speakers at the high school level describe both the degree program and career opportunities. Emphasize the amount of technology we use and why it could be valuable career braining to understand how that technology works.
- Possibly just doing tasks at the high school.
- Getting the word out through computer teachers and ROP classes.
- Attending the Grossmont District Annual College and Career Fair called "Got Plans?".
- Tour to the college, which includes intro to majors, incl CSIT.
- Speakers from the college to address our juniors/seniors or even freshmen/sophomores.
- It is most likely to stem from high school course exposure or a family member who works in the field.
- Presenting workshop at "Got Plans?" GUHSD's district career/college fair.
- Talking to computer classes on HS campus about careers in computers.
- Presentation in HS classes.
- Jazzy flyer – "Branding".
- Possible presentation at the high schools could be done in CS class of a more general audience to reach more students who may not know or understand the field.
- Guest speakers at the high school.
- More information re: possible jobs and type of training needed.
- Students tend to think of it in terms of "word processing" or "repair".
- Offer after school courses on our campus.
-

Table 17: Most effective strategy/tool to reach high school students

	Average	*Top 2 box (Effective)*	*Bottom2box (Not effective)*
High school counselors suggestion/recommendation	4.2	78%	0%
CSIS open session at high school	4.1	82%	8%
Internet	4.1	69%	8%
Education events	3.8	69%	8%
Brochures	3.7	58%	17%
TV ads	3.5	58%	25%
Radios	3.1	34%	25%
Magazines	2.2	17%	58%

Table 18: Counselor opinions about CSIS

	Average	*Top 2 box (Agree)*	*Bottom 2 box (Disagree)*
I would be interested in and willing to discuss how CSIS program can be useful to students.	4.3	92%	0%
I find it easy to get information about CSIS courses at Grossmont College.	3.5	62%	8%
I have a general knowledge/understanding of the field of Information Technology and Computer Science.	2.8	31%	39%
I find it easy to describe computer science-- both as a college major and a future career - to my students.	2.6	16%	42%

Community College Competitive Analysis

Cuyamaca Community College
MiraCosta Community College
Paloma Community College
San Diego City College
San Diego Mesa College
San Diego Miramar College
Southwestern College

Table 19: Community College Courses & Program Comparison

	Grossmont	Cuyamaca	Mira Costa	Palomar	San Diego City	San Diego Mesa	San Diego Miramar	South Western
# of courses offered (Fall 2006)	52	26	28	44	9	9	5	33
# of In-class courses offered (Fall 2006)	43	24	23	31	3	8	3	24
# of On-line courses offered (Fall 2006)	15	8	12	25	8	5	4	9
# of Hybrid courses offered (Fall 2006)	0	0	0	0	0	2	0	5
# of courses transferable to CSUs (06/07)	71	47	22	46	28	22	12	75
# of courses transferable to UCs (06/07)	11	10	9	9	10	9	8	10
# of courses transferable to SDSU (06/07)	5	7	7	12	5	5	4	2
# of courses transferable to UCSD (06/07)	2	6	5	6	2	3	2	4
# of A.A. Degree	4	3	5	5	1	1	1	13
# of Certificate program	5	11	10	17	8	3	2	26

Degree & Program

Table 20: Cuyamaca College – Degree&Program

Program	A.A. Degree Programs	Certificate of Achievement	Certificates of proficiency
Computer Network Administration	X	X	
Web Development	X	X	
Telecommunications Networking Technology	X	X	
Cisco Systems			X
Computer Programming			X
Network Servicing Technology			X
Operating Systems			X
Web Server Management			X
Web Design			X
Web Programming			X
Telecommunication Servicing Technology			X

Table 21: Mira Costa College – Degree&Program

Program	A.A. Degree Programs	Certificates of Competence	Certificates of Achievement
Computer Information Systems	X		
Computer Science	X		
Business or Communications with an emphasis in Information Systems	X		
Computer Applications	X	X	
Computer Networking	X	X	
Advanced Routing and Switching			X
Computer Internetworking Fundamentals			X
E-Commerce			X
Microsoft Certified Office User			X
Microsoft Office Expert			X
Unix Administration			X
Cisco Certified Network Associate			X
Cisco Certified Network Professional			X

Table 22: Palomar College – Degree&Program

Program	Emphasis	A.A. Degree Programs	Certificates of Achievement	Certificates of proficiency
Computer Science		X	X	
Information Systems		X	X	
Computer Network Administration	Cisco and Microsoft	X		
	Microsoft and Unix	X		
	Cisco and Unix	X		
Web Developer	Java / Open Source			X
	Windows			X
Web Server Administrator	Windows			X
	UNIX			X
Network Engineer				X
Desktop Support Specialist				X
Microsoft SQL Database Administrator				X
Cisco CCNA Networking Program				X
Microsoft Office User Specialist (MOUS)				X
Oracle Database Program				X
Unix Operating System				X
Visual Basic				X
Video Game Specialist				X
Video Game Artist				X
Voice and Data Cable Installer				X

Table 23: San Diego City College – Degree&Program

Program	A.A. Degree Programs	Certificates of Achievement	Certificates of proficiency
Computer Information Systems	X	X	
Certified Convergent Network Technologist			X
Computer Programming			X
Internet Fluency			X
Microsoft Certified Database Administrator			X
Microsoft Certified System Engineer			X
Microsoft Certified Systems Engineer 2003 - Security			X

Table 24: San Diego Mesa College – Degree&Program

Program	A.A. Degree Programs	Certificates of Achievement	Certificates of proficiency
Computer and Information Sciences	X	X	
Computer Programming			X
Microsoft Certified System Engineer			X

Table 25: San Diego Miramar College – Degree&Program

Program	A.A. Degree Programs	Certificates of Achievement	Certificates of proficiency
Computer and Information Sciences	X	X	
Computer Programming			X

Table 26: SouthWestern College – Degree&Program

Program	A.A. Degree Programs	Certificates of Achievement	Certificates of Completion
Applications Programming	X	X	
eCommerce	X	X	X
Internet	X	X	X
Internet Web Design	X	X	X
Internetwork Technician	X	X	X
Microcomputer Applications	X	X	X
Network Administration	X	X	
Operations/PC Support Specialist	X	X	X
Systems Programming	X	X	
Web Flash Developer and Gaming Animator	X	X	
Web Site Designer and Developer	X	X	
Web Site eCommerce Administrator	X	X	
Web Storefront Builder Using Miva	X	X	X
Network Associate Specialist— Intensive Training		X	X
Web Database Programmer/Administrator—LAMP			X
Web Designer			X
Web Flash Designer			X
Web Multimedia Developer Using Director			X

Student Survey Complete Results

Student survey complete result

1. What is your educational goal? (Check all that apply)

	Response Percent	*Response Total*
Obtain Associate Degree without transfer	15%	35
Transfer to a 4-year university or college	70%	159
Complete a certificate program	11%	25
Advance in current job	9%	20
Prepare for a new job	23%	53
Self improvement/personal enjoyment	33%	74
Other (please specify)	4%	9
	Total Respondents	227
	(skipped this question)	1

2. How important were each of the following in your decision to choose Grossmont College?

	1 - Not at all important		*2*		*3*		*4*		*5 - Very important*		*Response Average*
How close Grossmont College is to my house	9%	21	8%	18	22%	51	25%	56	36%	81	3.7
The academic reputation of Grossmont College	6%	14	8%	18	24%	55	35%	80	26%	60	3.68
The programs/courses available at Grossmont College	1%	3	4%	8	15%	35	30%	69	49%	112	4.23
Financial assistance was available for me	36%	82	13%	29	19%	43	12%	27	20%	46	2.67
Recommended by a high school teacher/counselor	53%	121	16%	37	18%	40	7%	17	5%	12	1.95
Recommended by a friend	40%	91	12%	27	21%	48	19%	42	8%	19	2.43
Recommended by a family member	42%	96	11%	26	23%	53	15%	35	7%	17	2.34
Recommended by a Grossmont or other college counselor	52%	118	12%	28	18%	41	11%	26	6%	14	2.07
Brochure or other information from Grossmont College	40%	90	13%	30	24%	54	14%	32	9%	21	2.4
									Total Respondents		227
									(skipped this question)		1

3. Which field best describes your current major or your anticipated major?

	Response Percent	Response Total
CSIS-Computer science and information systems	34%	77
Engineering	7%	17
Education	0%	1
Business (Management Accounting Marketing etc)	29%	66
Art (Ceramics Crafts Painting Drawing Acting	2%	4
Telecommunication (TV/Radio Speech Journalism etc)	0%	1
Architecture	0%	1
Mathematics	0%	1
Sciences (Physics Chemistry Biology etc)	1%	3
Humanities (English Literature Philosophy Religion etc)	0%	1
Social Science (Anthropology Economics Psychology etc)	0%	1
History	0%	0
Foreign Language and Literature (French Spanish etc)	1%	3
Health-related fields (Nursing Physical Therapy Health Technology etc)	3%	7
Public Administration (Law Enforcement City Management etc)	4%	8
Undecided/undeclared	8%	18
Other (please specify in the box below)	8%	18
Total Respondents		227
(skipped this question)		1

4. (For Non-CSIS major) Which of the following are the reasons why you did not choose the CSIS major?

	Yes		No		Response Total
I never took computer course(s) in high school	20%	29	80%	117	146
I think that Computer Science & Information Systems (CS) courses are too difficult	22%	32	78%	114	146
I think that CS is only for "geeks"	8%	12	92%	134	146
I think that CS is just for men not for women	1%	1	99%	145	146
I do not think that there are good jobs in the CS field	12%	18	88%	128	146
I think that CS jobs are undesirable/uninteresting	25%	37	75%	109	146
The CSIS department at Grossmont college doesn't have a good academic reputation	6%	9	94%	137	146
Lack of knowledge about the CSIS department	36%	52	64%	94	146
Lack support from high school teacher/counselor	19%	28	81%	118	146
Lack support from friend	12%	18	88%	128	146
Lack support from family member	15%	22	85%	124	146
			Total Respondents		146
			(skipped this question)		82

5. If there are other reasons why you did not choose the CSIS major, please specify

1. Simply wanted to be a business major
2. I majored in CIS at Coleman College, and worked on computers during a lot of my early teenage years. I am so sick of computers now, the last thing I would do would be to major in them at Grossmont.
3. I just don't want to go into that field all that much.

4. Just was not really interested in it. but i like taking the classes for my personal intrest and personal gain.
5. Outsourcejobs
6. I am 65 and am taking this class to immprove my knowledge of how a computer works, not to use it in job, althought I do use a computer helping my husband in his cpa practice
7. I am taking computer classes because every job/position anywhere a person works will have to be very computer literate. With my major, it is a must to know computers, so they are part of my major.
8. I like CSIS major but I was enrolled in my two majors Arabic and real estate that is why i did not pick up CSIS major. I have taken two CSIS class CSIS 110 (Instructor: David Olaon)and CSIS 299 (Instructor H. R. "Bob " Patchett. I like CSIS classes because they will help me to be more successful.
9. because I like the health care field.
10. That's English language barriers.
11. It's not what I wanted to do.
12. My ability to type is limited by a disablity. I already have a MS in EDTEC from SDSU.
13. Not taking course for any major or going for any college degree
14. I am actually looking at CSIS and Business but there is no option to select more than one. There is also no "N/A" option, which is limiting in and of itself
15. I'm not "majoring" in anything. Already have a bachelor's and 2 master's degrees. Just getting some more education.
16. I perfer my current Major over CSIS.
17. My interest is more focused towards Business Administration. I'm interested in CSIS but am not interested in making it a career although I do feel that it is related to the profession I am pursuing.
18. no
19. It's just not my desired major.
20. I might have but i have another
21. for me jobs in the cs field are very undesirable and boring. i do know, however, that there are good paying jobs out their.
22. My interests lies in other areas.
23. My interest was in another major
24. Because I'd prefer to go into International Business.
25. I just am not interested in that field. I know the basics and thats good enough for me. I also dont need csis in my career choice.
26. I am not interested in it, i am interested in another major.
27. I might consider minoring in csis because I want to major in business but still work with computers
28. Because I am not very good at computers
29. Preferred business over all others
30. Not interested
31. undecided
32. I'm taking CSIS classes for personal enjoyment, not for a degree
33. Knowing some back ground on what i would have to learn to have such a major i can say that any one i know that has ever even thought of it,including my self,has always thought it would, not nessesarly difficult but frustrating. there realy isnt mush discripion on those classes. all i ever hear is what the class will be teaching. yeah right that tells me exactly every thing i need to know to understand what the class will be like. NOT!!! try actuly discribing,not what the class will be teaching, but what you will be doing in the class. when i hear some one tell me that you will be learning code in some class i just thing about type LINES and LINES and LINES of code and i dont know about you but i would imagin to any one that would be pritty intimidating. unless thats your way of trying to get ppl to take those courses then by all means continue, but i dont think its realy the best way do you? just a thought.
34. i prefer to study more in engineering fields
35. My first attended major was computer engineering. I think there is a great future in the industry of computers, but I was not lookng forward to taking other classes such as chemistry (my worst subject) and math. Which in the case of my old major cosisted of lots of these classes. I wanted something more exciting, so I decided to chage my major to AOJ. If computer engineering consist of more hands on traning,

instead of all these chem and math classes, I might have stood with it.
36. I have not made my decision either way
37. I did not choose that major because i decided to go for the computer engineering major
38. I'm not pursuing a major at Grossmont. I'm taking a class for personal interest.
39. I already have a degree in a related engineering field
40. I'm not looking to obtain a degree nor take many more classes in this major.
41. It just isnt for me
42. I originally did plan on majoring in a CS related field, Multimedia, Computer Graphics, all that sorta stuff. Not that CS doesn't offer good jobs, but I felt business could offer me a better job, and the skills taught by business courses have relative value outside of the business environment, whereas I felt CS classes were primarily useful only to things dealing with computers. Oh, one more thing; CS jobs in the US are being outsourced frequently to foreign countries so the likliness of me getting and KEEPING a well paying job are ever decreasing.
43. I've been changing preferences of major from Pre-Medicine, Biology, Engineering, Computer Science etc... and I found out that Business Accounting is the right field for me because I've excelled like never before...
44. Because I am more interested in careers in which my major of choice is more beneficial than a CSIS degree.
45. I am not interested in this field as a profession or for further study in this subject.
46. I would like to minor CSIS major, but I'm still undecided about this.
47. I like Arts
48. Wasn't my main field of interest. ART MAJOR : Drawing / Painting = Actual Art. Photoshop is the biggest field of plagarism.
49. I like to mess around with computers, thats why I took this class. My major is physical therapy.

6. (For CISI major) How important were each of the following in your decision to choose CSIS major?

	1 - Not at all important		*2*		*3*		*4*		*5 - Very important*		*Response Average*
I like Computer Science & Information Systems (CSIS)	1%	1	0%	0	1%	1	26%	20	71%	55	4.66
Interesting classes provided by CSIS	5%	4	0%	0	10%	8	42%	32	42%	32	4.16
Good academic reputation of the CSIS department at Grossmont College	8%	6	6%	5	30%	23	32%	25	22%	17	3.55
Ease of transfer to desired university	16%	12	8%	6	23%	18	30%	23	22%	17	3.36
To get a new career	10%	8	3%	2	17%	13	27%	21	42%	32	3.88
To advance in a current career	23%	18	8%	6	22%	17	17%	13	29%	22	3.2
Suggestion from a teacher/school counselor	38%	29	18%	14	17%	13	16%	12	10%	8	2.42
Suggestion from a friend	38%	29	14%	11	30%	23	10%	8	6%	5	2.33
Suggestion from a family member	36%	28	13%	10	34%	26	9%	7	6%	5	2.36
Suggestion from a Grossmont or other college counselor	40%	31	21%	16	19%	15	10%	8	8%	6	2.24
Brochure or other information from CSIS department	39%	30	17%	13	16%	12	17%	13	10%	8	2.42
									Total Respondents		77
									(skipped this question)		151

7. How satisfied over all are you with Grossmont College?

	Response Percent	*Response Total*
1 - Very Dissatisfied	0%	1
2	2%	4
3	11%	25
4	49%	109
5 - Very Satisfied	37%	82
Response Average		4.21
Total Respondents		221
(skipped this question)		7

8. How satisfied over all are you with each of the following regarding Grossmont College?

	1 - Very Dissatisfied		2		3		4		5 - Very Satisfied		No Experience		Response Average
Academic advising/planing	4%	8	5%	12	19%	43	28%	62	23%	51	20%	45	3.77
Transfer credit assistance	2%	5	4%	8	15%	34	18%	40	20%	44	41%	90	3.84
Career counseling and advising	4%	8	4%	9	23%	50	20%	44	20%	44	30%	66	3.69
Parking	20%	44	24%	52	18%	39	22%	49	7%	15	10%	22	2.69
											Total Respondents		221
											(skipped this question)		7

9. How satisfied over all are you with the CSIS department?

	Response Percent	Response Total
1 - Very Dissatisfied	0%	1
2	2%	5
3	19%	43
4	46%	102
5 - Very Satisfied	32%	70
Response Average		4.06
Total Respondents		221
(skipped this question)		7

10. What are your opinions regarding CSIS instructors?

	1 - Not at all		2		3		4		5 - Extremely		Response Average
Helpful	2%	5	4%	9	10%	23	42%	93	41%	91	4.16
Sympathetic	4%	8	5%	10	21%	46	33%	72	38%	84	3.97
Available	2%	4	4%	8	17%	38	35%	78	42%	93	4.12
									Total Respondents		221
									(skipped this question)		7

11. How satisfied over all are you with each of the following regarding CSIS department?

	1 - Very Dissatisfied		2		3		4		5 - Very Satisfied		No Experience		Response Average
Course content	1%	3	4%	9	18%	39	41%	90	36%	79	0%	1	4.06
Class schedule	2%	4	6%	14	18%	39	36%	79	38%	83	1%	2	4.02
Availability of courses	5%	11	6%	13	23%	51	36%	79	29%	65	1%	2	3.79
Class size	1%	2	3%	6	12%	26	36%	79	49%	108	0%	0	4.29
Textbooks/learning materials	2%	5	6%	13	18%	40	35%	78	38%	84	0%	1	4.01
Quality of teaching	2%	5	5%	10	15%	33	32%	70	46%	102	0%	1	4.15
Fairness of grading	3%	6	3%	7	13%	29	36%	79	43%	95	2%	5	4.16
Computer lab/ classroom equipment	1%	2	1%	2	6%	13	34%	75	55%	122	3%	7	4.46
												Total Respondents	221
												(skipped this question)	7

11.1 What do you think could be improved regarding the CSIS Courses (new courses, course content, course materials, class schedule, etc)?

1. Offer more classes starting at 7 pm during the weekday.
2. Courses should be better tailored to individuals skill levels. One size fits all format is very annoying for CSIS 110. There should be assesment tests like there are for math or English.
3. Since CSIS 110 is required maybe have an intermediate class for students who aren't experienced with computers and have a faster paced one for people who are cause the class can get really boring when you already know about microsoft word and things like that
4. I think the labs in the tec mall should be worth more credits.
5. teach more about computers
6. I think everything is fine the way it is.
7. we need more cumputers for the class rooms.
8. Nothing that I can think of at this time.
9. I think they are fine as is.
10. i think that there should be a class shedule that is available earlier than 12.30
11. A course for the slower, older adult who is a beginnner and may have a desire to continue in the CSIS program, but has a fear they will be left behind.
12. more classes availible
13. 1. More advanced courses. 2. Prerequesties actually being met for some students. It appears some students are wasting time in the class on issues & questions they should already have knowledge of, if they are in the class. Its a waste of the instructors time.
14. better basic information
15. I feel that AOJ/CSIS 299-Sections 3098/4486 needs to be less reading stuff out of the book, and memorizing terms that most likely will not be remembered. I think this is a class for more practical application becuause using a computer is a hands-on application.
16. nothing
17. well make the text book cheaper it's only an eight week course. More calss room time needed to cover and learn the materials instead of a one day class make it a two day class.
18. new course
19. no opinion

20. I think a 2 unit 100 level course online or onground should reduce the number of points for group discussion when the course content is full enough without the vague connection between the discussion and subject matter. It takes time away from learning the course content. The high point value put on discussions reduces incentive to put the necessary time into the course content. For example, I am taking a 4 unit, 8 week, online course that is well balanced. The instructor keeps up with feedback and grades. It is intense but it's 4 units. I am also enrolled in a 2 unit, 8 week, online course that is not well structured, too demanding, the teacher is not giving feedback and nearly everyone has w/drawn from the course... at least they are not communicating in discussions. Topics are at a masters level in my opinion. I say this with the experience of a college level EDTEC instructor w/ a masters in EDTEC from SDSU. This 2 unit, 100 level course is as demanding as a 500 level, 3 unit course in EDTEC at SDSU, a very vigorous program.
21. Offer a A++ class, so I do not have to change schools
22. A few questions on blackboard for the quizes and tests are not very clear and I got questions from a previous test on a current test
23. More hands on lab.
24. Tie in tutorials to enhance memory retention of material. Review quizzes so students can see where their weak areas are and study them for hte major tests rather than getting the material wrong twice. Taking a computer quiz after reading a tutorial tests memory capacity not teaching ability nor course content retention.
25. I think the courses are just fine!
26. Not sure I have only taken one CSIS class so far so I haven't looked much at what courses are offered.
27. n/a
28. More orientation
29. Develope a more standardized test. Not being able to backtrack while taking a timed test gives you only one chance to get the question right.
30. less text books!! maybe add one more day like a monday wednesday class.
31. I would like more online courses.
32. More classes available in the evenings/online
33. I've looked at Cuyamaca and they have more "technical" oriented courses, such as network cabling.. I intend to take that class.. I prefer to take it at Grossmont if i could. Also, on the CSIS classes I've taken so far(3), I would rather have more emphasis on the technical aspect, as my current instructor seems to guide us to the buisness aspect.. But it's been intreresting, I'm enjoying it so far Last but not least, i would like to see more late afternoon/early classes.. Online is cool, but I would prefer a blended/hybrid class
34. More classes for CSIS 105. Only a few classess offered this semester and the 5 hour long class is just too long.
35. get more younger people in to it
36. I Don't Think the needs Improvement.
37. since computers are new to me, I find everything very interesting but challenging, but have no knowledge of what could be improved upon.
38. nothing
39. more classes including a broader range (engineering and such).
40. Class schedule. It seems you do not want to teach on a friday or saturday or some of your courses at night.
41. none
42. Discussion boards for web classes..I like the homework and quizzes but the discussions is what we stay away from thats why I choose an online course.
43. I haven't seen all the classes offered needed to complete for an associates degree. I'm not sure if they only offer them during certain semesters or what, but it would be nice if they offered them all.
44. More night classes and more vareity among them. It seems difficult if not impossible to complete a certificate with the current night scheduling.

45. perhaps make the programs needed more available for home use if needed as some students dont have the most updated versions of microsoft office so even reading assignments on blackboard can't be done from home computer
46. more lab time and less lecture.
47. I think i could do alot better
48. It is a good thing to have a group work. I don't want to comment anything. It's a nice class.
49. n/a
50. Instructor should assign our homework clearly and try to teach in class in a level for international students whose english are not very good.
51. none
52. The textbooks were extremely expensive!
53. teachers dont grade fairly
54. grades could be based on less theory and more practice
55. Nothing
56. The books more or less walk us through directions rather than actually teaching us why we need to learn how to do these various functions. The time limit we have on projects doesnt allow us to actually learn, its mindless following of directions.
57. More information about the classes
58. Add in basic skills like keyboard typing speed that will really help in the begginging of a class like CSIS 110
59. more classes at more different time
60. new courses
61. Course content
62. More classes, as well as more times for the class.
63. aa
64. better class schedule
65. More homework and more hands on work
66. having more required csis course for computer engineer, so i don't have to go to another community college to finish up all the class that requires me to go to SDSU.
67. Each class should have a lab. It's difficult to really grasp the concept of righting programs when there's no lab!
68. I would have to say hands on training courses.
69. more hands on activities
70. More diversity and a specialized degree field with an emphasis on entertainment software such as games.
71. expand the availability of programming classes geared towards specific programming languages and offer certifications as part of the process of getting a degree.
72. i do not have any complaints of the csis department
73. So far, the classes I've taken have been satisfactory enhough.
74. Make more VB language classes..
75. Have more classes with difernets teacher
76. more current subjects such as the asp .net perhaps a second half continuation of the subject
77. Wider variety of industry-current subjects/,languages (e.g. Visual Basic not offered...What's up with that?)
78. The instructor workstation projector should be brighter. The instructor should have better control of the lighting.
79. More text books formated for hybrid courses , kind like teach yourself
80. More information about the available classes particularly the "upper division".
81. better variety of classes dealing with networking and database administration

82. review online test before student take them. Mistakes on test or questions marker wrong that are correct. Review course material, text manuals. Requuired exercises that are suppost to be in book are not and you need to registor with the company of the book to get the information or search the web, books somewhat helpful but not that helpful
83. Nothing that I can think of.
84. none
85. online books that the students dont have to buy because most of the books are just touched into not fully used
86. nothing really from what i have seen so no comment on this one.
87. nothing
88. There should only be lab time because lecture is a waist of time.
89. More video game/ movie fx classes
90. Different class schedule with less time for lecture. Otherwise course is excellent.
91. Better use of lecture time, seems like there is too much time in lecture and not enough time in the lab.
92. I guess I thought the CS class I took was going to be a bit more challenging. I have a stronger background in computers than most other students my age due to the high school I attended so my expectations of the course content were [probably] higher than those of my peers. This appears to be a basic, computer familiarity course, and since it is becoming increasingly important for people to have a wide knowledge of computers, maybe as a side project the course could include "Building a Simple, Single Page, Website" or something like that.
93. adding new course material
94. Excellent as it is - No further comment
95. needs more instructer for a lab.
96. not having to buy the newest, most expensive version of texts for every class, especially when there are almost no differences from the previous version. More lab time, less lecture time. Multiple assistants to help students adress issues during lab time would be beneficial as well.
97. nothing at all
98. I think that CSIS class schedule is restricted in the morning and at night. Although i'd like to take a class between 1:00 and 5:00, there is no class.
99. Easier subject matter
100. not sure its my first class in csis
101. More programming courses. More handouts. Handouts specifying what we need to learn to prepare for each test (not quizzes, just the big tests). Handouts covering major topics, equations we need to know. etc.
102. In the course content, it seems like there are so many different things to learn at once. It seems very difficult to study for in comparison with a different class like history. I think there should be more grouped information so that there isn't so much varity of study at once. It's overwhelming.
103. n/a
104. new computers for CSIS114 hardware need to show the students when explaining what the hardware does
105. Review textbook information more thoroughly so we can get through the labs easier. We read the textbook, and then do the labs without direct instruction from teacher. I know we can ask for help, but sometimes that's too last: especially during the lab part of a midterm! Unfair!
106. the lecture material. We do not do anything that involves us so when the test comes we are unprepared.
107. That is not my job, it's yours. You have just taken a whole hour out of my workday. Maybe if there were less trivial and pointless surveys, which won't be read, questioning your teacher's competence then there would be more of a reason to think they could tech the way they want. Also, maybe if I didn't have to take !!8!! different surveys so far !!this semester!! I would have a slightly larger amount of time to work on the course material.
108. course materials.
109. Alot of courses are dropped due to low enrollment, which gets annoying when you need that class. Also, some of the textbooks are VERY expensive and are not available used or in the bookstore.

110. more classes to choose from. And more variety of teachers.
111. More programming classes
112. More open labs and qualified tutors.
113. More online classes
114. class schedule (add more sched)
115. 1. Class requirements for: Java Introduction Java Intermediate Java Advance Also using the same book for ALL three levels of Java programming. Paying $80(or more) for a book for the Introduction class and then buying a new/different book($80 or more) for the Intermediate and Advance classes, will financially stop students from taking the next programming level class in the series. 2. Lowering the required classes attendence to 10 - 12 students. Making the current class requirements 18 usually filters down to 10-12 student by mid-term.
116. To obtain some degress, such as an associates in programming, one of the tracks allows for taking the intro to Java and the intermediate Java courses. In instances like this, it seems the second level of the course is rarely/never offered. Extremely frustrating.
117. An Intermediate Java Course, and Advanced java course. More web design classes
118. Less expensive text books. I think it would be useful to have the class resources available online free of charge. There are many cases in the real world (especially in CSIS fields) where individuals learn via online tutorials, manuals, etc., and I believe paying for hard copies of course material is unnecessary and expensive. More varied class schedule.
119. The courses are very good and the material is presented in a very good manner.
120. more/better course
121. Overall am excited with the course, content, materials and schedules.
122. Classes for Photoshop needs to be 2 days classes. Have more time to learn and do the materail in class. Lab times suck ass.
123. Add more graphic design courses that teach more advanced programs. Also, lower cost on course texts
124. I think the Video Game Design class should be on the course list. The Video Game Design class is a special class. I think they should put more Video Game Design class because some student want to be a video game designer for major.
125. more classes
126. everything is pretty much good.
127. I have trouble attending the lab sessions because of conflicting scheduling. Normally, it isn't a problem but this semester one instructor will seemingly randomly not show up. On several instances I have had late homework because the instructor never showed up.

11.2 What do you think could be improved regarding the CSIS instructors overall?

1. Don't assume that student have prior knowledge on subject matter. I find that when a major of student are familar with the material instructors tend to go at that pace and the other students that are beginners are left behind to figure it out.
2. Get rid of the ones who pile on loads of redundant homework. There is no reason to do every question in the book. After a question or two, we get the idea...
3. n/a
4. Nothing, they are all very good.
5. nothing
6. The CSIS instructors are very helpful.
7. (same as above)
8. Instructer is great.
9. the CSIS course 105 instructor need to be change immediately
10. I was pleased with my instructor, my only gripe is the course moved rapidly and it was difficult to truly

remember the content.
11. nothing perfect
12. The instructors are great. Like mentioned in the above, they just need the opportunity to teach what they came to teach, & not have to waste time teaching students simple things they should already know if they are in a programming class like ASP.NET.
13. none
14. I can only speak for the instructor I have Bob Patchet, "using the PC". Good instructor.
15. My only instructor; so far, is H. R. Bob Patchett for CSIS at Grossmont College. He is a nice guy, but he needs to show more enthusiasm to keep the class more intertesting.
16. nothing
17. My INSTRUCTOR Bob Patchett is teaching the course very well but is also stress out that we need more classroom time to cover the material.
18. i couldn't agree more
19. no opinion
20. I have only had 3 instructors, all quite different. Perhaps the one professor lacking the most has too much going on, or is simply not organized. Standardizing courses and syllabi is a good idea to which lessons are improved upon and shared among instructors. Although I am sure this is being attempted by way of this survey and other means.
21. More time in class to get assistance from the instructor
22. Nothing, What the instructors are doing are a great help in personal situation and in job situation
23. see above, otherwise my CSIS intructors were pleasurable to deal with.
24. I've only had one instructor and he's pretty good.
25. I've only had one CSIS instructor so far and he has been fine.
26. n/a
27. Nothing
28. good instructor, may want to cover more on what will be on exames more then learning just for fun.
29. I only have experience with one instructor over 3 classes so I cannot answer the question
30. I would like the CSIS instructors in 105 to show more basic computer tools like just hookiing up the computer. I think this should be a hands on skill provided in class. I loved the programs but didn't know how to hands on hook up my computer without looking at pictures in my book.
31. nothing
32. Nothing
33. nothing
34. nothing
35. pay them more, they're great!
36. more explanations on what points will be cut with kind of errors/problems with the code. The teacher is very helpful and available to answer the questions. There is enogh time to get prepared the the assignments. Online class is very good for full time working adults, but we do not get enough of the teachers knowledge.
37. Get rid of mast of them and hire some that can and will teach. Most of your Instructors are not qualified to teach. And very few of them will actually met outside of class when one needs help.
38. none, instructors are easy to get a hold of.
39. Hotz is great and Terri is sooo helpful
40. The teachers are great they all know what they're doing and their classes are planned out very well and are easy to follow.
41. 3 out of 4 of my instructors were phenominal. I took CSIS110, CSIS114 and CSIS134 classes and both instructors were not only very in touch with the subject matter but excited to be teaching it. The instructor I had for CSIS 112 should not be teaching any longer since he has obviously lost his passion for it. He seemed more interested in belittling the students and inflating his ego than actually teaching.
42. n/a
43. alot of things
44. They always take care of us.
45. n/a

46. better lectures
47. be more interested in their students passing
48. nothing
49. Nothing
50. I think that my intructors give us all of the help we need, i dont think i need much else. The teachers aide is a great help.
51. I don't know any of them other than Diane and I really like her and her training is helpful
52. More accesible through web ct
53. there should be more of them
54. a little more hands on experience; on tutorials/projects.
55. everything is great
56. they could smile a little more often =)
57. They're greeeeat
58. they are pretty good but i think that they should give more homeworks to make the student learn the material
59. less talk and more letting the students do the work to learn.
60. no opinion
61. I really don't see any motive for improving in my opinion.
62. nothing
63. Nothing comes to mind.
64. i am happy with my instructors.
65. i do not have any complaints with the csis department
66. So far, the instructors I've experienced have been satisfactory enhough.
67. some teachers must have a little more experience teaching I know that they know much, but they don't know how to teach
68. All my Grossmont instructors have been excellent.
69. I find Robert Gillespie to be well suited to the job.
70. being hired to teach more classes
71. I have had very good experience with all instructors.
72. More face time but that is not always availbe due to schedules
73. Again nothing
74. none
75. nothing
76. the instructors are good i like them they try to make the class intresting and by them doing that it makes class intresting.
77. nothing
78. CSIS Instructors are great! Especially Ronald Norman!
79. I think they are fine the way they are
80. My instructor is excellent. The teachers are not the problem.
81. I've only taken 1 CSIS course but maybe better presentation of information in lecture it seems to move too slow.
82. Nothing, my instructor was great.
83. my CSIS instructor does a great job. i do not think any improvement would be necessary
84. Excellent as it is - No further comment
85. none
86. They each have there own way of running a class... I see no common weakness that is shared by the CSIS department.
87. nothing at all
88. i'm not sure but i think they have to give students group projects more than personal projects.
89. Not to give so much information at once

90. they may make the class more understanding if they had handouts
91. The Introductory CSIS course (110) asks WAY too much of beginners. They need to limit the expectations to something more reasonable. Class average of "F" on test #2 is an indictment, not of the students, but the test level set by the professor.
92. lectures more revelant to the tests
93. get interactive playing games or something that will get students to wake up and feel like this class is fun
94. Review important computer formulas that we're expected to know. Don't just let us have to ask for help on this. Some of us have never taken a computer class, ever.
95. Make the lectures more interesting and get us involved so we can learn the material.
96. This is an absolutely foolish question. The only real responses you are going to get are from people who are failing. You should get a ghost writer from an elementary school so poorly written questions like this don't get through to your surveys.
97. I want the instructor to force everyone to turn off computers during the class.
98. Well I am currently taking my first 2 courses here, and I am mixed. One instructor is the best. He is more than helpful and is in constant contact with us. He keeps the class going and fun. He goes over and beyond what I would expect out of any instructor. The other instructor I haven't heard from in over a week. Just to name a couple of recent problems... I emailed him regarding a quiz that had errors and never heard back. So much for those points... Also, on a homework assignment the entire class got it wrong because of his lack of directions and he did not give anyone a chance to make it up, which he told us we were all getting lower scores about 2 weeks after we turned in the homework. I just feel like he doesn't care about this class because it is online. I hope he is not this way in an on campus class, but I will never find out because I will never take another one of his classes.
99. more review for the tests. Explain what the test is going to be mainly about.
100. I don't have that much experience in the college and with CSIS instructors
101. Most of them are doing good jobs.
102. Nothing
103. Instructors should always discuss and prepare/have good notes in class, not just give out homework assignments and go over it ONLY when students asked.
104. no comment.
105. *The ones I have had have been good. No recommendations.*
106. get more organized with teaching, follow a step by step learning process schedule, not by subject or topic
107. Nothing I can think of. I have a good instructor.
108. There must be a better understanding from the part of the instructors to students who have never programmed in their life, to get the message across to them. Cause it is very difficult for people like me to program, when i have never programmed in my life.
109. my instructor in cis134 is great
110. Very good Instructors, they are doing really great.
111. Have their tricks to using photoshop and lesson plans for that session to be printed out beforehand... lesson plans currently blow.
112. teach less out of the book and more from experience.
113. I think the instructors are normal when students go to class. The instructors is improved normally by lecture in class, tests, and homework.
114. maybe more voluntary on helping students
115. My teacher was perfect.
116. CSIS instructors are very capable and highly knowledgable of their field of teaching.

11.3 What do you think could be improved regarding CSIS facilities (computer labs, software used, in-class visual aids, etc)?

1. The facilities are great.
2. nothing
3. Nothing really
4. nothing
5. Nothing everything works just fine.

6. we need computer lab that will be open at least four days of week.
7. (same as above)
8. Fine as is.
9. The work stations are not comfortable for short people!
10. everything is perfect
11. See above
12. nothing
13. Nothing. The equipment is great. The software is perfect for its needs.
14. none
15. I am not that experiened in these areas.
16. Not sure. I have not used much of th ecomputer facilities.
17. nothing
18. no opinion
19. more open computers for acidemic work rather than social
20. Some power outlets are exposed and are a potential problem for data loss if accidentally tampered with.
21. I am satisfied with my lab experiences, software and visual aids.
22. Open the computer rooms earlier before class to allow for extra study time.
23. More Labs.
24. So far, so good. My experience with the labs has been good to date.
25. I think the equipment provided is exceptionally good.
26. Unsure
27. n/a
28. Everything is fine
29. Having more computers in the library to do programming homework on.
30. have a class room available for homework. cis takes a lot of my time and most home computers dont come with the software needed. i suggest a room before class to be available for cis students.
31. On the brief visits I've made, i'm impressed with the facilities
32. Computer lab doens't coincide with my schedule. Somtimes the lab is too busy with others and its hard to get one on one help. This is frustrating when you have to wait around for one TA.
33. nothing it is really good and educatshional
34. Nothing
35. nothing
36. nothing
37. More lab hours available
38. I like it...
39. more awareness
40. nothing
41. Would be nice to set up software rental like SDSU does. I know some classmates struggle with homework due to different versions of software or dont have it at all at home. Being that most night class students work all day it is difficult to try and get to a computer lab. I had previously taken SDSU's CSIS110 equivilent and was able to rent the disk to install the program on my home computer, was REALLY helpful.
42. Open computer lab
43. Price..and we don't need the extra memory saver..I already have one..it should be optional.
44. The computers arn't the greatest. They can be sluggish and sometimes they can be a big hassle. But for the majority of class work they do everything needed.
45. Keep up with the newest technolgy. In particualr most of the machines we put together in CSIS114 were already obsolete.
46. n/a
47. Adding somemore software to the computer labs

48. There are four sticks in the middle of our class. So, I can't see the white board.
49. n/a
50. none
51. the computer labs should have more time available for students to come
52. Nothing
53. nothing
54. I haven't seen all of the facilities, but the rooms I have seen are very up to date and great resources
55. Over all good technology
56. nothing
57. have the computers have the same things on them that our personal computers have on them. when you go home to do a tutorial, our home computers are different. they should also save our personal setting suck as a desk top.
58. It's a minor note, but saving the personal settings on the desktop for each user would be a great help. Thanks
59. more computers
60. the facilities are nice
61. i have taken some CSIS classes before and ive noticed that not all lab rooms seem to have that program or softwaer that links all the sub computers to the instucter's computer. i realy like that program becuse it alowed the instructer to put what ever they were presenting not only on the big screan, but on my own computer as well. i founu this helped not only because some times i have truble seeing but i would like to see every thing that the instructor is showing.
62. Advancing in Technology.
63. everything is good in it
64. nohting
65. Make Firefox the default browser. How can I take the department seriously when they offer such a poor quality browser as the default?
66. I am satisfied with what we have, really don't no what to say about what we should have.
67. nothing
68. Well we should always have up to date software and machines, but that's not really a problem yet.
69. It's all good so far.
70. i do not have any complaints of the csis department
71. So far, the facilities I've experienced have been satisfactory enhough.
72. ok
73. It's good now.
74. Web development classes should offer students accounts on a webserver which can be accessed and used from off campus locations.
75. I'm satisfied what I got now.
76. Offer a remote conection for all the csis classes so students can have access to data base and other available tools at the school network system
77. Nothing
78. none
79. nothing
80. the facilities are great all the computers work there fast easy to get work done with no distractions i like it alot.
81. nothing
82. I think they are fine.
83. i think it will help my job.
84. Nothing
85. Indrusty standard game development softwear
86. Nothing the labs are very adequate for the work required.
87. I like the CSIS facilities and I think they work very well

88. Computers are fast, monitors are sleek, you guys have top of the line programs I haven't seen since high school like Maya. That was a surprise considering its so expensive. I think the CSIS facility is great.
89. CSIS facilities are equipped properly for school standards in my observation.i do not think any improvement would be necessary
90. Excellent as it is - No further comment
91. satisfied
92. The equipment is very acceptable.
93. nothing at all
94. I want to develope or study about computer language but there is nobody help me. I mean Grossmont College has a good tutoring center for Math and English. However they are not offering tutor for computer language, C#, Java, JSP(web developing). these language is very useful and important in the computer field.
95. nothing its all good
96. More handouts and study materials that we can take home and look over. It is very easy for me to miss something mentioned just once in class, and yet it may be crucial to the test itself.
97. n/a
98. for them to just go over what will b on the exams and tests and nothing that we dont need to know
99. The classrooms are fine, equipment is fine.
100. You could have a diamond plated lazy boy chair; however, I'm not sure if that would be in the budget. Asking such an open ended question yields no results because you know your budget and I don't, that's why they over pay people like you. Why on earth my time is being wasted like this I have no idea. If I ask you to build a student center you'll just throw away the money again.
101. In-class visual aids.
102. Well, both of my classes are online, but I have been to the labs and they are amazing. I would not change a thing.
103. nothing, just a bigger facility.
104. I think it's good enough
105. Nothing special.
106. greater variety in development software.
107. Computer labs should have more time availability because we only have about 3 rooms (i think) available for csis lab..
108. no comment.
109. The classrooms and labs continue to pleasantly surprise me with their cleanliness and updated hardware. Of course, I'm one of those guys who would love to be able to have a bottle of water or other capped drink with me for the longer classes! Can that rule be changed?
110. have CD-RW in all classes
111. programing lab outside of class
112. Nothing I can think of.
113. nothing. very good facility with short classrooms which is very good to learning.
114. nothing that i know
115. Probably should provide student copy of software, make it easier for students who can't afford the software.
116. Labs need to be more accesiable. computers are still a pain to use when you are a noob.
117. Increase the variety of programs used.
118. I think that the DSPS at the tech mall should have the sofware like the CSIS class. Like Photoshop. Some DSPS students need help in Photoshop and they need a tutor to help them. Some of the tutors knows photoshop and some are experts in photoshop.
119. no complaints
120. Just a little more open lab times.
121. I have trouble attending the lab sessions because of conflicting scheduling. Normally, it isn't a problem but this semester one instructor will seemingly randomly not show up. On several instances I have had late homework because the instructor never showed up.

12. Age

	Response Percent	Response Total
19 or younger	28%	61
20-23	30%	65
24-29	17%	36
30-39	10%	21
40 or over	16%	34
Total Respondents		217
(skipped this question)		11

13. Gender

	Response Percent	Response Total
Male	65%	141
Female	35%	76
Total Respondents		217
(skipped this question)		11

14. How do you describe yourself? (Check all that apply)

	Response Percent	Response Total
Caucasian/White	59%	129
African-American	6%	12
American Indian/Native American	1%	3
Asian American/Asian	17%	36
Mexican American	10%	22
Other Latino	4%	8
Other (please specify)	10%	22
Total Respondents		217
(skipped this question)		11

15. Did you start your college at Grossmont College or did you transfer to Grossmont College from another college?

	Response Percent	Response Total
Started here	72%	157
Transferred from another college	28%	60
Total Respondents		217
(skipped this question)		11

16. How many units are you taking this semester?

	Response Percent	Response Total
12 units or more	59%	128
6-11 units	23%	50
5 units or less	18%	39
Total Respondents		217
(skipped this question)		11

17. What is your classification in college?

	Response Percent	Response Total
Freshmen/first-year	39%	84
Sophomore	60%	131
Total Respondents		215
(skipped this question)		13

18. Are you a resident of California?

	Response Percent	Response Total
Yes	91%	197
No	9%	20
Total Respondents		217
(skipped this question)		11

19. Are you a local San Diegan?

	Response Percent	Response Total
Yes	82%	178
No	18%	39
Total Respondents		217
(skipped this question)		11

20. How many miles is Grossmont College from your permanent home?

	Response Percent	Response Total
Less than 5 miles	30%	65
5-10 miles	40%	86
11-30 miles	25%	55
31-50 miles	3%	6
More than 50 miles	2%	5
Total Respondents		217
(skipped this question)		11

21. Did either of your parents graduate from college?

	Response Percent	Response Total
No	53%	115
Yes both parents	25%	55
Yes	8%	17
Yes	8%	18
Do not know	6%	12
Total Respondents		217
(skipped this question)		11

22. If you have a job about how many hours per week do you work?

	Response Percent	Response Total
I do not have a job	32%	70
1-10 hours a week	3%	7
11-20 hours	12%	25
21-30 hours	18%	38
31-40 hours	23%	49
More than 40 hours	13%	28
Total Respondents		217
(skipped this question)		11

23. If you have a job how does your job affect your school work?

	Response Percent	Response Total
I do not have a job	34%	73
My job does not interfere with my school work	17%	37
My job takes some time from my school work	34%	74
My job takes a lot of time from my school work	15%	33
Total Respondents		217
(skipped this question)		11

24. How do you learn about the CSIS department at Grossmont College? (Check all that apply)

	Response Percent	Response Total
Campus visit	22%	47
Grossmont College counselor	36%	78
High school counselor	4%	9
High school faculty or instructor	2%	4
Friend	20%	44
Family member	11%	23
Brochure	23%	50
Website	30%	66
Television ads	1%	3
Radio	3%	6
Magazine	2%	4
Other (please specify)	18%	40
Total Respondents		217
(skipped this question)		11

Courses Offered in Fall 2006

Cuyamaca Community College
MiraCosta Community College
Paloma Community College
San Diego City College
San Diego Mesa College
San Diego Miramar College
Southwestern College

Courses Offered in Fall 2006 – Cuyamaca College

Class number	Title	Units	In-Class	Online
CIS105	Introduction to Computing	3	Yes	
CIS110	Principles of Information Systems	4	Yes	Yes
CIS120	Computer Maintenance and A+ Certification	3	Yes	Yes
CIS121	Network Cabling Systems	3	Yes	
CIS125	NETWORK+ CERTIFICATION	3		Yes
CIS140ABCD	Databases	3	Yes	
CIS161	Fundamentals of Telecommunications	3	Yes	
CIS162	Network Diagramming Using MS Visio	1	Yes	
CIS190	Introduction to Windows Operating Systems	3	Yes	Yes
CIS191	Introduction to Unix Operating System	3	Yes	Yes
CIS201	Cisco Networking Academy Semester I	3	Yes	
CIS202	Cisco Networking Academy Semester II	3	Yes	
CIS203	Cisco Networking Academy Semester III	3	Yes	
CIS204	Cisco Networking Academy Semester IV	3	Yes	
CIS212	Introduction to Dreamweaver	3	Yes	Yes
CIS213	Advanced Dreamweaver	3	Yes	Yes
CIS216	Active Server Pages	3	Yes	
CIS263	Fundamentals of Network Security	3		Yes
CIS267	Directed Work Experience	1	Yes	
CIS291	Unix System Administration	3	Yes	
CIS292	Unix Shell Programming	2	Yes	
CS119	Program Design and Development	3	Yes	
CS119L	Program Design and Development Lab	1	Yes	
CS180ABCD	Inroduction to Visual Basic Programming	4	Yes	
CS181	Introduction to C++ Programming	4	Yes	
CS182	Introduction to JAVA Programming	4	Yes	
		Total	**24**	**8**

Courses Offered in Fall 2006 – Mira Costa College

Course/Title	Units	In-Class	Online
CIS 100 Computer Applications	3	Yes	Yes
CIS 101 Fundamentals of computer information systems	3		Yes
CIS 102 Computer Literacy	1.5	Yes	
CIS 105 Intermediate computer Applications	3	Yes	Yes
CIS 107 Introduction to object-oriented Programming	3	Yes	
CIS 120 Cisco internetworking Fundamentals	3	Yes	
CIS 121 Basic cisco router configuration	3	Yes	
CIS 122 Intermediate cisco router configuration	3	Yes	
CIS 123 Cisco Wide Area network implementation and support	3	Yes	
CIS 150 Introduction to Microsoft Word	1.5	Yes	Yes
CIS 152 Introduction to Microsoft Excel	1.5		Yes
CIS 154 Advanced Microsoft Excel	1.5		Yes
CIS 164 Introduction to Microsoft Access	1.5	Yes	Yes
CIS 179 Desktop Publishing: Adobe inDesign	3	Yes	
CIS 184 Introduction to Microsoft PowerPoint	1.5	Yes	Yes
CIS 185 Introduction to Microsoft Windows	1.5	Yes	
CIS 187 Fundamentals of computer networks	2	Yes	
CIS 188 Network Administration - user Management	2	Yes	
CIS 191 Internet for Business	3		Yes
CIS 193 Network client	2	Yes	
CIS 246 Digital imaging: Adobe Photoshop	3	Yes	Yes
CIS 248 Computer graphics: Adobe illustrator	3	Yes	Yes
CIS 253 Advanced Adobe Photoshop	3	Yes	
CIS 297 Individualized Projects	.5-1	Yes	
CIS 299 Cooperative Work Experience -- occupational	4	Yes	
COMPUTER SCIENCE (CS)			
CS 111 Introduction to computer science i: Java	3	Yes	
CS 140 Visual Basic Programming	3		Yes
CS 299 Cooperative Work Experience -- occupational	1-4	Yes	
	Total	**23**	**12**

Courses Offered in Fall 2006 – Palomar College

Course/Title	In-class	Online
CSIS 55 Practical PC	Yes	Yes
CSIS 57 Introduction to Online Learning	Yes	
CSIS 105 Computer Concepts and Microcomputer Applications	Yes	Yes
CSIS 108 Hardware and O.S. Fundamentals	Yes	
CSIS 111 Networking Fundamentals	Yes	
CSIS 117 Introduction to Visual Basic	Yes	Yes
CSIS 119 Visual Studio.NET		
CSIS 120 Microcomputer Applications	Yes	Yes
CSIS 127 Word		Yes
CSIS 130 Cisco Networking Fundamentals	Yes	
CSIS 131 Cisco Router Configuration	Yes	
CSIS 134 Network Voice and Data Cabling	Yes	
CSIS 135 Wireless Networking	Yes	
CSIS 136 Hacker Prevention/Security	Yes	
CSIS 137 Web Site Development with HTML	Yes	Yes
CSIS 138 Javascript		Yes
CSIS 139 Advanced Web Site Development		Yes
CSIS 146 FORTRAN-90 for Mathematics and Science	Yes	
CSIS 160 Survey of Computer Science	Yes	Yes
CSIS 162 Windows Client	Yes	
CSIS 163 Windows Server	Yes	
CSIS 173 Designing Microsoft SQL Server Databases	Yes	
CSIS 174 Excel		Yes
CSIS 179 Access		Yes
CSIS 185 PowerPoint		Yes
CSIS 188 Outlook		Yes
CSIS 191 PHP		Yes
CSIS 194 Perl and CGI Scripting		Yes
CSIS 196 Introduction to SQL		Yes
CSIS 217 Advanced Visual Basic		Yes
CSIS 220 Programming for Computer Science	Yes	Yes
CSIS 221 Data Structures	Yes	Yes
CSIS 222 Machine Organization and Assembler Language	Yes	Yes
CSIS 225 Linux Fundamentals	Yes	
CSIS 235 C for Programmers	Yes	Yes
CSIS 240 Video Game Programming	Yes	
CSIS 241 Overview of the Video Game Industry	Yes	
CSIS 252 Introduction to Oracle	Yes	Yes
CSIS 256 Oracle Database Administration	Yes	
CSIS 257 Database Administration II	Yes	
CSIS 272 Java Programming for Information Systems	Yes	Yes
CSIS 280 C++ and Object-Oriented Programming	Yes	Yes
CSIS 282 C# Programming	Yes	
CSIS 285 Windows Programming I		Yes
Total	**31**	**25**

Courses Offered in Fall 2006 – San Diego City College

Course/Title	Units	In-Class	Online
CISC 114 Introduction to Computer Graphics and Web Media	2	YES	YES
CISC 128 Introduction to Computer Presentations	1		YES
CISC 181 Principles of Information Systems	4	YES	YES
CISC 186 Visual Basic Programming	4		YES
CISC 190 Java Programming	4		YES
CISC 192 C/C++ Programming	4		YES
CISC 270 Work Experience	1-4	YES	
MSFT 130 Installing, Configuring, and Administering Windows Clients	2.5		YES
MSFT 132 Manage and Maintain Windows Server	3		YES
	Total	**3**	**8**

Courses Offered in Fall 2006 – San Diego Mesa College

Course/Title	Units	In-Class	Online	Hybrid
CISC 130 Introduction to Local Area Networks	1	YES		
CISC 150 Introduction to Computer and Information Sciences	3	YES		
CISC 151 UNIX Operating Systems	3	YES		
CISC 181 Principles of Information Systems	4	YES	YES	YES
CISC 182 Fluency with Information Technology	4		YES	
CISC 186 Visual Basic Programming	4	YES		YES
CISC 190 Java Programming	4	YES	YES	
CISC 192 C/C++ Programming	4	YES	YES	
CISC 193 Microsoft C# Software Engineering 1	4	YES	YES	
	Total	**8**	**5**	**2**

Courses Offered in Fall 2006 – San Diego Miramar College

Course/Title	Units	In-Class	Online
CISC 181 Principles of Information Systems	4		YES
CISC 186 Visual Basic Programming	4	YES	YES
CISC 190 Java Programming	4		YES
CISC 192 C/C++ Programming	4	YES	YES
CISC 205 Object Oriented Programming Using C++	4	YES	
	Total	**3**	**4**

Courses Offered in Fall 2006 – SouthWestern College

Course/Title	Units	In-Class	Online	Hybrid
CIS 10A: Microcomputer Repair and Service	2	YES		
CIS 10B: Microcomputer Hardware and Sofeware Upgrade	2	YES		
CIS 14: Office Autimation Equipment Repair	2	YES		
CIS 92: Software Technologies for the Workplace	3	YES		
CIS 101: Introduction to Computers and Information Processing	4	YES	YES	
CIS 108: PHP (Persoanl Home Page) and MYSQL	6		YES	YES
CIS 115: Introduction to Programming Using C++	4	YES		
CIS 121B: Word Processing—Microsoft Word	1	YES		
CIS 122B: Spreadsheet Software—Excel	1	YES		
CIS 123: Web Publishiing with DREAMWEAVER	6	YES		
CIS 126: Advanced Flash ACTIonSCRIPT	6	YES		
CIS 129: Multimedia Presentations (Powerpoint)	6	YES		
CIS 130: Microcomputer Disk Operating System	1	YES		
CIS 133: Advanced Microcomputer Spreadsheets Software	1	YES		
CIS 134: Microcomputer Database Software—Access	1	YES		
CIS 135: Advanced Microcomputer Database Software—Access	1	YES		
CIS 139: Windowing Environments	1	YES		
CIS 141A: Networking Systems—Windows	2	YES		
CIS 142: Networking Academy Fundamentals (CISCO Certification Preparation)	3	YES		
CIS 144A: Routers and Internetwork Fundamentals (CISCO Certification Preparation)	3	YES		
CIS 144B: Advanced Routers and LAN Networking	3	YES		
CIS 146: Introduction to Structured Query Language (SQL)	2		YES	YES
CIS 147: Network Security	3		YES	
CIS 150: Introduction to TeleCommunications and the Internet	1	YES		
CIS 151: Research Using the Internet	1		YES	
CIS 152: Using HTML to Create World Wide Web Pages on the Internet	1		YES	
CIS 153: Internet Programming Using JAVA/J++	4			YES
CIS 157A: Web Authoring: Introduction to Macromedia DREAMWEAVER	3	YES		
CIS 158: Imaging for the World Wide Web (Photoshop and Imageready)	3	YES		YES
CIS 162: Web Design and Usability	2		YES	YES
CIS 226: Operating Systems and Command LanguageS	3		YES	
CIS 245: Implementing, Configuring, and Monitoring Network Firewalls	3		YES	
CIS 246: Desktop Publishiing	1	YES		
	Total	**24**	**9**	**5**

Transferable Courses[1]

Cuyamaca Community College
MiraCosta Community College
Paloma Community College
San Diego City College
San Diego Mesa College
San Diego Miramar College
Southwestern College

[1] www.assist.org

Transferable Courses -Cuyamaca College

Computer Information System	Units	To CSUs	To SDSU	To UCs	To UCSD
CIS 105 Introduction to Computing	3	Yes			
CIS 110 Principles of Information Systems	4	Yes	Yes	Yes	
CIS 120 Computer Maintenance and A+ Certification	3	Yes			
CIS 121 Network Cabling Systems	3	Yes			
CIS 125 Network + Certification	3	Yes			
CIS 140ABCD Databases	3	Yes			
CIS 161 Fundamentals of Telecommunications	3	Yes			
CIS 162 Network Diagramming Using MS Visio	1	Yes			
CIS 170ABCD Computer Graphics	3	Yes			
CIS 190 Introduction to Windows Operating Systems	3	Yes			
CIS 191 Introduction to Unix Operating System	3	Yes			
CIS 200ABCD Intro to Computer Networking	3	Yes			
CIS 201 CISCO Networking Academy I	3	Yes			
CIS 202 CISCO Networking Academy II	3	Yes			
CIS 203 CISCO Networking Academy III	3	Yes			
CIS 204 CISCO Networking Academy IV	3	Yes			
CIS 205 CISCO Networking Academy V	3	Yes			
CIS 211 Web Markup Languages	3	Yes			
CIS 212 Introduction to Dreamweaver	3	Yes			
CIS 213 Advanced Dreamweaver	3	Yes			
CIS 214 Web Server Management	3	Yes			
CIS 215 JavaScript Programming	3	Yes			
CIS 216 Active Server Pages	3	Yes			
CIS 219 PHP/MYSQL Dynamic Web-Based Applications	3	Yes			
CIS 221 Web Multimedia	3	Yes			
CIS 230ABCD Desktop Publishing	3	Yes			
CIS 240ABCD Advanced Databases	3	Yes			
CIS 242 Database Design	3	Yes			
CIS 261 Telecommunications and Convergence	3	Yes			
CIS 262 Fundamentals of Wireless LANs	3	Yes			
CIS 263 Fundamentals of Network Security	3	Yes			
CIS 267 Directed Work Experience in CIS	1-4	Yes			
CIS 270ABCD Advanced Graphics	3	Yes			
CIS 290 Windows System Administration	3	Yes			
CIS 291 Unix System Administration	3	Yes			
CIS 292 UNIX Shell Programming	2	Yes			
CIS 299 Selected Topics	1-7	Yes			
Computer Sciences					
CS 119 Program Design and Development	3	Yes		Yes	Yes
CS 119L Program Design and Development Lab	1	Yes		Yes	Yes
CS 180ABCD Introduction to Visual BASIC Programming	4	Yes	Yes	Yes	
CS 181 Introduction to C++ Programming	4	Yes	Yes	Yes	Yes
CS 182 Introduction to JAVA Programming	4	Yes	Yes	Yes	Yes
CS 280ABCD Intermediate Visual Basic Programming	4	Yes	Yes	Yes	
CS 281 Intermediate C++ Programming	4	Yes		Yes	
CS 282 Intermediate Java Programming and Fundamental Data Structures	4	Yes	Yes	Yes	Yes
CS 289 Computer Organization and Systems Programming	4	Yes	Yes	Yes	Yes
CS 299 Selected Topics	1-7	Yes			
	Total	47	7	10	6

Transferable Courses - Palomar College

Computer Science and Information Systems	Units	To CSUs	To SDSU	To UCs	To UCSD
CSIS 105 Computer Concepts and Microcomputer Applications	3	Yes	Yes	Yes	
CSIS 111 Networking Fundamentals	3	Yes			
CSIS 117 Introduction to Visual Basic	4	Yes	Yes		
CSIS 120 Microcomputer Applications	3	Yes	Yes		
CSIS 121 Microcomputer Applications - Advanced	3	Yes			
CSIS 127 Word	1	Yes			
CSIS 137 Web Site Development w/XHTML (R CSIS 137)	2	Yes			
CSIS 138 JavaScript	3	Yes			
CSIS 139 Advanced Web Site Development	2	Yes			
CSIS 145 Introduction to Linux (R CSIS 145)	3	Yes			
CSIS 146 FORTRAN-90 for Mathematics and Science	3	Yes	Yes	Yes	Yes
CSIS 160 Survey of Computer Science	4	Yes	Yes	Yes	
CSIS 170 Windows (R CSIS 170)	1	Yes			
CSIS 174 Excel	1	Yes			
CSIS 179 Access	1	Yes			
CSIS 185 Powerpoint	1	Yes			
CSIS 188 Outlook	1	Yes			
CSIS 194 Perl and CGI Scripting	2	Yes			
CSIS 196 Introduction to SQL	3	Yes			
CSIS 197 Computer Science and Information Systems Topics	.5-4	Yes			
CSIS 197B Internet Program w/JAVA	2	Yes			
CSIS 214 Intermediate Visual Basic	3	Yes			
CSIS 217 Advanced Visual Basic	4	Yes			
CSIS 218 Visual Basic for Applications	2	Yes			
CSIS 220 Programming for Computer Science	4	Yes	Yes	Yes	Yes
CSIS 221 Data Structures	4.5	Yes	Yes	Yes	Yes
CSIS 222 Machine Organization and Assembler Language	4	Yes	Yes	Yes	Yes
CSIS 225 LINUX Fundementals	2	Yes	Yes		
CSIS 226 LINUX Shell Scripting	2	Yes			
CSIS 227 LINUX Administration	2	Yes			
CSIS 228 LINUX Networking and Security	2.5	Yes			
CSIS 235 C for Programmers	4	Yes	Yes	Yes	Yes
CSIS 240 Video Game Programming	4	Yes			
CSIS 245 Systems Analysis and Design	4	Yes		Yes	
CSIS 252 Introduction to Oracle	3	Yes			
CSIS 254 Oracle Database Design	3	Yes			
CSIS 256 Database Administration 1	3	Yes			
CSIS 268 Active Server Pages	3	Yes			
CSIS 269 Web Security and E-Commerce	2	Yes			
CSIS 272 Java Programming for Information Systems	3	Yes	Yes		
CSIS 280 C++ and Object-Oriented Programming	4	Yes	Yes	Yes	Yes
CSIS 282 C# Programming	3	Yes			
CSIS 285 Windows Programming I	4	Yes			
CSIS 288 Windows Programming II	3	Yes			
CSIS 294 Enterprise JavaBeans and J2EE	3	Yes			
CSIS 295 Directed Studies in CSIS	1-3	Yes			
	Total	46	12	9	6

Transferable Courses - Mira Costa College

Computer Information System	Units	To CSUs	To SDSU	To UCs	To UCSD
CIS 100 Computer Applications	3	Yes		Yes	
CIS 101 Fundamentals of Computer Information Systems	3	Yes	Yes	Yes	
CIS 105 Intermediate Computer Applications	3	Yes			
CIS 164 Introduction to Microsoft Access	1.5	Yes			
CIS 169 Microsoft Visual Basic for Applications	3	Yes			
CIS 184 Introduction to Microsoft PowerPoint	1.5	Yes			
CIS 185 Introduction to Microsoft Windows	1.5	Yes			
CIS 187 Fundamentals of Computer Networks	2	Yes			
CIS 188 Network Administration	2	Yes			
CIS 191 Internet for Business	3	Yes			
CIS 246 Digital Imaging:Adobe Photoshop	3	Yes			
CIS 292 Internship Studies	.5-3	Yes			
CIS 296 Topics in Computer & Information Science	1-3	Yes			
CIS 298 Directed Studies	1-3	Yes			
Computer Sciences					
CS 107 Introduction to Object-Oriented Programming	3	Yes		Yes	
CS 110 Introduction to Computer Science and	4	Yes		Yes	
CS 111 Introduction to Computer Science I: Java	3	Yes	Yes	Yes	Yes
CS 112 Introduction to Computer Science II: Java	3	Yes	Yes	Yes	Yes
CS 113 Basic Data Structures and Algorithms	3	Yes	Yes	Yes	Yes
CS 140 Visual Basic Programming	3	Yes	Yes		
CS 150 C++ Programming	3	Yes	Yes	Yes	Yes
CS 220 Computer Organization and Architecture	3	Yes	Yes	Yes	Yes
	Total	**22**	**7**	**9**	**5**

Transferable Courses - San Diego City College

Computer and Information Sciences	Units	To CSUs	To SDSU	To UCs	To UCSD
CISC 114 Introduction to Computer Graphics and Web Media	2	Yes			
CISC 115 Adapted Microcomputer Applications for the Disabled	2	Yes			
CISC 121 Introduction to Operating Systems	1	Yes			
CISC 124A Data Base Programming I	1	Yes			
CISC 124B Data Base Programming II	1	Yes			
CISC 128 Introduction to Computer Presentations	1	Yes			
CISC 130 Introduction to Local Area Networks	1	Yes			
CISC 132 Intermediate Local Area Networking	1	Yes			
CISC 150 Introduction to Computer and Information Sciences	3	Yes			
CISC 152 Introduction to the Linux Operating System	4	Yes			
CISC 181 Principles of Information Systems	4	Yes	Yes	Yes	
CISC 186 Visual Basic Programming	4	Yes	Yes	Yes	
CISC 187 Data Structures and Object-Orientation	4	Yes	Yes	Yes	
CISC 189A Introduction to Programming I	4	Yes		Yes	
CISC 189B Introduction to Programming II	4	Yes		Yes	
CISC 190 JAVA Programming	4	Yes	Yes	Yes	Yes
CISC 192 C/C++ Programming	4	Yes	Yes	Yes	Yes
CISC 193 Microsoft C# Software Engineering I	4	Yes		Yes	
CISC 205 Object Oriented Programming Using C++	4	Yes		Yes	
CISC 210 System Analysis and Design	3	Yes		Yes	
CISC 265C Convergent Network Technologies: Basic Data Communication	1	Yes			
CISC 265D Convergent Network Technologies: Basic Telecommunications	1	Yes			
CISC 265E Convergent Technologies: Broadband Technologies	1	Yes			
CISC 265F Convergent Network Technologies: Computer Telephony Integration	1	Yes			
CISC 265G Convergent Network Technologies: Voice Over IP	1	Yes			
CISC 265H Convergent Network Technologies: Local Area Networks (LANs)	1	Yes			
CISC 270 Work Experience	1-4	Yes			
CISC 290 Independent Study	1-3	Yes			
	Total		**5**	**10**	**2**

Transferable Courses - San Diego Mesa College

Computer and Information Sciences	Units	To CSUs	To SDSU	To UCs	To UCSD
CISC 101 Software Development Process	3	Yes			
CISC 124B Data Base Programming II	1	Yes			
CISC 130 Introduction to Local Area Networks	1	Yes			
CISC 132 Intermediate Local Area Networking	1	Yes			
CISC 133 Wide Area Networking	1.5	Yes			
CISC 150 Introduction to Computer and Information Sciences	3	Yes			
CISC 151 UNIX Operating Systems	2	Yes			
CISC 152 Introduction to the Linux Operating System	4	Yes			
CISC 161 Software Project Management	4	Yes			
CISC 181 Principles of Information Systems	4	Yes	Yes	Yes	
CISC 182 Fluency with Information Technology	4	Yes		Yes	Yes
CISC 186 Visual Basic Programming	4	Yes	Yes	Yes	
CISC 187 Data Structures and Object-Orientation	4	Yes	Yes	Yes	
CISC 189A Introduction to Programming I	4	Yes		Yes	
CISC 189B Introduction to Programming II	4	Yes		Yes	
CISC 190 JAVA Programming	4	Yes	Yes	Yes	Yes
CISC 192 C/C++ Programming	4	Yes	Yes	Yes	Yes
CISC 193 Microsoft C# Software Engineering I	4	Yes			
CISC 210 System Analysis and Design	3	Yes		Yes	
CISC 220 Fundamentals of Computer Game Programming	4	Yes			
CISC 270 Work Experience	1-4	Yes			
CISC 290 Independent Study	1-3	Yes			
	Total	**22**	**5**	**9**	**3**

Transferable Courses - San Diego Miramar College

Computer and Information Sciences	Units	To CSUs	To SDSU	To UCs	To UCSD
CISC 181 Principles of Information Systems	4	Yes	Yes	Yes	
CISC 186 Visual Basic Programming	4	Yes	Yes	Yes	
CISC 189A Introduction to Programming I	4	Yes		Yes	
CISC 189B Introduction to Programming II	4	Yes		Yes	
CISC 190 JAVA Programming	4	Yes	Yes	Yes	Yes
CISC 192 C/C++ Programming	4	Yes	Yes	Yes	Yes
CISC 205 Object Oriented Programming Using C++	4	Yes		Yes	
CISC 210 System Analysis and Design	3	Yes		Yes	
CISC 265A Introduction to Windows Programming with Visual BASIC	3	Yes			
CISC 265B Visual BASIC Programming Lab	1	Yes			
CISC 270 Work Experience	1-4	Yes			
CISC 290 Independent Study	1-3	Yes			
	Total	12	4	8	2

Transferable Courses - SouthWestern College

Computer Information System	Units	To CSUs	To SDSU	To UCs	To UCSD
CIS 101 Introduction to Computers and Information Processing	4	Yes	Yes	Yes	
CIS 103A e-Commerce IIIA - Miva Merchant Online Stores Using Fireworks	4	Yes			
CIS 103B e-Commerce IVA - Miva Script-XML-based Programming	3	Yes			
CIS 103C e-Commerce VA - Dreamweaver MX Web Database Development	4	Yes			
CIS 104 e-Commerce IV - Beginning ColdFusion	3	Yes			
CIS 106 Programming Logic and Design	3	Yes		Yes	
CIS 107 e-Commerce V - Advanced ColdFusion	3	Yes			
CIS 108 PHP (Personal Home Page) and MySQL	6	Yes			
CIS 109 Linux Operating System and Apache Web Server	6	Yes			
CIS 111 Structured Programming Using BASIC	4	Yes		Yes	
CIS 115Introduction to Programming Using C++	4	Yes		Yes	Yes
CIS 117 Windows Programming Using Visual Basic	4	Yes			
CIS 118 Windows Programming Using Delphi	4	Yes			
CIS 121B Word Processing-Microsoft Word	1	Yes			
CIS 122B Spreadsheet Software-Excel	1	Yes			
CIS 123 Web Publishing with Dreamweaver	6	Yes			
CIS 124 Web Imaging with Fireworks	6	Yes			
CIS 125 Flash Motion Graphics	6	Yes			
CIS 126 Advanced Flash ActionScript	6	Yes			
CIS 127 Advanced Flash Gaming Methods	4	Yes			
CIS 128B Business & Presentation Graphics (Powerpoint)	1	Yes			
CIS 129 Multimedia Presentations (Powerpoint)	1	Yes			
CIS 130 Micro Disk Operating Syst	1	Yes			
CIS 133 Advanced Microcomputer Spreadsheets Software	1	Yes			
CIS 134 Micro Database Software-Access	1	Yes			
CIS 135 Advanced Database Software-Access	1	Yes			
CIS 136 e-Commerce VI - Interactive Web Development (Team Project)	4	Yes			
CIS 137 Advanced WP Software	1	Yes			
CIS 139 Window Environments	1	Yes			
CIS 140 Micro Networking Software	1	Yes			
CIS 141A Networking Systems-Windows	2	Yes			
CIS 142 Network Academy Fundamentals (Cisco Cert Prep)	3	Yes			
CIS 144A Routers and Internetwork Fundamentals (Cisco Certification Preparation)	3	Yes			
CIS 144B Adv. Routers/LAN Networking	3	Yes			
CIS 144C Wide Area Networking - Cisco	3	Yes			
CIS 146 Introduction to Structured Query Language (SQL)	2	Yes			
CIS 147 Network Security	3	Yes			
CIS 150 Intro to Telecommunications and the Internet	1	Yes			
CIS 151 Research Using the Internet	1	Yes			
CIS 152 Using HTML to create WWW Pages on the Internet	1	Yes			
CIS 153 Internet Programming using JAVA/++	4	Yes		Yes	Yes
CIS 154 Frame Programming Using HTML	1	Yes			
CIS 155 Interactive Web Pages with Perl	1	Yes			
CIS 157A Web Authoring: Introduction to Macromedia Dreamweaver	4	Yes			

Computer Information System (continued)	Units	To CSUs	To SDSU	To UCs	To UCSD
CIS 158 Imaging for the World Wide Web (Photoshop and ImageReady)	3	Yes			
CIS 159A Multimedia Development (Director)	4	Yes			
CIS 159B Advanced Web Design Using Director	4	Yes			
CIS 162 Web Design and Usability	2	Yes			
CIS 163 Web Illustrator with Adobe	2	Yes			
CIS 164 Web Publishing with Adobe	6	Yes			
CIS 201 Build an Online Storefront Using Miva	6	Yes			
CIS 202 Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6	Yes			
CIS 203 Integrating Dreamweaver and Flash With Online Storefront Using Miva	6	Yes			
CIS 204 Integrating MS Access With Online Storefront-Beginning	6	Yes			
CIS 205 Integrating MS Access With Online Storefront-Advanced	6	Yes			
CIS 209 Assembly Language Programming	4	Yes	Yes	Yes	Yes
CIS 226 Operating Systems and Command Languages	3	Yes		Yes	
CIS 244A Building Scalable Cisco Networks	4	Yes			
CIS 244B Building Cisco Remote Access Networks	3	Yes			
CIS 244C Building Cisco Multilayer Switched Networks	3	Yes			
CIS 244D CISCO Internetwork Troubleshooting	3	Yes			
CIS 245 Implementing, Configuring and Monitoring Network Firewalls	3	Yes			
CIS 246 Desktop Publishing	1	Yes			
CIS 250 Web Page Scripting	1	Yes			
CIS 252 Adv. Multimedia for Internet	4	Yes			
CIS 253 Animation for the Web using Flash	4	Yes			
CIS 254 Online Store Front - Building an Advanced Flash Web Site	4	Yes			
CIS 262 Graphical User Interface (GUI) Programming Using C++	4	Yes			
CIS 272 Intro. to the 'C' Programming Language	4	Yes		Yes	Yes
CIS 275 UNIX Operating System: Core Fundamentals	4	Yes		Yes	
CIS 276 UNIX Operating System: High Level Integration	4	Yes		Yes	
CIS 290 CIS Wk Exp-Appl I	1-4	Yes			
CIS 291 CIS Work Experience - Application II	1-4	Yes			
CIS 295 Selected Topics in Data Processing	1-3	Yes			
CIS 299 Independent Study	1-3	Yes			
	Total	**75**	**2**	**10**	**4**

Degree/Certificate Programs

Cuyamaca Community College
MiraCosta Community College
Paloma Community College
San Diego City College
San Diego Mesa College
San Diego Miramar College
Southwestern College

Cuyamaca College

Associate in Science Degree /Certificates of Achievement

Computer Network Administration Degree

This degree program prepares students for careers in computer networking and related fields. Upon completion, students may find entry-level positions as network administrators, hardware technicians, data/voice/video cabling technicians, project managers, designers/ estimators or as technical support personnel. Prepares students to work as team members in an information technology group which designs, evaluates, tests, installs and maintains corporate networks. Preparation for the following industry certifications: A+, Security+ and CCNA (Cisco Certified Network Associate).

Associate in Science Degree Requirements	
Course	**Units**
CIS120 Computer Maintenance and A+ Certification	3
CIS121 Network Cabling Systems	3
CIS140ABCD Databases	3
CIS190 Introduction to Windows Operating Systems	3
CIS191 Introduction to Unix Operating System	3
CIS201 Cisco Networking Academy Semester I	3
CIS202 Cisco Networking Academy Semester II	3
CIS263 Fundamentals of Network Security	3
TOTAL:	**24**
Electives: Select one (1) of the following courses:	
CIS292 Unix Shell Programming	2
CS119 Program Design and Development	3
CS180ABCD Inroduction to Visual Basic Programming	4
CS182 Introduction to JAVA Programming	4
	2 - 4
Electives: Select three (3) of the following courses:	
BUS105 Contact Center and Help Desk Procedures	2.5
CIS203 Cisco Networking Academy Semester III	3
CIS204 Cisco Networking Academy Semester IV	3
CIS205 Cisco Networking Academy V	3
CIS212 Introduction to Dreamweaver	3
CIS214 Web Server Management	3
CIS240ABCD Advanced Databases	3
CIS262 Fundamentals of Wireless LANs	3
CIS290 Windows System Administration	3
CIS291 Unix System Administration	3
	8.5 - 9
Total Required for major	**34.5 - 37**
Plus General Education Requirements	
*Students who complete only the major requirements listed above qualify for a Certificate in Computer Network Administration.	

Web Development Degree

This degree program provides students with practical experience creating websites and preparing them for entry level
positions as web designers, web programmers or web server administrators. The curriculum uses state of the art software and hardware typically found in the field of professional web development.

Associate in Science Degree Requirements	
Course	**Units**
CIS110 Principles of Information Systems	4
CIS140ABCD Databases	3
CIS190 Introduction to Windows Operating Systems	3
CIS211 Web Markup Languages	3
CIS212 Introduction to Dreamweaver	3
CIS213 Advanced Dreamweaver	3
CIS215 JavaScript Programming	3
CIS216 Active Server Pages	3
CS119 Program Design and Development	3
TOTAL:	**28**
Electives: Select three (3) courses from the following:	
CIS170ABCD Computer Graphics	3
CIS201 Cisco Networking Academy Semester I	3
CIS214 Web Server Management	3
CIS217 Web Graphics	3
CIS221 Web Multimedia	3
CIS222 Flash Web Animation	3
CIS240ABCD Advanced Databases	3
CIS290 Windows System Administration	3
CS180ABCD Inroduction to Visual Basic Programming	4
CS182 Introduction to JAVA Programming	4
Total Elective Units Required:	**9 - 11**
Total Required for major	**37 - 39**
Plus General Education Requirements	
*Students who complete only the major requirements listed above qualify for a Certificate in Web Development.	

Telecommunications Networking Technology Degree

This degree program prepares students with the technical and management skills necessary to enter careers in design, application, installation, management, operation and/or maintenance of computer and telecommunications networking systems including convergent voice, data and video communications over IP networks. Graduates will have specific strengths in the building, testing, operation and maintenance of computer and telecommunications networking systems.

Associate in Science Degree Requirements:	
Course	**Units**
CIS120 Computer Maintenance and A+ Certification	3
CIS121 Network Cabling Systems	3
CIS161 Fundamentals of Telecommunications	3
CIS162 Network Diagramming Using MS Visio	1
CIS190 Introduction to Windows Operating Systems	3
CIS201 Cisco Networking Academy Semester I	3
CIS202 Cisco Networking Academy Semester II	3
CIS261 Telecommunications and Convergence Technologies	3
CIS262 Fundamentals of Wireless LANs	3
CIS263 Fundamentals of Network Security	3
ENG270 Digital Systems	4
ET110 Introduction to Basic Electronics	4
MATH180 Analytic Geometry and Calculus	5
Total Units Required:	**41**
Electives: Select one (1) of the following:	
CS119 Program Design and Development	3
CS180ABCD Inroduction to Visual Basic Programming	4
CS182 Introduction to JAVA Programming	4
Total Elective Units Required:	**3 - 4**
Total Required for major:	**44 - 45**
Plus General Education Requirements	

Telecommunications Networking Technician

Certificate recipients will work in areas such as research, design, field service and technical support for telephone companies, low voltage cable installers, Internet service providers, cable and wireless communications companies, and communications equipment manufacturers.

Certificate of Achievement Requirements:	
Course	**Units**
BUS105 Contact Center and Help Desk Procedures	2.5
CIS120 Computer Maintenance and A+ Certification	3
CIS121 Network Cabling Systems	3
CIS161 Fundamentals of Telecommunications	3
CIS162 Network Diagramming Using MS Visio	1
CIS190 Introduction to Windows Operating Systems	3
CIS201 Cisco Networking Academy Semester I	3
CIS202 Cisco Networking Academy Semester II	3
CIS261 Telecommunications and Convergence Technologies	3
CIS262 Fundamentals of Wireless LANs	3
CIS263 Fundamentals of Network Security	3
ET110 Introduction to Basic Electronics	4
Total Units Required:	**34.5**
Electives: Select one (1) of the following:	
CS119 Program Design and Development	3
CS180ABCD Inroduction to Visual Basic Programming	4
CS182 Introduction to JAVA Programming	4
Total Elective Units Required:	**3 – 4**
Total Units Required:	**37.5 - 38.5**

Certificates of proficiency

These certificates offer specific training either for entry-level positions or to augment related programs such as Computer Network Administration, Web Development, Business Office Technology or Graphic Design. The certificates are designed to demonstrate a relatively narrow expertise or skill area that may be used to attain a computer industry "niche" job.

Cisco Systems

Course	Units
CIS201 Cisco Networking Academy Semester I	3
CIS202 Cisco Networking Academy Semester II	3
CIS203 Cisco Networking Academy Semester III	3
CIS204 Cisco Networking Academy Semester IV	3
TOTAL UNITS	12

Computer Programming

Course	Units
CS180ABCD Inroduction to Visual Basic Programming	4
CS182 Introduction to JAVA Programming	4
CS280ABCD Intermediate Visual Basic Programming	4
CS282 Intermediate Java Programming and Fundamental Data Structures	4
TOTAL UNITS	16

Network Servicing Technology

Course	Units
BUS105 Contact Center and Help Desk Procedures	2.5
CIS120 Computer Maintenance and A+ Certification	3
CIS121 Network Cabling Systems	3
CIS201 Cisco Networking Academy Semester I	3
CIS202 Cisco Networking Academy Semester II	3
Select one (1) of the following:	
CIS190 Introduction to Windows Operating Systems	3
CIS191 Introduction to Unix Operating System	3
TOTAL UNITS	17.5

Operating Systems

Course	Units
CIS190 Introduction to Windows Operating Systems	3
CIS191 Introduction to Unix Operating System	3
CIS290 Windows System Administration	3
CIS291 Unix System Administration	3
CIS292 Unix Shell Programming	2
TOTAL UNITS	14

Web Design

Course	Units
CIS211 Web Markup Languages	3
CIS212 Introduction to Dreamweaver	3
CIS213 Advanced Dreamweaver	3
CIS217 Web Graphics	3
Select one (1) of the following:	
CIS215 JavaScript Programming	3
CIS221 Web Multimedia	3
CIS222 Flash Web Animation	3
TOTAL UNITS	16.5

Web Programming

Course	Units
CIS140ABCD Databases	3
CIS211 Web Markup Languages	3
CIS215 JavaScript Programming	3
CIS216 Active Server Pages	3
Select one (1) of the following:	
CIS222 Flash Web Animation	3
CIS240ABCD Advanced Databases	3
CS119 Program Design and Development	3
CS119L Program Design and Development Lab	1
CS180ABCD Inroduction to Visual Basic Programming	4
CS181 Introduction to C++ Programming	4
CS182 Introduction to JAVA Programming	4
TOTAL UNITS	15-16

Web Server Management

Course	Units
CIS201 Cisco Networking Academy Semester I	3
CIS211 Web Markup Languages	3
CIS214 Web Server Management	3
CIS290 Windows System Administration	3
Select one (1) of the following:	
CIS215 JavaScript Programming	3
CIS216 Active Server Pages	3
TOTAL UNITS	15

Telecommunications Servicing Technology

Course	**Units**
BUS105 Contact Center and Help Desk Procedures	2.5
CIS120 Computer Maintenance and A+ Certification	3
CIS121 Network Cabling Systems	3
CIS161 Fundamentals of Telecommunications	3
CIS201 Cisco Networking Academy Semester I	3
CIS202 Cisco Networking Academy Semester II	3
TOTAL UNITS	17.5

Mira Costa College

Associate in Science Degree /Certificates of Competence

Computer Applications

The Computer Applications certificate is designed to meet the demand in the industry for individuals who are trained in the use of computers. Specific areas of application include word processing, spreadsheets, database management, electronic presentations, desktop publishing, computer graphics, digital imaging and applications for the Internet. Learning to use these powerful tools effectively is essential for those preparing for jobs in today's technological workplace.

Catalog Number/Course Name	Units
CIS 100 Computer Applications	3
AND	
CIS 105 Intermediate Computer Applications	3
OR	
CIS 150 Introduction to Microsoft Word	1.5
AND	
CIS 152 Introduction to Microsoft Excel	1.5
AND	
CIS 164 Introduction to Microsoft Access	1.5
AND	
CIS 184 Introduction to Microsoft PowerPoint	1.5
CIS 179 Desktop Publishing: Adobe InDesign	3
OR	
CIS 180 Desktop Publishing: QuarkXpress	3
CIS 185 Introduction to Microsoft Windows	1.5
CIS 246/ART 247 Digital Imaging: Adobe Photoshop	3
CIS 248/ART 248 Computer Graphics: Adobe Illustrator	3
Select at least three elective units from the following:	
CIS 107 Introduction to Object-Oriented Programming	3
CIS 151 Advanced Microsoft Word	1.5
CIS 154 Advanced Microsoft Excel	1.5
CIS 165 Advanced Microsoft Access	1.5
CIS 169 Microsoft Visual Basic for Applications	3
CIS 191 Internet for Business	3
CIS 249/ART 249 Advanced Computer Graphics and Publishing	3
CIS 253/ART 252 Advanced Adobe Photoshop	3
CIS 297 Individualized Projects	0 .5 – 1
BOT 100 Keyboarding, Self-Paced	1
IMT 120 Fundamentals of Multimedia Production	3
IMT 145 Web Animation	3
IMT 170 Motion Graphics	3
TOTAL UNITS	19.5

* Students interested in earning an A.A. degree must complete one of the Certificates of Competence and additional required courses

Computer Network Administration

This certificate is designed to meet the demand in the business community for individuals trained in computer networking, network administration, Enterprise networking, and Internet or intranet administration.

Catalog Number/Course Name	Units
CIS 187 Fundamentals of Computer Networks	2
CIS 188 Network Administration	2
CIS 193 Network Client	2
CIS 198 TCP/IP Network Administration	2
CIS 200 Advanced Network Administration	2
CIS 201 Enterprise Network Administration	2
Select at least six elective units from the following:	
CIS 194 Network Mail Server	3
CIS 195 Network Security	3
CIS 196 Database Server Administration	2
CIS 197 Internet Information Server	3
CIS 199 UNIX Networking	3
CIS 202 Network Directory Services	3
CIS 203 UNIX Administration	3
CIS 204 System Integration - Small Business Server	3
CIS 205 Wireless Networks	3
TOTAL UNITS	18
* Students interested in earning an A.A. degree must complete one of theCertificates of Competence and additional required courses	

Certificates of Achievement

Advanced Routing and Switching

Completion of this certificate indicates advanced expertise in managing access to computer networks and controlling traffic in growing networks. The course of study prepares students to interconnect multiple sites, utilize routing and switching technologies, connect corporate networks to an Internal Service Provider (ISP), use multiple routing protocols, and improve traffic flow, network performance and reliability. Prepares students for Cisco Certified Network Professional exams (4). **Note:** Satisfactory completion of CIS 120, CIS 121, CIS 122, and CIS 123 or Cisco CCNA certification is required prior to enrollment in CIS 124.

Catalog Number/Course Name	Units
CIS 124 Building Scalable Cisco Internetworks and Advanced Routing	4
CIS 125 Building Cisco Remote Access Networks	4
CIS 126 Building Multilayer Switching Networks	4
CIS 127 Cisco Network Troubleshooting and Support	4
TOTAL UNITS	16

Computer Internetworking Fundamentals

The Computer Internetworking Fundamentals certificate provides a foundation for knowledge of computer networking. The training provides the skills necessary to install, configure, and operate LAN, WAN, and dial access service for small networks. Graduates of the program are able to configure, operate, and troubleshoot routers and switches in small and medium-sized networks. The certificate prepares students to take the Cisco Certified Networking Associate exam.

Catalog Number/Course Name	Units
CIS 120 Cisco Internetworking Fundamentals	3
CIS 121 Basic Cisco Router Configuration	3
CIS 122 Intermediate Cisco Router Configuration	3
CIS 123 Cisco Wide Area Network Implementation and Support	3
BUS 137 Customer Service	3
TOTAL UNITS	15

E-Commerce

The E-Commerce certificate is designed for individuals interested in exploring the process of conducting business on the Internet and related design and technical considerations. Students are advised to enroll in CIS 191 prior to selecting electives.

Catalog Number/Course Name	Units
CIS 191* Internet for Business	3
IMT 125 Fundamentals of Web Page Construction	3
Select at least six elective units from the following:	
CIS 195 Network Security	3
CIS 196 Database Server Administration	2
CIS 197 Internet Information Server	3
CIS 246/ART 247 Digital Imaging: Adobe Photoshop	3
CIS 248/ART 248 Computer Graphics: Adobe Illustrator	3
IMT 180 Web Programming	3
IMT 190 Multimedia Programming	3
IMT 220 Internet Database Management	3
IMT 230 Web Site Architecture and Design	3
TOTAL UNITS	12

Microsoft Certified Office User

The Microsoft Certified Office User certificate will prepare students to pass a series of industry-recognized tests for certification in the use of Microsoft Office applications. All or most of the courses in this certificate also apply to the Data Entry, General Office, and Office Manager certificates.

Catalog Number/Course Name	Units
CIS 100 Computer Applications	3
AND	
CIS 105 Intermediate Computer Applications	3
OR	
CIS 150 Introduction to Microsoft Word	1.5
AND	
CIS 152 Introduction to Microsoft Excel	1.5
AND	
CIS 164 Introduction to Microsoft Access	1.5
AND	
CIS 184 Introduction to Microsoft PowerPoint	1.5
TOTAL UNITS	6

Microsoft Office Expert

This certificate is designed for students who want to develop mastery of the Microsoft Office Suite of products. It is appropriate for students who will be working in clerical and administrative assistant positions. Students who complete this certificate will be prepared to take and pass the Microsoft certification exams at the expert level.

Catalog Number/Course Name	Units
CIS 100 Computer Applications	3
AND	
CIS 105 Intermediate Computer Applications	3
OR	
CIS 150 Introduction to Microsoft Word	1.5
AND	
CIS 152 Introduction to Microsoft Excel	1.5
AND	
CIS 164 Introduction to Microsoft Access	1.5
AND	
CIS 184 Introduction to Microsoft PowerPoint	1.5
CIS 151 Advanced Microsoft Word	1.5
CIS 154 Advanced Microsoft Excel	1.5

CIS 165 Advanced Microsoft Access	1.5
Select at least 1.5 elective units from the following:	
CIS 166 Microsoft Outlook and Office Integration	1.5
CIS 169 Microsoft Visual Basic for Applications	3
CIS 185 Introduction to Microsoft Windows	1.5
CIS 297 Individualized Projects	0.5
TOTAL UNITS	12

Unix Administration

This certificate is designed to meet the demand of the business community for individuals trained in Linux/UNIX, Linux/UNIX networking and Linux/UNIX administration. The course of study provides an overview of computer networking fundamentals, TCP/IP, the fundamentals of Linux/UNIX configuration, networking, and systems administration in a Linux/UNIX environment.

Catalog Number/Course Name	Units
CIS 187 Fundamentals of Computer Networks	2
CIS 198 TCP/IP Network Administration	2
CIS 199 UNIX Networking	3
CIS 203 UNIX Administration	3
TOTAL UNITS	10

Cisco Certified Network Associate

Classes prepare students for the Cisco CCNA (Cisco Certified Network Associate) exam and entry level positions in networking. Certifications also enhance career opportunities for those already holding IT positions.

Catalog Number/Course Name	Units
CIS120 cisco internetworking Fundamentals	3
CIS121 Basic cisco router configuration	3
CIS122 intermediate cisco router configuration	3
CIS123 cisco Wide Area network implementation and support	3
TOTAL UNITS	12

Cisco Certified Network Professional

The CCNP certification indicates advanced or journeyman knowledge of networks. With a CCNP, a network professional can install, configure, and operate LAN, WAN, and dial access services for organizations with networks from 100 to more than 500 nodes, including but not limited to these protocols: IP, Async Routing, Extended Access Lists, IP RIP, Route Redistribution, IS-IS, Route Summarization, OSPF, VLSM, BGP, Frame Relay, ISDN, ISL, X.25, DDR, PSTN, PPP, VLANs, Ethernet, Access Lists, 802.10, FDDI, Transparent and Translational Bridging.

Catalog Number/Course Name	Units
CIS120 cisco internetworking Fundamentals	3
CIS121 Basic cisco router configuration	3
CIS122 intermediate cisco router configuration	3
CIS123 cisco Wide Area network implementation and support	3
CIS124 Building scalable cisco internetworks and Advanced routing	4
CIS125 Building cisco remote Access networks	4
CIS126 Building Multilayer switching networks	4
CIS127 cisco network troubleshooting and support	4
TOTAL UNITS	28

Computer Science

This program prepares students for technical positions in software development in business and industry. See a Counselor for additional university transfer requirements in this major.

Program Requirements	Units
CSIS 160 Survey of Computer Science	4
CSIS 220 Programming for Computer Science	4
CSIS 221 Data Structures	4.5
CSIS 222 Machine Organization and Assembler Language	4
CSIS 280 C++ and Object-Oriented Programming	4
Group One (Select 12 – 16 units)	
CSIS 111 Networking Fundamental	3
CSIS 235* C for Programmers	4
CSIS 240 Video Game Programming	4
CSIS 245 Systems Analysis and Design	4
CSIS 252 Introduction to Oracle	3
CSIS 282 C# Programming	3
CSIS 285 Windows Programming I	4
CSIS 288 Windows Programming II	4
MATH 245 Discrete Mathematics	3
Group Two (Select 2-3 units)	
CSIS 138 JavaScript	3
CSIS 194 Perl and CGI Scripting	3
CSIS 225 Linux Fundamentals	2
TOTAL UNITS	**34.5 – 40.5**

Information Systems

This program prepares students for employment in information systems applications development in business and industry. The focus is on developing skills in Visual Basic, Internet, spreadsheets, databases, presentation graphics, word processing, in systems analysis and design, and database design. See a counselor for additional university transfer requirements in this major.

Program Requirements	Units
CSIS 105 Computer Concepts/Microcomputer Applications	3
CSIS 117 Introduction to Visual Basic	4
CSIS/R CSIS 120 Microcomputer Applications	3
CSIS/R CSIS 137 Web Site Development with XHTML	2
CSIS 214 Intermediate Visual Basic	4
CSIS 217 Advanced Visual Basic	4
CSIS 245 Systems Analysis and Design	4
CSIS 252 Introduction to Oracle	3
Electives (Select 4 -5 units)	
CSIS 218 Visual Basic for Applications	2
CSIS 225 Linux Fundamentals	2
CSIS 268 Active Server Pages	3
GC/R GC 200 Introduction to Multimedia	3
TOTAL UNITS	**31-32**

Associate in Science Degree

Computer Network Administration

This program prepares the student for employment in the field of Computer Networking. The focus is on developing skills in a combination of the Network Operating Systems produced by Cisco, Microsoft, and /Linux/UNIX. Specific learning outcomes include developing team dynamics in the following skills: Network Media Installation, LAN and WAN Design, Network Management, Fundamentals of Networking Devices, Client Hardware Repair, Network Operating Systems Installation and Configuration, Networking Device Operating Systems, Installation and Configuration, Client Operating Systems Installation and Configuration, Network Security, Remote Access, Routing Principles and Configuration, and Maintaining a Corporate Network.

Computer Network Administration (Cisco and Unix)

Program Requirements	**Units**
CSIS 108 Hardware and OS Fundamentals Or R CSIS 155 Computer Technology – Hardware	3
CSIS 131 Cisco Router Configuration	3
CSIS 132 Cisco Advanced Routing and Switching	3
CSIS 133 Cisco Wide Area Network Design and Support	3
CSIS 134 Network Voice and Data Cabling	3
CSIS 130 Cisco Networking Fundamentals Or CSIS 111 Networking Fundamentals Or R CSIS 160 Introductions to Local Area Networking	3
CSIS 160 Survey of Computer Science	4
CSIS 162 Windows Client Or R CSIS 157 Windows XP Professional and Server	3
CSIS 163 Windows Server	3
CSIS 225 Linux Fundamentals Or R CSIS 145 Introduction to Linux	2
CSIS 136 Hacker Prevention/Security Or R CSIS 161 PC/Network Security	3
CSIS 135 Wireless Networking	3
CSIS 227 Linux Administration	2
CSIS 228 Linux Networking and Security	2
TOTAL UNITS	39-40

Computer Network Administration (Microsoft and Unix)

Program Requirements	**Units**
CSIS 108 Hardware and OS Fundamentals Or R CSIS 155 Computer Technology – Hardware	3
CSIS 130 Cisco Networking Fundamentals Or CSIS 111 Networking Fundamentals Or R CSIS 160 Introductions to Local Area Networking	3
CSIS 160 Survey of Computer Science	4
CSIS 162 Windows Client Or R CSIS 157 Windows XP Professional and Server	3
CSIS 163 Windows Server	3
CSIS 164 Network Infrastructure Administration	3
CSIS 165 Active Directory Services Administration	3

CSIS 225 Linux Fundamentals Or R CSIS 145 Introduction to Linux	2,3
CSIS 136 Hacker Prevention/Security Or R CSIS 161 PC/Network Security	3
CSIS 135 Wireless Networking	3
CSIS 227 Linux Administration	2
CSIS 228 Linux Networking and Security	2
Group One Electives (Select 2 courses)	
CSIS 166 Designing Active Directory Services	2
CSIS 167 Designing Network Infrastructure	2
CSIS 168 Designing Network Security	2
Group Two Electives (Select 1 course)	
CSIS 172 Microsoft SQL Server Administration	2
CSIS 173 Programming Microsoft SQL Server Databases	3
CSIS 176 Managing a Windows Network	2
CSIS 177 Microsoft Exchange Server	2
TOTAL UNITS	**39 -42**

Computer Network Administration (Cisco and Microsoft)

Program Requirements	**Units**
CSIS 108 Hardware and OS Fundamentals Or R CSIS 155 Computer Technology – Hardware	3
CSIS 130 Cisco Networking Fundamentals Or CSIS 111 Networking Fundamentals Or R CSIS 160 Introductions to Local Area Networking	3
CSIS 131 Cisco Router Configuration	3
CSIS 132 Cisco Advanced Routing and Switching	3
CSIS 133 Cisco Wide Area Network Design and Support	3
CSIS 134 Network Voice and Data Cabling	3
CSIS 160 Survey of Computer Science	4
CSIS 162 Windows Client Or R CSIS 157 Windows XP Professional and Server	3
CSIS 163 Windows Server	3
CSIS 164 Network Infrastructure Administration	3
CSIS 225 Linux Fundamentals Or R CSIS 145 Introduction to Linux	2
CSIS 135 Wireless Networking	3
CSIS 136 Hacker Prevention/Security Or R CSIS 161 PC/Network Security	3
CSIS 166 Designing Active Directory Services	2
TOTAL UNITS	**40-42**

Certificates of proficiency

Cisco CCNA Networking Program

The Cisco networking program is designed to teach students the skills needed to design, build, and maintain small to medium-sized networks. This provides students the opportunity to enter the workforce and/or further their education and training in the computer-networking field.

Program Requirements	Units
CSIS 130 Cisco Networking Fundamentals	3
CSIS 131 Cisco Router Configuration	3
CSIS 132 Cisco Advanced Routing/Switching	3
CSIS 133 Cisco WAN Design/Support	3
TOTAL UNITS	**12**

Desktop Support Specialist

Desktop support specialists are qualified to successfully troubleshoot, repair and upgrade the desktop computer including hardware and software in a networked environment.

Program Requirements	Units
CSIS 108 or Hardware and OS Fundamentals	
R CSIS 156 Computer Technology Software	3
CSIS 111 Networking Fundamentals	3
CSIS 162 Windows Client	3
CSIS 163 Windows Server	3
Electives (Select 1 course)	
CSIS 176 Managing a Windows Network	2
CSIS 227 Linux Administration	2
TOTAL UNITS	**14**

Microsoft Office User Specialist (MOUS)

The Microsoft Office User Specialist (MOUS) Program is a validation program that provides proof of proficiency in Microsoft Office applications. It is available for Microsoft Office applications at both Proficient and Expert User levels. As a general rule of thumb, Proficient Specialists can handle a wide range of everyday tasks with ease. Expert Specialists are expected to do all those everyday tasks, plus handle more complex assignments that require more advanced formatting and functionality.

Program Requirements	Units
CSIS 127 Word	1
CSIS 174 Excel	1
CSIS 179 Access	1
CSIS 185 PowerPoint	1
CSIS 188 Outlook	1
TOTAL UNITS	**5**

Microsoft SQL Database Administrator

Microsoft SQL Database Administrator is a validation program that provides a reliable measure of technical proficiency and expertise in implementation and administration of Microsoft SQL Server™ databases.

Program Requirements	Units
CSIS 111 Networking Fundamentals	3
CSIS 163 Windows Server	3
CSIS 164 Network Infrastructure Administration	3
CSIS 172 Microsoft SQL Server Administration	2
CSIS 173 Programming Microsoft SQL Server Databases	3
TOTAL UNITS	**14**

Network Engineer

Network Engineers are qualified to effectively plan, implement, maintain, troubleshoot and support networks in a wide range of computing environments using Microsoft Windows.

Program Requirements	**Units**
CSIS 163 Windows Server	3
CSIS 164 Network Infrastructure Administration	3
CSIS 165 Active Directory Services Administration	3
Group One Electives (Select 1 course)	
CSIS 166 Designing Active Directory Services	2
CSIS 167 Designing Network Infrastructure	2
CSIS 168 Designing Network Security	2
Group Two Electives (Select 2 courses)	
CSIS 166 Designing Active Directory Services	2
CSIS 167 Designing Network Infrastructure	2
CSIS 168 Designing Network Security	2
CSIS 172 Microsoft SQL Server Administration	2
CSIS 173 Programming Microsoft SQL Server Databases	3
CSIS 176 Managing a Windows Network	2
CSIS 177 Microsoft Exchange Server	2
CSIS 228 Linux Networking and Security	2
TOTAL UNITS	**15-16**

Oracle Database Program

Oracle is the most widely used relational database management system in the world. This certificate offers a series of courses designed to provide the fundamentals to become successful in the use of this powerful database system.

Program Requirements	**Units**
CSIS 252 Introduction to Oracle	3
CSIS 256 Database Administration I	3
CSIS 257 Database Administration II	3
CSIS 258 Database Performance Tuning	3
Electives (Select 1 course)	
CSIS 254 Oracle Data Base Design	3
CSIS 259 Oracle PL/SQL Programming	2
TOTAL UNITS	**15**

Unix Operating System

This certificate program in Linux/UNIX is designed for those currently in the computer industry who want to upgrade their skills, and for those with basic computer literacy who want to enter this fast-growing field. Being fluent in Linux/UNIX can make the difference in winning a job or promotion, as more personnel directors regard knowledge and fluency in Linux/UNIX principles as key criteria for job recruitment and selection.

Program Requirements	**Units**
CSIS 225 Linux Fundamentals	2
CSIS 226 Linux Shell Scripting	2
CSIS 227 Linux Administration	2
CSIS 228 Linux Networking and Security	2
CSIS 235 C for Programmers	4
TOTAL UNITS	**12**

Video Game Artist

This certificate program introduces students to the video game industry, game design, and the creation of both 2D and 3D artwork for video games.

Program Requirements	Units
CSIS 241 Overview of the Video Game Industry	4
CSIS 242 Game Design	4
ART 241 Computer Graphics Or GC/R GC140 Digital Imaging/Photoshop I Or GC 141 Digital Imaging/Photoshop II Or GC 142 Digital Imaging/Photoshop III	3
ARTI 246 Digital 3D Design and Modeling Or DT 180 3D Studio Max – Intro 3D Modeling/Animation Or DT 182 3D Studio Max – Adv 3D Modeling/Animation	3
ARTD 220 Motion Design Or ARTI 247 Digital 3D Design and Animation Or DT 184 Real Time 3D Technical/Game Animation Or GC 204 Motion Graphics for Multimedia-A	2,3
TOTAL UNITS	**16 -17**

Video Game Specialist

This certificate program introduces students to the video game industry, game design and programming.

Program Requirements	Units
CSIS 240 Video Game Programming	4
CSIS 240 Video Game Programming (repeat for Advanced project)	4
CSIS 241 Overview of the Video Game Industry	4
CSIS 242 Game Design	4
TOTAL UNITS	**16**

Visual Basic

This certificate is designed for individuals interested in acquiring the advanced programming skills necessary to design and implement Visual Basic programs.

Program Requirements	Units
CSIS 117 Introduction to Visual Basic	4
CSIS 214 Intermediate Visual Basic	4
CSIS 217 Advanced Visual Basic	4
CSIS 268 Active Server Pages	3
TOTAL UNITS	**15**

Voice and Data Cable Installer

This program provides students a strong foundation in Networking with an emphasis on the Physical, Data-link and Network Layers of the OSI model. It is designed to provide students with the knowledge of in-depth physical connectivity of networks and how data is transmitted across the media. This will prepare the student to achieve the BISCI installer's certificate and/or further their education and training in the computer-networking field with an emphasis on installations.

Program Requirements	Units
CSIS 108 or Hardware and O.S. Fundamentals	
R CSIS 156 Computer Technology-Software	3
CSIS 111 Networking Fundamentals	3
CSIS 134 Network Voice and Data	3
TOTAL UNITS	**9**

Web Developer

This program includes the Web page design and programming languages that allow a developer to build dynamic Web applications. The student may choose an emphasis on either the Java/Open Source or Windows platforms.

Web Developer (Java / Open Source Emphasis)

Program Requirements	**Units**
CSIS/R CSIS 137 Web Site Development with XHTML	2
CSIS 138 JavaScript	3
CSIS 191 PHP with MySQL	3
CSIS 194 Perl and CGI Scripting	3
CSIS 272 Java Programming for Information Systems	3
Elective Courses (select 1 course)	
CSIS 139 Adv Web Site Development	3
CSIS 195 Python Programming	3
CSIS 196 Introduction to SQL	3
CSIS 252 Introduction to Oracle	3
CSIS 273 Java Servlets and JSPs	3
CSIS 294 Enterprise JavaBeans and J2EE	3
GC 144 Web Graphics	3
GC/R GC 202 Web Page Layout I	3
TOTAL UNITS	17

Web Developer (Windows Emphasis)

Program Requirements	**Units**
CSIS/ R CSIS 137 Web Site Development with XHTML	2
CSIS 138 JavaScript	3
CSIS 139 Adv Web Site Development	3
CSIS 268 Active Server Pages	2
CSIS 282 C# Programming	3
Elective Courses (select 1 course)	
CSIS 173 Programming Microsoft SQL Server Databases	3
CSIS 272 Java Programming for Information Systems	3
CSIS 273 Java Servlets and JSPs	3
GC 144 Web Graphics	3
GC/R GC 202 Web Page Layout I	3
TOTAL UNITS	**16**

Web Server Administrator

This program includes the use and implementation of web-networked environments for the purpose of administering Internet/Intranet applications. Strong emphasis is placed on hands-on server administration, networking, supplemented with web development and design. The student may choose an emphasis on either the Linux/UNIX or Windows platforms.

Web Server Administrator (UNIX Emphasis)

Program Requirements	**Units**
CSIS/R CSIS 137 Web Site Development with XHTML	2
CSIS 194 Perl and CGI Scripting	3
CSIS 225 Linux Fundamentals	2
CSIS 227 Linux Administration	2
CSIS 228 Linux Networking and Security	2
Elective Courses (select 2 courses)	
CSIS 226 Linux Shell Scripting	2
CSIS 266 Implementing/Admin Web Servers	2.5
CSIS 269 Web Security and E-Commerce	2
GC 217 Online Store Design I	3
TOTAL UNITS	**15 – 16.5**

Web Server Administrator (Windows Emphasis)

Program Requirements	**Units**
CSIS/R CSIS 137 Web Site Development with XHTML	2
CSIS 162 Windows Client	3
CSIS 163 Windows Server	2
CSIS 172 Microsoft SQL Server Administration	2
Elective Courses (select 1 course)	
CSIS 173 Programming Microsoft SQL Server Databases	3
CSIS 266 Implementing/Admin Web Servers	2.5
CSIS 269 Web Security and E-Commerce	2
GC 217 Online Store Design I	3
TOTAL UNITS	**11-12**

San Diego City College

Associate in Science Degree /Certificate of Achievement

Computer Information Systems*: 31 Units

*The associate degree requires completion of a minimum of 60 units.
*Electives as needed to meet minimum of 60 units required for the degree

Courses	Units
ACCT 116A, Financial Accounting	4
ACCT 116B, Managerial Accounting	4
BUSE 119, Business Communications	3
BUSE 140, Business Law & the Legal Environment	3
CISC 181, Principles of Information Systems	4
CISC 186, Visual Basic Programming	4
ECON 120, Principles of Economics I	3
MATH 119, Elementary Statistics	3
CISC Elective(s)*	3
Total	**31**

*Choose a minimum of 3 units in CISC. Students should consult with their counselor prior to choosing electives to ensure electives meet program and/or transfer goals.
Note: Only one Computer and Information Sciences (CISC) course from the above list may be used to satisfy

Certificate of Completion

Certified Convergent Network Technologist*: 9.5 Units

The Certified in Convergent in Network Technologies (CCNT) certificate provides students with competencybased training addressing convergence services. This certificate provides students with the required knowledge to perform the following job roles: Telco/ Service Provider Technical Sales Professionals Network Administrators and Engineers Product Manager.

Courses	Units
INWT 090A, Convergent Network Technology: Basic Data Communications	2
INWT 090B, Convergent Network Technology: Basic Telecommunications	1.5
INWT 090C, Convergent Network Technology: Broadband Technologies	2
INWT 090D, Convergent Network Technology: Computer Telephony Integration	1
INWT 090E, Convergent Network Technology: Local Area Networks (LANs)	2
INWT 090F, Convergent Network Technology: Voice Over IP (VoIP) Essentials	1
Total	**9.5**

Computer Programming*: 15 Units

This certificate of completion in computer programming requires completion of the courses listed below and is meant to prepare students who are planning on preparing for entry-level positions in computer programming and/or information technology. The certificate of completion also offers students the opportunity to learn or enhance computer programming skills.

Courses	Units
CISC 186, Visual Basic Programming	4
CISC 190, Java Programming	4
CISC 192, C/C++ Programming	4
CISC 210, System Analysis and Design	3
Total	**15**

Internet Fluency*: 5 Units

This Certificate of Completion in Computer Information Systems requires completion of the courses listed below. The certificate is meant to prepare students who are planning for entry-level positions in the field of information technology, as well as for those students who wish to take courses or work in e-commerce.

Courses	Units
CBTE 161, Learning the Internet	1
CBTE 162, Web Page Creation	2
CISC 114, Introduction to Computer Graphics & Web Media	2
Total	**5**

Microsoft Certified Database Administrator*: 10.5 Units

Upon successful completion of this certificate, students will be prepared to take Microsoft Certified Database Administrator (MCDBA) exams and to become successful Microsoft Database Administrator.

Courses	Units
MSFT 130, Installing, Configuring, and Administering Windows Clients	2.5
MSFT 132, Manage and Maintain Windows Server	3
MSFT 170, Programming a Microsoft SQL Server	2.5
MSFT 171, Microsoft SQL Server System Administration	2.5
Total	**10.5**

Microsoft Certified System Engineer*: 17 Units

Upon successful completion of this certificate, students will be prepared to take Microsoft Certification exams and for becoming successful Microsoft Certified System Engineers.

Courses	Units
MSFT 051, Installing, Configuring, and Administering Windows 2000 Professional	2.5
MSFT 052, Installing, Configuring, & Administering Microsoft Windows 2000 Server	2.5
MSFT 053, Implementing & Administering a Microsoft Windows 2000 Network Infrastructure	2.5
MSFT 054, Implementing & Administering a Microsoft Windows 2000 Directory Infrastructure	2.5
MSFT 055, Designing a Microsoft Windows 2000 Directory Services Infrastructure	2.5
MSFT 056, Designing a Microsoft Windows 2000 Network Infrastructure	2
MSFT 057, Designing Security for a Microsoft Windows 2000 Network	2.5
Total	**17**

Microsoft Certified Systems Engineer 2003*: 13-14.5 Units

Upon successful completion of this certificate, students will be prepared to take the Microsoft Certified Systems Engineer (MCSE) exams and to become successful information technology professionals as MCSE generalists.

Courses	Units
MSFT 130, Installing, Configuring, and Administering Windows Clients	2.5
MSFT 132, Manage and Maintain Windows Server	3
MSFT 134, Implementing, Managing, and Maintaining Network Infrastructure I	1.5
MSFT 136, Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure II	1.5
MSFT 138, Planning, Implementing, and Maintaining a Microsoft Windows Server Active Directory Infrastructure	1.5
MSFT 140, Designing Security for Microsoft Networks	1.5
Total	**11.5**

Select one course from the following: 1.5-3 Units

- MSFT 160, Microsoft Exchange Server Administration
- MSFT 170, Programming a Microsoft SQL Server
- MSFT 171, Microsoft SQL Server System Administration
- MSFT 070, Microsoft Sequel Server Database Design and Implementation
- MSFT 071, Microsoft SQL Server System Administration

- MSFT 080, Microsoft Exchange Server Administration
- INWT 140, Security + Certification Training

Microsoft Certified Systems Engineer 2003 - Security*: 14.5 Units

Upon successful completion of this certificate, students will be prepared to take the Microsoft Certified Systems Engineer (MCSE) exams and to become successful information technology professionals as MCSE specializing in network security.

Courses	**Units**
MSFT 130, Installing, Configuring, and Administering Windows Clients	2.5
MSFT 132, Manage and Maintain Windows Server	3
MSFT 134, Implementing, Managing, and Maintaining Network Infrastructure I	1.5
MSFT 136, Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure II	1.5
MSFT 138, Planning, Implementing, and Maintaining a Microsoft Windows Server Active Directory Infrastructure	1.5
MSFT 140, Designing Security for Microsoft Networks	1.5
INWT 140, Security + Certification Training	3
Total	**14.5**

San Diego Mesa College

Associate in Science Degree/Certificate of Achievement

Computer and Information Sciences: 31 Units

The associate degree in Computer Information Sciences requires completion of the courses listed below and is meant to prepare students who are planning on transferring to Information Decision Systems programs at four-year institutions. Additional general education and graduation requirements for the associate degree are listed on page 64 of this catalog.

The certificate of achievement in Computer Information Sciences requires completion of the courses listed below and is meant to prepare students who are planning and preparing for entry-level positions in the Computer Information Sciences Industry.

***The associate degree requires completion of a minimum of 60 units.**
***Electives as needed to meet minimum of 60 units required for the degree**

Courses	Units
ACCT 116A, Financial Accounting	4
ACCT 116B, Managerial Accounting	4
BUSE 119, Business Communications	3
BUSE 140, Business Law & the Legal Environment	3
CISC 181, Principles of Information Systems	4
CISC 186, Visual Basic Programming	4
ECON 120, Principles of Economics I	3
MATH 119, Elementary Statistics	3
CISC Elective(s)*	3
Total	**31**

*Choose a minimum of 3 units in CISC. Students should consult with their counselor prior to choosing electives to ensure electives meet program and/or transfer goals.
Note: Only one Computer and Information Sciences (CISC) course from the above list may be used to satisfy SDCCD general education requirements.

Certificate of Completion

Computer Programming: 15 Units

This certificate of completion in computer programming requires completion of the courses listed below and is meant to prepare students who are planning on preparing for entry-level positions in computer programming and/or information technology. The certificate of completion also offers students the opportunity to learn or enhance computer programming skills.

Courses	Units
CISC 186, Visual Basic Programming	4
CISC 190, Java Programming	4
CISC 192, C/C++ Programming	4
CISC 210, System Analysis and Design	3
Total	**15**

Microsoft Certified System Engineer: 17 Units

Upon successful completion of this certificate, students will be prepared to take Microsoft Certification exams and for becoming successful Microsoft Certified System Engineers.

Courses	Units
MSFT 051, Installing, Configuring, and Administering Windows 2000 Professional	2.5
MSFT 052, Installing, Configuring, and Administering Microsoft Windows 2000 Server	2.5
MSFT 053, Implementing and Administering a Microsoft Windows 2000 Network Infrastructure	2.5
MSFT 054, Implementing and Administering a Microsoft Windows 2000 Directory Infrastructure	2.5
MSFT 055, Designing a Microsoft Windows 2000 Directory Services Infrastructure	2.5
MSFT 056, Designing a Microsoft Windows 2000 Network Infrastructure	2
MSFT 057, Designing Security for a Microsoft Windows 2000 Network	2.5
Total	17

San Diego Miramar College

Associate in Science Degree/ Certificate of Achievement

Computer and Information Sciences: 31 Units

The associate degree in Computer Information Sciences requires completion of the courses listed below and is meant to prepare students who are planning on transferring to Information Decision Systems programs at four-year institutions. Additional general education and graduation requirements for the associate degree are listed on page 64 of this catalog.

***The associate degree requires completion of a minimum of 60 units.**
***Electives as needed to meet minimum of 60 units required for the degree**

Courses	Units
ACCT 116A, Financial Accounting	4
ACCT 116B, Managerial Accounting	4
BUSE 119, Business Communications	3
BUSE 140, Business Law & the Legal Environment	3
CISC 181, Principles of Information Systems	4
CISC 186, Visual Basic Programming	4
ECON 120, Principles of Economics I	3
MATH 119, Elementary Statistics	3
CISC Elective(s)*	3
Total	**31**

*Choose a minimum of 3 units in CISC. Students should consult with their counselor prior to choosing electives to ensure electives meet program and/or transfer goals.
Note: Only one Computer and Information Sciences (CISC) course from the above list may be used to satisfy SDCCD general education requirements.

Certificate of Completion

Computer Programming*: 15 Units

This certificate of completion in computer programming requires completion of the courses listed below and is meant to prepare students who are planning on preparing for entry-level positions in computer programming and/or information technology. The certificate of completion also offers students the opportunity to learn or enhance computer programming skills.

Courses	Units
CISC 186, Visual Basic Programming	4
CISC 190, Java Programming	4
CISC 192, C/C++ Programming	4
CISC 210, System Analysis and Design	3
Total	**15**

SouthWestern College

Associate in Science Degree/ Certificate of Achievement

***The associate degree requires completion of a minimum of 60 units.**
***Electives as needed to meet minimum of 60 units required for the degree**

Computer Information Systems Common Core

Courses	Units
BUS 211 Communication in Business and Industry **OR** BUS 212 Business Communication	3
CIS 10A Microcomputer Repair and Service	2
CIS 101 Introduction to Computers and Information Processing	4
CIS 130 Microcomputer Disk Operating System	1
CIS 139 Windowing Environments	1
CIS 150 Introduction to Telecommunications and the Internet	1
CIS 226 Operating Systems and Command Languages	3
Total	**15**

Plus at least one emphasis below

***1. CIS—Applications Programming Emphasis:* 37 Units**

Provides training in the theory and practice of computer programming emphasizing business and computer information systems applications. Prepares students for employment as entry-level programmer trainees able to utilize micro, mini and mainframe computers with a variety of programming languages, application development tools, structured techniques, and software packages.

Courses	Units
ACCT 7 Basic Business Bookkeeping	3
CIS 106 Programming Logic and Design	3
CIS 122B Spreadsheet Software—Excel	1
CIS 133 Advanced Microcomputer Spreadsheets Software	1
CIS 134 Microcomputer Database Software—Access	1
CIS 135 Advanced Microcomputer Database Software—Access	1
Total	**10**

Select 2 units from the courses listed below: 2

- CIS 111 Structured Programming Using BASIC (4)
- CIS 115 Introduction to Programming Using C++ (4)
- CIS 117 Windows Programming Using Visual Basic (4)
- CIS 118 Windows Programming Using Delphi (4)
- CIS 146 Introduction to Structured Query Language (SQL) (2)
- CIS 153 Internet Programming Using Java/++ (4)

****Plus Common Core courses for Computer Information Systems 15 Units**

2. *CIS—eCommerce Emphasis:* 38-39 Units

The objective of the eCommerce curriculum is to prepare students for entry-level employment in the eCommerce industry. The curriculum is designed to provide students with basic and advanced eCommerce knowledge, along with the skills necessary to design, maintain, and administer a Web-based eCommerce site. Students will understand the complexities of the marketplace for eCommerce and will become familiar with the legal and regulatory issues that affect eCommerce. Students will gain an understanding of the issues surrounding privacy, security, and the protection of intellectual property.

Courses	Units
BUS 134 eCommerce I: Principles of Electronic Commerce	3
CIS 146 Introduction to Structured Query Language (SQL)	2
CIS 252 Advanced Multimedia for the Internet	4
CIS 103A eCommerce IIIa—Miva Merchant Online Stores Using Fireworks **OR**	3-4

CIS 104 eCommerce IV—Beginning ColdFusion	
CIS 103B eCommerce IVa—Miva Script XML Based Programming Language **OR** CIS 107 eCommerce V: Advanced ColdFusion	3
CIS 103C eCommerce Va: Dreamweaver MX Web Database Development	4
CIS 136/BUS 137 eCommerce VI: Interactive Web Development	4
Total	**23-24**
****Plus Common Core courses for Computer Information Systems**	**15**

***3. CIS—Internet Emphasis:* 40 Units**

Designed to provide students with a fundamental understanding of Web pages for the Internet. The objective of the curriculum is to prepare students for employment as Internet specialists, by learning how Internet technology can be used to reengineer business processes. Students will gain programming, art, and telemedia skills using applications that are geared for designing World Wide Web pages. The Internet specialist designs a plan that specifies how a Web site integrates with a company's existing infrastructure, and is also well versed in developing and managing sophisticated Web projects.

Courses	Units
ART 192 Introduction to Digital Imaging	3
CIS 151 Research Using the Internet	1
CIS 152 Using HTML to Create World Wide Web Pages on the Internet	1
CIS 154 Frame Programming Using HTML	1
CIS 155 Interactive Web Pages With Perl	1
CIS 157A Web Authoring: Introduction to Macromedia Dreamweaver	4
CIS 158 Imaging for the World Wide Web (Photoshop and ImageReady)	3
CIS 250 Web Page Scripting	1
CIS 252 Advanced Multimedia for the Internet	4
TELE 131 Introduction to Video and Film Production	3
TELE 163 Video Post-production and Special Effects	3
Total	**25**
****Plus Common Core courses for Computer Information Systems**	**15**

***4. CIS—Internet Web Design Emphasis:* 37 Units**

Designed to provide students with a fundamental understanding of building next generation Web sites for private, corporate, and entertainment industry. The objective of the curriculum is to prepare students for employment as entry-level Internet Web designers. An Internet Web designer brings a Web site to life providing an intuitive interface through effective information design. The student will gain knowledge of how to provide the navigational structure for Web sites and determine the appropriate level of interactivity for the content and audience. The student will also learn how to handle preproduction technical considerations to integrate multiple media types, such as graphics, audio, and video into Web sites.

Courses	Units
ART 137 Web Site Development for Artists and Graphic Designers	4
ART 192 Introduction to Digital Imaging	3
CIS 141A Networking Systems—Windows	2
CIS 155 Interactive Web Pages With Perl	1
CIS 159A Multimedia Development (Director)	4
CIS 250 Web Page Scripting	1
CIS 252 Advanced Multimedia for the Internet	4
CAD 276 Technical Computer Imaging and Animation I	3
Total	**22**
****Plus Common Core courses for Computer Information Systems**	**15**

5. *CIS—Internetwork Technician Emphasis:* 44 Units

Provides intensive training in the theory and practice of the operation and maintenance of internetworking with special emphasis on switches, routers, and other specialized equipment. The objectives of the curriculum are to prepare students for employment as certified level technicians in the Internetworking industry.

Courses	Units
CIS 142 Networking Academy Fundamentals (Cisco Certification Preparation)	3
CIS 144A Routers and Internetwork Fundamentals (Cisco Certification Preparation)	3
CIS 144B Advanced Routers and LAN Networking	3
CIS 144C Wide Area Networks Implementation and Support	3
CIS 147 Network Security	3
CIS 275 UNIX Operating System: Core Fundamentals	4
ELEC 15 Data, Voice, and Video Cable Installation	2
ELEC 260 Microcomputer Systems and A+ Certification	4
ELEC 266 Network Management for Technicians	4
Total	**29**
****Plus Common Core courses for Computer Information Systems**	**15**

6. *CIS—Microcomputer Applications Emphasis :* 29 Units

Designed for those students with no prior computer experience who want to learn how to use the computer as a business and personal tool. Some vocational opportunities are accounting clerk, data entry clerk, bookkeeper, administrative assistant, general office clerk, and small office data processor. Students will gain computer skills such as using appropriate office applications software, programming, and familiarity with information systems concepts in a microcomputer environment. Students should have typing skills or should complete *BUS 70 Keyboarding I, as their first course of the program.

Courses	Units
BUS 120 Introduction to Business	3
CIS 10B Microcomputer Hardware and Software Upgrade	2
CIS 121B Word Processing—Microsoft Word	1
CIS 122B Spreadsheet Software—Excel	1
CIS 133 Advanced Microcomputer Spreadsheets Software	1
CIS 134 Microcomputer Database Software—Access	1
CIS 135 Advanced Microcomputer Database Software—Access	1
CIS 137 Advanced Word Processing Software	1
CIS 146 Introduction to Structured Query Language (SQL)	2
CIS 246 Desktop Publishing	1
Total	**14**
****Plus Common Core courses for Computer Information Systems**	**15**

7. *CIS—Network Administration Emphasis:* 38 Units

Designed to prepare students for employment as certified network technicians in the internetworking industry. Provides advanced training in the design, operation, and maintenance of internetworking with an emphasis on Cisco routers and switches. Provides students with the suggested preparation for the Cisco industry certification.

Courses	Units
CIS 244A Building Cisco Scalable Networks	4
CIS 244B Building Cisco Remote Access Networks	3
CIS 244C Building Cisco Multilayer Switched Networks	3
CIS 244D Cisco Internetwork Troubleshooting	3
CIS 245 Implementing, Configuring, and Monitoring Network Firewalls	3
CIS 276 UNIX Operating System: High Level Integration	4
CIS 290–291 Work Experience CIS Applications I–II (2–4)	3
Total	**23**
****Plus Common Core courses for Computer Information Systems**	**15**

***8. CIS—Operations/PC Support Specialist Emphasis:* 29 Units**

Designed for strong background in micro and supermini computer operations and support. Students will learn hardware and software installation, the maintenance and repair of PCs and peripherals, and local area networking. Vocational opportunities include, but are not limited to, entry-level PC support specialist, computer operations, and network operations.

Courses	Units
CIS 10B/ ELEC 10B Microcomputer Hardware and Software Upgrade	2
CIS 14/ ELEC 14 Office Automation Equipment Repair	2
CIS 141A Networking Systems—Windows	2
ELEC 15 Data, Voice, and Video Cable Installation	2
ELEC 131 Digital Electronics Principles	2
ELEC 260 Microcomputer Systems and A+ Certification	4
Total	**14**
****Plus Common Core courses for Computer Information Systems**	**15**

***9. CIS—Systems Programming Emphasis:* 46 Units**

Provides training in the theory and practice of computer programming emphasizing industrial, business, and scientific applications. The objective of the computer information systems programming curriculum is to prepare students for employment as entry-level programmers, system level software integrators (mini/micro environments), or software error recovery test and acceptance personnel using a variety of system software resources and associated techniques.

Courses	Units
CIS 106 Programming Logic and Design	3
CIS 115 Introduction to Programming Using C++	4
CIS 209 Assembly Language Programming	4
CIS 272 Introduction to the "C" Programming Language	4
CIS 275 UNIX Operating System: Core Fundamentals	4
CIS 276 UNIX Operating System: High Level Integration	4
Total	**23**

Select 8 units from the courses listed below: 8

- CIS 111 Structured Programming Using BASIC (4)
- CIS 117 Windows Programming Using Visual BASIC (4)
- CIS 118 Windows Programming Using Delphi (4)
- CIS 153 Internet Programming Using Java/J++ (4)

*****Plus Common Core courses for Computer Information Systems 15***

***CIS—Web Flash Developer and Gaming Animator:* 36 Units**

Designed to prepare students to work in a computer animation studio, Web design firm, gaming firm, or to work independently as a freelance animator. Students will create interactive video games and Web sites using Flash ActionScript, Personal Home Page (PHP), and My Server Query Language (MySQL).

Courses	Units
BUS 134 eBusiness I: Principles of Electronic Commerce	3
BUS 211 Communication in Business and Industry	3
CIS 108 PHP (Personal Home Page) and MySQL	6
CIS 124 Web Imaging With Fireworks	6
CIS 125 Flash Motion Graphics	6
CIS 126 Advanced Flash ActionScript	6
CIS 127 Advanced Flash Gaming Methods	4
CIS 162 Web Design and Usability	2
Total	**36**

***CIS—Web Site Designer and Developer:* 32Units**

Designed to prepare students to work in Web design studios, computer firms, or as independent freelance Web designers or database developers. Students will create dynamic Web sites using Dreamweaver and Personal Home Page (PHP) and My Server Query Language (MySQL), and create and manage Internet databases using LINUX operating system and Apache Web server.

Courses	Units
BUS 134 eBusiness I: Principles of Electronic Commerce	3
BUS 211 Communication in Business and Industry	3
CIS 108 PHP (Personal Home Page) and MySQL	6
CIS 109 Linux Operating System and Apache Web Server	6
CIS 123 Web Publishing With Dreamweaver	6
CIS 124 Web Imaging With Fireworks	6
CIS 162 Web Design and Usability	2
Total	**32**

***CIS—Web Site eCommerce Administrator:* 44 Units**

Designed to prepare students to work as a Web site eCommerce administrator installing and implementing eCommerce software using open source and Macromedia/Miva implementations.

Courses	Units
BUS 134 eBusiness I: Principles of Electronic Commerce	3
BUS 211 Communication in Business and Industry	3
CIS 108 PHP (Personal Home Page) and MySQL	6
CIS 109 Linux Operating System and Apache Web Server	6
CIS 123 Web Publisher With Dreamweaver	6
CIS 162 Web Design and Usability	2
CIS 201 Build an Online Storefront Using Miva	6
CIS 202 Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
CIS 203 Integrating Dreamweaver and Flash With Online Storefront Using Miva	6
Total	**44**

***CIS—Web Storefront Builder Using Miva:* 38 Units**

Designed to prepare students to build an advanced online store using Miva and Macromedia software. Includes online order processing, payments collection to include credit card processing, MS Access database creation, online database development, and security technologies utilized by eCommerce entities on the Web.

Courses	Units
BUS 134 eBusiness I: Principles of Electronic Commerce	3
BUS 211 Communication in Business and Industry	3
CIS 162 Web Design and Usability	2
CIS 201 Build an Online Storefront Using Miva	6
CIS 202 Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
CIS 203 Integrating Dreamweaver and Flash With Online Storefront Using Miva	6
CIS 204 Integrating MS Access With Online Storefront—Beginning	6
CIS 205 Integrating MS Access With Online Storefront—Advanced	6
Total	**38**

Certificates of Completion/ Other Certificates of Achievement

CIS—eCommerce Emphasis—Basic: **15-16 Units**

Courses	Units
BUS 134 eBusiness I: Principles of Electronic Commerce	3
CIS 146 Introduction to Structured Query Language (SQL)	2
CIS 252 Advanced Multimedia for the Internet	4
CIS 103A eCommerce IIIa—Miva Merchant Online Stores Using Fireworks (4) **OR** CIS 104 eCommerce IV—Beginning ColdFusion (3)	3-4
CIS 103B eCommerce IVa—Miva Script XML-Based Programming Language **OR** CIS 107 eCommerce V: Advanced ColdFusion	3
Total	**15-16**

CIS—Internet Emphasis—Basic: **16 Units**

Courses	Units
CIS 151 Research Using the Internet	1
CIS 152 Using HTML to Create World Wide Web Pages on the Internet	1
CIS 154 Frame Programming Using HTML	1
CIS 155 Interactive Web Pages With Perl	1
CIS 157A Web Authoring: Introduction to Macromedia Dreamweaver	4
CIS 158 Imaging for the World Wide Web (Photoshop and ImageReady)	3
CIS 250 Web Page Scripting	1
CIS 252 Advanced Multimedia for the Internet	4
Total	**16**

CIS—Internet Web Design Emphasis Basic: **22 Units**

Courses	Units
ART 137 Web Site Development for Artists and Graphic Designers	4
ART 192 Introduction to Digital Imaging	3
CIS 141A Networking Systems—Windows	2
CIS 155 Interactive Web Pages With Perl	1
CIS 159A Multimedia Development (Director)	4
CIS 250 Web Page Scripting	1
CIS 252 Advanced Multimedia for the Internet	4
CAD 276 Technical Computer Imaging and Animation I	3
Total	**22**

CIS—Internetwork Technician Emphasis—Basic: **12 Units**

Courses	Units
CIS 142 Networking Academy Fundamentals (Cisco Certification Preparation)	3
CIS 144A Routers and Internetwork Fundamentals (Cisco Certification Preparation)	3
CIS 144B Advanced Routers and LAN Networking	3
CIS 144C Wide Area Networks Implementation and Support	3
Total	**12**

***CIS—Microcomputer Applications Emphasis—Basic:* 13 Units**

Courses	Units
BUS 70 Keyboarding I	1
BUS 120 Introduction to Business	3
CIS 10A Microcomputer Repair and Service	2
CIS 121B Word Processing—Microsoft Word	1
CIS 122B Spreadsheet Software—Excel	1
CIS 133 Advanced Microcomputer Spreadsheets Software	1
CIS 134 Microcomputer Database Software—Access	1
CIS 137 Advanced Word Processing Software	1
CIS 139 Windowing Environments	1
CIS 150 Introduction to Telecommunications and the Internet	1
Total	**13**

***CIS—Operations/PC Support Specialist Emphasis—Basic:* 16 Units**

Courses	Units
CIS 10A/ ELEC 10A Microcomputer Repair and Service	**2**
CIS 10B/ ELEC 10B Microcomputer Hardware and Software Upgrade	**2**
CIS 14/ ELEC 14 Office Automation Equipment Repair	**2**
CIS 139 Windowing Environments	**1**
CIS 141A Networking Systems—Windows	**2**
CL 120 Computer Literacy	**1**
ELEC 15 Data, Voice, and Video Cable Installation	**2**
ELEC 260 Microcomputer Systems and A+ Certification	**4**
Total	**16**

***CIS—Network Associate Specialist— Intensive Training—Basic:* 8 Units**

Introduces students to key concepts, technologies, components, and protocols inherent in local and wide area networking. Introduction to technologies used to move voice and data across long distances and to the underlying applications and troubleshooting methodologies of TCP/IP services and primary enablers of the Internet.

Courses	Units
CIS 61 Network Associate Specialist—Intensive Training—Basic	8
Total	**8**

***CIS—Network Associate Specialist—Intensive Training—Advanced:* 16 Units**

Covers Internet technologies and investigating methods of accessing the Internet and managing local area network (LAN) and wide area network (WAN). The program allows student to take the Senior Network Specialist Certification exam (NSNS) sponsored by NACSE. A one-unit work experience internship must also be completed to earn the certificate.

Courses	Units
CIS 61 Network Associate Specialist—Intensive Training—Basic	8
CIS 62 Network Associate Specialist—Intensive Training—Advanced	8
Total	**16**

***CIS—Web Database Programmer/Administrator—LAMP (Linux, Apache, MySQL, PHP):* 14 Units**

Designed to prepare students to work as a first-level Database/Web Administrator support specialists installing and implementing the Linux, Apache, MySQL, PHP (LAMP) open source software platform.

Courses	Units
CIS 108 PHP (Personal Home Page) and MySQL	6
CIS 109 Linux Operating System and Apache Web Server	6
CIS 162 Web Design and Usability	2
Total	**14**

***CIS—Web Designer:* 14 Units**

Designed to prepare students to work in an Internet Web design studio or to work independently as a freelance project consultant. Students receive training in creating, designing, testing, uploading, and maintaining multimedia Web sites.

Courses	Units
CIS 123 Web Publishing with Dreamweaver	6
CIS 124 Web Imaging with Fireworks	6
CIS 162 Web Design and Usability	2
Total	**14**

***CIS—Web Flash Designer:* 14 Units**

Designed to prepare students to work in computer-animation studios, Web design firms, or to work independently as freelance project consultants. Students will learn to create basic vector and raster images for the Web.

Courses	Units
CIS 125 Flash Motion Graphics	6
CIS 126 Advanced Flash ActionScript	6
CIS 162 Web Design and Usability	2
Total	**14**

***CIS—Web Multimedia Developer Using Director:* 10 Units**

Designed to prepare students to work in an Internet design studio or to work independently as a freelance project consultant.

Courses	Units
CIS 159A Multimedia Development (Director)	4
CIS 159B Advanced Web Design Using Director	4
CIS 162 Web Design and Usability	2
Total	**10**

***CIS—Web Storefront Builder Using Miva—Basic:* 17 Units**

Courses	Units
BUS 134 eBusiness I: Principles of Electronic Commerce	3
CIS 162 Web Design and Usability	2
CIS 201 Build an Online Storefront Using Miva	6
CIS 202 Integrating Dreamweaver and Fireworks With Online Storefront Using Miva	6
Total	**17**

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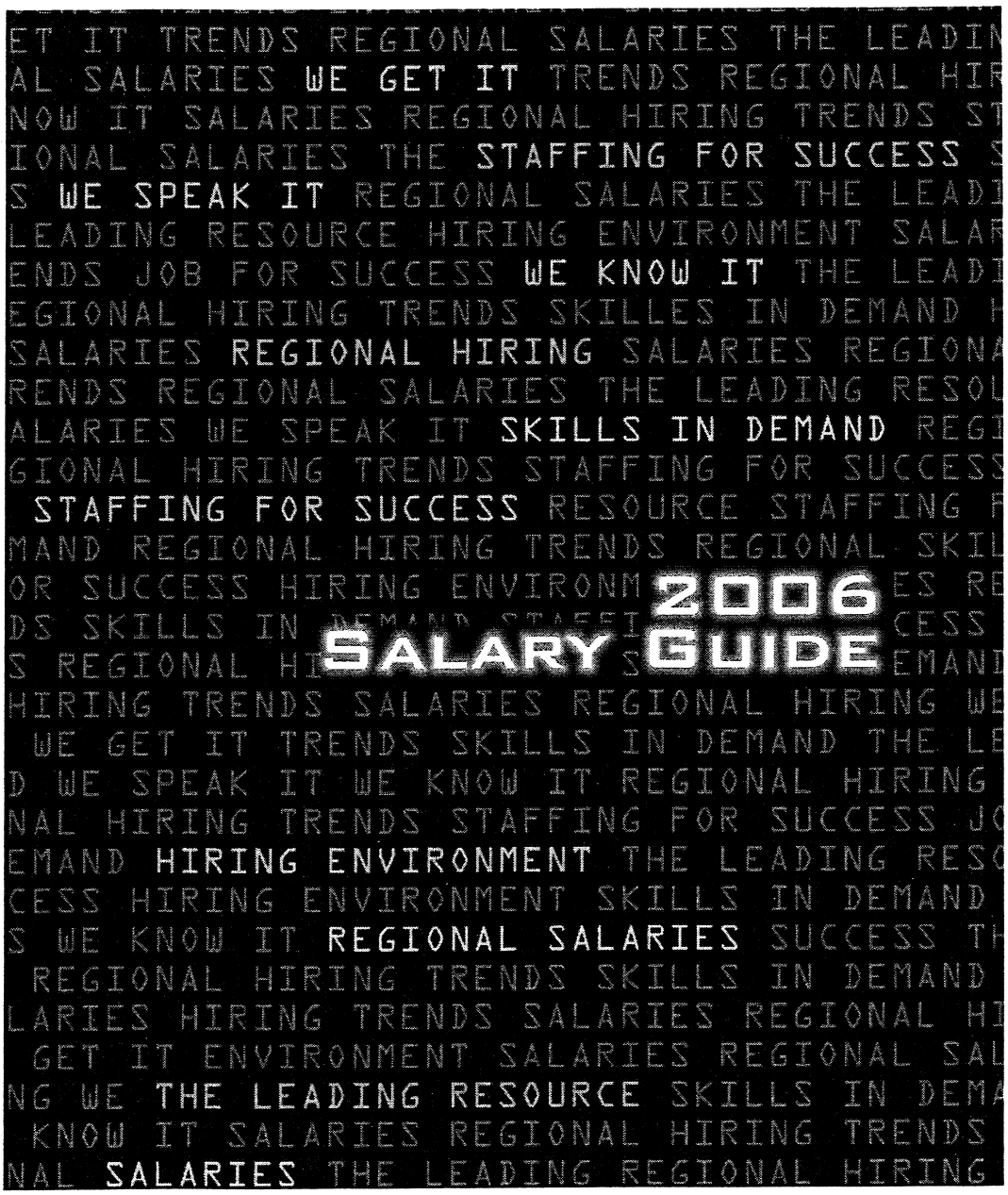

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ROBERT HALF TECHNOLOGY 2006 SALARY GUIDE

TABLE OF CONTENTS

IT EMPLOYMENT OUTLOOK

While technical expertise remains an important criterion when evaluating candidates, CIOs also are placing greater weight on nontechnical skills. With companies' increasing reliance on technology to support and drive their businesses, the role of IT professionals has become much more prominent, and they are frequently looked to for strategic guidance. It's common, for example, for those in technology to be asked to make a case for or against a particular upgrade or hardware purchase, which requires excellent communication skills and a fundamental understanding of the firm's business needs. These skills are an important factor in ensuring that the IT department meets the diverse requirements of the individuals and business units it serves.

Capital expenditures – Firms across all industries are replacing desktop systems and software to avoid the cost of maintenance and support of older systems. Launches of new versions of popular Microsoft products in 2006 also may impact IT spending.

Development of web applications – The Web is being woven into every aspect of business and providing for enhanced levels of collaboration, customer service, customization, streamlining and management.

AS A RESULT OF RENEWED EMPLOYMENT [illegible] SKILL SETS ARE RECEIVING MULTIPLE OFFERS.

AREAS OF INVESTMENT

The following initiatives are among those driving information technology hiring:

Network security – The safeguarding of internal systems remains critical for companies of all sizes. CIOs seek individuals who can manage an enterprisewide security strategy, including the assessment of network vulnerabilities, virus protection and intrusion detection.

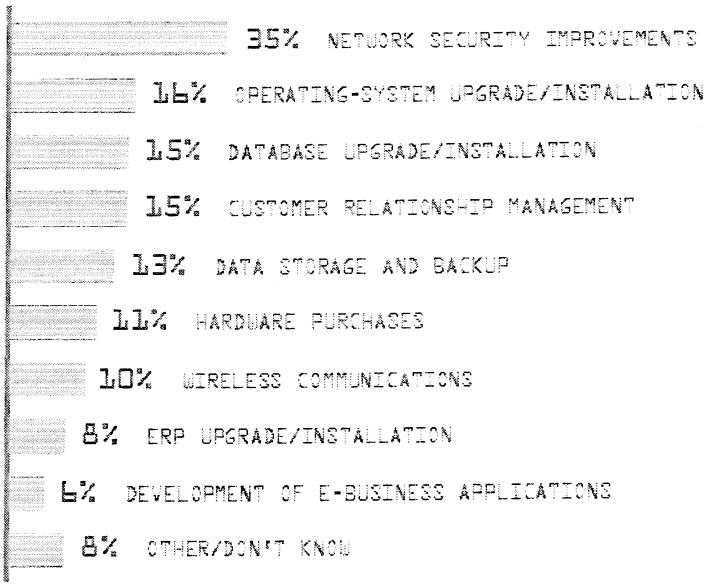
Business intelligence – This broad category of applications and technologies is growing rapidly as organizations seek to collect, store, analyze and provide access to data that assists systems users in making better business decisions.

Wireless communication – IT executives are increasing their investment in wireless applications as they recognize the potential benefits of mobile solutions. As a result, their departments are charged with supporting users of tablet computers, portable e-mail devices, smart phones and other tools.

Regulatory requirements – The Sarbanes-Oxley Act of 2002 has had a significant impact on technology departments within publicly traded companies as well as nonpublic firms. IT professionals are required to assess information systems for potential vulnerabilities and help implement and manage procedures that contribute to achieving sound internal control over financial reporting. Additional regulations affecting IT departments in various industries include the Health Insurance Portability and Accountability Act (HIPAA), the USA PATRIOT Act and the Graham-Leach-Bliley Act, among others.

IT PRIORITIES

CIOs were asked "Which of the following initiatives are the highest priorities for your IT department in the next 12 months?" Their responses:



Source: Robert Half Technology survey of more than 1,400 CIOs from companies with more than 100 employees. CIOs were allowed multiple responses.

THE ROLE OF CERTIFICATION IN HIRING

For managers hiring technology professionals, certification is an important consideration. But how much value should be placed on it? The answer isn't always clear and frequently depends on the needs of the IT department.

THE CERTIFICATION ADVANTAGE

Certification provides an employer clear evidence of an individual's familiarity with a particular technology or practice. Certification also demonstrates initiative on the part of the applicant because he or she has invested the extra effort to obtain it. In addition, some employers view certification as essential to a lifelong learning process.

THE ROLE OF EXPERIENCE

Certification is of greatest value when it is accompanied by practical work experience. For example, a job candidate who possesses a Microsoft Certified Database Administrator designation is highly marketable, but one who also has spent five years working with Microsoft systems and has a track record of completing projects on time and under budget is eminently more desirable to prospective employers.

CIOs want to hire individuals with a track record of successful projects. Consequently, they seek candidates who not only possess the right technological skills but also know how to put those skills to practical use to deliver timely, quality results.

THE ROLE OF CERTIFICATION IN HIRING

VENDOR NEUTRAL VS. VENDOR SPECIFIC

Employers often inquire about the difference between vendor-neutral and vendor-specific certification. The answer is best described as a depth-versus-breadth issue. If the position requires someone who possesses an intricate knowledge of a particular program or technology, then a candidate who either has years of experience with that program or has a vendor-specific designation supporting it will be the best fit. On the other hand, businesses that need an IT professional who knows a variety of programs and technologies would seek to hire someone who possesses a vendor-neutral certification, such as CompTIA's Network+ designation.

CERTIFICATION IS OF GREATEST VALUE WHEN IT IS ACCOMPANIED BY PRACTICAL WORK EXPERIENCE.

In the end, certification should play a role in hiring, but it is only one of many factors. There is no substitute for a candidate's actual work experience and a record of success on past projects.

IT SALARIES – UNITED STATES

Job Title	2005	2006	% Change
ADMINISTRATION			
Chief Information Officer (CIO)	$114,000 - $191,250	$114,750 - $196,000	1.8%
Chief Technology Officer (CTO)	$ 95,250 - $149,000	$ 96,750 - $153,000	2.3%
Chief Security Officer (CSO)	$ 90,750 - $134,000	$ 95,250 - $138,750	4.1%
Vice President of Information Technology	$104,250 - $150,500	$104,750 - $154,000	1.6%
Information Technology Manager	$ 80,250 - $112,250	$ 81,500 - $113,750	1.4%
APPLICATIONS & PROJECT MANAGEMENT (a)			
Manager	$ 75,750 - $105,750	$ 78,250 - $108,000	2.6%
Project Manager	$ 71,250 - $ 93,750	$ 72,750 - $ 99,250	4.2%
Systems Analyst	$ 61,500 - $ 82,500	$ 62,500 - $ 84,750	2.3%
Applications Architect	$ 74,500 - $105,750	$ 77,250 - $108,000	2.8%
Business Systems Analyst	$ 56,000 - $ 80,500	$ 58,750 - $ 84,750	5.1%
Developer/Programmer Analyst	$ 52,500 - $ 83,250	$ 55,250 - $ 86,750	4.6%
Lead Applications Developer	$ 68,750 - $ 93,000	$ 72,000 - $ 98,250	5.3%
Technical Writer	$ 42,750 - $ 64,750	$ 45,000 - $ 67,000	4.2%
CONSULTING & SYSTEMS INTEGRATION			
Director	$ 86,000 - $121,250	$ 87,500 - $127,000	3.5%
Practice Manager	$ 85,250 - $113,750	$ 85,750 - $118,250	2.5%
Project Manager/Senior Consultant	$ 73,250 - $ 96,000	$ 75,000 - $ 99,500	3.1%
Staff Consultant	$ 53,750 - $ 74,000	$ 54,500 - $ 76,500	2.5%
IT Auditor	$ 63,250 - $ 81,750	$ 67,000 - $ 94,250	11.2%

(a) Add 5 percent for C++ development skills, 7 percent for Java development skills, 5 percent for Visual Basic development skills, 10 percent for C# development skills and 10 percent for Visual Basic .NET development skills.

IT SALARIES - UNITED STATES

Job Title	2005	2006	% Change
DATA/DATABASE ADMINISTRATION (b)			
Database Manager	$ 81,250 - $110,250	$ 82,750 - $113,750	2.6%
Database Developer	$ 66,250 - $ 97,750	$ 69,750 - $101,250	4.3%
Database Administrator	$ 67,750 - $ 95,500	$ 68,250 - $ 98,750	2.3%
Data Analyst/Report Writer	$ 51,250 - $ 68,000	$ 54,000 - $ 71,250	5.0%
Data Architect	$ 76,750 - $106,750	$ 78,500 - $108,250	1.8%
Data Modeler	$ 67,250 - $ 89,500	$ 67,250 - $ 93,250	2.4%
Data Warehouse Manager	$ 82,000 - $104,500	$ 83,750 - $107,250	2.4%
Data Warehouse Analyst	$ 70,750 - $ 93,250	$ 72,500 - $ 95,250	2.3%
Business Intelligence Analyst	$ 71,250 - $ 94,250	$ 71,250 - $ 99,750	3.3%
QUALITY ASSURANCE (QA) & TESTING (c)			
QA/Testing Manager	$ 64,750 - $ 86,750	$ 67,250 - $ 88,250	2.6%
QA Analyst/Tester	$ 50,250 - $ 66,750	$ 51,500 - $ 70,250	4.1%
INTERNET & E-COMMERCE (d)			
Senior Web Developer	$ 68,000 - $ 96,750	$ 69,250 - $ 97,250	1.1%
Web Developer	$ 51,750 - $ 74,250	$ 53,250 - $ 77,500	3.8%
Web Administrator	$ 48,250 - $ 70,250	$ 48,500 - $ 72,000	1.7%
Web Designer	$ 43,750 - $ 68,250	$ 45,250 - $ 70,000	2.9%
Electronic Data Interchange (EDI) Specialist	$ 53,750 - $ 74,500	$ 55,250 - $ 77,000	3.1%
E-Commerce Analyst	$ 58,250 - $ 82,750	$ 60,500 - $ 84,500	2.8%
Messaging Administrator	$ 48,000 - $ 68,000	$ 50,000 - $ 69,500	3.0%
NETWORKING/TELECOMMUNICATIONS (e)			
Network Architect	$ 71,750 - $105,500	$ 75,000 - $109,500	4.1%
Network Manager	$ 64,250 - $ 86,000	$ 66,750 - $ 89,500	4.0%
Network Engineer	$ 61,250 - $ 88,250	$ 64,750 - $ 89,750	3.3%
LAN/WAN Administrator	$ 47,000 - $ 68,500	$ 49,000 - $ 70,750	3.7%
Telecommunications Manager	$ 64,500 - $ 84,500	$ 66,250 - $ 87,250	3.0%
Telecommunications Specialist	$ 46,250 - $ 65,500	$ 46,250 - $ 68,750	2.9%

(b) Add 10 percent for Oracle database skills, 10 percent for Microsoft SQL Server skills and 7 percent for IBM DB2 database skills.

(c) Add 5 percent for performance testing skills (e.g., Mercury Interactive tools).

(d) Add 7 percent for Java development skills, 10 percent for Java 2 Enterprise Edition development skills, 5 percent for Cold Fusion development skills, 7 percent for XML/Web services development skills, 5 percent for Active Server Page development skills, 10 percent for DCOM/COM/ActiveX development skills, 10 percent for C# development skills, 10 percent for Visual Basic .NET development skills and 5 percent for WebLogic clustering administration skills.

(e) Add 12 percent for Cisco network administration skills, 10 percent for UNIX/LINUX administration skills, 5 percent for Windows 2000/2003/XP administration skills and 10 percent for Voice over Internet Protocol administration skills.

IT SALARIES – UNITED STATES

Job Title	2005	2006	% Change
OPERATIONS			
Manager	$ 50,750 - $ 67,750	$ 51,250 - $ 69,750	2.1%
Computer Operator	$ 27,250 - $ 39,500	$ 28,000 - $ 40,250	2.2%
Mainframe Systems Programmer	$ 50,250 - $ 67,500	$ 51,750 - $ 69,250	2.8%
SECURITY (f)			
Data Security Analyst	$ 68,250 - $ 93,000	$ 71,250 - $ 96,750	4.2%
Systems Security Administrator	$ 67,500 - $ 92,750	$ 69,250 - $ 97,250	3.9%
Network Security Administrator	$ 63,750 - $ 90,500	$ 67,500 - $ 94,750	5.2%
SOFTWARE DEVELOPMENT (g)			
Product Manager	$ 77,000 - $104,250	$ 77,250 - $106,250	1.2%
Software Engineer	$ 63,250 - $ 92,750	$ 65,250 - $ 95,750	3.2%
Software Developer	$ 55,000 - $ 88,250	$ 57,250 - $ 90,250	3.0%
TECHNICAL SERVICES, HELP DESK & TECHNICAL SUPPORT (h)			
Manager	$ 59,000 - $ 85,500	$ 61,500 - $ 87,000	2.8%
Desktop Support Analyst	$ 44,500 - $ 63,250	$ 45,000 - $ 63,500	0.7%
Systems Administrator	$ 47,250 - $ 70,500	$ 49,000 - $ 72,500	3.2%
Help Desk Level 3	$ 41,000 - $ 53,750	$ 41,750 - $ 53,750	0.8%
Help Desk Level 2	$ 32,500 - $ 42,750	$ 32,750 - $ 43,000	0.7%
Help Desk Level 1	$ 26,250 - $ 36,750	$ 27,250 - $ 36,750	1.6%
Instructor/Trainer	$ 43,250 - $ 65,500	$ 43,500 - $ 66,500	1.1%
PC Technician	$ 27,750 - $ 40,750	$ 28,250 - $ 41,250	1.5%
Business Continuity Analyst	$ 60,500 - $ 90,750	$ 62,500 - $ 93,500	3.1%

(f) Add 12 percent for Cisco network administration skills, 10 percent for LINUX/UNIX administration skills and 10 percent for Check Point firewall administration skills.

(g) Add 5 percent for C++ development skills, 7 percent for Java development skills, 7 percent for XML/Web services development skills, 5 percent for Active Server Page development skills, 5 percent for Visual Basic development skills, 10 percent for DCOM/COM/ActiveX development skills, 10 percent for C# development skills and 10 percent for Visual Basic .NET development skills.

(h) Add 12 percent for Cisco network administration skills, 10 percent for UNIX/UNIX administration skills and 5 percent for Windows 2000/2003/XP administration skills.

REGIONAL HIRING TRENDS – UNITED STATES

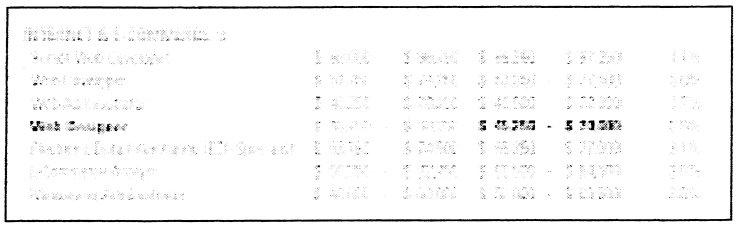
The salary ranges provided in the previous pages reflect the national averages for each position. Approximate salary ranges for your market can be calculated using the formula below and variance index numbers for specific cities (see Pages 13-16). The average salary index for all U.S. cities is 100.

To determine the estimated salary range for a position in your area, follow the process outlined below:

CALCULATING THE LOCAL SALARY RANGE

Example: web designer in Dallas

1. Locate the position "web designer" on Page 10 and your city's index number. (The index number for Dallas is 105.0.)



2. Move the decimal point in the index number two places to the left (1.050).
3. Multiply the low end of the national salary range ($45,250) by the index number as a percentage (from step two).

   ($45,250 x 1.050 = $47,513)

4. Repeat step three using the high end of the salary range ($70,000).
5. The approximate starting salary range for a web designer in Dallas is $47,513 to $73,500.

The index figures should be used as a guide in determining actual compensation. A number of factors, including company size, employee benefits, the candidate's skill set and current market conditions, can impact starting salaries. Please consult an account executive with Robert Half Technology for help refining salary packages to match local conditions.

REGIONAL HIRING TRENDS – UNITED STATES

NEW ENGLAND

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Leading Industries:

Retail, Software and Information Technology Services, Banking and Financial Services

Positions in Demand:

Project Manager, Business Systems Analyst, Help Desk Specialist

Selected Local Variances:

Boston, MA 123.9	Portland, ME 95.0
Hartford, CT 108.1	Providence, RI 110.0
Manchester, NH 115.3	Springfield, MA 92.0
New Haven, CT 107.5	Stamford, CT 121.4

Source: U.S. Department of Labor's Bureau of Labor Statistics and Robert Half Technology. Note that city index figures are reflective of all industries and are not specific to the information technology field. For more information on average salaries in your city, contact the Robert Half Technology office nearest you.

REGIONAL HIRING TRENDS - UNITED STATES

MIDDLE ATLANTIC

New Jersey, New York, Pennsylvania

Leading Industries:

Manufacturing, Real Estate, Banking and Financial Services

Positions in Demand:

Help Desk Specialist, Developer/Programmer Analyst, Software Developer

Selected Local Variances:

Buffalo, NY 88.5	Philadelphia, PA 115.0
New York, NY 150.0	Pittsburgh, PA 95.5
Paramus, NJ 121.2	Rochester, NY 94.1

SOUTH ATLANTIC

Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia

Leading Industries:

Real Estate, Hospitality and Tourism, Manufacturing

Positions in Demand:

Applications Architect, Help Desk Specialist, Network Security Administrator

Selected Local Variances:

Atlanta, GA 112.6	Orlando, FL 102.0
Baltimore, MD 103.0	Raleigh, NC 102.0
Charlotte, NC 102.0	Washington, D.C. 126.0
Greenville, SC 97.2	Wilmington, DE 100.0
Miami, FL 114.0	

WEST NORTH CENTRAL

Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

Leading Industries:

Business Services, Real Estate, Manufacturing

Positions in Demand:

Help Desk Specialist, LAN/WAN Administrator, Network Engineer

Selected Local Variances:

Des Moines, IA 95.0	Omaha, NE 94.0
Kansas City, MO 98.2	St. Louis, MO 100.0
Minneapolis, MN 104.0	

Source: U.S. Department of Labor's Bureau of Labor Statistics and Robert Half Technology. Note that city index figures are reflective of all industries and are not specific to the information technology field. For more information on average salaries in your city, contact the Robert Half Technology office nearest you.

REGIONAL HIRING TRENDS – UNITED STATES

EAST NORTH CENTRAL

Illinois, Indiana, Michigan, Ohio, Wisconsin

Leading Industries:

Banking and Financial Services, Manufacturing, Real Estate

Positions in Demand:

Project Manager, Applications Architect, Help Desk Specialist

Selected Local Variances:

Chicago, IL 123.0	Detroit, MI 103.5
Cincinnati, OH 96.4	Indianapolis, IN 101.0
Cleveland, OH 95.9	Milwaukee, WI 100.0
Columbus, OH 95.0	

WEST SOUTH CENTRAL

Arkansas, Louisiana, Oklahoma, Texas

Leading Industries:

Energy, Construction, Real Estate

Positions in Demand:

Developer/Programmer Analyst, Help Desk Specialist, Web Administrator

Selected Local Variances:

Austin, TX 105.0	Midland, TX 87.7
Dallas, TX 105.0	New Orleans, LA 84.1
Fayetteville, AR 95.0	Oklahoma City, OK 87.0
Houston, TX 106.5	San Antonio, TX 93.0
Little Rock, AR 91.0	Tulsa, OK 86.0

EAST SOUTH CENTRAL

Alabama, Kentucky, Mississippi, Tennessee

Leading Industries:

Business Services, Real Estate, Legal Services

Positions in Demand:

Developer/Programmer Analyst, Applications Architect, Network Engineer

Selected Local Variances:

Birmingham, AL 93.5	Louisville, KY 92.5
Chattanooga, TN 95.0	Memphis, TN 95.0
Knoxville, TN 88.0	Nashville, TN 94.5
Lexington, KY 84.1	

Source: U.S. Department of Labor's Bureau of Labor Statistics and Robert Half Technology. Note that city index figures are reflective of all industries and are not specific to the information technology field. For more information on average salaries in your city, contact the Robert Half Technology office nearest you.

REGIONAL HIRING TRENDS – UNITED STATES

MOUNTAIN

Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

Leading Industries:

Real Estate, Business Services, Legal Services

Positions in Demand:

Developer/Programmer Analyst, Help Desk Specialist, Software Engineer

Selected Local Variances:

Albuquerque, NM 87.0	Phoenix, AZ 104.0
Boise, ID 85.6	Reno, NV 100.0
Denver, CO 102.5	Salt Lake City, UT 100.0
Las Vegas, NV 100.0	

PACIFIC

Alaska, California, Hawaii, Oregon, Washington

Leading Industries:

Hospitality and Tourism, Real Estate, Banking and Financial Services

Positions in Demand:

Help Desk Specialist, Developer/Programmer Analyst, Systems Administrator

Selected Local Variances:

Honolulu, HI 93.0	San Diego, CA 115.0
Irvine, CA 125.0	San Francisco, CA 130.0
Los Angeles, CA 125.0	San Jose, CA 126.4
Ontario, CA 104.0	Seattle, WA 115.0
Portland, OR 98.0	Spokane, WA 79.1
Sacramento, CA 107.5	

Source: U.S. Department of Labor's Bureau of Labor Statistics and Robert Half Technology. Note that city index figures are reflective of all industries and are not specific to the information technology field. For more information on average salaries in your city, contact the Robert Half Technology office nearest you.

IT SALARIES – CANADA

Job Title	2005	2006	% Change
ADMINISTRATION			
Chief Information Officer (CIO)	$116,750 - $167,500	$118,250 - $172,000	2.1%
Chief Technology Officer (CTO)	$101,000 - $147,000	$104,750 - $150,250	2.8%
Vice President of Information Technology	$104,250 - $168,500	$106,750 - $176,000	3.7%
Information Technology Manager	$ 84,250 - $111,000	$ 84,750 - $115,000	2.3%
APPLICATIONS DEVELOPMENT (a)			
Manager	$ 72,000 - $105,250	$ 74,250 - $104,250	0.7%
Project Manager	$ 67,000 - $ 94,500	$ 67,750 - $ 98,250	2.8%
Systems Analyst	$ 58,750 - $ 80,750	$ 57,250 - $ 82,250	0.0%
Applications Architect	$ 69,750 - $ 91,250	$ 73,250 - $ 94,250	4.0%
Business Systems Analyst	$ 56,750 - $ 79,500	$ 59,250 - $ 84,250	5.3%
Developer/Programmer Analyst	$ 50,500 - $ 77,000	$ 51,000 - $ 77,750	1.0%
Lead Applications Developer	$ 60,750 - $ 80,750	$ 64,250 - $ 84,250	4.9%
Technical Writer	$ 39,250 - $ 57,000	$ 40,750 - $ 59,500	4.2%
CONSULTING & SYSTEMS INTEGRATION			
Director	$ 76,000 - $111,750	$ 79,500 - $114,250	3.2%
Practice Manager	$ 78,000 - $104,000	$ 77,750 - $106,000	1.0%
Project Manager/Senior Consultant	$ 72,500 - $ 93,250	$ 71,250 - $ 98,250	2.3%
Staff Consultant	$ 48,250 - $ 61,750	$ 51,250 - $ 63,750	4.5%
IT Auditor	$ 59,250 - $ 80,250	$ 61,750 - $ 87,500	7.0%
DATA/DATABASE ADMINISTRATION (b)			
Database Manager	$ 77,250 - $ 99,250	$ 77,750 - $102,750	2.3%
Database Developer	$ 53,500 - $ 81,250	$ 55,500 - $ 82,750	2.6%
Database Administrator	$ 61,750 - $ 84,750	$ 62,250 - $ 86,000	1.2%
Data Analyst/Report Writer	$ 55,000 - $ 75,000	$ 56,750 - $ 78,750	4.2%
Data Architect	$ 69,250 - $ 95,250	$ 71,750 - $ 98,250	3.3%
Data Modeler	$ 59,500 - $ 90,750	$ 63,250 - $ 88,250	0.8%
Data Warehouse Manager	$ 76,000 - $ 95,000	$ 78,500 - $ 96,750	2.5%
Data Warehouse Analyst	$ 64,750 - $ 87,250	$ 65,250 - $ 87,750	0.7%
Business Systems Analyst	$ 55,000 - $ 75,000	$ 58,250 - $ 80,250	6.5%

(a) Add 5 percent for C++ development skills, 7 percent for Java development skills, 5 percent for Visual Basic development skills, 10 percent for C# development skills and 10 percent for Visual Basic .NET development skills.

(b) Add 10 percent for Oracle database skills, 10 percent for Microsoft SQL Server skills and 7 percent for IBM DB2 database skills.

Note: All salary ranges listed above are in Canadian dollars.

IT SALARIES – CANADA

Job Title	2005	2006	% Change
QUALITY ASSURANCE (QA) & TESTING (c)			
QA/Testing Manager	$ 60,000 - $ 82,750	$ 62,750 - $ 89,500	6.7%
QA Analyst/Tester	$ 53,000 - $ 73,250	$ 54,250 - $ 77,750	4.6%
INTERNET & E-COMMERCE (d)			
Senior Web Developer	$ 62,000 - $ 90,500	$ 64,250 - $ 92,000	2.5%
Web Developer	$ 51,750 - $ 68,500	$ 51,750 - $ 70,500	1.7%
Web Administrator	$ 45,750 - $ 66,250	$ 46,250 - $ 67,000	1.1%
Web Designer	$ 57,500 - $ 75,000	$ 58,000 - $ 75,500	0.8%
Electronic Data Interchange (EDI) Specialist	$ 54,250 - $ 79,750	$ 54,750 - $ 80,250	0.7%
E-Commerce Analyst	$ 48,750 - $ 72,750	$ 49,250 - $ 74,250	1.6%
Messaging Administrator	$ 42,500 - $ 60,750	$ 45,000 - $ 60,500	2.2%
NETWORKING/TELECOMMUNICATIONS (e)			
Network Architect	$ 64,250 - $ 92,000	$ 66,500 - $ 92,500	1.8%
Network Manager	$ 64,750 - $ 85,000	$ 65,250 - $ 87,250	1.8%
Network Engineer	$ 57,250 - $ 82,000	$ 58,750 - $ 82,000	1.1%
LAN/WAN Administrator	$ 44,750 - $ 65,250	$ 46,500 - $ 65,500	1.8%
Telecommunications Manager	$ 63,500 - $ 83,750	$ 64,250 - $ 86,000	2.0%
Telecommunications Specialist	$ 51,750 - $ 67,500	$ 52,000 - $ 68,750	1.3%
OPERATIONS			
Manager	$ 53,250 - $ 63,000	$ 54,250 - $ 64,250	1.9%
Computer Operator	$ 30,750 - $ 40,750	$ 31,000 - $ 41,500	1.4%
Mainframe Systems Programmer	$ 54,500 - $ 75,750	$ 56,000 - $ 76,250	1.4%

(c) Add 5 percent for performance testing skills (e.g., Mercury Interactive tools).

(d) Add 7 percent for Java development skills, 10 percent for Java 2 Enterprise Edition development skills, 5 percent for Cold Fusion development skills, 7 percent for XML/Web services development skills, 5 percent for Active Server Page development skills, 10 percent for DCOM/COM/ActiveX development skills, 10 percent for C# development skills, 10 percent for Visual Basic .NET development skills and 5 percent for WebLogic clustering administration skills.

(e) Add 12 percent for Cisco network administration skills, 10 percent for LINUX/UNIX administration skills, 5 percent for Windows 2000/2003/XP administration skills and 10 percent for Voice over Internet Protocol administration skills.

Note: All salary ranges listed above are in Canadian dollars.

IT SALARIES – CANADA

Job Title	2005	2006	% Change
SECURITY (f)			
Data Security Analyst	$ 67,000 - $ 90,250	$ 68,250 - $ 96,250	4.6%
Systems Security Administrator	$ 61,500 - $ 88,250	$ 63,750 - $ 91,250	3.5%
Network Security Administrator	$ 68,500 - $ 97,500	$ 69,250 - $102,500	3.5%
SOFTWARE DEVELOPMENT (g)			
Product Manager	$ 75,250 - $103,750	$ 77,500 - $105,750	2.4%
Software Engineer	$ 57,250 - $ 84,000	$ 58,750 - $ 87,000	3.2%
Software Developer	$ 47,750 - $ 77,250	$ 48,750 - $ 78,750	2.0%
TECHNICAL SERVICES, HELP DESK & TECHNICAL SUPPORT (h)			
Manager	$ 68,000 - $ 84,750	$ 67,750 - $ 86,250	0.8%
Desktop Support Analyst	$ 51,250 - $ 65,250	$ 51,750 - $ 65,250	0.4%
Systems Administrator	$ 43,500 - $ 66,250	$ 46,000 - $ 66,750	2.7%
Help Desk Level 3	$ 47,750 - $ 61,500	$ 49,250 - $ 62,750	2.1%
Help Desk Level 2	$ 36,250 - $ 47,250	$ 36,500 - $ 48,250	2.4%
Help Desk Level 1	$ 29,500 - $ 38,250	$ 30,250 - $ 38,750	1.8%
Instructor/Trainer	$ 46,000 - $ 63,250	$ 47,750 - $ 65,500	3.7%
PC Technician	$ 46,500 - $ 57,250	$ 46,000 - $ 58,250	0.5%
Business Continuity Analyst	$ 51,250 - $ 85,000	$ 57,000 - $ 87,250	5.9%

(f) Add 12 percent for Cisco network administration skills, 10 percent for UNIX/UNIX administration skills and 10 percent for Check Point firewall administration skills.

(g) Add 5 percent for C++ development skills, 7 percent for Java development skills, 7 percent for XML/Web services development skills, 5 percent for Active Server Page development skills, 5 percent for Visual Basic development skills, 10 percent for DCOM/COM/ActiveX development skills, 10 percent for C# development skills and 10 percent for Visual Basic .NET development skills.

(h) Add 12 percent for Cisco network administration skills, 10 percent for LINUX/UNIX administration skills and 5 percent for Windows 2000/2003/XP administration skills.

Note: All salary ranges listed above are in Canadian dollars.

REGIONAL HIRING TRENDS – CANADA

CANADIAN EMPLOYMENT OUTLOOK

Technology executives in Canada – chiefly those within the legal services, oil and gas, and business services sectors – are increasing IT hiring activity in response to economic growth. As in the United States, companies are experiencing heightened demand for highly skilled candidates. In fact, individuals possessing in-demand specialties – particularly those with a combination of well-developed soft skills, strong business fundamentals and technical expertise – are receiving multiple offers. Experienced .NET developers, IT auditors and data security analysts are among the most highly sought candidates.

IT executives in the Vancouver area – particularly those within the energy, oil and gas, and software development industries – are seeking project managers, software architects and business intelligence specialists. Ottawa is experiencing IT employment growth within the federal government, healthcare and education sectors. Many CIOs in Toronto and Calgary are adopting the .NET platform as part of broader initiatives to replace outdated technologies. This is fueling demand in these areas for C# and Visual Basic .NET development skills.

CALCULATING LOCAL SALARIES

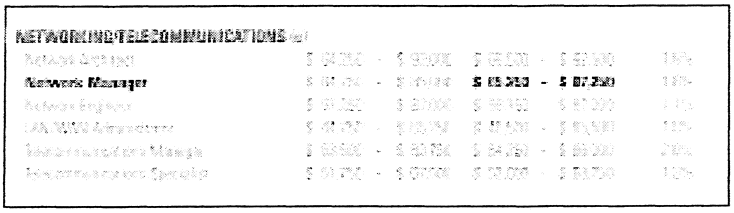
The salary ranges listed in this guide are national averages. To calculate local salary ranges, apply the equation outlined on Page 21 or contact one of our account executives for assistance in refining compensation packages for your market. A number of factors – including company size, employee benefits, the candidate's skill set and current market conditions – can impact starting salaries. Therefore, the salary variance index figures should be used only as a guide in determining actual compensation. For salary ranges more specific to your market and industry, please contact your local office.

Provided on the following page are salary variance index numbers for selected cities. Information in that section is based on data provided by our recruiting and staffing experts in our Canadian offices, as well as our company's ongoing national surveys, independent research and data from Statistics Canada. The average salary variance number for all Canadian cities is 100.

To determine the estimated salary range for a position in your area, follow the steps outlined below:

Example: network manager in Ottawa

1. Locate the position "network manager" on the chart on Page 18 and your city's salary variance index number listed below. (The salary variance index number for Ottawa is 99.5.)



2. Move the decimal point in the index number two places to the left (.995).

3. Multiply the low end of the national salary range ($65,250) by the index number as a percentage (from step two).
($65,250 x .995 = $64,924)

4. Repeat step three using the high end of the salary range ($87,250).

5. The approximate starting salary range for a network manager in Ottawa is $64,924 to $86,814.

CANADIAN LOCAL VARIANCES			
Calgary	103.9	Toronto	105.1
Edmonton	95.5	Vancouver	102.5
Montréal	98.3	Winnipeg	95.1
Ottawa	99.5		

Source: Statistics Canada and Robert Half Technology

Note: Please contact one of our account executives for salary information regarding cities not listed above.

STAFFING FOR SUCCESS

Achieving appropriate IT staffing levels continues to be a challenge and an opportunity as companies seek to capitalize on avenues for growth while remaining within budget limitations. Overhiring can compromise a firm's competitiveness and possibly lead to layoffs should the business experience a slowdown. At the same time, not hiring enough people can jeopardize client service levels and cause an organization to miss valuable opportunities to capture market share. Adding to the dilemma, businesses that continue to expect employees to accomplish more without additional support may see burnout among essential staff.

How can firms find the proper balance? One solution is the development of a strategic staffing plan that builds in flexibility through a blend of full-time and project-based technology employees.

An increasing number of businesses are discovering that augmenting core IT staff with highly skilled project professionals offers them a cost-effective way to bring together the specialized experience they need for both short- and long-term initiatives. This approach allows companies to adapt rapidly to market changes without assuming the fixed costs associated with hiring full-time staff until there is a sustainable need to do so. When that time arrives, companies that have engaged temporary workers often find them to be excellent candidates for full-time positions since their on-the-job performance can be evaluated over an extended period of time.

THE VALUE OF SPECIALIZATION

The best way for businesses to find experienced project professionals who can supplement the efforts of core staff and immediately address IT needs is to enlist the assistance of a staffing firm that specializes in the field. Robert Half Technology is the leader in placing highly skilled IT professionals, and our account executives can quickly develop targeted solutions for each client's individual needs.

We have built extensive networks in the local business communities we serve.

We also have longstanding national alliances with highly respected organizations, including:

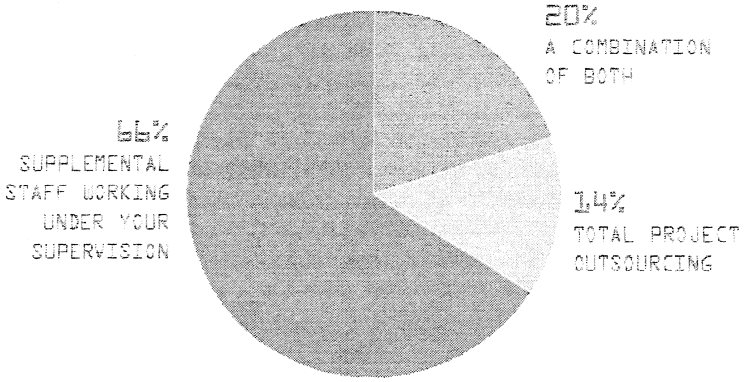
- Help Desk Institute
- Microsoft
- Association of Information Technology Professionals

Our relationships with these organizations offer us a unique advantage in locating candidates with the specialized expertise to help companies boost productivity and grow their businesses.

Robert Half Technology is a division of Robert Half International Inc. (NYSE symbol: RHI), the world's leader in specialized staffing services. We are proud to be the exclusive staffing sponsor of Dress for Success, a nonprofit organization that provides assistance to low-income women transitioning from unemployment to self-sufficiency. Robert Half Technology has more than 100 offices throughout North America and Europe and offers online recruiting and job search services at **www.rht.com**.

STAFFING OPTIONS

CIOs were asked, "When using outside staffing services for IT needs, do you generally prefer on-site supplemental staff working under your supervision or total-project outsourcing?" Their responses:



Source: Robert Half Technology survey of more than 1,100 CIOs from companies with more than 100 employees

THE LEADING RESOURCE

Robert Half Technology has built a reputation as the leading resource for IT employment and management trends and advice. Each year, our firm conducts targeted research and publishes articles, booklets, white papers and other informational tools to assist job seekers in finding meaningful employment and companies in locating the talent they need to remain competitive.

ADVICE BOOKLETS AND WHITE PAPERS

In addition to our annual *Salary Guide*, Robert Half Technology produces a number of complimentary publications to help IT professionals navigate the hiring and job-search processes. These resources include *What You Should Know About Background Checks, How to Check References When References are Hard to Check* and *Creating Compensation and Benefits Packages for Today's Technology Professionals.*

BOOKS AND COLUMNS

RHI chairman and CEO Max Messmer is a widely published workplace expert, whose popular advice column, *Resumania®*, is syndicated by Scripps-Howard News Service. He also is the author of *Motivating Employees For Dummies; Human Resources Kit For Dummies; Managing Your Career For Dummies; Job Hunting For Dummies*, 2nd Edition; and *The Fast Forward MBA in Hiring* (all published by John Wiley & Sons, Inc.).

NATIONAL SURVEYS

Robert Half Technology conducts regular surveys of executives and professionals throughout North America to provide our clients and candidates with up-to-date information about the employment market. Since 1995, our quarterly *Robert Half Technology IT Hiring Index and Skills Report* has forecast national hiring levels and now includes information on IT employment trends in major metropolitan areas.

PROFESSIONAL DEVELOPMENT OPPORTUNITIES

Robert Half Technology is committed to the professional development of our consultants. Through our web-based training program, we provide them with the resources necessary to enhance both their technical and professional skills. This includes 24-hour online access to more than 2,500 interactive educational courses covering topics ranging from .NET and project management to business fundamentals and interpersonal skills.

For more information about our many resources, please visit **www.rht.com**.

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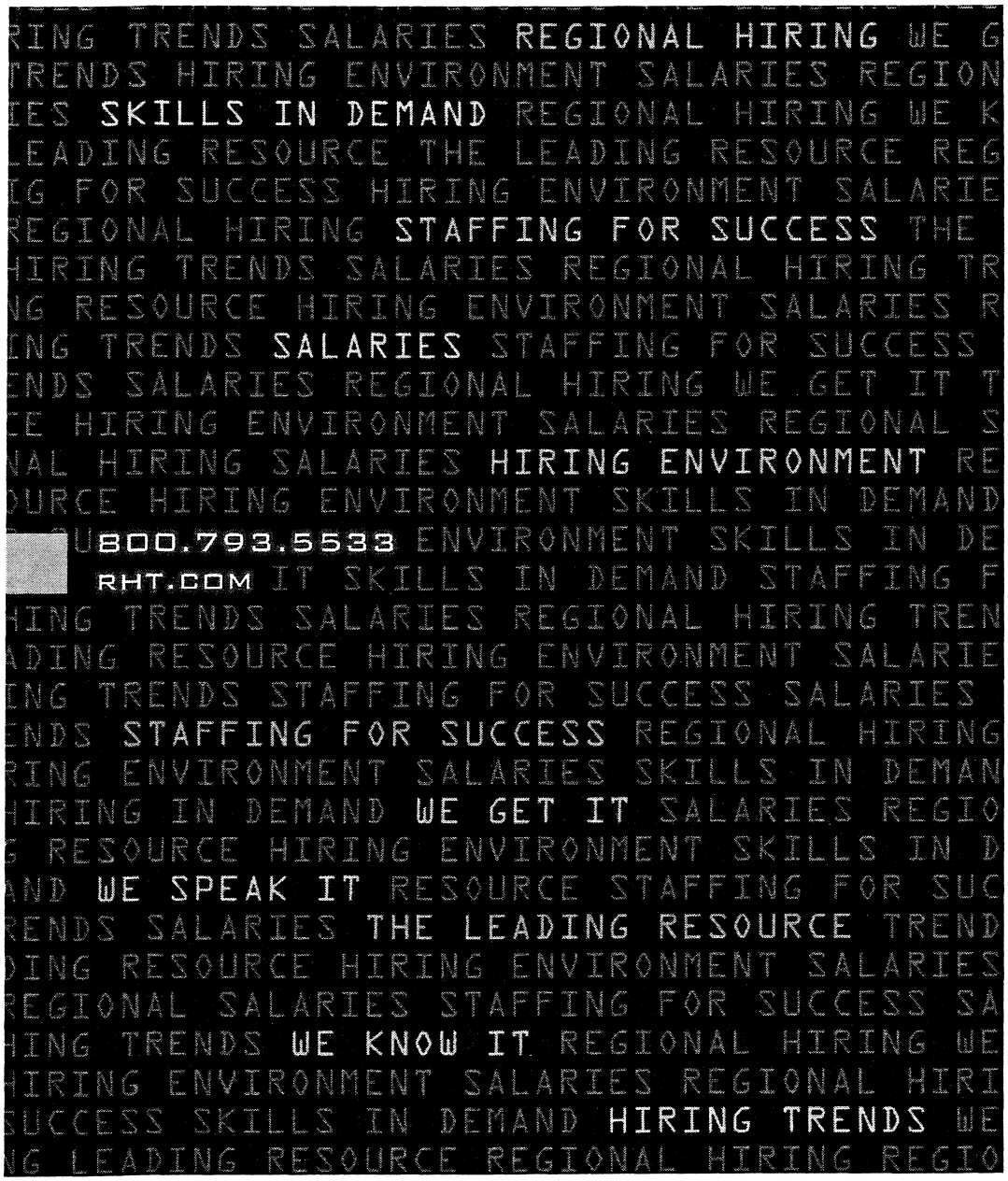

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APPENDICES

APPENDIX 1

The Educational Master Plan

Technology Plan

Division: Business and Professional Studies

Department: CSIS

Director or Chair: Janet Gelb

Program Description: Program Description: Computer Science Information Systems (CSIS) offers degree and certificate programs in computer programming, small computer specialist, web master and local area network support specialist. In addition the department is developing new mini-certificates in new and emerging technologies. The department is cooperating with other departments at Grossmont College to provide a cross-discipline MultiMedia program, and other cross discipline courses with AOJ. Course curriculum must be modified continually to keep current with the rapid changes in the field. Labs also require continuous upgrading to keep up-to-date with industry standards particularly in the networking technologies. Above capacity demand on computer classrooms/labs by the CSIS department and other college departments makes it difficult to provide adequate system and workstation maintenance. There is an increasing need for support services for second language students

Activities

Activity #1:
Continually revise and update and expand curriculum and introduce new technologies to reflect industry standards in new and emerging technologies. Possibly of further interdisciplinary courses will be explored. Continue to participate in county wide BAC and SD4C meetings and in order maintain currency with industry needs.

Benefits:
Attract more students both from high school graduates and re-entry students as well as those who are planning to upgrade their skills in order to be better prepared for careers in the IT industry. Continued emphasis needs to be placed on developing articulation agreements with the four year universities and local high schools.

Requirements:

Curriculum Development?	Y
Equipment?	N
Facilities?	N
Marketing?	Y
Staffing – Classified?	N
Staffing – Faculty?	N
Staff Development?	N

Goals and Objectives: 1, 1.7

Activity #2:
Develop, in conjunction with the Business, Business Office Technology, Library Science and Education departments as cross listed GE course.

Benefits:
Provide students with the computer skills needed and experience appropriate for transfer and career tracks.

Requirements:

Curriculum Development?	Y
Equipment?	N
Facilities?	N
Marketing?	Y
Staffing – Classified?	N
Staffing – Faculty?	N
Staff Development?	N

Goals and Objectives: 1, 1.6

Activity #3:
Continue to update various technologies in our labs to keep pace with current industry standards; including Hardware and Software updates. Upgrade and expand the existing network lab through the Grossmont College ICS 3 year "rollover " plan to meet industry standards and develop new courses.

Benefits:
Attract more students and prepare them for careers in Information Technology particularly wireless as San Diego is a center for the development of wireless data transfer and telephony and data security that is in compliance with the guidelines set down by the Homeland Security department. Improve delivery of instruction and provide greater access of classes to students

Requirements:

Curriculum Development?	Y
Equipment?	Y
Facilities?	N
Marketing?	Y
Staffing – Classified?	N

Staffing – Faculty?	N
Staff Development?	N

Goals and Objectives: 2, 2.4

Activity #4:
Hire at least one additional faculty member

Benefits:
Improved and expanded curriculum to better reflect industry needs.
Provide students the skills and experience appropriate for transfer and career tracks. Continue improving and developing curriculum, develop advanced teaching methods and utilize technology to facilitate student learning.

Requirements:

Curriculum Development?	Y
Equipment?	N
Facilities?	N
Marketing?	N
Staffing – Classified?	N
Staffing – Faculty?	Y
Staff Development?	Y

Goals and Objectives: 4, 4.2

Activity #5:
Explore new industry technologies and add new courses to support those technologies by seeking grant based funding to train special populations for the IT industry

Benefits:
By creating a highly competitive fast track program not only do we provide a service to the community but provide opportunities to both dislocated workers and local companies needing upgrade the IT skills of their current employees

Requirements:
Curriculum Development? Y

Equipment?	N
Facilities?	N
Marketing?	Y
Staffing – Classified?	N

Staffing – Faculty?	N
Staff Development?	N

Goals and Objectives: 3, 3.1

Additional Planning Activities

• Acquire servers, wireless equipment, high-speed lines and other technical equipment to support new curriculum.
• Upgrade and expand computer classroom and lab facilities to accommodate new technology i.e. wireless and security.
• Provide additional technical and instructional support for CSIS faculty and students.
• Articulate curriculum with feeder high schools and senior institutions (SDSU, UCSD).
• Continue to develop an Internet –based distance-learning curriculum for college and high school courses.

Accomplishments

Accomplishment #1:
Developed new curriculum – Networking and Internet Security, cross listed Computer Forensics course with the AOJ department and updated outdated courses to reflect the new and emerging technologies.
Revision of several courses to reflect current industry standards

Goals and Objectives: 1, 1.1

Accomplishment #2:
Updated Equipment and software to reflect current standards.Acquired new equipment (servers) in 531 to support new curriculum. Acquired upgrades to all software used for instruction.
Added two new labs adjacent to the existing labs

Goals and Objectives: 5, 5.2

Accomplishment #3:
Attendance at Technological Expos and Conventions to keep current with new trends in the industry an in the educational environment.

Goals and Objectives: 4, 4.2

Accomplishment #4:
Additional Full time Faculty

Goals and Objectives: 4, 4.1

Accomplishment #5:
Maintain Business Advisory Council with an annual meeting in conjunction with the Region 10 local colleges

Goals and Objectives: 2, 2.4

Accomplishment #6:
Maintain and possibly increase Outreach activities

Goals and Objectives: 2, 2.1

Accomplishment #7:
Maintain, restore and increase FT/PT ratio; be responsive to student need, and support new Instructional facilities and technologies.

Goals and Objectives: 1, 1.7

Accomplishment #8:
Continue improving and developing curriculum, develop advanced teaching methods and utilize technology to facilitate student learning. Revision of several courses to reflect current industry standards.

Goals and Objectives: 1, 1.3

Accomplishment #9:
none

Goals and Objectives: 0, 0

Accomplishment 10:
none

Goals and Objectives: 0, 0

Additional Accomplishments:

1. Acquire servers, wireless equipment, high-speed lines and other technical equipment to support new curriculum.
2. Upgrade and expand computer classroom and lab facilities to accommodate new technology i.e. wireless and security.

3. Provide additional technical and instructional support for CSIS faculty and students.
4. Articulate curriculum with feeder high schools and senior institutions (SDSU, UCSD).
5. Continue to develop an Internet –based distance-learning and hybrid curriculum for college and high school courses.

GROSSMONT COLLEGE

Technology Plan 2004-2007

GROSSMONT COLLEGE

Computer Science Information Systems

Description

- Continue to support CSIS Department and College-wide faculty in developing state-of-the-art classes and experiences for our students.
- Continue to work collaboratively with other departments to develop new courses supporting technology across the curriculum.
- Continue to upgrade all CSIS classrooms with new computers at least every three years with top-of-the-line computer models. This policy has had the distinct advantage of allowing the "retired" CSIS lab computers to remain useful to other constituents in the College.
- A great deal of progress has been made in utilizing the three existing CSIS labs, for the traditional CSIS classes but with the development of new curriculum and a collaborative effort to develop new cross listed courses, which have specific needs, two new labs have been added. These labs will have an advantage to other departments who require some lab time but cannot maintain their own lab.
- There continues to be significant student pressure to add more open lab time for supervised tutoring labs which leaves very little free time for additional sections and scheduled maintenance. The addition of the two new labs will help alleviate this problem.
- Upgrade faculty office computers when necessary to match the configuration of the lab machines.
- To ease the utilization impact somewhat, the Department plans to continue to offer distance online or hybrid courses, or other collaborative learning opportunities.
- The convergence of computer technology with all forms of digital media presents new challenges and opportunities for the Department and the College, as a whole. New servers and digital communications technologies will be necessary during the next three years.
- There is an increase pressure from business and industry, and the community to develop Information/Network/Internet security courses. These courses will require a teaching lab facility that must be isolated from the campus network. CSIS is working closely with IS and ICS to accomplish this task.

Curriculum Impact

- Computer technology has arguably been the fastest changing area there is in our culture and economy. Over the past few years, even with the current downturn in the economy there is a continued need for advancement. Keeping the curriculum current to meet new emerging community needs, is a challenge not only in the area of curriculum development but also in the maintenance of our labs. Specifically, new programs in Internet technology (such as the Webmaster certificate) which have previously had high enrollments are now experiencing a downturn in student interest. Media networking, multimedia, video games programming, security, collaborative and distance learning, certification (such as the 3COM and proposed Linux and Microsoft certification programs), artificial intelligence and robotics are in development or are being updated, to enhance changes needed in our existing programs to meet student needs.
- In order to successfully enter the job market, it is essential that CSIS majors develop their skills and abilities using current technology and systems. State-of-the-art facilities and systems must be available to provide incentives for students to enroll in Grossmont programs. The proposed 3 year rollover process will allow the department to support current and projected systems and software found in industry, thus directly supporting and enhancing student success. In addition, faculty will be able to take advantage of new teaching modalities as we explore the challenge of making education accessible to all.

Approximate Number of Students Served

- CSIS has traditionally occupied about 5000-6000 seats per annum but due to the downturn in the economy we have seem a lower enrollment in many of our courses. The majority of these students are taking more than one class. This does not include students in other departments that use the CSIS labs. Although the CSIS department had seen an increase in FTES in the past, the last few years shows lower enrollments as the industry experienced a strong down turn after the crash of the DOT COM companies two years ago. It has become evident that unless we offer the skills business and industry are demanding, we will continue to see a downturn in student enrollment.
- The three on-campus CSIS labs were upgraded during the summer of 2002 as part of the three year rollover process. We have since upgraded the operating system to Windows XP, the industry standard, putting CSIS in a good position to offer the latest in current software applications such as Office 2003, Macromedia MX products and the latest versions of the Adobe products. Hardware and software tools, including all software maintenance agreements, will continue to be upgraded to provide our students with opportunities to gain the skills they will need in order to succeed in the classroom and in the workplace. During the summer of 2004 two(2) new labs will be added to the CSIS department.

Support Impact

- CSIS needs at least two new full time faculty and a number of new adjuncts, who are currently employed in the industry, to work with the new curriculum that is being developed.

- An additional classified support position is required to manage the increasing number of labs. New servers that will be purchased to support the new curriculum will be added and in need of departmental support. Currently, this is being done by faculty, with help from the lab specialist. As the number of servers increases and as more faculty are hired to teach in these areas, support must be centralized. IS and ICS have been supportive in helping the CSIS department attain our technical goals and requirements.

Year 1 (2004-2005)

Objective

- The CSIS department will continue to maintain currency by continually updating the existing courses and being able to offer new programs relevant to community needs in rapidly emerging areas of high technology. Keeping current in this explosive field requires significant expenditure of both time and money.
- We will continue to meet the needs of students in both job attainment and transfer to the four-year universities by continuing to develop course articulation with the four years universities and the UCSD extension program. Experience has proven that by not doing this on a continuing basis, results in lower enrollments. We must continue to move forward into new areas in order to attract new students both at the freshman level and re-entry adults.
- The CSIS Department continues, on an ongoing basis, to plan equipping the classrooms with new technology to support advanced and new course offerings. These classes will include expanded offerings in Internet support, management and security, and administration in networking including wireless technology and network security, databases, computer hardware, computer forensics and video games programming.
- Upgrade software and maintenance agreements in order to keep the software application current.
    1. MSDNAA membership
    2. Adobe Photoshop and Premiere maintenance renewal
    3. SQI server 2003
    4. Cold Fusion
    5. Renewal of Red Hat Enterprise Linux, Proxy, Workstations and server licenses.
- Upgrade CSIS classroom/Lab computers with top-of-the line models as part of the three year rollover plan.
- Maintain the faculty office computers to match the configuration of those in the lab resulting in greater productivity and ease with which faculty can transfer their courses to the CSIS classrooms.
- As the CSIS department continues to offer more online or hybrid courses, students in these classes are expected to require access from off-campus to the specialized servers and software in the labs.
- Continue to upgrade and maintain the CSIS website and to keep the student showcase area current with the latest student assignments as supplied by the instructors.

- Continue to collaborate with other departments on campus to offer cross listed courses

Action to Meet Objective

- As stronger support collaboration with CSIS, IS and ICC departments has become available, the Department has been able and will continue to implement the above objectives efficiently and successfully.
- CSIS will add two new labs, one to offer networking, including wireless and security, and hardware classes that cannot easily be supported in the present labs.
- The CSIS Department continues, on an ongoing basis, to plan on equipping our classrooms/labs with upgraded technology in order to support advanced and new course offerings. These classes will include expanded offerings to our existing courses and new classes in .NET, information security and wireless technology.
- The Department plans to acquire and configure the hardware and software server systems necessary to offer a true collaborative learning environment. Hosted on the Internet and modeled after currently available systems, the server will be used to meet the needs of distance learning students.
- The Local Area Network serving CSIS classrooms will be upgraded to allow IP Multicast, segmentation based on classroom requirements, and implementation of virtual LAN and wireless technologies. The purpose of the upgrade will be to support the technologies required to offer collaborative learning experiences as well as to take full advantage of new media. A streaming media (video, audio) server will be acquired, installed, and configured to allow the classroom presentation of new instructional materials. Initial candidates for study and evaluation include Microsoft's Netshow and Cisco's IP/TV. Titles and materials will be acquired to support current and new class offerings.
- As our online/hybrid course offerings expand, more faculty will need to be trained in distance learning management software. The CSIS department will continue to support faculty who are eager to develop new course content and online courses to add to our existing curriculum.
- The department will actively market our new programs to both the high school graduates and adult re-entry population in our ongoing recruiting efforts.
- Work in collaboration with local business and industry to develop a wireless technology and information security "attack and defend" lab and the curriculum to support this technology.

Year 2 (2005-2006)

Objective

- The CSIS Department continues, on an ongoing basis, to plan on equipping our classrooms/labs with upgraded technology in order to support advanced and new course offerings. These classes will include expanded offerings to our existing courses and new classes in .NET, information security and wireless technology.
- Continue to meet the needs of students for both employment and transfer to four year

universities by providing classes to support new industry and educational standards.

- Continue to support faculty with new technology and upgrade their office computers to meet the needs of the new and updated courses.
- Continue to expand online and hybrid courses in both new and existing curriculum.
- Explore new industry technologies and add new courses to support those technologies.
- Maintenance currency of the software library with maintenance agreements. Timely upgrades of lab hardware and servers is imperative to meet the needs of new and emerging technology.

Action to Meet Objective

- Hire a second lab specialist to maintain added servers and new hardware and software and the addition of new labs.
- As our online course offerings expand, faculty need to be trained in distance learning management software. The CSIS department will continue to support faculty who are eager to develop new course content to add to our existing curriculum.
- Actively market our new programs and recruit new students.
- Replace digital cameras, laser printers, scanners and multimedia hardware that are more than 3 years old with the latest generation and upgrade and purchase new software to support newly developed curriculum.
- Continue to keep our software maintenance agreements current.
- Replace and upgrade old software with the latest versions.
- Continue to work collaboratively with other departments to develop new cross-listed courses.

Year 3 (2006-2007)

Objective

- Upgrade tech office (529B) outdated hub to a switch which is compatible with IS standards (approx $700).
- The CSIS department will continue to support faculty who are eager to develop new course content to add to our existing curriculum by purchasing a new Windows Vista capable system for support of Windows Operating System course and new curriculum development.
- Upgrade MS Office 2003 with Office 2007 to meet industry standards.

Action to Meet Objective

- Purchase switch (approx. $700)
- Purchase laptop (approx. $2,500)

- Fund any expenses incurred by upgrading MS Office to version 2007.

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APPENDIX 2

Previous Program Review Summary

COMPUTER SCIENCE AND INFORMATION SYSTEMS
PROGRAM REVIEW COMMITTEE
SUMMARY EVALUATION

The program review committee commends the department for:

1. Initiating and implementing the Net Prep/3Com Program, a Tech Prep articulated program involving 3COM, Grossmont College, and local high schools. Grossmont College will also train faculty from the high schools and community college to teach this program.
2. Developing and maintaining extensive industry contacts and internships that provide students with practical and up-to-date experience in the computer industry leading to job placement.
3. Constant development of new curriculum that reflects changes in the technology fields and collaboration with Cuyamaca College on alignment issues.
4. Community involvement and leadership, especially service to the Mid-City Project developing PowerPoint presentations "Main Streets", "Streetcars" and "Theater" as part of community revitalization projects.

The committee recommends that the department:

1. Re-establish an active advisory committee in collaboration with the Leadership and Economic Development Institute.
2. Develop greater cooperation between CSIS and Business Office Technology, Art, Media Communications and Music to define and develop coursework that is relevant to multiple disciplines.
3. Develop a proposal with supporting rationale for computer literacy general education requirements and options for consideration by the Curriculum Committee.
4. Add one full-time faculty position due to the difficulty of recruiting and maintaining appropriately qualified part-time faculty.
5. Coordinate with Information Systems and Instructional Computing Services to provide adequate infrastructure and human resources to support the development of up-to-date networking curriculum.
6. Update course outlines: CSIS 112, 114,115, 119, 140, 141, 151 A-D, 155, 160, 165, 172, 174 A-D, 175 A-D, 176, 177 A-D, 178, 184 A-D, 185 A-D, 186 A-D, 220, 250, 270, 274 A-D, 275 A-D, 280, 281, 282, 284, 290, 291, 295, 296, 297.

Computer Science And Information Systems

SCHOOL YEAR	FALL SEMESTER		SPRING SEMESTER		COST/FTES	COMMITTEE RECOMMENDATION
	WSCH/FTEF	% of MAX WSCH	WSCH/FTEF	% of MAX WSCH		
1995-96	442.02	120.6	435.55	112	$1708	MAINTAIN
1996-97	427.72	102	411.85	83.34	$1039	
1997-98	458.85	122	449.82	123.31	$1062	
1998-99	492.59	97	410.76	110	$1292	
1999-2000	314.88	95.38	465.19	92.31	$1450	

College President 9/24/01

Academic Program Review Chair

APPENDIX 3

Catalog Descriptions

Computer Science Information Systems

COMPUTER SCIENCE INFORMATIONSYSTEMS 096 ††
(Business Office Technology 096)
Computer Basics for the Office
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 100 or equivalent and English 105 or equivalent reading level.
This course is designed to give students with little or no computer experience the basic information and skills needed to operate a computer efficiently in an office environment. Content includes an overview of components of a computer system hardware and software, proficiency in using a mouse, storing information, using the Internet and purchasing and maintaining a computer. It is recommended that students complete a basic keyboarding course prior to enrolling in this course. This course is offered on a Credit/No Credit basis only. (Nondegree credit course)

COMPUTER SCIENCE INFORMATIONSYSTEMS 097 ††
(Business Office Technology 097)
Windows Basics for the Office
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 100 or equivalent. CSIS/BOT 096 or concurrent enrollment or equivalent, and English 105 or equivalent reading level.
This course is designed for students with little or no computer experience. Students will learn to use the Windows operating system efficiently to create and manage files and folders. This course is offered on a Credit/No Credit basis only. (Nondegree credit course)

COMPUTER SCIENCE INFORMATIONSYSTEMS 100 †
(Business Office Technology 100)
Basic Keyboarding
1 unit, 3 hours laboratory
A course in beginning keyboarding techniques for those students who wish to use keyboarding skills for inputting information to computers. The course is taught on computers using appropriate software. Emphasis will be placed on the development of speed and accuracy by use of touch keyboarding methods, development of touch skills on the 10-key pad, understanding of basic vocabulary and concepts used in keyboarding operations for inputting and retrieving information, and composition at the keyboard. For students with physical disabilities that may impair proficiency, emphasis will be on quality of output instead of speed, and on the use of alternative input devices.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 105 †
Introduction to Computing
3 units, 2 hours lecture, 3 hours laboratory
This is an introductory small computing course for those desiring beginning computer knowledge and skills. It includes an overview of a typical personal computer system including input and output devices, the processor, and storage devices. Also included is hands-on experience with a computer and popular applications software. Emphasis will be placed on those skills and knowledge needed to use and maintain a home or small business computer.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 110 †
Principles of Information Systems
4 units, 3 hours lecture, 3 hours laboratory
A course to develop basic knowledge of computers and information systems. The broad overview of topics includes computer organization, hardware and software systems, and application software. Approximately one third of the course will consist of hands-on problem-solving using spreadsheets. Another one-third will cover other applications, and the final one-third will address computer concepts and terminology.
Transfers to: CSU, UC
(CAN BUS 6)

COMPUTER SCIENCE INFORMATION SYSTEMS 112 †
Windows Operating System
3 units, 3 hours lecture
This course introduces the Microsoft Windows family of operating systems. Coverage begins with the desktop graphical user interface, and ends with the configuration and maintenance of Windows as might be required of a home or small business user. Topics will include hardware and software installation and configuration, networking to a LAN and to the Internet, security and file sharing, administrative tools, scripting and batch files, and maintenance and performance tuning. The course will also cover file systems, storage devices, communication devices, command line options, registry repairs, disaster recovery and troubleshooting.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 113 †
Introduction To UNIX
3 units, 3 hours lecture
Recommended Preparation: A "C"or "CR"grade or higher in CSIS 110 and 112 or equivalent.
This course introduces the student to mainframe computer operating systems using the UNIX Operating System (OS). Topics include: general operating system design, examination and comparison of different types of OS, security concerns and log-on procedures, file creation and manipulation, files and file system, UNIX utilities, shell commands, and process creation and control.

Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 114 †
Small Computer Systems
3 units, 2 hours lecture, 3 hours laboratory
This course is designed for the individual responsible for selecting and maintaining a small computer for business or personal use. Topics include: the fundamentals of supporting and troubleshooting computer hardware and software and the maintenance and upgrade procedures, an overview of industry trends, types of small computers available, performance/cost issues, peripheral devices, methods of determining current and future needs. This course serves as a resource for the acquisition of appropriate skills for the A+ Core Hardware and OS Technologies certification exam.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 115 A-B-C-D †
.NET Programming Using Visual Basic/C#
4 units, 3 hours lecture, 3 hours laboratory
Prerequisite: A "C"or "CR"grade or higher in CSIS 110 and 119 or equivalent.
This course is designed to provide students with an introduction to the use of the .NET programming environment and to one or more languages (such as Visual Basic or C#) in order to solve problems using structured design logic. Emphasis will be on learning the fundamentals including sequence, decision and repetition. The course will also focus on learning to utilize the .NET Framework and the Common Language Runtime. Included in the course is an overview of the various languages which work on the .NET platform.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 116 A-B-C-D †
Digital Peripherals
3 units, 3 hours lecture
This course examines one or two of the newest personal computer peripheral devices. Possible types of peripherals under study might include anti-terrorist biometric identification systems, industrial or personal robots, assistive devices for the disabled, or artificial intelligence control peripherals. The emphasis will be on newly accepted and emerging technologies, those for which textbooks may not yet exist. Students will gain hands-on experience where practical, and learn not only the technical aspects of new hardware, but its application, integration into present industrial use, and the implications thereof in society. The class schedule will note the exact type of devices being investigated each semester.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 119 †
Program Design and Development
3 units, 3 hours lecture
Recommended Preparation: A "C"or "CR" grade or higher in CSIS 110 and 112 or equivalent.

An introductory course in program design and development as a foundation for more advanced programming, computer science courses, or networking courses. Emphasis: development of problem solving skills as it introduces students to computer science through modern object oriented programming language. Attention to: development of effective software engineering practices emphasizing such principles as design decomposition, encapsulation, procedural abstraction, testing, and software reuse. Students learn and apply: standard programming constructs, problem-solving strategies, the concept of an algorithm, fundamental data structures, the machine representation of data, introductory graphics and networking.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 120 †
(Business Office Technology 120)
Comprehensive Word, Level I
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 096 and 097 or equivalent, BOT 101 or 101A and 101B or equivalent, and English 105 or equivalent reading level.
This is the first level of a three-level course sequence designed to give students thorough coverage of most features of Microsoft Word. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations. Students wishing less comprehensive coverage of Microsoft Word should consider enrolling in Business Office Technology 114.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 121 †
(Business Office Technology 121)
Comprehensive Word, Level II
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 120 or equivalent.
This course is the second level in a three-level course sequence designed to give students thorough coverage of all features of Microsoft Word. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 122 †
(Business Office Technology 122)
Comprehensive Word, Level III
1 unit, .5 hour lecture, 1.5 hours laboratory
Prerequisite: A "C"or "CR"grade or higher in CSIS/BOT 121 or equivalent.
This course is the third in a three-level course sequence designed to give students thorough coverage of most features of Microsoft Word. Students completing this three course sequence and preparing to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations should consider enrolling in Business Office Technology 280 prior to taking the examination.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 123 †
(Business Office Technology 123)
Comprehensive Excel, Level I
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 096, 097 and 100 or equivalent.
This is the first level of a three-level course sequence designed to give students thorough coverage of most features of Microsoft Excel. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations. Students wishing less comprehensive coverage of Microsoft Excel should consider enrolling in Business Office Technology 115.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 124 †
(Business Office Technology 124)
Comprehensive Excel, Level II
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 123 or equivalent.
This course is the second level in a three-level course sequence designed to give students a thorough coverage of all features of Excel. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 125 †
(Business Office Technology 125)
Comprehensive Excel, Level III
1 unit, .5 hour lecture, 1.5 hours laboratory
Prerequisite: A "C"or "CR"grade or higher in CSIS/BOT 124 or equivalent.
This course is the third in a three-level course sequence designed to give students through coverage of most features of Microsoft Excel. Students completing this three course sequence and preparing to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations should consider enrolling in Business Office Technology 281 prior to taking the examination.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 126 †
(Business Office Technology 126)
Comprehensive Access, Level I
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 096, 097, 100, and BOT 116 or equivalent, and English 105 or equivalent reading level.
This is the first level of a three-level course sequence designed to give students thorough coverage of most features of Microsoft Access. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations. Students wishing less comprehensive

coverage of Microsoft Access should consider enrolling in Business Office Technology 116.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 127 †
(Business Office Technology 127)
Comprehensive Access, Level II
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 126 or equivalent.
This course is the second level in a three-level course sequence designed to give students a thorough coverage of all features of Microsoft Access. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 128 †
(Business Office Technology 128)
Comprehensive Access, Level III
1 unit, .5 hour lecture, 1.5 hours laboratory
Prerequisite: A "C"or "CR"grade or higher in CSIS/BOT 127 or equivalent.
This course is the third in a three-level course sequence designed to give students through coverage of most features of Microsoft Access. Students completing this three course sequence and preparing to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations should consider enrolling in Business Office Technology 282 prior to taking the examination.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 129 †
(Business Office Technology 129)
Comprehensive PowerPoint, Level I
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: BOT 101, BOT 114 and CSIS/BOT 120 or equivalent, and English 105 or equivalent reading level.
This is the first level of a three-level course sequence designed to give students thorough coverage of most features of Microsoft PowerPoint. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations. Students wishing less comprehensive coverage of Microsoft PowerPoint should consider enrolling in Business Office Technology 117.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 130 †
(Business Office Technology 130)
Comprehensive PowerPoint, Level II
1 unit, .5 hour lecture, 1.5 hours laboratory
Recommended Preparation: CSIS/BOT 129 or equivalent.

This course is the second level in a three-level course sequence designed to give students a thorough coverage of all features of Microsoft PowerPoint. Students who complete all three levels will be prepared to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations in PowerPoint.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 131 †
(Business Office Technology 131)
Comprehensive PowerPoint, Level III
1 unit, .5 hour lecture, 1.5 hours laboratory
Prerequisite: A "C"or "CR"grade or higher in CSIS/BOT 130 or equivalent.
This course is the third in a three-level course sequence designed to give students through coverage of most features of Microsoft PowerPoint. Students completing this three course sequence and preparing to take the Microsoft Office User Specialist (MOUS) certification examination or similar examinations should consider enrolling in Business Office Technology 283 prior to taking the examination.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 132 †
Exploring the Internet
1.5 units, 1 hour lecture, 1.5 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 105 or 110 or equivalent.
This course introduces students to Internet services such as Email, the World Wide Web, FTP, mailing lists, Telnet, and Internet Relay Chat. Students will achieve proficiency with using Email, browsers, searching the Web, and downloading files as well as also learning about becoming a good web citizen. Students will create and publish a simple web site.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 134 †
Web Publishing I
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 132 or equivalent.
This course will focus on techniques for designing and creating simple web presentations. Students will use web authoring and graphics software to develop a small web site. Students will apply principles of good web design to create a web site that is attractive, organized, easy to navigate, and quick to download.
Transfers to CSU

COMPUTER SCIENCE INFORMATIONSYSTEMS 135 †
JavaScript Programming
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C"or "CR" grade or higher in CSIS 134 or equivalent.

An introductory course in JavaScript programming focusing on creating dynamic web pages. The course will include embedding JavaScript in HTML, event-handling, and writing and calling JavaScript functions.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 136 †
Web Publishing II
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C"or "CR" grade or higher in CSIS 134 and 135 or equivalent.
This course will focus on intermediate topics in web presentation design and production utilizing current web publishing technologies. Topics to be covered will include areas such as Cascading Style Sheets, Forms, JavaScript, database integration, usability and accessibility. The theory portion of the class will focus on understanding current web technologies with a focus on user-centric design. The hands-on portion will allow the students to utilize professional web authoring software to create and publish exciting, state of the art web sites. Specific software packages will be identified in the class schedule.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 137 †
Web Animation
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in Computer Science Information Systems 105 or 110 or equivalent.
This course introduces the fundamentals of creating graphics, animation and interactivity in web page design. Concepts focus on development and implementation of expressive web based animation using software such as Macromedia Flash. Students will create animations, interactive controls and web interfaces.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 138 †
Web Publishing III
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 135 or 136 or equivalent.
This class will focus on maintaining, expanding, and managing a web site on the Internet or an Intranet. Students will develop internet or intranet on a medium sized web site including a variety of objects such as sound, video, frames, and the addition of applets. Students will also create applets using either ActiveX or Java and graphics. (Specific software packages to be identified in the class schedule.)
Transfers to CSU

COMPUTER SCIENCE INFORMATIONSYSTEMS 139 †
Introduction to PERLwith CGI Applications
3 units, 3 hours lecture

any other programming language and CSIS 113.
An introductory course in the PERL language, a commonly used language in web site development and back-end web programming, which focuses on object-oriented methodologies. Basics of the languages in the development of interactive web applications will be covered. To reinforce design methodologies and programming strategies topics will include: control structures, variables, array references and patterns, subroutines and functions, forms, patterns and files.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 140 †
Introduction to Local Area Network (LAN) Management
4 units, 3 hours lecture, 3 hours laboratory
Recommended Preparation: CSIS 110, 112 and 143.
Subjects covered include an orientation to and instruction in the use of both standalone and networked configurations, and communication equipment. Instruction is given in the use of various network operating systems, and network administration programs. Topics will include Local Area Network (LAN) topologies with internetworking devices, software directory design, user groups, security rights, network menus and login scripts, and electronic mail. The course will include extensive hands-on experience and is designed to help students gain an understanding of the management of a LAN.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 141 †
Network Analysis and Systems Integration
2 units, 1 hour lecture, 3 hours laboratory
Recommended Preparation: CSIS 140 and 142.
A course designed to enable qualified Computer Science Information Systems students to refine skills in the efficient operation of a Local Area Network (LAN). Activities will include the operation of standalone and networked configurations, peripherals, and communications equipment, using an operating system and related software. The course will also include experience working with system users and programmers, hardware and software problem resolution, and system security. The student will set up a local area network, manage printers and print queues, and isolate potential causes for LAN problems.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 142 †
Introduction to Networking
2 units, 2 hours lecture
Recommended Preparation: A "C" or "CR"grade or higher in CSIS 105 or 110 or equivalent.
This course introduces the student to the underlying concepts of data communications, telecommunications and networking. It provides a conceptual view of networking and will bring together the acronyms, protocols, and components used in today's networks.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 143 †
Introduction to Local Area Networks
2 units, 2 hours lecture
Prerequisite: A "C" or "CR" grade or higher in CSIS 142 or equivalent.
This course is designed to bring the student up-to-date on the latest concepts of Local Area Networks (LAN) technologies. It provides a comprehensive introduction to the concepts, technologies, components and acronyms inherent in today's local networking environment.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 144 †
Wide Area Networks
2 units, 2 hours lecture
Prerequisite: A "C" or "CR" grade or higher in CSIS 143 or equivalent.
The course is designed to provide the student with conceptual and working knowledge of how Local Area Networks communicate over a wide area. This course will introduce the student to telephony, the technology of switched voice communications, and will provide the understanding of how communication channels of the public switched telephone networks are used for data communications, and how voice and data communications are integrated.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 145 †
Introduction to TCP/IP
2 units, 2 hours lecture
Prerequisite: A "C" or "CR" grade or higher in CSIS 144 or equivalent.
This course introduces the student to the operation of the Transmission Control Protocol/Internet Protocol (TCP/IP) standard and related protocols. The course will cover the underlying components and protocols that make up the Internet. Tools used to navigate and access information on the Internet will be studied. Demonstrations will be given on some of the more popular Internet navigation tools, such as Internet Explorer and Netscape.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 146 †
Network Security
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in Computer Science Information Systems 140 or 141, and 145 or equivalent.
This course provides the fundamental knowledge needed to analyze risks to the system and implement a workable security policy that protects information assets from potential intrusion, damage or theft. Students will learn which countermeasures to deploy to thwart potential attacks. This course will also prepare students for CompTIA's Security+ Exam.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 151 A-B-C-D †
Introduction to Computer Graphics
3 units, 3 hours lecture
This course provides the student with a broad introduction to the variety of software applications utilized in the computer graphics industry for illustrations, animations, image retouching and game character creation. This is not an artistic design course, but emphasizes tools used by the software applications.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 155 †
Intermediate Programming in BASIC
4 units, 3 hours lecture, 3 hours laboratory
Prerequisite: CSIS 115.
Concentrates on problem-solving and computer program design, brief review of programming and flowcharting standards and techniques, structured programming and ten-statement BASIC. Extensive use will be made of string manipulation, matrix commands, logical masks, report formatting, iteration, functions, subroutines, linkages, graphics, text editing, sequential, random and indexed files. Interfaces to files and programs created in other programming languages will be demonstrated. Comparisons of BASIC capabilities on several different systems will be made.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 159 †
(Education 159)
Introduction to Educational Technology
2 units, 1.5 hours lecture, 1.5 hours laboratory
This course is designed to introduce basic computer skills and terminology in the context of teacher education. Basic competencies required for meeting the educational technology standards required for teachers are addressed in the curriculum.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 160 †
Introduction to Video Game Development
3 units, 3 hours lecture
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 110 or 105 or equivalent.
This course provides an introduction to the theory and practice of video game design and development. Students will survey the historical, technological, business, social and psychological aspects of the video gaming industry; analyze popular PC, handheld, and console games; understand the roles of the development team members; and design and create their own game using an existing game engine.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 165 †
Assembly Language and Machine Architecture
4 units, 3 hours lecture, 3 hours laboratory

Recommended Preparation: A "C" or "CR" grade or higher in CSIS 296 or equivalent. This is an introductory course in assembly language programming and machine architecture for small computers. Topics covered include number theory, registers, memory, CPU, linkers, debuggers, basic language syntax and high-level language/ operating system interface. This course is intended for persons with a prior background in any other programming language, and will emphasize those applications not easily performed using higher-level languages.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 172 †
(Business Office Technology 172)
Introduction to Microcomputer Applications
2 units, 2 hours lecture
Recommended Preparation: CSIS 105 or 110 or BOT 096 and 097 and the ability to type 25 words per minute verified by a typing certificate or BOT 100 or 101 or CSIS 100. This class introduces a student to microcomputer application software. It is taught using a Windows operating system and IBM-compatible microcomputer, using business software in a hands-on lecture approach. Topics include the use of microcomputers for word processing, spreadsheet, database, electronic publishing and presentation functions.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 173 A-B-C-D †
Computer Word Processing
2 units, 2 hours lecture
Recommended Preparation: CSIS/BOT 100.
Instruction in the use of a word processing software package to create, update and retrieve business reports using a computer. A word processing package will be used to give the student a solid background in word processing applications. This course is beneficial for those individuals who wish to use the computer to prepare typed documents for business or personal use.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 174 A-B-C-D †
Computer Database Packages
2 units, 2 hours lecture
Recommended Preparation: CSIS/BOT 100.
Instruction in the use of database software to create, update, and retrieve business information on a computer. Software packages will be utilized to give the student a solid background in database applications. This course is beneficial for those individuals who wish to use the computer to file and retrieve data.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 175 A-B-C-D †
Computer Electronic Spreadsheet Packages
2 units, 2 hours lecture

Recommended Preparation: CSIS/BOT 100.
This beginning course consists of use of electronic spreadsheets and how they are utilized in the financial planning process. This course is especially beneficial for students, teachers, and professionals who are using, or who plan to use, computers in a business environment.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 176 †
(Business 176, Business Office Technology 176)
Computerized Accounting Applications
2 units, 2 hours lecture
Recommended Preparation: A "C" or "CR" grade or higher or concurrent enrollment in BUS/BOT 109 or BUS 120.
An introductory course of computerized accounting functions utilizing an integrated general ledger software package. This course is especially beneficial for students, teachers and professionals who are using or who plan to use computerized accounting packages in a business environment.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 177 A-B-C-D †
Presentation Graphics
3 units, 3 hours lecture
Recommended Preparation: A "C" or "CR" grade or higher in CSIS/BOT 100 or equivalent.
Lectures, demonstrations, and experience in producing business information graphics utilizing a personal computer. Students will operate a computer using page composition and graphics software. The course will utilize a popular business software package to produce graphics related to business presentation requirements.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 180 †
Fundamentals of Database Design
3 units, 3 hours lecture
Recommended Preparation: A "C" or "CR" grade or higher in Computer Science Information Systems 110 and 174 A-B-C-D or equivalent.
This course introduces the student to fundamental design strategies of relational data models for organizations. Concepts will include assessing organizational needs, logical design and application generating tools, normalization strategies, database architectures, data models, integrity rules, and query formulation skills. Students will formulate, design, implement, and manipulate databases using a commercial software package.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 190 †
(Multimedia 190)
Digital Multimedia I

4 units, 3 hours lecture, 3 hours laboratory
Prerequisite: A"C "or "CR "grade or higher in CSIS 110 or CSIS 105 or ART 170 or equivalent.
This interdisciplinary course is an introduction to the theory and practice of digital media as the digital integration of art, video, graphics, sound, and music for design and production in art, communications, entertainment, science, engineering and industrial applications. This course is an overview of simple 2D and 3D graphics and animation, digital still-image processing, digital sound and music generation, and the steps involved in multimedia. Instructors from the departments involved will participate in team teaching this class.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 195A-B-C-D †
Video Editing on the PC
3.5 units, 3 hours lecture, 1.5 hours laboratory
This course introduces the fundamentals of a non-linear video editing software application using a personal computer. This is a hands-on course in which students will gain practical experience in editing digital footage.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 196 †
Interactive Multimedia Authoring
2 units, 1 hour lecture, 2 hours lecture/lab
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 110 or equivalent.
An applications-based course using a multimedia authoring package such as Macromedia Director. Concepts focus on building cross platform multimedia applications and presentations. The lab will focus on producing interactive multimedia titles for CD-ROM and Internet delivery. The goal is to develop a visual language that will make various multimedia elements come to life, work together and support the functions of the screen and audio.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 198
Supervised Tutoring
0 unit, 50 hours
Corequisite: Official enrollment in Grossmont College.
This course uses a variety of educational tools to assist students with various learning needs. It could be used to strengthen prerequisite skills prior to enrolling in a specific course or to receive supplemental assistance while enrolled in another course. The course may be repeated with different content.
This is a no fee/no credit course.

COMPUTER SCIENCE INFORMATION SYSTEMS 199
Special Studies or Projects in Computer Science Information Systems
1-3 units, 3-9 hours
Prerequisite: Consent of instructor.

Individual study, research or projects in the field of data processing under instructor guidance. These fields can be oriented to operations, programming and systems, or software concentrations including databases system. Written reports and periodic conferences required. Content and unit credit to be determined by student/instructor conferences and/or division. May be repeated for a maximum of nine units.

COMPUTER SCIENCE INFORMATION SYSTEMS 213 †
Intermediate UNIX
4 units, 3 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 112 and 113 or equivalent.
An intermediate course in operating system theory and the current implementation of at least one operating system. The course will include the analysis of general and specific operating system services and the configuration and installation of operating systems and application suite software suitable for a business or individual. The course will emphasize a 'project team' approach to the completion of exercises and projects that require hands-on practice.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 217 †
Web Graphics I
3 units, 2 hours lecture, 3 hours laboratory
This course is for anyone wishing to create graphics for the web. The course will cover graphics principles, screen design concepts, digitizing, and production of vector and raster images. Students will create attractive, compact graphics and mock web page layouts.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 218 †
Web Graphics II
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 217 or equivalent.
This introductory course introduces the fundamentals of creating graphics, animation and interactivity in web page design. Concepts focus on the skills required to create effective web page animation using Macromedia Flash. The basic principles of animation technologies and their application in cyberspace will be explored. The student will develop an understanding of the role of animation on the Internet and the World Wide Web. Students will create animations, interactive controls and web interfaces.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 219 †
Web Graphics III
3 units, 2 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 218 or equivalent.

This course is an advanced course in graphics for the web. The course will cover the creative and technical processes of project management, and budgetary considerations in web design using advanced graphics principles and screen design. Students will create attractive, compact graphics and mock web page.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 220 †
Systems Analysis and Design
3 units, 3 hours lecture
Prerequisite: CSIS 110 and one programming language course.
An overview of the various methodologies used to develop information systems in today's world including: the traditional waterfall approach, the evolutionary approach, the rapid application development (RAD) approach, and the object oriented (OO) approach. The class will address the various methods for managing the system development processes from identifying the problem, planning the system development process, analyzing the requirements, and designing the solution. The focus of the class is on analysis and design of information systems. The development, testing, implementation and the maintenance of systems are reviewed and the student is made aware of skill set and the various processes that are involved with developing an information system from concept to actual use by the client community.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 230 †
Desktop Publishing
3 units, 2 hours lecture, 3 hours laboratory
This course provides entry-level and upgrade skills in desktop publishing. Topics to be covered include design and page layout with emphasis on type classification and specification, table of contents, indexing, cross referencing, multiple chapter publications, presentation graphics, working with printers and service bureaus, evaluation of various hardware, software and third-party fonts, project planning, organization and management.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 247 †
Internetworking Devices and Concepts
2 units, 2 hours lecture
Prerequisite: A "C" or "CR" grade or higher in CSIS 132 and 145 or equivalents.
This is an advanced course intended for networking professionals and students who already grasp the general concepts of data communications and networking, but would like a more detailed understanding of internetworking. Techniques and components for managing network growth and connecting disparate network architectures will be presented and solutions to internetworking problems will be developed.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 248 †
Processes and Protocols

2 units, 2 hours lecture
Prerequisite: A "C"or "CR"grade or higher in CSIS 247 or equivalent.
This is an advanced course intended for networking professionals and students who grasp the basic concepts of networking. Emphasis will be placed on the understanding of protocols controlling the flow of information between data communication layers and between cooperating processes on network nodes. Trace and analysis tools will be used to analyze the frames and packets traversing a network.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 249 †
Network Analysis and Design
2 units, 2 hours lecture
Prerequisite: A "C"or "CR"grade or higher in CSIS 248 or equivalent.
This is an advanced course intended for networking professionals and students who grasp the basic concepts of networking. Emphasis is placed on understanding methods used to analyze, design and manage LANs and point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 251 A-B-C-D †
Intermediate Computer Graphics
3 units, 3 hours lecture
Prerequisite: A "C" or "CR" grade or higher in CSIS 151 A-B-C-D or equivalent.
This course is a continuation of CSIS 151 A-B-C-D. It presents application-based only intermediate concepts of computer graphics including advanced techniques in scanning, tracing, styles and templates, importing, exporting, vector and raster files, storage and networking strategies and manipulation of graphic files for web page designers. This course is designed for students who want to become more productive by mastering the graphic files editing software's tools, controls and shortcuts, along with media and project management. The course will utilize a PC computer and Windows operating system.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 270 †
Advanced Computer Programming
3 units, 3 hours lecture
Prerequisite: CSIS 155 or 230 or 290 or 296.
Recommended Preparation: Based upon the backgrounds of students who have successfully completed this course, the Computer Science Information Systems Department strongly recommends completion of or concurrent enrollment in CSIS 291 or 297.
This course emphasizes the design and development of reliable, useable, and maintainable software systems using modern design methods (top-down, object-oriented), programming languages, and operating systems. Emphasis is on proper design and implementation of small as well as large projects. Topics include: inter-

process communication, mixed language modules and libraries, project management, documentation techniques, and the use of Computer-Aided Software Engineering (CASE) tools. Specific projects will address such systems as graphic libraries, graphic user interfaces (GUI), Terminate-and-Stay Resident (TSR) programs, interrupt handlers, etc.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 274 A-B-C-D †
Advanced Database Packages
2 units, 2 hours lecture
Recommended Preparation: A "C" or "CR" grade or higher in CSIS/BOT 100 and CSIS/BUS 174 or equivalent.
A course in which students learn the full potential of database programming. Topics covered will include foreign file conversions, multiple file processing, system conversions, and proper handling of large databases. Students will program a complete menu-driven system using a computer database system.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 275 A-B-C-D †
Advanced Electronic Spreadsheet Packages
2 units, 2 hours lecture
Recommended Preparation: A "C" or "CR" grade or higher in CSIS/BOT 100 and CSIS/BUS 175 or equivalent.
A course that addresses all aspects of spreadsheet macros from simple keyboard-initiated sequences to spreadsheet programming commands and including the creation of fully automated worksheets.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 276 †
Introduction to SQL
3 units, 3 hours lecture
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 110 and 274 A-B-C-D or equivalent.
This is an introductory course in SQL (Structured Query Language) programming intended for persons with basic computer literacy skills. The course is designed to teach students the fundamentals of good relational database design and how to use and maintain a database using the industry standard data query and manipulation language SQL. Students will use SQL to create tables, keys and indexes, handle security in the database and perform simple and complex queries.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 280 †
Job Search Assistance and Retention
2 units, 2 hours lecture
Corequisite: Concurrent enrollment in CSIS 281 or 282.

This course is designed to prepare the CSIS student for the world of work and to provide support and guidance through the Directed Work Experience program. Topics covered include expectations of employers, resume preparation, interview techniques, job retention and self marketing. Students will prepare a personal profile folder to use as a resource when seeking employment.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 281 †
Directed Work Experience in Computer Science Information Systems
2 units, 10 hours work experience and concurrent enrollment in 5 units at Grossmont College
Prerequisite: Last semester in CSIS certificate program or equivalent.
Corequisite: Concurrent enrollment in CSIS 280.
Work experience in a computer science or information systems occupation category leading to a position in computer science or information systems. Trainee spends a minimum of ten hours weekly in on-the-job training.
Transfers to CSU

COMPUTER SCIENCE INFORMATION SYSTEMS 282 †
Directed Work Experience in Computer Science Information Systems
3 units, 15 hours work experience and concurrent enrollment in 4 units at Grossmont College
Prerequisite: Last semester in CSIS certificate program or equivalent.
Corequisite: Concurrent enrollment in CSIS 280.
Work experience in a computer science or information systems occupation category leading to a position in computer science or information systems. Trainee spends a minimum of 15 hours weekly in on-the-job training.

COMPUTER SCIENCE INFORMATION SYSTEMS 293 †
Introduction to Java Programming
4 units, 3 hours lecture, 3 hours laboratory
Recommended Preparation: A "C" or "CR" grade or higher in CSIS 110 and 119 or equivalent.
An introductory course in Java programming focusing on object oriented methodology. The course will include using objects from the standard Java library, writing and using new objects, calling Java applets with HTML that will execute over the World Wide Web, and integrating Java with VRML and JavaScript. Students will learn how to use Java's extensive class libraries to produce graphical, animated, multimedia-based, audio-intensive programs.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 294 †
Intermediate Java Programming
4 units, 3 hours lecture, 3 hours laboratory
Recommended Preparation: A "C or "CR" grade or higher in CSIS 293 or equivalent.

An intermediate course in Java programming focusing on a more advanced development of Graphic User Interfaces using software design tools as well as the development of larger scale programs. The course provides an in depth discussion and application of the development of large scale enterprise programs. Technologies discussed will include XML, JavaBeans, the Java security model, JDBC, Java Server Pages, Remote Method Invocation and JINI, and Enterprise JavaBeans.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 296 †
Introduction to C++ Programming
4 units, 3 hours lecture, 3 hours laboratory
Prerequisite: A "C" or "CR" grade or higher in CSIS 119 or equivalent.
This is an introductory course in C++ programming. Topics covered include basic language syntax, functions, data types, pointers, strings, structures, software tools, and an introduction to classes. This course is intended for persons with a prior background in any programming language.
Transfers to: CSU, UC
(CAN CSCI 16)

COMPUTER SCIENCE INFORMATION SYSTEMS 297 †
Intermediate C++ Programming
4 units, 3 hours lecture, 3 hours laboratory
Prerequisite: A "C" or "CR" grade or higher in CSIS 296 or equivalent.
A second course in C++ programming which explores some of the more advanced concepts of preprocessing, low-level data objects, dynamic data structures, and object oriented programming.
Transfers to: CSU, UC

COMPUTER SCIENCE INFORMATION SYSTEMS 299
Selected Topics in Computer Science Information Systems
1-3 units, 3-9 hours
Prerequisite: Varies with topic.
Selected topics in Computer Science Information Systems not covered by regular catalog offerings. Course content and unit credit to be determined by the Division of Business and Professional Studies in relation to the community/student need(s) and/or available staff. May be offered as a seminar, lecture or laboratory class.

Course	Approved	Save Nbr	Last Offered
BUSINESS AND PROFESSIONAL STUDIES			
CSIS096	04/17/2001	01-0580-002	2005 Summer
CSIS097	04/15/2003	03-0558-002	2005 Summer
CSIS100	04/17/2001	01-0582-002	2005 Summer
CSIS105	05/16/2000	00-0941-002	2005 Spring
CSIS110	05/16/2000	00-0942-002	2005 Summer
CSIS112	04/20/2004	04-0440-003	2005 Spring
CSIS113	04/19/2005	05-4286-002	2005 Spring
CSIS114	04/20/2004	04-0441-002	2005 Spring

BUSINESS AND PROFESSIONAL STUDIES

Course	Approved	Save Nbr	Last Offered
CSIS115A	04/19/2005	05-0429-002	Not Offered
CSIS115B	04/19/2005	05-0429-002	Not Offered
CSIS115C	04/19/2005	05-0429-002	Not Offered
CSIS115D	04/19/2005	05-0429-002	Not Offered
CSIS116A	04/19/2005	05-0430-002	Not Offered
CSIS116B	04/19/2005	05-0430-002	Not Offered
CSIS116C	04/19/2005	05-0430-002	Not Offered
CSIS116D	04/19/2005	05-0430-002	Not Offered
CSIS119	04/16/2002	02-0755-002	2005 Spring
CSIS120	04/15/2003	03-0559-002	2005 Summer
CSIS121	04/15/2003	03-0560-002	2005 Summer
CSIS122	04/17/2001	01-0585-002	2005 Summer
CSIS123	04/15/2003	03-0561-002	2005 Summer
CSIS124	04/15/2003	03-0562-002	2005 Summer
CSIS125	04/17/2001	01-0588-002	2005 Summer
CSIS126	04/15/2003	03-0563-002	2005 Summer
CSIS127	04/15/2003	03-0564-002	2005 Summer
CSIS128	04/17/2001	01-0591-002	2005 Summer
CSIS129	04/15/2003	03-0565-002	2005 Summer
CSIS130	04/15/2003	03-0566-002	2005 Summer
CSIS131	04/17/2001	01-0594-002	2005 Summer
CSIS132	04/19/2005	05-0431-002	2005 Spring
CSIS134	04/20/2004	04-0442-002	2005 Spring
CSIS135	05/16/2000	00-0944-002	2005 Spring
CSIS136	04/20/2004	04-0443-002	2005 Spring
CSIS137	04/16/2002	02-0756-002	2005 Spring
CSIS138	05/16/2000	00-0946-002	2005 Spring
CSIS139	04/20/2004	04-0444-002	Not Offered
CSIS140	04/20/2004	04-0445-002	2005 Spring
CSIS141	04/20/2004	04-0446-002	2003 Fall
CSIS142	04/17/2001	01-0595-002	2005 Summer
CSIS143	04/17/2001	01-0596-002	2005 Spring
CSIS144	04/17/2001	01-0597-002	2004 Spring
CSIS145	04/17/2001	01-0598-002	2005 Summer
CSIS146	04/19/2005	05-0432-002	Not Offered
CSIS151A	04/19/2005	05-0433-002	2005 Spring
CSIS151B	04/19/2005	05-0433-002	1996 Spring
CSIS151C	04/19/2005	05-0433-002	1999 Spring
CSIS151D	04/19/2005	05-0433-002	2005 Summer
CSIS155	05/01/1996	93-0677-002	2003 Spring
CSIS159	04/16/2002	02-0757-004	Not Offered
CSIS160	04/15/2003	03-0600-002	2005 Spring
CSIS165	04/15/2003	03-0601-002	2004 Spring
CSIS172	04/20/2004	04-0447-002	2005 Spring
CSIS173A	04/16/2002	02-0758-002	2001 Spring
CSIS173B	04/16/2002	02-0758-002	2005 Spring
CSIS173C	04/16/2002	02-0758-002	1996 Spring
CSIS173D	04/16/2002	02-0758-002	2001 Spring
CSIS174A	04/16/2002	02-0759-002	2001 Summer
CSIS174B	04/16/2002	02-0759-002	2005 Spring
CSIS174C	04/16/2002	02-0759-002	1996 Fall
CSIS174D	04/16/2002	02-0759-002	Not Offered
CSIS175A	04/16/2002	02-0760-002	2001 Summer
CSIS175B	04/16/2002	02-0760-002	2003 Fall
CSIS175C	04/16/2002	02-0760-002	Not Offered
CSIS175D	04/16/2002	02-0760-002	Not Offered
CSIS176	04/20/2004	04-0448-002	2005 Spring
CSIS177A	04/16/2002	02-0762-002	2002 Fall
CSIS177B	04/16/2002	02-0762-002	1997 Spring
CSIS177C	04/16/2002	02-0762-002	2003 Spring
CSIS177D	04/16/2002	02-0762-002	Not Offered
CSIS180	04/01/2005	05-0434-002	Not Offered
CSIS190	05/16/2000	00-0947-002	2005 Spring
CSIS195	05/16/2000	00-0948-002	2005 Spring
CSIS196	05/16/2000	00-0949-002	2003 Spring
CSIS198	04/17/2001	01-0599-002	2005 Summer
CSIS199	/ /		
CSIS213	04/16/2002	02-0763-002	2002 Fall
CSIS217	04/16/2002	02-0764-002	2005 Spring
CSIS218	04/16/2002	02-0765-002	2004 Spring
CSIS219	04/16/2002	02-0766-002	2005 Spring
CSIS220	04/20/2004	04-0449-002	2005 Spring
CSIS230	04/16/2002	02-0767-002	2005 Spring
CSIS247	04/17/2001	01-0600-002	Not Offered
CSIS248	04/17/2001	01-0610-002	Not Offered
CSIS249	04/17/2001	01-0611-002	2003 Spring

BUSINESS AND PROFESSIONAL STUDIES

Course	Approved	Save Nbr	Last Offered
CSIS251A	04/01/2001	01-0603-002	2004 Spring
CSIS251B	04/17/2001	01-0603-002	Not Offered
CSIS251C	04/17/2001	01-0603-002	Not Offered
CSIS251D	04/17/2001	01-0603-002	2002 Fall
CSIS270	04/01/1993	92-1443-002	2002 Fall
CSIS274A	04/16/2002	02-0768-002	2004 Spring
CSIS274B	04/16/2002	02-0768-002	2005 Spring
CSIS274C	04/16/2002	02-0768-002	1996 Fall
CSIS274D	04/16/2002	02-0768-002	Not Offered
CSIS275A	04/16/2002	02-0769-002	2001 Spring
CSIS275B	04/16/2002	02-0769-002	2003 Fall
CSIS275C	04/16/2002	02-0769-002	Not Offered
CSIS275D	04/16/2002	02-0769-002	Not Offered
CSIS276	04/20/2004	04-0450-002	Not Offered
CSIS280	04/15/2003	03-0602-002	2005 Spring
CSIS281	04/15/2003	03-0603-002	2005 Spring
CSIS282	04/01/2003	03-0604-002	2003 Spring
CSIS293	05/16/2000	00-0950-002	2005 Spring
CSIS294	04/16/2002	02-0770-002	2002 Fall
CSIS296	04/15/2003	03-0605-002	2005 Summer
CSIS297	04/15/2003	03-0606-002	2005 Spring
CSIS299	/ /		

CSIS Enrollment Demographics by Age			
			% of Total
Student Age	Course Number	Number	in Age Group
Less than 20	96	12	14.50%
	97	5	9.80%
	100	135	17.00%
	105	184	16.30%
	110	1506	23.70%
	112	181	16.40%
	113	89	12.40%
	114	18	4.70%
	115	18	12.40%
	119	146	15.90%
	120	2	3.30%
	123	4	4.50%
	129	2	5.00%
	130	1	4.30%
	132	42	7.00%
	134	127	14.40%
	135	25	9.90%
	136	22	9.50%
	137	23	16.40%
	138	6	5.70%
	140	15	5.00%
	141	8	3.20%
	142	46	9.30%
	143	36	12.00%
	144	8	7.90%
	145	13	7.90%
	151A	28	25.90%
	151D	345	27.40%
	155	2	5.10%
	160	49	47.10%
	165	14	10.40%
	172	23	8.70%
	173B	44	16.80%
	173D	3	7.90%
	174B	8	2.10%
	175B	13	6.10%
	176	2	4.50%
	177A	5	8.10%
	177C	9	15.30%
	181A	1	5.60%
	181B	1	12.50%
	185A	12	9.20%
	186A	8	3.40%
	190	19	12.60%
	195	45	18.80%
	198	541	18.40%
	217	6	17.10%
	218	1	5.60%
	220	4	1.90%
	230	1	5.00%
	249	2	5.70%
	250	1	0.50%
	251A	17	27.40%

APPENDIX 4

Course Status

APPENDIX 4

4. Course Status

C(SE AN NUMBER Example: GEOG 130	When was course last updated? 10/14/01	Status of Alignment with Cuyamaca Completred (C) In Progress (IP) Not Applicable (N/A)C	TIME OFFERED Morning (M) Afternoon (A) Evening (E) Weekend (W)M, A, E	SEMESTER LAST OFFERED Fall 2002
CSIS 096	04/01	C	M,A,E	FALL 2006
CSIS 097	04/03	C	M,A,E	Fall 2006
CSIS 100	04/01	C	M,A,E	FALL 2006
CSIS 105	05/00	C	M,A	FALL 2006
CSIS 110	05/00	C	M,A,E	FALL 2006
CSIS 112	04/04	C	M,A	FALL 2006
CSIS 113	04/05	C	ONLINE	FALL 2006
CSIS 114	04/04	C	W	FALL 2006
CSIS 115 ABCD	04/05	C	E,ONLINE	FALL 2006
CSIS 116 ABCD	04/05	N/A	M	FALL 2005
SIS 119	04/02	C	M, ONLINE	FALL 2006
CSIS 120	04/03	C	M,A,E,W	FALL 2006
CSIS 121	04/03	C	M,A,E,W	FALL 2006
CSIS 122	04/01	C	M,A,E,W	FALL 2006
CSIS 123	04/03	C	M,A,E,W	FALL 2006
CSIS 124	04/03	C	M,A,E,W	FALL 2006
CSIS 125	04/01	C	M,A,E,W	FALL 2006
CSIS 126	04/03	C	M,A,E,W	FALL 2006
CSIS 127	04/03	C	M,A,E,W	FALL 2006
CSIS 129	04/03	C	M,A,E,W	FALL 2006
CSIS 130	04/03	C	M,A,E,W	FALL 2006
CSIS 131	04/01	C	M,A,E,W	FALL 2006
CSIS 132	04/05	N/A	M	SPRING 2006
CSIS 134	04/04	C	M, ONLINE	FALL 2006
CSIS135	05/00	C	A	FALL 2006

APPENDIX 4

4. Course Status

COURSE AND NUMBER Example: GEOG 130	When was course last updated? 10/14/01	Status of Alignment with Cuyamaca Completred (C) In Progress (IP) Not Applicable (N/A)C	TIME OFFERED Morning (M) Afternoon (A) Evening (E) Weekend (W)M, A, E	SEMESTER LAST OFFERED Fall 2002
CSIS 136	04/04	C	A	FALL 2006
CSIS 137	04/02	C	W	FALL 2006
CSIS 138	05/00	N/A	A	SPRING 2006
CSIS 139	04/04	N/A	E	
CSIS 140	04/04	C	E	SPRING 2006
CSIS 141	04/04	N/A	E	FALL 2006
CSIS 142	04/01	N/A	ONLINE	FALL 2006
CSIS 143	04/01	N/A	ONLINE	FALL 2006
CSIS 144	04/01	N/A	ONLINE	FALL 2006
CSIS 145	04/01	N/A	ONLINE	FALL 2006
CSIS 146	04/05	N/A	E	FALL 2006
CSIS 151 ABCD	04/05	C	M,A	FALL 2006
CSIS 155	05/96	C	E	
CSIS 159	04/02	N/A	A,ONLINE	
CSIS 160	04/03	N/A	M	FALL 2006
CSIS 165	04/03	C	A	FALL 2006
CSIS 172	04/04	C	ONLINE	FALL 2006
CSIS 173 ABCD	04/02	C	ONLINE	FALL 2006
CSIS 174 ABCD	04/02	C	ONLINE	FALL 2006
CSIS 175 ABCD	04/02	C	ONLINE	FALL 2006
CSIS 176	04/04	N/A	M,E	FALL 2006
CSIS 180	04/05	N/A	E	FALL 2006
CSIS 190	05/00	C	E	FALL 2006
CSIS 195 ABCD	04/06	N/A	A,E	FALL 2006
CSIS198	04/01	N/A	M,A,E	FALL 2005

APPENDIX 4

4. Course Status

COURSE AND NUMBER Example: GEOG 130	When was course last updated? 10/14/01	Status of Alignment with Cuyamaca Completred (C) In Progress (IP) Not Applicable (N/A)C	TIME OFFERED Morning (M) Afternoon (A) Evening (E) Weekend (W)M, A, E	SEMESTER LAST OFFERED Fall 2002
CSIS 213	04/02	N/A	E	FALL 2000
CSIS 217	04/02	N/A	E	FALL 2006
CSIS 218	04/02	N/A	E	FALL 2006
CSIS 219	04/02	N/A	E	
CSIS 220	04/04		ONLINE	FALL 2006
CSIS 230	04/02	N/A	E	FALL 2006
CSIS 247	04/01	N/A	ONLINE	
CSIS 248	04/01	N/A	ONLINE	
CSIS 249	04/01	N/A	ONLINE	
CSIS 251 ABCD	04/01		E	FALL 2006
CSIS 270	04/93	N/A	E	
CSIS 274 ABCD	04/02		ONLINE	
CSIS 275 ABCD	04/02		ONLINE	
CSIS 276	04/04		E	FALL 2006
CSIS 280	04/03		E	FALL 2006
CSIS 281	04/03	C		FALL 2006
CSIS 282	04/03	C		
CSIS 293	05/00		M, ONLINE	FALL 2006
CSIS 294	04/02		E	FALL 2006
CSIS 296	04/03		E	FALL 2006
CSIS 297	04/03		E	SPRING 2005

Equivalent Course List

The following Grossmont and Cuyamaca College courses are considered similar enough to be treated as equivalent.
No Modification of Major forms will be required for the departments to accept these courses from Cuyamaca College.

Grossmont Course	Similar Cuyamaca Course
CSIS 110	CIS 110
CSIS 112	CIS 190
CSIS 113	CIS 191
CSIS 114	CIS 120
CSIS 115	CS 180
CSIS 119	CS 119
CSIS 120	BOT 120
CSIS 121	BOT 121
CSIS 122	BOT 122
CSIS 123	BOT 123
CSIS 124	BOT 124
CSIS 125	BOT 125
CSIS 126	BOT 126
CSIS 127	BOT 127
CSIS 128	BOT 128
CSIS 129	BOT 129
CSIS 130	BOT 130
CSIS 131	BOT 131
CSIS 134	CIS 211
CSIS 135	CIS 215
CSIS 136	CIS 212
CSIS 137	GD 222
CSIS 140*	CIS 201
CSIS 151D	CIS 170A
CSIS 155	CS 280
CSIS 165	CS 289
CSIS 172	CIS 105
CSIS 173	BOT 120 + 121 + 122
CSIS 174	CIS 140
CSIS 175	BOT 123 + 124 + 125
CSIS 190	CIS 221
CSIS 213	CIS 291
CSIS 217	GD 217
CSIS 230	CIS 230
CSIS 251	CIS 270
CSIS 276	CIS 240
CSIS 293	CS 182
CSIS 294	CS 282
CSIS 296	CS 181
CSIS 297	CS 281

* does not satisfy prerequisite to CIS 202

CSIS Enrollment Demographics by Age			
			% of Total
Student Age	Course Number	Number	in Age Group
20 - 24	96	19	22.90%
	97	9	17.60%
	100	220	27.70%
	105	237	21.00%
	110	2696	42.50%
	112	257	23.30%
	113	191	26.50%
	114	51	13.30%
	115	35	24.10%
	119	280	30.50%
	120	11	18.00%
	121	5	14.70%
	122	2	14.30%
	123	19	21.60%
	124	5	8.90%
	125	2	8.30%
	126	10	18.90%
	127	3	8.30%
	128	2	8.30%
	129	3	7.50%
	130	1	4.30%
	132	114	19.10%
	134	243	27.50%
	135	57	22.60%
	136	47	20.30%
	137	34	24.30%
	138	28	26.70%
	140	49	16.20%
	141	38	15.00%
	142	111	22.40%
	143	80	26.60%
	144	18	17.80%
	145	36	21.80%
	151A	42	38.90%
	151D	367	29.20%
	155	7	17.90%
	160	34	32.70%
	165	40	29.60%
	172	57	21.50%
	173B	84	32.10%
	173D	6	15.80%
	174A	9	9.70%
	174B	51	13.50%
	175A	7	8.00%
	175B	47	22.10%
	176	8	18.20%
	177A	12	19.40%
	177C	16	27.10%
	181A	5	27.80%
	181B	1	12.50%
	185A	24	18.50%
	186A	23	9.90%

	186B	6	3.90%
	190	44	29.10%
	195	75	31.30%
	196	8	29.60%
	198	983	33.40%
	199	1	20.00%
	217	5	14.30%
	218	3	16.70%
	219	1	8.30%
	220	33	15.80%
	230	3	15.00%
	249	3	8.60%
	250	22	11.80%
	251A	16	25.80%
	251D	17	27.00%
	270	5	38.50%
	274A	5	5.00%
	274B	63	17.80%
	275B	29	22.50%
	276	7	30.40%
	280	50	10.90%
	281	48	11.00%
	282	6	14.60%
	290	33	37.50%
	293	169	40.70%
	294	3	21.40%
	296	121	37.00%
	297	23	25.60%
	299	372	17.30%
	Total	7907	27.90%

CSIS Enrollment Demographics by Age

Student Age	Course Number	Number	% of Total in Age Group
25 - 29	96	9	10.80%
	97	7	13.70%
	100	117	14.70%
	105	118	10.40%
	110	801	12.60%
	112	172	15.60%
	113	149	20.70%
	114	62	16.20%
	115	21	14.50%
	119	155	16.90%
	120	12	19.70%
	121	5	14.70%
	122	3	21.40%
	123	19	21.60%
	124	8	14.30%
	125	3	12.50%
	126	9	17.00%
	127	6	16.70%
	128	4	16.70%
	129	9	22.50%
	130	7	30.40%
	131	5	31.30%
	132	62	10.40%
	134	133	15.00%
	135	48	19.00%
	136	35	15.20%
	137	26	18.60%
	138	17	16.20%
	140	40	13.20%
	141	35	13.80%
	142	70	14.10%
	143	51	16.90%
	144	12	11.90%
	145	24	14.50%
	151A	18	16.70%
	151D	122	9.70%
	155	7	17.90%
	160	15	14.40%
	165	31	23.00%
	172	49	18.50%
	173B	47	17.90%
	173D	8	21.10%
	174A	16	17.20%
	174B	49	13.00%
	175A	14	16.10%
	175B	45	21.10%
	176	7	15.90%
	177A	6	9.70%
	177C	10	16.90%
	180A	1	20.00%
	181A	2	11.10%
	185A	17	13.10%
	186A	21	9.00%

	186B	13	8.60%
	190	32	21.20%
	195	33	13.80%
	196	5	18.50%
	198	375	12.80%
	199	3	60.00%
	217	3	8.60%
	218	3	16.70%
	219	2	16.70%
	220	33	15.80%
	230	4	20.00%
	249	2	5.70%
	250	26	13.90%
	251A	6	9.70%
	251D	7	11.10%
	270	1	7.70%
	274A	13	12.90%
	274B	54	15.30%
	275B	24	18.60%
	276	3	13.00%
	280	64	14.00%
	281	61	14.00%
	282	10	24.40%
	290	15	17.00%
	293	59	14.20%
	296	55	16.80%
	297	20	22.20%
	299	215	10.00%
	Total	3880	13.70%

CSIS Enrollment Demographics by Age

Student Age	Course Number	Number	% of Total in Age Group
30 - 49	96	33	39.80%
	97	21	41.20%
	100	262	33.00%
	105	445	39.40%
	110	1190	18.80%
	112	412	37.40%
	113	249	34.60%
	114	209	54.60%
	115	57	39.30%
	119	298	32.40%
	120	24	39.30%
	121	19	55.90%
	122	4	28.60%
	123	33	37.50%
	124	26	46.40%
	125	10	41.70%
	126	22	41.50%
	127	16	44.40%
	128	11	45.80%
	129	19	47.50%
	130	12	52.20%
	131	8	50.00%
	132	275	46.00%
	134	301	34.00%
	135	92	36.50%
	136	90	39.00%
	137	44	31.40%
	138	36	34.30%
	140	172	56.80%
	141	149	58.90%
	142	205	41.30%
	143	107	35.50%
	144	51	50.50%
	145	78	47.30%
	151A	16	14.80%
	151D	325	25.80%
	155	18	46.20%
	160	5	4.80%
	165	42	31.10%
	172	115	43.40%
	173B	70	26.70%
	173D	18	47.40%
	174A	59	63.40%
	174B	195	51.60%
	175A	58	66.70%
	175B	91	42.70%
	176	19	43.20%
	177A	24	38.70%
	177C	18	30.50%
	180A	4	80.00%
	181A	9	50.00%
	181B	3	37.50%

	185A	54	41.50%
	186A	134	57.50%
	186B	99	65.10%
	186C	5	100.00%
	190	45	29.80%
	195	72	30.00%
	196	11	40.70%
	198	783	26.60%
	199	1	20.00%
	217	15	42.90%
	218	9	50.00%
	219	7	58.30%
	220	122	58.40%
	230	7	35.00%
	249	24	68.60%
	250	123	65.80%
	251A	16	25.80%
	251D	19	30.20%
	270	4	30.80%
	274A	66	65.30%
	274B	162	45.90%
	275B	47	36.40%
	276	12	52.20%
	280	270	59.10%
	281	260	59.50%
	282	23	56.10%
	290	21	23.90%
	293	69	16.60%
	294	4	28.60%
	296	88	26.90%
	297	34	37.80%
	299	1024	47.60%
	Total	9699	34.30%

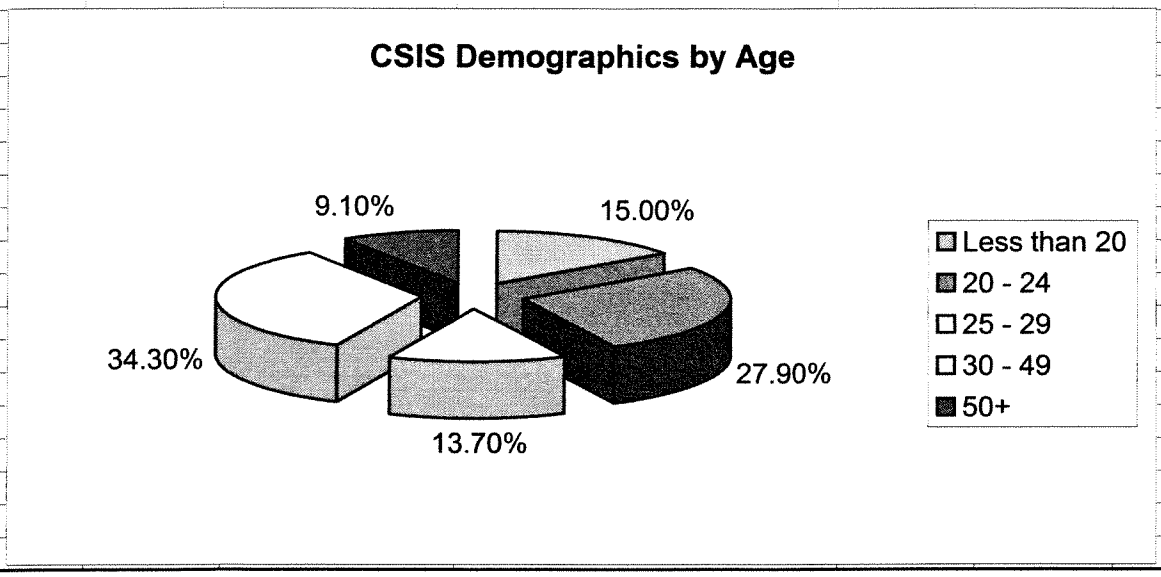
CSIS Enrollment Demographics by Age

Student Age	Course Number	Number	% of Total in Age Group
50+	96	10	12.00%
	97	9	17.60%
	100	60	7.60%
	105	146	12.90%
	110	151	2.40%
	112	81	7.30%
	113	42	5.80%
	114	43	11.20%
	115	14	9.70%
	119	40	4.40%
	120	12	19.70%
	121	5	14.70%
	122	5	35.70%
	123	13	14.80%
	124	17	30.40%
	125	9	37.50%
	126	12	22.60%
	127	11	30.60%
	128	7	29.20%
	129	7	17.50%
	130	2	8.70%
	131	3	18.80%
	132	105	17.60%
	134	80	9.00%
	135	30	11.90%
	136	37	16.00%
	137	13	9.30%
	138	18	17.10%
	140	27	8.90%
	141	23	9.10%
	142	64	12.90%
	143	27	9.00%
	144	12	11.90%
	145	14	8.50%
	151A	4	3.70%
	151D	99	7.90%
	155	5	12.80%
	160	1	1.00%
	165	8	5.90%
	172	21	7.90%
	173B	17	6.50%
	173D	3	7.90%
	174A	9	9.70%
	174B	75	19.80%
	175A	8	9.20%
	175B	17	8.00%
	176	8	18.20%
	177A	15	24.20%
	177C	6	10.20%
	181A	1	5.60%
	181B	3	37.50%
	185A	23	17.70%

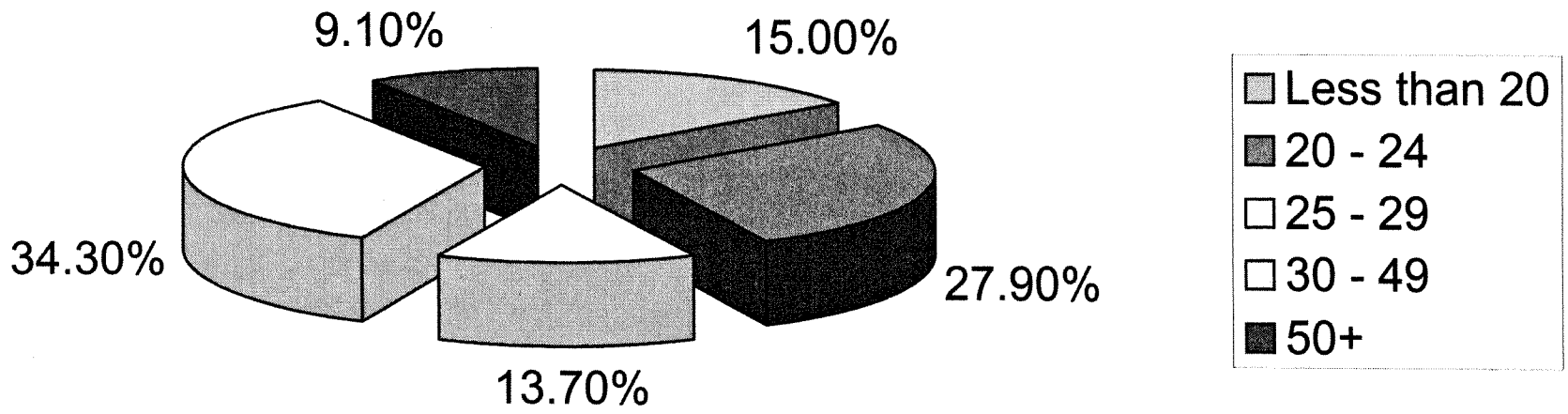
	186A	47	20.20%
	186B	34	22.40%
	190	11	7.30%
	195	15	6.30%
	196	3	11.10%
	198	258	8.80%
	217	6	17.10%
	218	2	11.10%
	219	2	16.70%
	220	17	8.10%
	230	5	25.00%
	249	4	11.40%
	250	15	8.00%
	251A	7	11.30%
	251D	11	17.50%
	274A	17	16.80%
	274B	62	17.60%
	275B	18	14.00%
	276	1	4.30%
	280	69	15.10%
	281	65	14.90%
	282	2	4.90%
	290	3	3.40%
	293	20	4.80%
	294	6	42.90%
	296	18	5.50%
	297	5	5.60%
	299	395	18.30%
	Total	2590	9.10%

CSIS Demographics by Age

Age	Number of Students	% of number of Students in Age
Less than	4235	15.00%
20 - 24	7907	27.90%
25 - 29	3880	13.70%
30 - 49	9699	34.30%
50+	2590	9.10%
Total	28311	100.00%



CSIS Demographics by Age

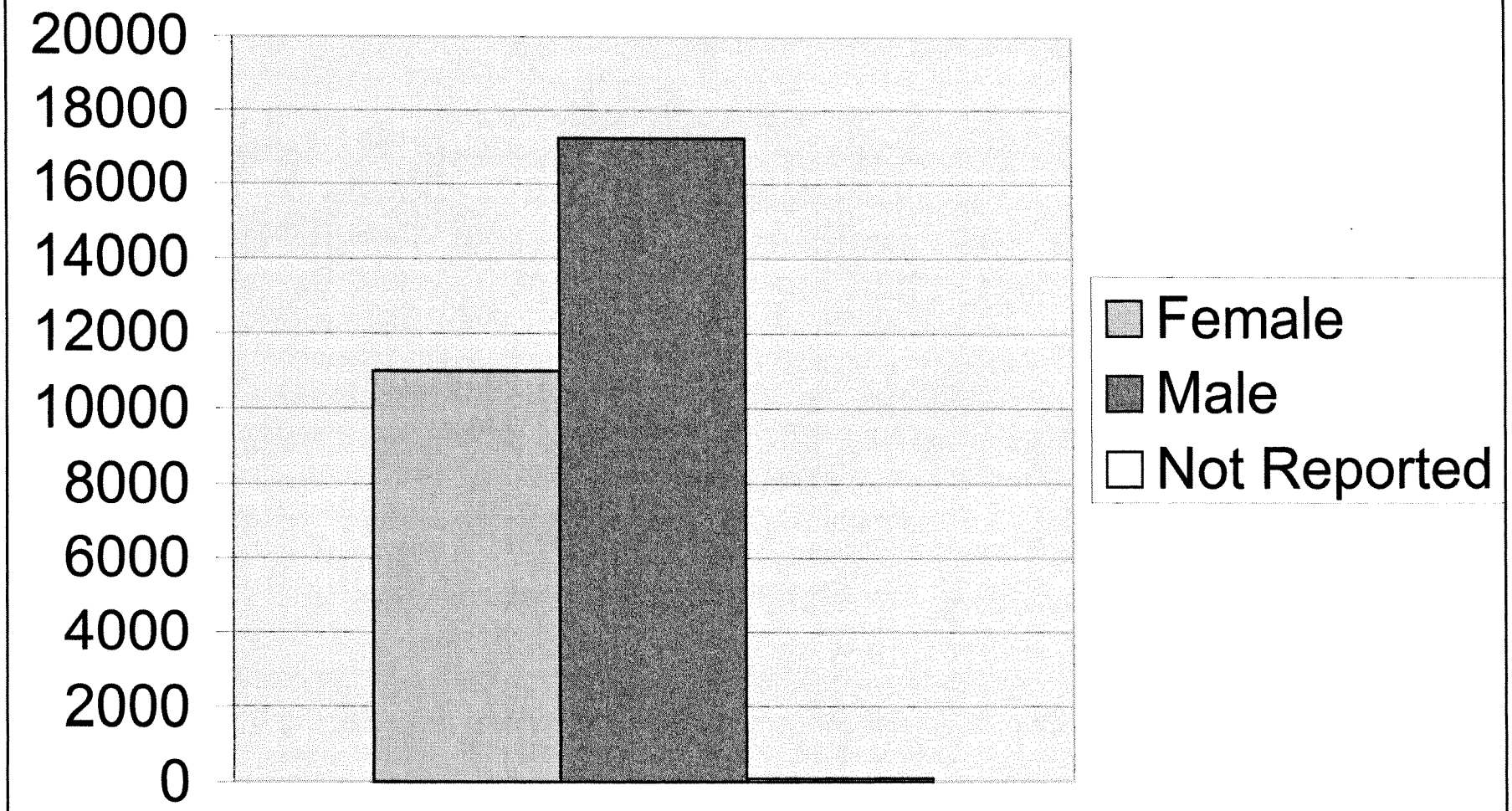


Male/Female distribution per course for Semesters Fall 2001-Fall 2005							
	Total Students		Female		Male		
CSIS Course Number	Total Number of Students	% of total	Females	% of Females	Males	% of Males	
96	83	100.00%	49	59.00%	34	41.00%	
97	51	100.00%	33	64.70%	18	35.30%	
100	794	100.00%	375	47.20%	418	52.60%	
105	1130	100.00%	593	52.50%	534	47.30%	
110	6344	100.00%	2641	41.60%	3686	58.10%	
112	1103	100.00%	295	26.70%	805	73.00%	
113	720	100.00%	151	21.00%	564	78.30%	
114	383	100.00%	104	27.20%	278	72.60%	
115	145	100.00%	46	31.70%	99	68.30%	
119	919	100.00%	243	26.40%	669	72.80%	
120	61	100.00%	39	63.90%	22	36.10%	
121	34	100.00%	24	70.60%	10	29.40%	
122	14	100.00%	10	71.40%	4	28.60%	
123	88	100.00%	53	60.20%	35	39.80%	
124	56	100.00%	41	73.20%	15	26.80%	
125	24	100.00%	13	54.20%	11	45.80%	
126	53	100.00%	23	43.40%	30	56.60%	
127	36	100.00%	17	47.20%	19	52.80%	
128	24	100.00%	10	41.70%	14	58.30%	
129	40	100.00%	21	52.50%	19	47.50%	
130	23	100.00%	17	73.90%	6	26.10%	
131	16	100.00%	11	68.80%	5	31.30%	
132	598	100.00%	269	45.00%	329	55.00%	
134	884	100.00%	332	37.60%	549	62.10%	
135	252	100.00%	83	32.90%	168	66.70%	
136	231	100.00%	80	34.60%	151	65.40%	
137	140	100.00%	42	30.00%	95	67.90%	
138	105	100.00%	38	36.20%	67	63.80%	
140	303	100.00%	50	16.50%	252	83.20%	
141	253	100.00%	37	14.60%	215	85.00%	
142	496	100.00%	125	25.20%	368	74.20%	

Male/Female distribution per course for Semesters Fall 2001-Fall 2005							
	Total Students		Female		Male		
CSIS Course Number	Total Number of Students	% of total	Females	% of Females	Males	% of Males	
143	301	100.00%	58	19.30%	240	79.70%	
144	101	100.00%	16	15.80%	85	84.20%	
145	165	100.00%	34	20.60%	131	79.40%	
151A	108	100.00%	16	14.80%	92	85.20%	
151D	1258	100.00%	481	38.20%	775	61.60%	
155	39	100.00%	11	28.20%	28	71.80%	
160	104	100.00%	9	8.70%	95	91.30%	
165	135	100.00%	29	21.50%	106	78.50%	
172	265	100.00%	136	51.30%	129	48.70%	
173B	262	100.00%	174	66.40%	87	33.20%	
173D	38	100.00%	24	63.20%	14	36.80%	
174A	93	100.00%	33	35.50%	60	64.50%	
174B	378	100.00%	177	46.80%	200	52.90%	
175A	87	100.00%	31	35.60%	56	64.40%	
175B	213	100.00%	105	49.30%	108	50.70%	
176	44	100.00%	34	77.30%	10	22.70%	
177A	62	100.00%	28	45.20%	34	54.80%	
177C	59	100.00%	34	57.60%	25	42.40%	
180A	5	100.00%	4	80.00%	1	20.00%	
181A	18	100.00%	11	61.10%	7	38.90%	
181B	8	100.00%	6	75.00%	2	25.00%	
185A	130	100.00%	61	46.90%	68	52.30%	
186A	233	100.00%	98	42.10%	134	57.50%	
186B	152	100.00%	60	39.50%	92	60.50%	
186C	5	100.00%	3	60.00%	2	40.00%	
190	151	100.00%	56	37.10%	95	62.90%	
195	240	100.00%	61	25.40%	178	74.20%	
196	27	100.00%	9	33.30%	18	66.70%	
198	2940	100.00%	1298	44.10%	1634	55.60%	
199	5	100.00%	3	60.00%	2	40.00%	
217	35	100.00%	21	60.00%	14	40.00%	
218	18	100.00%	11	61.10%	7	38.90%	

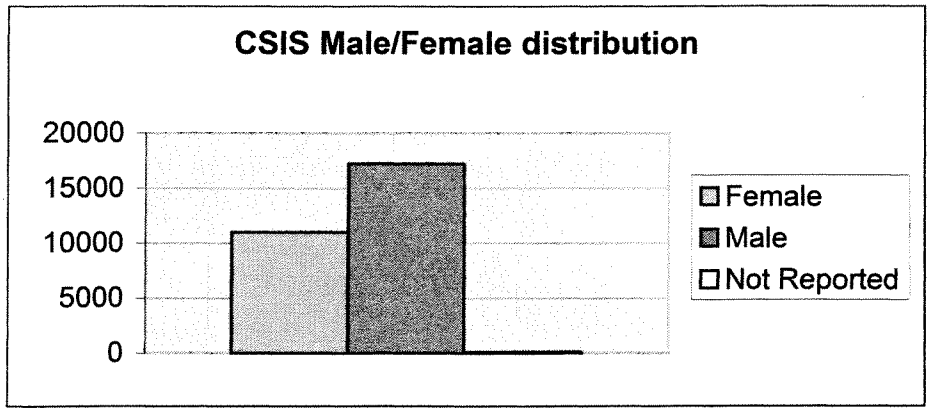
Male/Female distribution per course for Semesters Fall 2001-Fall 2005							
	Total Students		Female		Male		
CSIS Course Number	Total Number of Students	% of total	Females	% of Females	Males	% of Males	
219	12	100.00%	9	75.00%	3	25.00%	
220	209	100.00%	41	19.60%	167	79.90%	
230	20	100.00%	13	65.00%	7	35.00%	
249	35	100.00%	6	17.10%	29	82.90%	
250	187	100.00%	39	20.90%	146	78.10%	
251A	62	100.00%			45	72.60%	
251D	63	100.00%	17	27.40%	42	66.70%	
270	13	100.00%	21	33.30%	13	100.00%	
274A	101	100.00%	36	35.60%	65	64.40%	
274B	353	100.00%	66	51.20%	181	51.30%	
275B	129	100.00%	5	21.70%	63	48.80%	
276	23	100.00%	151	33.00%	17	73.90%	
280	457	100.00%	149	34.10%	305	66.70%	
281	437	100.00%	8	19.50%	288	65.90%	
282	41	100.00%	25	28.40%	32	78.00%	
290	88	100.00%	103	24.80%	63	71.60%	
293	415	100.00%	4	28.60%	310	74.70%	
294	14	100.00%	62	19.00%	10	71.40%	
296	327	100.00%	11	12.20%	263	80.40%	
297	90	100.00%	1055	49.00%	78	86.70%	
299	2153	100.00%	10990	38.80%	1094	50.80%	
Total	28311	100.00%			17239	60.90%	

CSIS Male/Female distribution



CSIS Male/Female Distribution Ratio

Gender	Number	Percentage
Female	10990	38.80%
Male	17239	60.90%
Not Reported	82	0.30%
Total	28311	100.00%



CSIS Course Demographics by Ethnicity

CSIS Course Number	Total Number Students	% of Students	White	Black	Filipino	Pacific Islander	American Indian	Hispanic	Other	Unknown
96	83	100.00%	48	12	2	2	2	12	5	4
97	51	100.00%	32	7			1	7	4	3
100	794	100.00%	402	113	16	5	11	113	51	36
105	1130	100.00%	652	162	17	10	16	162	40	47
110	6344	100.00%	3459	813	166	89	66	813	229	233
112	1103	100.00%	611	142	27	11	19	142	32	47
113	720	100.00%	423	71	19	6	10	71	21	42
114	383	100.00%	217	38	9	2	7	38	12	13
115	145	100.00%	92	19	1	1		19	3	4
119	919	100.00%	528	92	30	12	12	92	33	39
120	61	100.00%	32	6	2			6	2	4
121	34	100.00%	22	4	1		1	4		
122	14	100.00%	9	1				1		
123	88	100.00%	57	3	1	1		3	2	5
124	56	100.00%	38	3	2			3	1	2
125	24	100.00%	15	3				3		1
126	53	100.00%	32	7		1	1	7	1	2
127	36	100.00%	23	5		1		5		
128	24	100.00%	18	2				2		1
129	40	100.00%	21	4				4	3	1
130	23	100.00%	9	4				4	2	1
131	16	100.00%	9	1				1	2	
132	598	100.00%	378	70	11	4	11	70	11	16
134	884	100.00%	538	96	19	7	10	96	21	45
135	252	100.00%	154	23	5	2	2	23	5	14
136	231	100.00%	159	16	2	1	2	16	5	9
137	140	100.00%	76	16	4		1	16	4	9
138	105	100.00%	65	7		1		7	3	3
140	303	100.00%	189	32	12		5	32	8	8
141	253	100.00%	161	23	7	1	4	23	7	11
142	496	100.00%	310	58	11	3	12	58	7	34
143	301	100.00%	184	36	6	1	7	36	3	21

CSIS Course Demographics by Ethnicity

CSIS Course Number	Total Number Students	% of Students	White	Black	Filipino	Pacific Islander	American Indian	Hispanic	Other	Unknown
144	101	100.00%	62	12	3			12		7
145	165	100.00%	85	23	5			23	6	15
151A	108	100.00%	66	13	2		4	13	2	9
151D	1258	100.00%	813	121	34	9	16	121	29	56
155	39	100.00%	29	5	1			5	1	
160	104	100.00%	59	11	3	2	2	11	3	8
165	135	100.00%	76	14	4	2		14	2	9
172	265	100.00%	150	26	7	2	6	26	8	4
173B	262	100.00%	147	27	8	1	3	27	9	6
173D	38	100.00%	23	6	1			6	1	1
174A	93	100.00%	63	10	2		1	10	2	1
174B	378	100.00%	237	43	7	2	1	43	3	11
175A	87	100.00%	59	8	2		1	8	3	1
175B	213	100.00%	135	19	1	1	2	19	6	6
176	44	100.00%	31	6				6	1	2
177A	62	100.00%	42	3				3	1	2
177C	59	100.00%	35	7		1		7		1
180A	5	100.00%	3	2				2		
181A	18	100.00%	8	6	1			6		1
181B	8	100.00%	6	2				2		
185A	130	100.00%	76	19	2	1		19	4	8
186A	233	100.00%	151	29	8		4	29	5	10
186B	152	100.00%	103	19	4		2	19	3	5
186C	5	100.00%	5							
190	151	100.00%	91	8	5	1		8	8	5
195	240	100.00%	140	31	9	1	4	31	5	13
196	27	100.00%	18	2	1			2	1	
198	2940	100.00%	1564	353	67	25	38	353	93	126
199	5	100.00%	5							
217	35	100.00%	22	7	1		1	7		1
218	18	100.00%	10	2	1		1	2		1
219	12	100.00%	9				1			1

CSIS Course Demographics by Ethnicity

CSIS Course Number	Total Number Students	% of Students	White	Black	Filipino	Pacific Islander	American Indian	Hispanic	Other	Unknown
220	209	100.00%	136	18	5		6	18	4	8
230	20	100.00%	12	4	1			4		
249	35	100.00%	22	3	1			3		2
250	187	100.00%	121	12	5		4	12	5	9
251A	62	100.00%	38	12	1			12	2	4
251D	63	100.00%	40	4	2			4	6	6
270	13	100.00%	8	14	1	1			1	2
274A	101	100.00%	67		2		1	14	2	2
274B	353	100.00%	204	36	7	2	2	36	9	12
275B	129	100.00%	68	12	3	2	1	12	2	6
276	23	100.00%	14	2	1			2	1	3
280	457	100.00%	283	46	10		4	46	9	17
281	437	100.00%	266	46	9		4	46	7	14
282	41	100.00%	26	2	1		1	2	2	2
290	88	100.00%	50	9	2	1	1	9	4	2
293	415	100.00%	208	33	10	5	6	33	19	18
294	14	100.00%	11	2				2		
296	327	100.00%	195	25	5	1	2	25	9	14
297	90	100.00%	61	4	2		1	4	4	5
299	2153	100.00%	1399	268	42	13	19	268	41	63
Total	28311	100.00%	16515	3275	659	234	339	3275	840	1154

APPENDIX 5

Grade Distribution Summary

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4190 **	17	0.0													
COURSE TOTAL											2	2	0.0	ANSPACH	
													0.0		
CSIS 097 WINDOWS BASICS FOR THE OFFICE															
4191	17	2.0							1		2	3	1.9	ANSPACH	
COURSE TOTAL									1		2	3	1.9		
CSIS 100 BASIC KEYBOARDING															
4193	17	3.0	3								6	9	8.7	PRESSNALL	
4194	17	3.0	1								3	4	2.9	MCMANUS	
4195	17	3.0	1	2								3	8.7	DOHERTY	
4197 **	17	0.0									2	2	0.0	SIKES	
4198	17	3.0	1									1	2.9	SMERK	
COURSE TOTAL			6	2							9	17	23.2		
CSIS 105 INTRODUCTION TO COMPUTING															
4203		5.0	5	3	1	2	2		2		6	21	100.0	SMITH	PT
4204		5.0	4	3	4	1	2		2		13	29	145.0	SMITH	PT
COURSE TOTAL			9	6	5	3	4		4		19	50	245.0		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4205		6.0	27	7	4						1	39	234.0	PATCHETT	PT
4206		6.0	11	8	6	1	2				6	34	204.0	QUALLS	
4209		6.0	6	20	5		1	1			4	37	222.0	MAYNE-STAFFORD	XP
4212		6.0	14	13	4		2		1		5	39	234.0	OLSON	PT
4214		6.0	4	19	8	1	1				4	37	222.0	MAYNE-STAFFORD	
4219		6.0	8	14	4	1	1				7	35	210.0	NORMAN	XP
4221N		6.0	2	11	10	1					6	30	180.0	NORMAN	
4223		6.0	4	9	4	3	5				12	37	222.0	GELB	XP
4224	8	12.0	3	2	7	2	1				7	22	82.3	HOTZ	
4225	8	12.0	1	2	8	4	3				9	27	98.7	HOTZ	
COURSE TOTAL			80	105	60	13	16	1	1		61	337	1909.0		
CSIS 112 WINDOWS OPERATING SYSTEMS															
4227		3.0	4	2			5				10	21	63.0	SELLERS	PT
4229		3.0	7	4	1	1	3	1			2	19	57.0	SELLERS	PT
COURSE TOTAL			11	6	1	1	8	1			12	40	120.0		
CSIS 113 INTRODUCTION TO UNIX															
4233		3.0	2	5	2	1	2				9	21	63.0	MAYNE-STAFFORD	
COURSE TOTAL			2	5	2	1	2				9	21	63.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4236		5.0		5	2	1	1				1	10	50.0	WATERS	PT
COURSE TOTAL				5	2	1	1				1	10	50.0		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 115C .NET PROGRAM-VISUAL BASIC/C#															
4237		6.0	6	2							4	12	72.0	HOTZ	
COURSE TOTAL			6	2							4	12	72.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4239		3.0	5	5	4	1	3				6	24	72.0	QUALLS	
4241		3.0	2	3	6	2	2				3	18	54.0	NORMAN	
COURSE TOTAL			7	8	10	3	5				9	42	126.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4245	17	2.0			1						2	3	1.9	SNIDER	
COURSE TOTAL					1						2	3	1.9		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4251	17	2.0		1			1				7	9	3.9	ANSPACH	
COURSE TOTAL				1			1				7	9	3.9		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4253	17	2.0	1								1	2	1.9	MCMANUS	
COURSE TOTAL			1								1	2	1.9		
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4257	17	2.0		1							2	3	1.9	MCMANUS	
COURSE TOTAL				1							2	3	1.9		
CSIS 127 COMPREHNSIVE ACCESS LEVEL II															
4259 **	17	0.0									1	1	0.0	MCMANUS	
COURSE TOTAL													0.0		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4261	17	2.0		1								1	1.9	MCMANUS	
COURSE TOTAL				1								1	1.9		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4263	17	2.0		1							1	2	1.9	THOMAS	
COURSE TOTAL				1							1	2	1.9		
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II															
4265	17	2.0			1							1	1.9	SNIDER	
COURSE TOTAL					1							1	1.9		
CSIS 132 EXPLORING THE INTERNET															
4271		2.5	8	3	1						3	15	37.5	OLSON	PT
COURSE TOTAL			8	3	1						3	15	37.5		
CSIS 134 WEB PUBLISHING I															
4275		5.0	6	7	1		2		1	1	13	31	150.0	NORMAN	
COURSE TOTAL			6	7	1		2		1	1	13	31	150.0		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 135 JAVASCRIPT PROGRAMMING															
4277		5.0	4	1		1	4				1	11	55.0	WILSON	PT
COURSE TOTAL			4	1		1	4				1	11	55.0		
CSIS 137 WEB ANIMATION															
4280		5.0	5	3	1		1				4	14	65.0	SANDRONI	PT
COURSE TOTAL			5	3	1		1				4	14	65.0		
CSIS 138 WEB PUBLISHING III															
4281		5.0	8	2	1				1			12	60.0	FLORES	PT
COURSE TOTAL			8	2	1				1			12	60.0		
CSIS 140 INTRODUCTION TO LAN MANAGEMENT															
4283N		6.0	2	5	2	1	2				1	13	78.0	UMBARGER	PT
COURSE TOTAL			2	5	2	1	2				1	13	78.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4287	8	4.0	4	4	4	2	6	1			8	29	38.4	GELB	XP
COURSE TOTAL			4	4	4	2	6	1			8	29	38.4		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4293	8	4.0	3	5	1		4				17	30	23.8	GELB	XP
COURSE TOTAL			3	5	1		4				17	30	23.8		
CSIS 144 WIDE AREA NETWORKS															
4299	8	4.0	5	5	1		4				4	19	27.4	SEEGER	PT
COURSE TOTAL			5	5	1		4				4	19	27.4		
CSIS 145 INTRODUCTION TO TCP/IP															
4301	8	4.0	1	3	3		1				16	24	14.6	CARLETON	PT
COURSE TOTAL			1	3	3		1				16	24	14.6		
CSIS 151A INTRO TO COMPUTER GRAPHICS															
4303N		3.0	10		4		3				10	27	78.0	DEAN	PT
COURSE TOTAL			10		4		3				10	27	78.0		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4304		3.0	3	2	2		2		1		5	15	45.0	CUDAHY	PT
4305		3.0	2	1	4	1	1				5	14	42.0	CUDAHY	PT
4309		3.0	12	1	1	2	10			1	16	43	129.0	DEAN	PT
COURSE TOTAL			17	4	7	3	13		1	1	26	72	216.0		
CSIS 160 INTRO/VIDEO GAME DEVELOPMENT															
4312		3.0	10	7	4		4				2	27	81.0	CORNISH	PT
COURSE TOTAL			10	7	4		4				2	27	81.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4316	8	4.0	2	1			3				3	9	11.0	KELLENBERGER	PT
COURSE TOTAL			2	1			3				3	9	11.0		

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 173B COMPUTER WORD PROCESSING															
4318	8	4.0	8	8	4		16			1	16	53	67.7	KELLENBERGER	PT
COURSE TOTAL			8	8	4		16			1	16	53	67.7		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4324		2.0		1			1				1	3	6.0	AUBRY	
COURSE TOTAL				1			1				1	3	6.0		
CSIS 190 DIGITAL MULTIMEDIA I															
4330N		6.0	6	2							1	9	54.0	CALIGIURI	PT
COURSE TOTAL			6	2							1	9	54.0		
CSIS 195 VIDEO EDITING ON THE PC															
4332N		3.0	2	4	1						3	10	30.0	QUALLS	
COURSE TOTAL			2	4	1						3	10	30.0		
CSIS 217 WEB GRAPHICS I															
4338N**		0.0	1								2	3	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 219 WEB GRAPHICS III															
4341N**		0.0	1	2							1	4	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 280 JOB SEARCH ASSIST & RETENTION															
4355N		2.0	4	3							3	10	16.0	RILEY	PT
COURSE TOTAL			4	3							3	10	16.0		
CSIS 281 DIRECTED WORK EXP IN CSIS															
4357 **		0.0	7								3	10	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4363		6.0	4	5	2	2	2				9	24	144.0	QUALLS	
4365N		6.0	8	3	3						9	23	132.0	HARRISBURG	PT
COURSE TOTAL			12	8	5	2	2				18	47	276.0		
CSIS 296 INTRO TO C++ PROGRAMMING															
4368N		6.0	3	3	2		6				8	22	132.0	HOTZ	
COURSE TOTAL			3	3	2		6				8	22	132.0		
CSIS 297 INTERMEDIATE C++ PROGRAMMING															
4370N		6.0	4	2	3						2	11	66.0	SFAKIANAKIS	PT
COURSE TOTAL			4	2	3						2	11	66.0		
CSIS 299 COMPUTER FORENSICS															
4372N		3.0	3								2	5	15.0	MEHLHOFF	PT

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR
CSIS 299 COMPUTER FORENSICS (CONT"D)														
COURSE TOTAL		3									2	5	15.0	
SUBJECT TOTAL			249	224	127	31	109	3	9	3	301	1056	4223.8	

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4347	17	2.0							1		1	2	1.9	SNIDER	
COURSE TOTAL									1		1	2	1.9		
CSIS 097 WINDOWS BASICS FOR THE OFFICE															
4349	17	2.0							1			1	1.9	SNIDER	
COURSE TOTAL									1			1	1.9		
CSIS 100 BASIC KEYBOARDING															
4351	17	3.0	1				1				2	4	5.8	PRESSNALL	
4352 **	17	0.0									5	5	0.0	MCMANUS	
4353	17	3.0	1								1	2	2.9	SNIDER	
4356	17	3.0					1					1	2.9	SIKES	
COURSE TOTAL			2				2				3	7	11.6		
CSIS 105 INTRODUCTION TO COMPUTING															
4360		5.0	7	4	2	1	1		2		7	24	120.0	SMITH	PT
4361		5.0	3	1	2		3				9	18	85.0	SMITH	PT
COURSE TOTAL			10	5	4	1	4		2		16	42	205.0		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4368		6.0	19	8	3	1					9	40	240.0	PATCHETT	PT
4374		6.0	13	9	5	1	3	1			4	36	216.0	MAYNE-STAFFORD	
4375		6.0	17	12	1	1					6	37	222.0	MAYNE-STAFFORD	XP
4378		6.0	17	11	4		1				6	39	234.0	OLSON	PT
4382		6.0	10	11	6	1	1				7	36	216.0	QUINN	XP
4383		6.0	5	1	7	1	1				1	16	96.0	GUZMAN	PT
4386N		6.0	10	7	1	3	2				2	25	150.0	MCMILLAN	PT
4387N		6.0	12	8	1		3				6	30	180.0	HARRISBURG	PT
4388	8	6.0	6	7	1	4	2	1			13	34	57.6	HOTZ	
4389	8	6.0	4	7	3		5			1	14	34	54.9	HOTZ	
COURSE TOTAL			113	81	32	12	18	2		1	68	327	1666.5		
CSIS 112 WINDOWS OPERATING SYSTEMS															
4391		3.0	7		1		2				8	18	51.0	SELLERS	PT
4392		3.0	4	3			3				11	21	63.0	SELLERS	PT
COURSE TOTAL			11	3	1		5				19	39	114.0		
CSIS 113 INTRODUCTION TO UNIX															
4395N		3.0	2	5	3	2					1	13	39.0	GEORGES	PT
4397		3.0	3	2			2				9	16	48.0	MAYNE-STAFFORD	
COURSE TOTAL			5	7	3	2	2				10	29	87.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4398		5.0	3	5	2			1			2	13	65.0	WATERS	PT
COURSE TOTAL			3	5	2			1			2	13	65.0		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 115A .NET PROGRAM-VISUAL BASIC/C#															
4399N		6.0	8	3	1	2			3		3	20	120.0	QUINN	
COURSE TOTAL			8	3	1	2			3		3	20	120.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4402		3.0	8	1	4	3	1				4	21	63.0	QUALLS	
4404N		3.0	2	4	3	1			1		7	18	54.0	GUZMAN	PT
COURSE TOTAL			10	5	7	4	1		1		11	39	117.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4320	17	2.0	1	1		1					3	6	5.8	ANSPACH	
COURSE TOTAL			1	1		1					3	6	5.8		
CSIS 121 COMPREHNSIVE WORD LEVEL II															
4322 **	17	0.0									1	1	0.0	SMERK	
COURSE TOTAL													0.0		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4326	17	2.0		1	1						5	7	3.9	MCMANUS	
COURSE TOTAL				1	1						5	7	3.9		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4328	17	2.0	1	1							1	3	3.9	MCMANUS	
COURSE TOTAL			1	1							1	3	3.9		
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4332	17	2.0					1				2	3	1.9	SMERK	
COURSE TOTAL							1				2	3	1.9		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4336 **	17	0.0									1	1	0.0	MCMANUS	
COURSE TOTAL													0.0		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4338 **	17	0.0									1	1	0.0	SIKES	
COURSE TOTAL													0.0		
CSIS 134 WEB PUBLISHING I															
4411		5.0	8	4	5	1			4	1	21	44	215.0	QUINN	
COURSE TOTAL			8	4	5	1			4	1	21	44	215.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4413		5.0	6	1	2		2				7	18	90.0	WILSON	PT
COURSE TOTAL			6	1	2		2				7	18	90.0		
CSIS 137 WEB ANIMATION															
4415		5.0	3	2	3		6				2	16	80.0	SANDRONI	PT
COURSE TOTAL			3	2	3		6				2	16	80.0		

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BUSINESS AND PROFESSIONAL STUDIES

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR															
4418N		4.0	3	2	1		1		1		2	10	40.0	BALDWIN	PT
COURSE TOTAL			3	2	1		1		1		2	10	40.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4419N	8	4.0	2	6	3	1	1				7	20	23.8	UMBARGER	PT
4421	8	4.0	7	2	1	1	1				10	22	21.9	LYCAN	PT
COURSE TOTAL			9	8	4	2	2				17	42	45.7		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4422N	8	4.0	2	2	4		1				5	14	16.5	UMBARGER	PT
4423	8	4.0	4	4	4		4				6	22	29.3	LYCAN	PT
COURSE TOTAL			6	6	8		5				11	36	45.8		
CSIS 151A INTRO TO COMPUTER GRAPHICS															
4427N		3.0	6				3				10	19	57.0	DEAN	PT
COURSE TOTAL			6				3				10	19	57.0		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4428		3.0	4	4	4		1				4	17	51.0	CUDAHY	PT
4430		3.0	5	4	3	1	2				5	20	60.0	CUDAHY	PT
4431		3.0	8	1	2		16		1		10	38	114.0	DEAN	PT
COURSE TOTAL			17	9	9	1	19		1		19	75	225.0		
CSIS 160 INTRO/VIDEO GAME DEVELOPMENT															
4434		3.0	7	6	1	1					10	25	72.0	CORNISH	PT
COURSE TOTAL			7	6	1	1					10	25	72.0		
CSIS 165 ASSEMBLY LANG/MACHINE ARCHITEC															
4435N		6.0	2	3	3	3					10	21	126.0	HOTZ	
COURSE TOTAL			2	3	3	3					10	21	126.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4437	8	4.0		3	1		2				1	7	11.0	KELLENBERGER	PT
COURSE TOTAL				3	1		2				1	7	11.0		
CSIS 174B COMPUTER DATABASE PKGS															
4443	8	4.0	7	1	3		21				12	44	58.5	KELLENBERGER	PT
COURSE TOTAL			7	1	3		21				12	44	58.5		
CSIS 175B COMPUTER ELEC SPREADSHEET PKGS															
4447	8	4.0	5	4	5		21				11	46	64.0	KELLENBERGER	PT
COURSE TOTAL			5	4	5		21				11	46	64.0		
CSIS 190 DIGITAL MULTIMEDIA I															
4462N		6.0	8	1		1						10	60.0	CALIGIURI	PT
COURSE TOTAL			8	1		1						10	60.0		
CSIS 195 VIDEO EDITING ON THE PC															
4463		3.0	8	1							5	14	42.0	QUALLS	XP

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 195 VIDEO EDITING ON THE PC (CONT"D)															
COURSE TOTAL			8	1							5	14	42.0		
CSIS 217 WEB GRAPHICS I															
4467N**		0.0	7			1					2	10	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 218 WEB GRAPHICS II															
4468N**		0.0	4	2							2	8	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 230 DESKTOP PUBLISHING															
4469N**		0.0	1								1	2	0.0	ROTH	PT
COURSE TOTAL													0.0		
CSIS 251D INTERMEDIATE COMPUTER GRAPHICS															
4472N		3.0	11	1	2		1				1	16	48.0	CALIGIURI	PT
COURSE TOTAL			11	1	2		1				1	16	48.0		
CSIS 276 INTRODUCTION TO SQL															
4474N		3.0	5	5	1						3	14	42.0	MAYNE-STAFFORD	
COURSE TOTAL			5	5	1						3	14	42.0		
CSIS 281 DIRECTED WORK EXP IN CSIS															
4475 **		0.0	3								1	4	0.0	RILEY	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4476		6.0	1	5			2				6	14	84.0	QUALLS	
4477		6.0	3	6	3	1					7	20	120.0	QUALLS	
COURSE TOTAL			4	11	3	1	2				13	34	204.0		
CSIS 296 INTRO TO C++ PROGRAMMING															
4480		6.0	2	2	6	3					6	19	114.0	HOTZ	XP
COURSE TOTAL			2	2	6	3					6	19	114.0		
CSIS 299 COMPUTER FORENSICS															
4481N		3.0	2	1	1		1					5	15.0	MEHLHOFF	PT
4482	8	4.0	4			2	3				2	11	16.5	FLORES	PT
COURSE TOTAL			6	1	1	2	4				2	16	31.5		
SUBJECT TOTAL			287	183	109	37	122	3	14	2	307	1064	4076.9		

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BUSINESS AND PROFESSIONAL STUDIES

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4190	17	2.0							3			3	5.8	ANSPACH	
COURSE TOTAL									3			3	5.8		
CSIS 100 BASIC KEYBOARDING															
4193	17	3.0	1				2				5	8	8.7	HARLEY	
4194	17	3.0	1				2				1	4	8.7	MCMANUS	
4195	17	3.0			1		1					2	5.8	HARLEY	
4199	17	3.0	2									2	5.8	THOMAS	
COURSE TOTAL			4		1		5				6	16	29.0		
CSIS 105 INTRODUCTION TO COMPUTING															
4203		5.0	10	4		2					3	19	95.0	SMITH	PT
4204		5.0	6	3	4	1	1				3	18	90.0	SMITH	PT
COURSE TOTAL			16	7	4	3	1				6	37	185.0		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4205		6.0	29	3	3		1				3	39	228.0	PATCHETT	PT
4206		6.0	23	3	1		1				5	33	198.0	OLSON	PT
4209		6.0	5	17	4	2	2				8	38	228.0	MAYNE-STAFFORD	
4212		6.0	8	9	7		1				6	31	186.0	QUINN	
4214		6.0	10	12	6						6	34	204.0	MAYNE-STAFFORD	
4219		6.0	6	9	10	1	4				7	37	222.0	LYCAN	PT
4221N		6.0	5	10	3	1					4	23	138.0	DOCKTER	PT
4223N		6.0	11	5	4	1	1					22	132.0	MCMILLAN	PT
4224	8	12.0	7	4	7	5	6				6	35	159.1	HOTZ	
4225	8	12.0	9	8	4	2	3		1		11	38	148.1	HOTZ	
COURSE TOTAL			113	80	49	12	19		1		56	330	1843.2		
CSIS 112 WINDOWS OPERATING SYSTEMS															
4227		3.0	4	1			6				4	15	45.0	SELLERS	PT
4229		3.0	4				10				4	18	54.0	SELLERS	PT
COURSE TOTAL			8	1			16				8	33	99.0		
CSIS 113 INTRODUCTION TO UNIX															
4233		3.0	4	4	3		1				6	18	54.0	MAYNE-STAFFORD	
COURSE TOTAL			4	4	3		1				6	18	54.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4236		5.0	6	1	2	2	1	2			3	17	85.0	WATERS	PT
COURSE TOTAL			6	1	2	2	1	2			3	17	85.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4239		3.0	3	11	3		1				7	25	75.0	QUALLS	XP
4241		3.0	3	3	3		2				3	14	39.0	QUALLS	
COURSE TOTAL			6	14	6		3				10	39	114.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4245	17	2.0	2				1					3	5.8	SNIDER	
COURSE TOTAL			2				1					3	5.8		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 122 COMPREHNSIVE WORD LEVEL III															
4249 **	17	0.0									1	1	0.0	SMERK	
COURSE TOTAL													0.0		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4251	17	2.0	1								3	4	1.9	CORRELL	
COURSE TOTAL			1								3	4	1.9		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4253	17	2.0		1			2				1	4	5.8	MCMANUS	
COURSE TOTAL				1			2				1	4	5.8		
CSIS 125 COMPREHNSIVE EXCEL LEVEL III															
4255	17	2.0		1							2	3	1.9	MCMANUS	
COURSE TOTAL				1							2	3	1.9		
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4257	17	2.0	1		1							2	3.9	SMERK	
COURSE TOTAL			1		1							2	3.9		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4261	17	2.0	1	1							1	3	3.9	MCMANUS	
COURSE TOTAL			1	1							1	3	3.9		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4263	17	2.0					1					1	1.9	DOHERTY	
COURSE TOTAL							1					1	1.9		
CSIS 132 INTRODUCTION TO THE INTERNET															
4271		2.5	10	2					1		3	16	40.0	FLORES	PT
COURSE TOTAL			10	2					1		3	16	40.0		
CSIS 134 WEB PUBLISHING I															
4273		5.0	3	5	4		2		3		6	23	115.0	QUINN	
4275		5.0	10	5	6		1		5		11	38	190.0	QUINN	
COURSE TOTAL			13	10	10		3		8		17	61	305.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4277		5.0	6						1		13	20	100.0	WILSON	PT
COURSE TOTAL			6						1		13	20	100.0		
CSIS 136 WEB PUBLISHING II															
4279N		5.0	6	2		2	1				5	16	75.0	EISENBERG	PT
COURSE TOTAL			6	2		2	1				5	16	75.0		
CSIS 137 WEB ANIMATION															
4280		5.0	8	2							9	19	95.0	MILES	PT
COURSE TOTAL			8	2							9	19	95.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 138 WEB PUBLISHING III															
4281		5.0	7	5							3	15	70.0	FLORES	PT
COURSE TOTAL			7	5							3	15	70.0		
CSIS 140 INTRODUCTION TO LAN MANAGEMENT															
4283N		6.0	3	6	3	1	1				1	15	90.0	UMBARGER	PT
COURSE TOTAL			3	6	3	1	1				1	15	90.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4287N	8	4.0	1	2	2	2	5	1			5	18	23.8	GELB	XP
4291	8	4.0	7	1	3	1	2				7	21	25.6	GELB	
COURSE TOTAL			8	3	5	3	7	1			12	39	49.4		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4293N	8	4.0	1	3		1	5				3	13	18.3	GELB	XP
4297	8	4.0	3	1							9	13	7.3	GELB	XP
COURSE TOTAL			4	4		1	5				12	26	25.6		
CSIS 151A INTRO TO COMPUTER GRAPHICS															
4303N		3.0	8		1		2				5	16	48.0	DEAN	PT
COURSE TOTAL			8		1		2				5	16	48.0		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4304		3.0	4	2			1				11	18	54.0	CUDAHY	PT
4305		3.0	6	2	3	2	1				5	19	54.0	CUDAHY	PT
4309		3.0	7	3	1		12	1			15	39	117.0	DEAN	PT
COURSE TOTAL			17	7	4	2	14	1			31	76	225.0		
CSIS 160 INTRO/VIDEO GAME DEVELOPMENT															
4312		3.0	8	10	2		2				2	24	72.0	CORNISH	PT
COURSE TOTAL			8	10	2		2				2	24	72.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4316	8	4.0	5		1		3					9	16.5	KELLENBERGER	PT
COURSE TOTAL			5		1		3					9	16.5		
CSIS 173B COMPUTER WORD PROCESSING															
4318	8	4.0	8	7	5	1	22		1		7	51	80.5	KELLENBERGER	PT
COURSE TOTAL			8	7	5	1	22		1		7	51	80.5		
CSIS 174B COMPUTER DATABASE PKGS															
4319N	8	4.0	4	3	2						2	11	16.5	QUINN	
COURSE TOTAL			4	3	2						2	11	16.5		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4324		2.0		1			2		1			4	8.0	JENSEN	
COURSE TOTAL				1			2		1			4	8.0		
CSIS 190 DIGITAL MULTIMEDIA I															
4330N		6.0	2	2		2					2	8	48.0	CALIGIURI	PT

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 190 DIGITAL MULTIMEDIA I (CONT"D)															
COURSE TOTAL			2	2		2					2	8	48.0		
CSIS 195 VIDEO EDITING ON THE PC															
4332N		3.0	10		1		2				3	16	48.0	QUALLS	XP
COURSE TOTAL			10		1		2				3	16	48.0		
CSIS 198 SUPERVISED TUTORING - CSIS															
4336 **	16	0.0									17	17	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 217 WEB GRAPHICS I															
4338N**		0.0									1	1	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 219 WEB GRAPHICS III															
4341N**		0.0	1									1	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 220 SYSTEMS ANALYSIS & DESIGN															
4342		3.0	2	3	3	1	1				4	14	42.0	MAYNE-STAFFORD	
COURSE TOTAL			2	3	3	1	1				4	14	42.0		
CSIS 230 DESKTOP PUBLISHING															
4344N**		0.0	1									1	0.0	ROTH	PT
COURSE TOTAL													0.0		
CSIS 274B ADVANCED DATABASE PACKAGES															
4350N	8	4.0	4	5			1				2	12	18.3	QUINN	
COURSE TOTAL			4	5			1				2	12	18.3		
CSIS 280 JOB SEARCH ASSIST & RETENTION															
4355N		2.0	11	4								15	30.0	RILEY	PT
COURSE TOTAL			11	4								15	30.0		
CSIS 281 DIRECTED WORK EXP IN CSIS															
4357 **		0.0	15									15	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4363		6.0	3	5	1		2				9	20	114.0	QUALLS	
4365		6.0	4	5			2				4	15	90.0	QUALLS	
COURSE TOTAL			7	10	1		4				13	35	204.0		
CSIS 296 INTRO TO C++ PROGRAMMING															
4368N		6.0	7	5	2	1	4				5	24	144.0	HOTZ	
COURSE TOTAL			7	5	2	1	4				5	24	144.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 297 INTERMEDIATE C++ PROGRAMMING															
4370N		6.0	5	1	1		1				2	10	60.0	SFAKIANAKIS	PT
COURSE TOTAL			5	1	1		1				2	10	60.0		
CSIS 299 COMPUTER FORENSICS															
4372N	8	4.0	3	1								4	7.3	MEHLHOFF	PT
4373N	8	4.0	3			2	4				2	11	16.5	HOTZ	
COURSE TOTAL			6	1		2	4				2	15	23.8		
SUBJECT TOTAL			331	203	107	33	129	4	16		257	1080	4374.7		

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4347 **	17	0.0													
COURSE TOTAL											1	1	0.0	ANSPACH	
													0.0		
CSIS 100 BASIC KEYBOARDING															
4351	17	3.0		1							3	4	2.9	HARLEY	
4352	17	3.0	2				2			1	1	6	14.6	MCMANUS	
4353	17	3.0				1						1	2.9	HARLEY	
4354 **	17	0.0									1	1	0.0	THOMAS	
4356	17	3.0					2				1	3	5.8	THOMAS	
COURSE TOTAL			2	1		1	4			1	5	14	26.2		
CSIS 105 INTRODUCTION TO COMPUTING															
4360N		5.0	10	2	3	1	1			1	9	27	135.0	HEIDLER	PT
4361		5.0	9	2	2	2	2		1		13	31	155.0	SMITH	PT
COURSE TOTAL			19	4	5	3	3		1	1	22	58	290.0		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4368		6.0	31	4	1						6	42	252.0	PATCHETT	PT
4374		6.0	3	14	8	1	2	1			9	38	228.0	MAYNE-STAFFORD	
4375		6.0	5	9	6	3	4				3	30	180.0	MAYNE-STAFFORD	
4378		6.0	9	16	8	2	2				2	39	234.0	QUINN	
4382		6.0	11	12	8	2					9	42	246.0	QUINN	
4383		6.0	6	6	8		2				10	32	192.0	MCMILLAN	PT
4386N		6.0	8	8	1		1				1	19	114.0	SHARIFRAZI	PT
4387N		6.0	7	10	6	2	3				4	32	192.0	ALLEN	PT
4388		6.0	8	13	7	2	4				6	40	240.0	LINGVALL	PT
4389		6.0	6	4	1	1	5				11	28	168.0	HOTZ	
COURSE TOTAL			94	96	54	13	23	1			61	342	2046.0		
CSIS 112 WINDOWS OPERATING SYSTEMS															
4391		3.0	4	1	3		6				5	19	57.0	SELLERS	PT
4392		3.0	4	5	4	2					5	20	60.0	OLSON	PT
4393N		3.0	8		2	2	1				7	20	60.0	SELLERS	PT
COURSE TOTAL			16	6	9	4	7				17	59	177.0		
CSIS 113 INTRODUCTION TO UNIX															
4395		3.0	4	1			4		1		4	14	39.0	SFAKIANAKIS	PT
4397		3.0	2	4		1	3				9	19	57.0	MAYNE-STAFFORD	
COURSE TOTAL			6	5		1	7		1		13	33	96.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4398		5.0	4	4	2		4				7	21	100.0	WATERS	PT
COURSE TOTAL			4	4	2		4				7	21	100.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4402		3.0	3	8	2	4	2		1		1	21	63.0	QUALLS	
4404N		3.0	6	1	3	1	3	1			10	25	75.0	GUZMAN	PT

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BUSINESS AND PROFESSIONAL STUDIES

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT (CONT"D)														
COURSE TOTAL			9	9	5	5	5	1	1		11	46	138.0	
CSIS 120 COMPREHNSIVE WORD LEVEL I														
4320	17	2.0					1			1	1	3	3.9	SNIDER
COURSE TOTAL							1			1	1	3	3.9	
CSIS 122 COMPREHNSIVE WORD LEVEL III														
4324 **	17	0.0									1	1	0.0	SMERK
COURSE TOTAL													0.0	
CSIS 123 COMPREHNSIVE EXCEL LEVEL I														
4326	17	2.0	1				1				1	3	3.9	CORRELL
COURSE TOTAL			1				1				1	3	3.9	
CSIS 124 COMPREHNSIVE EXCEL LEVEL II														
4328	17	2.0	2								2	4	3.9	MCMANUS
COURSE TOTAL			2								2	4	3.9	
CSIS 125 COMPREHNSIVE EXCEL LEVEL III														
4330	17	2.0	2								1	3	3.9	MCMANUS
COURSE TOTAL			2								1	3	3.9	
CSIS 126 COMPREHNSIVE ACCESS LEVEL I														
4332	17	2.0	1								3	4	1.9	SNIDER
COURSE TOTAL			1								3	4	1.9	
CSIS 127 COMPREHNSIVE ACCESS LEVEL II														
4334	17	2.0	1				1				2	4	3.9	MCMANUS
COURSE TOTAL			1				1				2	4	3.9	
CSIS 128 COMPREHNSIVE ACCESS LEVEL III														
4336 **	17	0.0									2	2	0.0	MCMANUS
COURSE TOTAL													0.0	
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I														
4338 **	17	0.0									2	2	0.0	DOHERTY
COURSE TOTAL													0.0	
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II														
4340 **	17	0.0									1	1	0.0	DOHERTY
COURSE TOTAL													0.0	
CSIS 134 WEB PUBLISHING I														
4410		5.0	6	3	2	1	2		1		7	22	110.0	QUINN
4411		5.0	7	8	1				3		14	33	165.0	QUINN
COURSE TOTAL			13	11	3	1	2		4		21	55	275.0	

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BUSINESS AND PROFESSIONAL STUDIES

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 135 JAVASCRIPT PROGRAMMING															
4413		5.0	5	2	1		2				4	14	70.0	WILSON	PT
COURSE TOTAL			5	2	1		2				4	14	70.0		
CSIS 136 WEB PUBLISHING II															
4414N		5.0	6	1	4	2	2				5	20	100.0	EISENBERG	PT
COURSE TOTAL			6	1	4	2	2				5	20	100.0		
CSIS 137 WEB ANIMATION															
4415		5.0	12	2	3						6	23	110.0	MILES	PT
COURSE TOTAL			12	2	3						6	23	110.0		
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR															
4418N		4.0	6	5	1	1	1					14	56.0	KEMP	PT
COURSE TOTAL			6	5	1	1	1					14	56.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4419N	8	4.0	4	5	2	2	7				6	26	36.6	GELB	XP
4421	8	4.0		4	2	1	4				9	20	20.1	GELB	
COURSE TOTAL			4	9	4	3	11				15	46	56.7		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4422N	8	4.0	7		6	2	5				2	22	36.6	GELB	XP
4424	8	4.0	1	4	3		2	1			5	16	20.1	GELB	
COURSE TOTAL			8	4	9	2	7	1			7	38	56.7		
CSIS 144 WIDE AREA NETWORKS															
4425N	8	4.0	2	3	2		1			1	1	10	16.5	SEEGER	PT
COURSE TOTAL			2	3	2		1			1	1	10	16.5		
CSIS 145 INTRODUCTION TO TCP/IP															
4426N	8	4.0	3	2	4							9	16.5	CARLETON	PT
COURSE TOTAL			3	2	4							9	16.5		
CSIS 151A INTRO TO COMPUTER GRAPHICS															
4427N		3.0	9				2		2		10	23	66.0	DEAN	PT
COURSE TOTAL			9				2		2		10	23	66.0		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4428		3.0	9	5	1		1				3	19	54.0	BEKHTYAR	PT
4430		3.0	4	8	3	1	3				5	24	72.0	CUDAHY	PT
4431		3.0	6	2	1		9				13	31	93.0	DEAN	PT
COURSE TOTAL			19	15	5	1	13				21	74	219.0		
CSIS 160 INTRO/VIDEO GAME DEVELOPMENT															
4434		3.0	6	9	4		1				4	24	72.0	CORNISH	PT
COURSE TOTAL			6	9	4		1				4	24	72.0		
CSIS 165 ASSEMBLY LANG/MACHINE ARCHITEC															
4435		6.0	4	2	2	1					2	11	66.0	HOTZ	

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 165 ASSEMBLY LANG/MACHINE ARCHITEC (CONT"D)															
COURSE TOTAL			4	2	2	1					2	11	66.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4437	8	4.0	8				8				7	23	29.3	KELLENBERGER	PT
COURSE TOTAL			8				8				7	23	29.3		
CSIS 173B COMPUTER WORD PROCESSING															
4438	8	4.0	5		2	3	3				9	22	23.8	KELLENBERGER	PT
COURSE TOTAL			5		2	3	3				9	22	23.8		
CSIS 175B COMPUTER ELEC SPREADSHEET PKGS															
4447	8	2.0	5	9			12				7	33	23.8	KELLENBERGER	PT
COURSE TOTAL			5	9			12				7	33	23.8		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4457N		2.0	1				1			1		3	6.0	JENSEN	
COURSE TOTAL			1				1			1		3	6.0		
CSIS 190 DIGITAL MULTIMEDIA I															
4462N		6.0	7	5							2	14	84.0	CALIGIURI	PT
COURSE TOTAL			7	5							2	14	84.0		
CSIS 195 VIDEO EDITING ON THE PC															
4463N		3.0	2	7	1	3	3				8	24	69.0	QUALLS	XP
COURSE TOTAL			2	7	1	3	3				8	24	69.0		
CSIS 198 SUPERVISED TUTORING - CSIS															
4465 **	16	0.0									26	26	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 217 WEB GRAPHICS I															
4467N**		0.0	3		1							4	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 218 WEB GRAPHICS II															
4468N**		0.0	2		1							3	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 230 DESKTOP PUBLISHING															
4469N**		0.0	1									1	0.0	ROTH	PT
COURSE TOTAL													0.0		
CSIS 251D INTERMEDIATE COMPUTER GRAPHICS															
4472N		3.0	7	6			2				3	18	54.0	BEKHTYAR	PT
COURSE TOTAL			7	6			2				3	18	54.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR
CSIS 276 INTRODUCTION TO SQL														
4474N		3.0	11	2		2	1		1		6	23	69.0	MAYNE-STAFFORD
COURSE TOTAL			11	2		2	1		1		6	23	69.0	
CSIS 281 DIRECTED WORK EXP IN CSIS														
4475 **		0.0	6									6	0.0	GELB
COURSE TOTAL													0.0	
CSIS 293 INTRO TO JAVA PROGRAMMING														
4476		6.0	4	4	2	1	2				8	21	126.0	QUALLS
4477		6.0	7	8	2	2	1				4	24	144.0	QUALLS
COURSE TOTAL			11	12	4	3	3				12	45	270.0	
CSIS 296 INTRO TO C++ PROGRAMMING														
4480		6.0	6	3	3	2	1				4	19	114.0	HOTZ
COURSE TOTAL			6	3	3	2	1				4	19	114.0	
CSIS 299 COMPUTER FORENSICS														
4481	8	4.0	2				2		1	1	3	9	11.0	HOTZ
COURSE TOTAL			2				2		1	1	3	9	11.0	
SUBJECT TOTAL			319	234	127	51	134	3	11	6	303	1188	4828.9	

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4190	16	2.0							5	3	5	13	14.6	ANSPACH	
COURSE TOTAL									5	3	5	13	14.6		
CSIS 097 WINDOWS BASICS FOR THE OFFICE															
4191	16	2.0							4	1	5	10	9.1	SMERK	
COURSE TOTAL									4	1	5	10	9.1		
CSIS 100 BASIC KEYBOARDING															
4193	16	3.0	2	1			1				8	12	11.0	HARLEY	
4194	16	3.0	8	1	2				1		2	14	32.9	HARLEY	
4195	16	3.0	2								2	4	5.5	MCMANUS	
4197	16	3.0	3								1	4	8.2	SNIDER	
4198 **	16	0.0									3	3	0.0	SNIDER	
4199	16	3.0	1				1				1	3	5.5	ANSPACH	
COURSE TOTAL			16	2	2		2		1		14	37	63.1		
CSIS 105 INTRODUCTION TO COMPUTING															
4203		5.0	8	5	2	2	1		2		5	25	125.0	SMITH	PT
4204N		5.0	5	3	1		1				3	13	65.0	HEIDLER	PT
COURSE TOTAL			13	8	3	2	2		2		8	38	190.0		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4205		6.0	14	12	2	2	5	1			5	41	246.0	PATCHETT	PT
4206		6.0	7	7	5		1				3	23	138.0	OLSON	PT
4209		6.0	7	11	10		1				7	36	216.0	MAYNE-STAFFORD	
4211		6.0	26	2	3		1				3	35	210.0	CORTEZ-KARIMI	PT
4212		6.0	9	7	5	1	2				6	30	180.0	MCMILLAN	PT
4214		6.0	12	13	7		1				4	37	222.0	QUINN	
4216		6.0	5	12	2	1	2		1		6	29	168.0	MAYNE-STAFFORD	
4219		6.0	3	2	5	1	1				8	20	120.0	KALLAS	PT
4221N		6.0	7	6	2	1					6	22	132.0	DOCKTER	PT
4223N		6.0	6	7	5	2	2				4	26	156.0	ALLEN	PT
4224		6.0	7	4	3	2	3				8	27	156.0	HOTZ	XP
4225		6.0	24	8	2	2	3				5	44	264.0	LINGVALL	PT
6001 **	7	0.0	13	3	2	2						20	0.0	WEINBERG	
COURSE TOTAL			127	91	51	12	22	1	1		65	370	2208.0		
CSIS 112 INTRO IBM PC DISK OPERATNG SYS															
4227		3.0	4				7				7	18	54.0	SELLERS	PT
4229		3.0	5		1		6				3	15	45.0	SELLERS	PT
COURSE TOTAL			9		1		13				10	33	99.0		
CSIS 113 INTRODUCTION TO UNIX															
4231		3.0	3	2	3	1	2				9	20	60.0	SFAKIANAKIS	PT
4233		3.0	8	3	1		2				7	21	63.0	MAYNE-STAFFORD	
COURSE TOTAL			11	5	4	1	4				16	41	123.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 114 SMALL COMPUTER SYSTEMS															
4236		5.0	3	3	2	1	1				3	13	65.0	WATERS	PT
COURSE TOTAL			3	3	2	1	1				3	13	65.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4239		3.0	6	6	2	1	2				8	25	75.0	QUALLS	
4241N		3.0	4	6	1	1	3	3	2		10	30	90.0	GUZMAN	PT
4243N		3.0	3	3	1	3					10	20	57.0	GUZMAN	PT
COURSE TOTAL			13	15	4	5	5	3	2		28	75	222.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4245	16	2.0		1							3	4	1.8	SIKES	
COURSE TOTAL				1							3	4	1.8		
CSIS 121 COMPREHNSIVE WORD LEVEL II															
4247	16	2.0	1	1							2	4	3.7	SIKES	
COURSE TOTAL			1	1							2	4	3.7		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4251	16	2.0	3								6	9	5.5	SMITH	
COURSE TOTAL			3								6	9	5.5		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4253	16	2.0	3	2							1	6	9.1	MCMANUS	
COURSE TOTAL			3	2							1	6	9.1		
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4257	16	2.0	4								1	5	7.3	SMERK	
COURSE TOTAL			4								1	5	7.3		
CSIS 127 COMPREHNSIVE ACCESS LEVEL II															
4259	16	2.0	2	2								4	7.3	MCMANUS	
COURSE TOTAL			2	2								4	7.3		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4261	16	2.0					1					1	1.8	MCMANUS	
COURSE TOTAL							1					1	1.8		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4263	16	2.0	1	1			1				3	6	5.5	SMITH	
COURSE TOTAL			1	1			1				3	6	5.5		
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II															
4265	16	2.0	1								1	2	1.8	SMITH	
COURSE TOTAL			1								1	2	1.8		
CSIS 132 INTRODUCTION TO THE INTERNET															
4271		2.5	6	2							7	15	37.5	FLORES	PT
COURSE TOTAL			6	2							7	15	37.5		

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CSIS 134 WEB PUBLISHING I															
4273		5.0	6	3			3				7	19	95.0	QUINN	
4275		5.0	8	12	5		2				11	38	190.0	QUINN	
COURSE TOTAL			14	15	5		5				18	57	285.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4277		5.0	7		4	1					4	16	80.0	WILSON	PT
COURSE TOTAL			7		4	1					4	16	80.0		
CSIS 136 WEB PUBLISHING II															
4279N		5.0	6	2	3		2				6	19	95.0	EISENBERG	PT
COURSE TOTAL			6	2	3		2				6	19	95.0		
CSIS 137 WEB ANIMATION															
4280		5.0	12	2		4					3	21	105.0	MILES	PT
COURSE TOTAL			12	2		4					3	21	105.0		
CSIS 138 WEB PUBLISHING III															
4281		5.0	13	3			1				1	18	90.0	FLORES	PT
COURSE TOTAL			13	3			1				1	18	90.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4287N	8	4.0	5	7	6		4				1	23	40.2	GELB	
4291	8	4.0	2	2			7	1			12	24	21.9	GELB	
6008 **	8	0.0	4	13	2	1	1					21	0.0	CARLETON	PT
COURSE TOTAL			7	9	6		11	1			13	47	62.1		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4293N	8	4.0	2	4	6	1	2				6	21	27.4	GELB	XP
4297	8	4.0	3	1	1	1	3				14	23	16.5	GELB	XP
COURSE TOTAL			5	5	7	2	5				20	44	43.9		
CSIS 144 WIDE AREA NETWORKS															
4299N	8	4.0	3	3	2	2	2				2	14	21.9	SEEGER	PT
COURSE TOTAL			3	3	2	2	2				2	14	21.9		
CSIS 145 INTRODUCTION TO TCP/IP															
4301N	8	4.0	1	1	1	2	6	1			7	19	21.9	SEEGER	PT
COURSE TOTAL			1	1	1	2	6	1			7	19	21.9		
CSIS 151A INTRO TO COMPUTER GRAPHICS															
4303N		3.0	11		1		2				9	23	69.0	DEAN	PT
COURSE TOTAL			11		1		2				9	23	69.0		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4304		3.0	6	8	1		4		1		2	22	66.0	BEKHTYAR	PT
4305		3.0	7	4	3		3				6	23	69.0	CUDAHY	PT
4309		3.0	10	1	1	1	6				14	33	90.0	DEAN	PT

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 151D INTRO TO COMPUTER GRAPHICS							(CONT"D)								
COURSE TOTAL			23	13	5	1	13		1		22	78	225.0		
CSIS 165 ASSEMBLY LANG/MACHINE ARCHITEC															
4313		6.0	4	2	1		1		1	1	5	15	90.0	HOTZ	
COURSE TOTAL			4	2	1		1		1	1	5	15	90.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4316	8	4.0	9		1	1	3				4	18	25.6	KELLENBERGER	PT
COURSE TOTAL			9		1	1	3				4	18	25.6		
CSIS 173B COMPUTER WORD PROCESSING															
4318	8	4.0	9	5	2	1	17			2	9	45	65.8	KELLENBERGER	PT
COURSE TOTAL			9	5	2	1	17			2	9	45	65.8		
CSIS 174B COMPUTER DATABASE PKGS															
4319N	8	4.0	7	5	1	1					3	17	25.6	QUINN	
6014 **	5	0.0	8	6	3	5						22	0.0	WEINBERG	
COURSE TOTAL			7	5	1	1					3	17	25.6		
CSIS 190 DIGITAL MULTIMEDIA I															
4330N		6.0	2	1			3				3	9	54.0	CALIGIURI	PT
COURSE TOTAL			2	1			3				3	9	54.0		
CSIS 195 VIDEO EDITING ON THE PC															
4332N		3.0	5	2	1	1					11	20	60.0	QUALLS	
COURSE TOTAL			5	2	1	1					11	20	60.0		
CSIS 198 SUPERVISED TUTORING - CSIS															
4336 **	16	0.0									17	17	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 218 WEB GRAPHICS II															
4339N**		0.0	6						1			7	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 219 WEB GRAPHICS III															
4340N**		0.0	4									4	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 220 SYSTEMS ANALYSIS & DESIGN															
4342N		3.0	8									8	24.0	BEHNKE	PT
COURSE TOTAL			8									8	24.0		
CSIS 230 DESKTOP PUBLISHING															
4344N**		0.0	3								1	4	0.0	ROTH	PT
COURSE TOTAL													0.0		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 251A INTERMEDIATE COMPUTER GRAPHICS															
4348N		3.0	7	5	2	4					4	22	66.0	BEKHTYAR	PT
COURSE TOTAL			7	5	2	4					4	22	66.0		
CSIS 274A ADVANCED DATABASE PACKAGES															
6019 **	4	0.0	11	6	3	1						21	0.0	KEMP	PT
COURSE TOTAL													0.0		
CSIS 274B ADVANCED DATABASE PACKAGES															
4350N	8	4.0	7	3	1	1	3				6	21	27.4	QUINN	
COURSE TOTAL			7	3	1	1	3				6	21	27.4		
CSIS 280 JOB SEARCH ASSIST & RETENTION															
4355N		2.0	8	3	1							12	24.0	BROOKS	PT
6022 **	10	0.0	14	2		3	1				1	21	0.0	WEINBERG	
COURSE TOTAL			8	3	1							12	24.0		
CSIS 281 DIRECTED WORK EXP IN CSIS															
4357 **		0.0	14									14	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4363		6.0	3	7	6	1	2				2	21	126.0	QUALLS	
4365		6.0	3	7	4	1				1	9	25	150.0	QUALLS	
COURSE TOTAL			6	14	10	2	2			1	11	46	276.0		
CSIS 296 INTRO TO C++ PROGRAMMING															
4368		6.0	4	3	3	1	1				8	20	120.0	HOTZ	
COURSE TOTAL			4	3	3	1	1				8	20	120.0		
CSIS 297 INTERMEDIATE C++ PROGRAMMING															
4370N		6.0	9	2	1						6	18	108.0	WHITESIDE	PT
COURSE TOTAL			9	2	1						6	18	108.0		
CSIS 299 INTRODUCTION TO SQL															
4375N		3.0	5	5					1		8	19	57.0	MAYNE-STAFFORD	
6027 **	7	0.0	9	7	5	1						22	0.0	KEMP	PT
6028 **	4	0.0	8	12		1					1	22	0.0	KEMP	PT
COURSE TOTAL			5	5					1		8	19	57.0		
SUBJECT TOTAL			405	236	125	45	128	6	18	8	361	1332	5197.3		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4347	17	2.0							3	1	1	5	7.8	ANSPACH	
COURSE TOTAL									3	1	1	5	7.8		
CSIS 097 WINDOWS BASICS FOR THE OFFICE															
4349	17	2.0							3		1	4	5.8	ANSPACH	
COURSE TOTAL									3		1	4	5.8		
CSIS 100 BASIC KEYBOARDING															
4351	17	3.0	4				1				5	10	14.6	HARLEY	
4352	17	3.0	1	2			1				3	7	11.7	MCMANUS	
4353	17	3.0	2	1			1				5	9	11.7	HARLEY	
4354	17	3.0					1				1	2	2.9	SNIDER	
4355	17	3.0	2								1	3	5.8	SMERK	
4356	17	3.0					1				2	3	2.9	SIKES	
COURSE TOTAL			9	3			5				17	34	49.6		
CSIS 105 INTRODUCTION TO COMPUTING															
4360N		5.0	8	2	1			1			10	22	110.0	HEIDLER-III	PT
4361		5.0	6	2	2	4	1				7	22	110.0	SMITH	PT
4362N		5.0	11		1						6	18	90.0	NORMAN	PT
6505	6	13.3	17	1	2	1					1	22	95.8	WEINBERG	
COURSE TOTAL			42	5	6	5	1	1			24	84	405.8		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4366		6.0	3	7	7	1	4				6	28	168.0	OLSON	PT
4368		6.0	13	4	4	1	7		1		10	40	240.0	PATCHETT	PT
4372		6.0	4	4	6		3				4	21	126.0	LYCAN	PT
4374		6.0	15	12	2	1	2				3	35	210.0	MAYNE-STAFFORD	
4375		6.0	11	9	6	2					3	31	186.0	MAYNE-STAFFORD	
4378		6.0	15	15	9	1					7	47	282.0	QUINN	
4382		6.0	13	14	6	2	3				6	44	264.0	QUINN	
4383		6.0	8	14	5	1				1	7	36	210.0	MCMILLAN	PT
4384		6.0	7	6	3				1		4	21	126.0	KALLAS	PT
4386N		6.0	5	7	2		1				5	20	120.0	RUSSELL	PT
4387N		6.0	16	6	4						4	30	180.0	SHARIFRAZI	PT
4388		6.0	12	5	5	3	8		1		14	48	288.0	LINGVALL	PT
4389		6.0	5	6		1	8		1		11	32	192.0	HOTZ	
COURSE TOTAL			127	109	59	13	36		4	1	84	433	2592.0		
CSIS 112 INTRO IBM PC DISK OPERATNG SYS															
4391		3.0	3	3	3	3	7			1	7	27	78.0	SELLERS	PT
4392		3.0	5	8	6		4				2	25	75.0	OLSON	PT
4393N		3.0	12	4	1						2	19	54.0	NORMAN	PT
COURSE TOTAL			20	15	10	3	11			1	11	71	207.0		
CSIS 113 INTRODUCTION TO UNIX															
4395		3.0	4	3			1	1			14	23	63.0	SFAKIANAKIS	PT
4396		3.0	2	3	4		3				7	19	57.0	MAYNE-STAFFORD	
4397		3.0	5	2	3	5	2		1		5	23	69.0	MAYNE-STAFFORD	

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 113 INTRODUCTION TO UNIX (CONT"D)															
COURSE TOTAL			11	8	7	5	6	1	1		26	65	189.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4398		5.0	5	2	4	2	3				5	21	95.0	WATERS	PT
COURSE TOTAL			5	2	4	2	3				5	21	95.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4402		3.0	7	4	1		2	2		1	5	22	63.0	GUZMAN	PT
4404N		3.0	4	4	1		1		1		4	15	45.0	SFAKIANAKIS	PT
4405N		3.0	20		1		3				6	30	90.0	BEHNKE	PT
COURSE TOTAL			31	8	3		6	2	1	1	15	67	198.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4320	17	2.0	3		1	1					7	12	9.7	SNIDER	
COURSE TOTAL			3		1	1					7	12	9.7		
CSIS 121 COMPREHNSIVE WORD LEVEL II															
4322	17	2.0		1	1						2	4	3.9	SMERK	
COURSE TOTAL				1	1						2	4	3.9		
CSIS 122 COMPREHNSIVE WORD LEVEL III															
4324	17	2.0					1					1	1.9	SMERK	
COURSE TOTAL							1					1	1.9		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4326	17	2.0	2	3			3				2	10	15.5	SMITH	
COURSE TOTAL			2	3			3				2	10	15.5		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4328 **	17	0.0									4	4	0.0	MCMANUS	
COURSE TOTAL													0.0		
CSIS 125 COMPREHNSIVE EXCEL LEVEL III															
4330	17	2.0	1									1	1.9	MCMANUS	
COURSE TOTAL			1									1	1.9		
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4332	17	2.0	2	1		1						4	7.8	SMERK	
COURSE TOTAL			2	1		1						4	7.8		
CSIS 127 COMPREHNSIVE ACCESS LEVEL II															
4334	17	2.0					1		1		2	4	3.9	MCMANUS	
COURSE TOTAL							1		1		2	4	3.9		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4336	17	2.0	1		1						1	3	3.9	MCMANUS	
COURSE TOTAL			1		1						1	3	3.9		

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BUSINESS AND PROFESSIONAL STUDIES

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4338	17	2.0	2		1						1	4	5.8	SMITH	
COURSE TOTAL			2		1						1	4	5.8		
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II															
4340 **	17	0.0									1	1	0.0	SMITH	
COURSE TOTAL													0.0		
CSIS 132 INTRODUCTION TO THE INTERNET															
4408		2.5	14	3			1		1		1	20	50.0	FLORES	PT
6522	5	8.0	16	2	2	1					1	22	48.0	WEINBERG	
COURSE TOTAL			30	5	2	1	1		1		2	42	98.0		
CSIS 134 WEB PUBLISHING I															
4410		5.0	7	4	5	1			1		6	24	120.0	QUINN	
4411		5.0	13	6	5		3				18	45	225.0	QUINN	
COURSE TOTAL			20	10	10	1	3		1		24	69	345.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4413N		5.0	9	1	1		5				9	25	125.0	WILSON	PT
COURSE TOTAL			9	1	1		5				9	25	125.0		
CSIS 136 WEB PUBLISHING II															
4415N		5.0	5	4	1		1				3	14	70.0	EISENBERG	PT
COURSE TOTAL			5	4	1		1				3	14	70.0		
CSIS 137 WEB ANIMATION															
4416		5.0	16		1			2	1		2	22	110.0	MILES	PT
COURSE TOTAL			16		1			2	1		2	22	110.0		
CSIS 140 INTRODUCTION TO LAN MANAGEMENT															
4417N		6.0	5	5	6		2				5	23	138.0	UMBARGER	PT
COURSE TOTAL			5	5	6		2				5	23	138.0		
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR															
4418N		4.0	3	4	3	1					2	13	48.0	KEMP	PT
COURSE TOTAL			3	4	3	1					2	13	48.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4419N	8	4.0	3	2	2	1	3				9	20	20.1	GELB	
4421	8	4.0	3	2	2	1	2	1			6	17	20.1	GELB	
6537	4	8.0	2	11	4	1			3			21	38.4	CARLETON	PT
COURSE TOTAL			8	15	8	3	5	1	3		15	58	78.6		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4422N	8	4.0	2	1			1				6	10	7.3	GELB	XP
4424	8	4.0		2	2		1				9	14	9.1	GELB	XP
COURSE TOTAL			2	3	2		2				15	24	16.4		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 145 INTRODUCTION TO TCP/IP															
4426N	8	4.0	5		1		7				6	19	23.8	SEEGER	PT
COURSE TOTAL			5		1		7				6	19	23.8		
CSIS 151A INTRO TO COMPUTER GRAPHICS															
4427N		3.0	12	2	1			2			5	22	66.0	MILES	PT
COURSE TOTAL			12	2	1			2			5	22	66.0		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4428		3.0	8	11			5				3	27	81.0	BEKHTYAR	PT
4429		3.0	7	1	4		4			2	6	24	72.0	CUDAHY	PT
4430		3.0	3	5	6		3				2	19	57.0	CUDAHY	PT
4431		3.0	15	2			1		1		18	37	111.0	DEAN	PT
COURSE TOTAL			33	19	10		13		1	2	29	107	321.0		
CSIS 160 INTRO/VIDEO GAME DEVELOPMENT															
4434		3.0	6	5	9						4	24	72.0	ALLEN	
COURSE TOTAL			6	5	9						4	24	72.0		
CSIS 165 ASSEMBLY LANG/MACHINE ARCHITEC															
4435		6.0	6	4	5	1	3				10	29	174.0	HOTZ	
COURSE TOTAL			6	4	5	1	3				10	29	174.0		
CSIS 173B COMPUTER WORD PROCESSING															
4438	8	4.0	8	4	3	3	7		1	1	22	49	49.4	KELLENBERGER	PT
COURSE TOTAL			8	4	3	3	7		1	1	22	49	49.4		
CSIS 174B COMPUTER DATABASE PKGS															
4443	8	4.0	9	1	1		5				6	22	29.3	FITZPATRICK	PT
6551	4	10.6	16	1	1	1	1			1		21	50.9	WEINBERG	
COURSE TOTAL			25	2	2	1	6			1	6	43	80.2		
CSIS 175B COMPUTER ELEC SPREADSHEET PKGS															
4447	8	2.0	7	1			2				2	12	9.1	DE-MARCO	PT
COURSE TOTAL			7	1			2				2	12	9.1		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4457N		2.0			1							1	2.0	MAJCHER	
COURSE TOTAL					1							1	2.0		
CSIS 186A P C OPERATING SYSTEMS															
6555	1	8.0							20	1		21	9.6	WEINBERG	
COURSE TOTAL									20	1		21	9.6		
CSIS 186B P C OPERATING SYSTEMS															
6558	1	8.0							18	3		21	9.6	WEINBERG	
COURSE TOTAL									18	3		21	9.6		
CSIS 190 DIGITAL MULTIMEDIA I															
4462N		6.0	3	2							5	10	60.0	CALIGIURI	PT

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 190 DIGITAL MULTIMEDIA I						(CONT"D)									
COURSE TOTAL			3	2							5	10	60.0		
CSIS 195 VIDEO EDITING ON THE PC															
4463N		3.0	7	8	1		2	1	1		1	21	63.0	BEKHTYAR	PT
COURSE TOTAL			7	8	1		2	1	1		1	21	63.0		
CSIS 198 SUPERVISED TUTORING - CSIS															
4465 **	16	0.0									19	19	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 217 WEB GRAPHICS I															
4467N**		0.0	5								1	6	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 218 WEB GRAPHICS II															
4468N**		0.0	5						1		2	8	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 230 DESKTOP PUBLISHING															
4469N**		0.0	3								3	6	0.0	ROTH	PT
COURSE TOTAL													0.0		
CSIS 274B ADVANCED DATABASE PACKAGES															
4473	8	4.0	5	1			1				14	21	12.8	FITZPATRICK	PT
6566	4	8.0	14	2	2						3	21	32.9	FITZPATRICK	PT
COURSE TOTAL			19	3	2		1				17	42	45.7		
CSIS 275B ADV ELECTRONIC SPREADSHEET PKG															
4474	8	4.0	2	2			4				7	15	14.6	DE-MARCO	PT
COURSE TOTAL			2	2			4				7	15	14.6		
CSIS 280 JOB SEARCH ASSIST & RETENTION															
6570	11	2.9	14	2	3	1	1				1	22	38.3	WEINBERG	
COURSE TOTAL			14	2	3	1	1				1	22	38.3		
CSIS 281 DIRECTED WORK EXP IN CSIS															
6574 **	8	0.0						18				18	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4476		6.0	4	3	3		2	2			3	17	102.0	GUZMAN	PT
4477		6.0	5		4		3				8	20	120.0	SELLERS	PT
COURSE TOTAL			9	3	7		5	2			11	37	222.0		
CSIS 296 INTRO TO C++ PROGRAMMING															
4480N		6.0	8	5	1		1				7	22	132.0	WHITESIDE	PT
COURSE TOTAL			8	5	1		1				7	22	132.0		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 299	INTRODUCTION TO SQL														
4485N		3.0	6		2		2		1		5	16	48.0	MAYNE-STAFFORD	
6576	3	13.3	12	4	2						4	22	41.0	FITZPATRICK	PT
6578	5	9.6	10	7	1						3	21	49.4	KEMP	PT
COURSE TOTAL			28	11	5		2		1		12	59	138.4		
SUBJECT TOTAL			546	275	178	42	146	12	61	12	421	1693	6364.0		

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4190	16	2.0							4		4	8	7.3	ANSPACH	
COURSE TOTAL									4		4	8	7.3		
CSIS 097 WINDOWS BASICS FOR THE OFFICE															
4191	16	2.0							4		5	9	7.3	MCMANUS	
COURSE TOTAL									4		5	9	7.3		
CSIS 100 BASIC KEYBOARDING															
4193	16	3.0	3		1			1			9	14	13.7	HARLEY	
4194	16	3.0	4	2			3				6	15	24.7	HARLEY	
4195	16	3.0	1								4	5	2.7	SIKES	
4197	16	3.0	1	1							2	4	5.5	SNIDER	
4198	16	3.0	1								2	3	2.7	ANSPACH	
4199	16	3.0	1								5	6	2.7	ANSPACH	
COURSE TOTAL			11	3	1		3	1			28	47	52.0		
CSIS 105 INTRODUCTION TO COMPUTING															
4200		5.0	4	2	2	1	2				4	15	75.0	MAYNE-STAFFORD	
4203		5.0	6	4	1	1	2				13	27	135.0	SMITH	PT
4204N		5.0	20								7	27	135.0	NORMAN	PT
6002	6	13.3	17	1	1						1	20	86.6	WEINBERG	
COURSE TOTAL			47	7	4	2	4				25	89	431.6		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4205		6.0	6	2	1		5				4	18	108.0	OLSON	PT
4206		6.0	17	3		3					2	25	150.0	WILSON	PT
4207		6.0	12	1	2		4				11	30	168.0	PATCHETT	PT
4208		6.0	5	2	2	2	4				9	24	144.0	CORTEZ-KARIMI	PT
4209		6.0	5	4	6	1	4				7	27	162.0	LYCAN	PT
4210		6.0	10	11	4		1		2			28	168.0	SHARIFRAZI	PT
4211		6.0	18	3	2			1			12	36	216.0	GUZMAN	PT
4212		6.0	13	11	5	1					1	31	186.0	MCMILLAN	PT
4214		6.0	18	6	3						3	30	180.0	MAYNE-STAFFORD	
4216		6.0	13	6	6	1	3				4	33	198.0	KALLAS	PT
4219		6.0	6	15	4	2	6				5	38	228.0	ALLEN	XP
4221N		6.0	5	11	4	5	3	1		1	5	35	204.0	ALLEN	
4223N		6.0	5	9	1	1	5				9	30	180.0	ALLEN	
4225		6.0	23	6	4		2				4	39	234.0	LINGVALL	PT
COURSE TOTAL			156	90	44	16	37	2	2	1	76	424	2526.0		
CSIS 112 INTRO IBM PC DISK OPERATNG SYS															
4227		3.0	5	2	2		2				9	20	60.0	SELLERS	PT
4229N		3.0	11	2	3	1	2				2	21	63.0	NORMAN	PT
4230		3.0	3	1	2		5	1			6	18	54.0	SELLERS	PT
COURSE TOTAL			19	5	7	1	9	1			17	59	177.0		
CSIS 113 INTRODUCTION TO UNIX															
4231		3.0	3	4	1		2				6	16	48.0	SFAKIANAKIS	PT
4232		3.0	10	2	1		4		1		8	26	75.0	QUALLS	XP
4233		3.0	6	5	1	2	3	1			10	28	84.0	MAYNE-STAFFORD	

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 113 INTRODUCTION TO UNIX (CONT"D)															
COURSE TOTAL		19	11	3	2		9	1	1		24	70	207.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4235		5.0	7	3			1				3	14	70.0	WATERS	PT
6012 **	5	0.0	5	2		1						8	0.0	PELLERIN-III	PT
COURSE TOTAL			7	3			1				3	14	70.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4239		3.0	5	6	2	1	3				5	22	66.0	QUALLS	
4241N		3.0	2	10	2		1				6	21	66.0	GUZMAN	PT
4243N		3.0	5	1	1						6	14	42.0	RUSSELL	PT
COURSE TOTAL			12	17	5	1	5				17	57	174.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4245	16	2.0	4	1							3	8	9.1	SIKES	
COURSE TOTAL			4	1							3	8	9.1		
CSIS 121 COMPREHNSIVE WORD LEVEL II															
4247	16	2.0	2					1			3	6	5.5	SIKES	
COURSE TOTAL			2					1			3	6	5.5		
CSIS 122 COMPREHNSIVE WORD LEVEL III															
4249	16	2.0					1					1	1.8	SIKES	
COURSE TOTAL							1					1	1.8		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4251	16	2.0	8		1						3	12	16.5	SMITH	
COURSE TOTAL			8		1						3	12	16.5		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4253	16	2.0	6								3	9	11.0	MCMANUS	
COURSE TOTAL			6								3	9	11.0		
CSIS 125 COMPREHNSIVE EXCEL LEVEL III															
4255	16	2.0	2								4	6	3.7	MCMANUS	
COURSE TOTAL			2								4	6	3.7		
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4257	16	2.0	1								2	3	1.8	SNIDER	
COURSE TOTAL			1								2	3	1.8		
CSIS 127 COMPREHNSIVE ACCESS LEVEL II															
4259	16	2.0	1	1							1	3	3.7	MCMANUS	
COURSE TOTAL			1	1							1	3	3.7		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4261	16	2.0	1								1	2	1.8	MCMANUS	

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 128 COMPREHNSIVE ACCESS LEVEL III (CONT"D)															
COURSE TOTAL			1								1	2	1.8		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4263	16	2.0	5								3	8	9.1	SMITH	
COURSE TOTAL			5								3	8	9.1		
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II															
4265	16	2.0	5									5	9.1	SMITH	
COURSE TOTAL			5									5	9.1		
CSIS 131 COMPRHNSV POWERPOINT LEVEL III															
4267	16	2.0	6		1							7	12.8	SMITH	
COURSE TOTAL			6		1							7	12.8		
CSIS 132 INTRODUCTION TO THE INTERNET															
4271		2.5	17	1					1	1	3	23	57.5	FLORES	PT
6015	6	6.7	19								1	20	43.6	FITZPATRICK	PT
COURSE TOTAL			36	1					1	1	4	43	101.1		
CSIS 134 WEB PUBLISHING I															
4273		5.0	10	4	2		1				5	22	105.0	QUINN	
4275		5.0	11	6	4		1		3		17	42	200.0	QUINN	XP
COURSE TOTAL			21	10	6		2		3		22	64	305.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4277N		5.0	4	4	4	1	1				4	18	90.0	WILSON	PT
COURSE TOTAL			4	4	4	1	1				4	18	90.0		
CSIS 136 WEB PUBLISHING II															
4279N		5.0	8	2	2		2				2	16	80.0	EISENBERG	PT
COURSE TOTAL			8	2	2		2				2	16	80.0		
CSIS 137 WEB ANIMATION															
4280		5.0	9	1							7	17	85.0	MILES	PT
COURSE TOTAL			9	1							7	17	85.0		
CSIS 138 WEB PUBLISHING III															
4281N		5.0	13				3				6	22	110.0	FLORES	PT
COURSE TOTAL			13				3				6	22	110.0		
CSIS 140 INTRODUCTION TO LAN MANAGEMENT															
4283N		6.0	2	2	2	2	1				3	12	66.0	UMBARGER	PT
6018 **	6	0.0	1	2	3	1					1	8	0.0	GELB	XP
COURSE TOTAL			2	2	2	2	1				3	12	66.0		
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR															
6021 **	7	0.0	4	3							1	8	0.0	GELB	XP

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR (CONT"D)															
COURSE TOTAL													0.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4287N	8	4.0	4	6	3		6				1	20	34.7	GELB	
4291	8	4.0	3	8	3	1	6				10	31	38.4	GELB	
6022 **	5	0.0	3	4	1							8	0.0	KALLAS	PT
6023	4	8.0	8	9	1		1					19	34.7	CARLETON	PT
COURSE TOTAL			15	23	7	1	13				11	70	107.8		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4293N	8	4.0	3	3	1	2	2				5	16	20.1	GELB	XP
4297	8	4.0	3	2	1		3		1		7	17	18.3	GELB	XP
6024 **	5	0.0	1	2	3	1	1					8	0.0	CARLETON	PT
COURSE TOTAL			6	5	2	2	5		1		12	33	38.4		
CSIS 144 WIDE AREA NETWORKS															
4299N	8	4.0	4	4	1	3	1				2	15	23.8	SEEGER	PT
6026 **	4	0.0	2	2	3						1	8	0.0	CARLETON	PT
COURSE TOTAL			4	4	1	3	1				2	15	23.8		
CSIS 145 INTRODUCTION TO TCP/IP															
4301N	8	4.0	3	2	3	1	2				4	15	20.1	SEEGER	PT
6028 **	5	0.0	3	1	3							7	0.0	CARLETON	PT
COURSE TOTAL			3	2	3	1	2				4	15	20.1		
CSIS 151A INTRO TO COMPUTER GRAPHICS															
4303N		3.0	10	6	1	2	2			1	2	24	72.0	KOCH	PT
COURSE TOTAL			10	6	1	2	2			1	2	24	72.0		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4304		3.0	4	5	4		8				1	22	66.0	BEKHTYAR	PT
4305		3.0	5	3	1	1	1				10	21	63.0	CUDAHY	PT
4307		3.0	1	6	2	1	4	1			6	21	63.0	CUDAHY	PT
4309		3.0	12	1	5		3		1		15	37	108.0	DEAN-JR.	PT
COURSE TOTAL			22	15	12	2	16	1	1		32	101	300.0		
CSIS 160 COMPUTER ASSISTED LEARNING/SIM															
4314		3.0	4	4	2		5				3	18	54.0	ALLEN	
COURSE TOTAL			4	4	2		5				3	18	54.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4316	8	4.0	12	4			3		1		8	28	36.6	KELLENBERGER	PT
COURSE TOTAL			12	4			3		1		8	28	36.6		
CSIS 173B COMPUTER WORD PROCESSING															
4318	8	4.0	7	8	1		4				23	43	36.6	KELLENBERGER	PT
COURSE TOTAL			7	8	1		4				23	43	36.6		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 174B COMPUTER DATABASE PKGS															
4319	8	4.0	4	5					1			10	18.3	QUINN	
6030	4	8.0	15	4								19	34.7	WEINBERG	
COURSE TOTAL			19	9					1			29	53.0		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4324		2.0			2							2	4.0	RICHARDS	
COURSE TOTAL					2							2	4.0		
CSIS 186A P C OPERATING SYSTEMS															
6034	1	8.0							20			20	9.1	KEMP	PT
COURSE TOTAL									20			20	9.1		
CSIS 186B P C OPERATING SYSTEMS															
6036	1	8.0							20			20	9.1	KEMP	PT
COURSE TOTAL									20			20	9.1		
CSIS 190 DIGITAL MULTIMEDIA I															
4330N		6.0	9	1							4	14	78.0	CALIGIURI	PT
COURSE TOTAL			9	1							4	14	78.0		
CSIS 195 VIDEO EDITING ON THE PC															
4332N		3.0	12	5	2		4				3	26	78.0	BEKHTYAR	PT
COURSE TOTAL			12	5	2		4				3	26	78.0		
CSIS 198 SUPERVISED TUTORING - CSIS															
4336 **	16	0.0									23	23	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 217 WEB GRAPHICS I															
4339N**		0.0	8	2		1						11	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 220 SYSTEMS ANALYSIS & DESIGN															
4342N		3.0	9								3	12	36.0	BEHNKE	PT
COURSE TOTAL			9								3	12	36.0		
CSIS 230 DESKTOP PUBLISHING															
4344N**		0.0	4			1						5	0.0	ROTH	PT
COURSE TOTAL													0.0		
CSIS 249 NETWORK ANALYSIS AND DESIGN															
6039 **	5	0.0	2	3	2						1	8	0.0	EISENBERG	PT
COURSE TOTAL													0.0		
CSIS 251A INTERMEDIATE COMPUTER GRAPHICS															
4348N		3.0	4	6	1		4				3	18	54.0	BEKHTYAR	PT
COURSE TOTAL			4	6	1		4				3	18	54.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 270 ADV COMPUTER PROGRAMMING															
4349N		3.0	3	1	1		2				6	13	36.0	CRAM	PT
COURSE TOTAL			3	1	1		2				6	13	36.0		
CSIS 274B ADVANCED DATABASE PACKAGES															
4350	8	4.0	4	3	2	1			1		1	12	20.1	QUINN	
6041	5	6.4	10	6	3							19	34.7	FITZPATRICK	PT
COURSE TOTAL			14	9	5	1			1		1	31	54.8		
CSIS 280 JOB SEARCH ASSISTANCE															
4355N		2.0	16	7			1				3	27	54.0	ENOWITZ	XP
6043	12	2.6	16	1		1	1				1	20	33.9	PEIFER	PT
6044 **	8	0.0	4	2							1	7	0.0	ZAMBO	PT
COURSE TOTAL			32	8		1	2				4	47	87.9		
CSIS 281 DIRECTED WORK EXP IN CSIS															
4357 **		0.0	20					1			1	22	0.0	ENOWITZ	
COURSE TOTAL													0.0		
CSIS 282 DIRECTED WORK EXP IN CSIS															
4359 **		0.0	7								1	8	0.0	ENOWITZ	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4363		6.0	9	6	3		1				7	26	156.0	QUALLS	
4365		6.0	7	8		2	1				3	21	126.0	QUALLS	
COURSE TOTAL			16	14	3	2	2				10	47	282.0		
CSIS 296 PROGRAMMING WITH C															
4368		6.0	4	4	3	1	1				7	20	120.0	HOTZ	
COURSE TOTAL			4	4	3	1	1				7	20	120.0		
CSIS 297 INTERMEDIATE C PROGRAMMING															
4370N		6.0	3	1		1			1		4	10	60.0	WHITESIDE	PT
COURSE TOTAL			3	1		1			1		4	10	60.0		
CSIS 299 INTRODUCTION TO PERL															
4373		3.0	3	3			1		2		5	14	42.0	SFAKIANAKIS	PT
4375N		3.0	6	6	1		3	1			5	22	63.0	MAYNE-STAFFORD	
6049	4	12.0	4	10	4		1					19	52.1	KEMP	PT
6052	3	13.3	10	2	3	2	2					19	43.3	FITZPATRICK	PT
COURSE TOTAL			23	21	8	2	7	1	2		10	74	200.4		
SUBJECT TOTAL			636	308	134	44	151	8	63	3	422	1769	6426.8		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4332	16	2.0	1	1			1					3	5.5	MCMANUS	
COURSE TOTAL			1	1			1					3	5.5		
CSIS 127 COMPREHNSIVE ACCESS LEVEL II															
4334	16	2.0	1				1				1	3	3.7	MCMANUS	
COURSE TOTAL			1				1				1	3	3.7		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4338	16	2.0	2		1						3	6	5.5	SMITH	
COURSE TOTAL			2		1						3	6	5.5		
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II															
4340	16	2.0	3								2	5	5.5	SMITH	
COURSE TOTAL			3								2	5	5.5		
CSIS 131 COMPRHNSV POWERPOINT LEVEL III															
4342	16	2.0	2								2	4	3.7	SMITH	
COURSE TOTAL			2								2	4	3.7		
CSIS 132 INTRODUCTION TO THE INTERNET															
4408		2.5	7	2	1		2				4	16	37.5	SMITH	PT
6522	5	8.0	12	6	2	1					1	22	48.0	CARLETON	PT
COURSE TOTAL			19	8	3	1	2				5	38	85.5		
CSIS 134 WEB.PUBLISHING I															
4410		5.0	7	5	6		1		1		3	23	115.0	QUINN	
4411		5.0	5		6	3	4				3	21	105.0	FLORES	PT
4412		5.0	4	3	2			1			8	18	90.0	QUINN	XP
COURSE TOTAL			16	8	14	3	5	1	1		14	62	310.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4413N		5.0	11				3				9	23	110.0	WILSON	PT
COURSE TOTAL			11				3				9	23	110.0		
CSIS 136 WEB PUBLISHING II															
4414N		5.0	7	2	1	3	1				7	21	95.0	EISENBERG	PT
COURSE TOTAL			7	2	1	3	1				7	21	95.0		
CSIS 137 WEB ANIMATION															
4415		5.0	15	3	2						2	22	110.0	MILES	PT
COURSE TOTAL			15	3	2						2	22	110.0		
CSIS 140 INTRODUCTION TO LAN MANAGEMENT															
4417N		6.0	5	3	1						4	13	78.0	UMBARGER	PT
COURSE TOTAL			5	3	1						4	13	78.0		
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR															
4418N		4.0	4	5	1		1				1	12	48.0	KEMP	PT
COURSE TOTAL			4	5	1		1				1	12	48.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 142 INTRODUCTION TO NETWORKING															
4419	8	4.0	3	2		3	3				4	15	20.1	GELB	XP
4421N	8	4.0	3	2	1	2	2				6	16	18.3	GELB	XP
6537	4	8.0	4	11	4	3					1	23	40.2	CARLETON	PT
COURSE TOTAL			10	15	5	8	5				11	54	78.6		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4422	8	4.0	3	3	1	2					2	11	16.5	GELB	
4424N	8	4.0	3	1	2	2	1				4	13	16.5	GELB	
COURSE TOTAL			6	4	3	4	1				6	24	33.0		
CSIS 144 WIDE AREA NETWORKS															
4425N	8	4.0	2	1	4	2	1				6	16	18.3	SEEGER	PT
COURSE TOTAL			2	1	4	2	1				6	16	18.3		
CSIS 145 INTRODUCTION TO TCP/IP															
4426N	8	4.0	3	3	2		5				5	18	23.8	SEEGER	PT
COURSE TOTAL			3	3	2		5				5	18	23.8		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4427		3.0	10	9	1		3				4	27	78.0	BEKHTYAR	PT
4428		3.0	5	5	5		3	1			4	23	69.0	CUDAHY	PT
4429		3.0	6	4	1	1					6	18	54.0	CUDAHY	PT
4430		3.0	10	1	1		6		2		12	32	96.0	DEAN-JR.	PT
COURSE TOTAL			31	19	8	1	12	1	2		26	100	297.0		
CSIS 160 COMPUTER ASSISTED LEARNING/SIM															
4434		3.0	4	4	2						4	14	39.0	MOORE	PT
COURSE TOTAL			4	4	2						4	14	39.0		
CSIS 165 MICRO ASSEMBLY LANGUAGE PROG															
4433		6.0	10	1		5	3	2			8	29	174.0	SELLERS	PT
COURSE TOTAL			10	1		5	3	2			8	29	174.0		
CSIS 173B COMPUTER WORD PROCESSING															
4438		2.0	11	3	1		3				6	24	48.0	KELLENBERGER	PT
COURSE TOTAL			11	3	1		3				6	24	48.0		
CSIS 174B COMPUTER DATABASE PACKAGES															
4443	8	4.0	10		1		4				6	21	27.4	DE-MARCO	PT
6551	3	10.6	13	6	3						1	23	40.0	WEINBERG	
COURSE TOTAL			23	6	4		4				7	44	67.4		
CSIS 175B COMPUTER ELEC SPREADSHEET PKGS															
4447		2.0	7	5	1	1			2		2	18	36.0	FITZPATRICK	PT
COURSE TOTAL			7	5	1	1			2		2	18	36.0		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4457N		2.0	1		1		3				1	6	12.0	JUDKINS	
COURSE TOTAL			1		1		3				1	6	12.0		

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BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 186A P C OPERATING SYSTEMS															
6555	1	8.0							23			23	10.5	KEMP	PT
COURSE TOTAL									23			23	10.5		
CSIS 186B P C OPERATING SYSTEMS															
6558	1	8.0							23			23	10.5	KEMP	PT
COURSE TOTAL									23			23	10.5		
CSIS 190 DIGITAL MULTIMEDIA I															
4462N		6.0	9	3								12	72.0	CALIGIURI	PT
COURSE TOTAL			9	3								12	72.0		
CSIS 195 VIDEO EDITING ON THE PC															
4463N		3.0	8	5	2		3		1		4	23	69.0	BEKHTYAR	PT
COURSE TOTAL			8	5	2		3		1		4	23	69.0		
CSIS 198 SUPERVISED TUTORING - CSIS															
4465 **	16	0.0									41	41	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 217 WEB GRAPHICS I															
4467N**		0.0	5	4	1	1					2	13	0.0	CALVERT	PT
COURSE TOTAL													0.0		
CSIS 230 DESKTOP PUBLISHING															
4469N**		0.0	3									3	0.0	ROTH	PT
COURSE TOTAL													0.0		
CSIS 251D INTERMEDIATE COMPUTER GRAPHICS															
4471N		3.0	6	8	1		4		1		4	24	69.0	BEKHTYAR	PT
COURSE TOTAL			6	8	1		4		1		4	24	69.0		
CSIS 274B ADVANCED DATABASE PACKAGES															
4473	8	4.0	6	4			3				14	27	23.8	DE-MARCO	PT
6566	3	10.6	12	4	2	2		2				22	40.0	FITZPATRICK	PT
COURSE TOTAL			18	8	2	2	3	2			14	49	63.8		
CSIS 275B ADV ELECTRONIC SPREADSHEET PKG															
4474	8	4.0	9	1	1		8				8	27	34.7	FITZPATRICK	PT
COURSE TOTAL			9	1	1		8				8	27	34.7		
CSIS 280 JOB SEARCH ASSISTANCE															
6570 **	5	0.0	21			1						22	0.0	PEIFER	PT
COURSE TOTAL													0.0		
CSIS 281 DIRECTED WORK EXP IN CSIS															
6574 **	4	0.0						22				22	0.0	QUINN	
COURSE TOTAL													0.0		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 293	INTRO TO JAVA PROGRAMMING														
4476		6.0	6	5	5		2				5	23	138.0	QUALLS	
4477		6.0	4	9	2		2			2	4	23	138.0	QUALLS	XP
COURSE TOTAL			10	14	7		4			2	9	46	276.0		
CSIS 294	INTERMEDIATE JAVA														
4478N		6.0	7	3							4	14	84.0	PARKER	PT
COURSE TOTAL			7	3							4	14	84.0		
CSIS 296	PROGRAMMING WITH C														
4480N		6.0	6	2	2	1	3		1		8	23	138.0	WHITESIDE	PT
COURSE TOTAL			6	2	2	1	3		1		8	23	138.0		
CSIS 299	INTRODUCTION TO PERL														
4483		3.0	2	4	2				1		6	15	45.0	SFAKIANAKIS	PT
6578	4	12.0	6	7	8	1						22	60.3	KEMP	PT
6580	3	13.3	15	3			2	2				22	50.2	FITZPATRICK	PT
COURSE TOTAL			23	14	10	1	2	2	1		6	59	155.5		
SUBJECT TOTAL			593	339	183	64	132	11	67	9	425	1823	7075.7		

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4130	16	2.0							6	1	7	14	12.8	SIKES	
COURSE TOTAL									6	1	7	14	12.8		
CSIS 097 WINDOWS BASICS FOR THE OFFICE															
4131	16	2.0							8	1	4	13	16.5	SIKES	
COURSE TOTAL									8	1	4	13	16.5		
CSIS 100 BASIC KEYBOARDING															
4133	16	3.0	6	3			4				8	21	35.7	ANSPACH	
4134	16	3.0	8		1	1	3			1	7	21	38.4	ANSPACH	
4135	16	3.0	2				2				10	14	11.0	ANSPACH	
4136	16	3.0	2				3				5	10	13.7	HARLEY	
4137	16	3.0	1	1							5	7	5.5	HARLEY	
4138	16	3.0	7	1			2				9	19	27.4	MAROVIC	
COURSE TOTAL			26	5	1	1	14			1	44	92	131.7		
CSIS 105 INTRODUCTION TO COMPUTING															
4140		5.0	5	3	2	1	4		1		14	30	150.0	MAYNE-STAFFORD	
4143		5.0	8	7	3		2		1		12	33	165.0	SMITH	PT
4145N		5.0	2	2	1	1	2				8	16	80.0	DURKEE	PT
4147N		5.0	28	1			1				12	42	200.0	NORMAN	PT
6901 **	4	0.0	6									6	0.0	KLINGER	
COURSE TOTAL			43	13	6	2	9		2		46	121	595.0		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4152		6.0	5	4	1	2					4	16	96.0	COSTELLO	PT
4154		6.0	20	7	3	1					5	36	216.0	WILSON	PT
4157		6.0	21	6	2	1	1				6	37	222.0	PATCHETT	PT
4159		6.0	11		2		5				8	26	156.0	CORTEZ-KARIMI	PT
4162		6.0	8	4	1						3	16	96.0	PHALAN	PT
4166		6.0	7	3	4	2					9	25	150.0	SMERK	PT
4168		6.0	19	11	1		2				7	40	240.0	MAYNE-STAFFORD	XP
4173		6.0	7	13	12	1	1		1		9	44	264.0	QUINN	XP
4175		6.0	10	9	2	1	2				2	26	156.0	OLSON	PT
4177		6.0	7	13	3						7	30	180.0	QUINN	
4180		6.0	9	8	4		6				9	36	216.0	MAYNE-STAFFORD	
4182		6.0	7	9	4	1	2				9	32	192.0	ALLEN	XP
4184N		6.0	2	12	3	1	3			1	16	38	222.0	ALLEN	
4186N		6.0	7	13		2	3				6	31	186.0	LINGVALL	PT
4188N		6.0	8	12			3				11	34	204.0	ALLEN	
4190		6.0	5	10	10	4	2				6	37	222.0	HOTZ	
6906 **	5	0.0	7	4								11	0.0	KLINGER	
COURSE TOTAL			153	134	52	16	30		1	1	117	504	3018.0		
CSIS 112 INTRO IBM PC DISK OPERATNG SYS															
4191		3.0	4				1	2			9	16	42.0	SELLERS	PT
4192		3.0	4	6	5		2				6	23	69.0	GELB	XP
4193		3.0	3	2	4	2	5				5	21	63.0	GELB	

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 112 INTRO IBM PC DISK OPERATNG SYS (CONT"D)															
4194N		3.0	16	2	4		1				10	33	99.0	NORMAN	PT
6909 **	7	0.0	4	5	2							11	0.0	HEIDLER	PT
COURSE TOTAL			27	10	13	2	9	2			30	93	273.0		
CSIS 113 INTRODUCTION TO UNIX															
4195		3.0	4	2	3	2	1	2			6	20	60.0	SFAKIANAKIS	PT
4196		3.0	7	7	2	1	4				2	23	69.0	QUALLS	XP
4197N		3.0	10	5	1		4				6	26	78.0	SFAKIANAKIS	PT
COURSE TOTAL			21	14	6	3	9	2			14	69	207.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4198		5.0	7	3	2	1	2				8	23	115.0	WATERS	PT
6912 **	5	0.0	10	2	1							13	0.0	PHALAN	PT
6913 **	4	0.0	11	1							1	13	0.0	LA-FRENZ	PT
COURSE TOTAL			7	3	2	1	2				8	23	115.0		
CSIS 115 MICROCOMPUTER PROGRAM/BASIC															
4199		6.0	5	5		1					11	22	132.0	GUZMAN	PT
COURSE TOTAL			5	5		1					11	22	132.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4200		3.0	22								2	24	72.0	CLARK	PT
4201N		3.0	7	6	2						8	23	66.0	GUZMAN	PT
4202N		3.0	14	4							16	34	102.0	PARKER	PT
COURSE TOTAL			43	10	2						26	81	240.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4110	16	2.0	3	1							4	8	7.3	MCMANUS	
COURSE TOTAL			3	1							4	8	7.3		
CSIS 121 COMPREHNSIVE WORD LEVEL II															
4111	16	2.0	4	1	1						2	8	11.0	MCMANUS	
COURSE TOTAL			4	1	1						2	8	11.0		
CSIS 122 COMPREHNSIVE WORD LEVEL III															
4112	16	2.0	1									1	1.8	MCMANUS	
COURSE TOTAL			1									1	1.8		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4114	16	2.0	6	2	1	1	1				2	13	20.1	MCMANUS	
COURSE TOTAL			6	2	1	1	1				2	13	20.1		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4115	16	2.0	2				2				3	7	7.3	MCMANUS	
COURSE TOTAL			2				2				3	7	7.3		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 125 COMPREHNSIVE EXCEL LEVEL III															
4116	16	2.0	2								2	4	3.7	MCMANUS	
COURSE TOTAL			2								2	4	3.7		
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4118	16	2.0	7	2							4	13	16.5	MCMANUS	
COURSE TOTAL			7	2							4	13	16.5		
CSIS 127 COMPREHNSIVE ACCESS LEVEL II															
4119	16	2.0	1				1				1	3	3.7	MCMANUS	
COURSE TOTAL			1				1				1	3	3.7		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4120	16	2.0	2				1				1	4	5.5	MCMANUS	
COURSE TOTAL			2				1				1	4	5.5		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4122	16	2.0				1						1	1.8	MCMANUS	
COURSE TOTAL						1						1	1.8		
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II															
4123	16	2.0	2			1					1	4	5.5	MCMANUS	
COURSE TOTAL			2			1					1	4	5.5		
CSIS 132 INTRODUCTION TO THE INTERNET															
4203		2.5	13	1							8	22	55.0	FLORES	PT
4204N		2.5	5	2	2	1					5	15	37.5	DOCKTER	PT
COURSE TOTAL			18	3	2	1					13	37	92.5		
CSIS 134 WEB PUBLISHING I															
4205		5.0	14	6	3	2					5	30	150.0	QUINN	
4206N		5.0	9	2	5		4				4	24	120.0	WILSON	PT
COURSE TOTAL			23	8	8	2	4				9	54	270.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4207N		5.0	12	9					1		2	24	120.0	PARKER	PT
COURSE TOTAL			12	9					1		2	24	120.0		
CSIS 136 WEB PUBLISHING II															
4208N		5.0	8	3	1	1	2				4	19	95.0	EISENBERG	PT
COURSE TOTAL			8	3	1	1	2				4	19	95.0		
CSIS 138 WEB PUBLISHING III															
4209		5.0	17	1		1			1		4	24	120.0	FLORES	PT
6919 **	6	0.0	7	1	1							9	0.0	AGAMAH	PT
COURSE TOTAL			17	1		1			1		4	24	120.0		

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BUSINESS AND PROFESSIONAL STUDIES

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 140 INTRODUCTION TO LAN MANAGEMENT															
4210N		6.0	7	5	4		2				3	21	126.0	UMBARGER	PT
COURSE TOTAL			7	5	4		2				3	21	126.0		
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR															
4211N		4.0	3	4	3		6				3	19	76.0	KEMP	PT
6921 **	5	0.0	7	7								14	0.0	KEMP	PT
COURSE TOTAL			3	4	3		6				3	19	76.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4212	8	4.0	4	5	2	3					5	19	25.6	LYCAN	PT
4213N	8	4.0	11	2	2	1	2				4	22	32.9	GELB	
4280	8	4.0	3	3	2	4					2	14	21.9	GELB	XP
6922 **	4	0.0	5	3	2	1					1	12	0.0	CARLETON	PT
COURSE TOTAL			18	10	6	8	2				11	55	80.4		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4214	8	4.0	3	5		2	3				2	15	23.8	LYCAN	PT
4215N	8	4.0	4	4	1	2	1				2	14	21.9	GELB	
4281	8	4.0	2	2	1	1	4				4	14	18.3	GELB	
6924 **	4	0.0	4	5	2							11	0.0	CARLETON	PT
COURSE TOTAL			9	11	2	5	8				8	43	64.0		
CSIS 144 WIDE AREA NETWORKS															
4216N	8	4.0	3	1	1	1		1			4	11	12.8	SEEGER	PT
6926 **	6	0.0	4	6	5						1	16	0.0	CARLETON	PT
6927 **	5	0.0	5	3	2	1						11	0.0	CARLETON	PT
COURSE TOTAL			3	1	1	1		1			4	11	12.8		
CSIS 145 INTRODUCTION TO TCP/IP															
4217N	8	4.0	1	1		2					11	15	7.3	SEEGER	PT
COURSE TOTAL			1	1		2					11	15	7.3		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4218		3.0	6	8	2		4				2	22	66.0	BEKHTYAR	PT
4219		3.0	7	4	6		2	1	1		5	26	78.0	CUDAHY	PT
4220		3.0	4	6	3	2	2				4	21	63.0	CUDAHY	PT
4222		3.0	12		2		3				10	27	81.0	DEAN-JR.	PT
COURSE TOTAL			29	18	13	2	11	1	1		21	96	288.0		
CSIS 155 INTERMEDIATE PROGRAMMING-BASIC															
4223N		6.0	4	2	1						2	9	54.0	SELLERS	PT
COURSE TOTAL			4	2	1						2	9	54.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4224		2.0	6	6							3	15	30.0	SMITH	PT
4225		2.0	9	2							13	24	46.0	PRIGMORE	PT
COURSE TOTAL			15	8							16	39	76.0		

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BUSINESS AND PROFESSIONAL STUDIES

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 173B MICROCOMPUTER WORD PROCESSING															
4227		2.0	6	1		1					6	14	28.0	PRIGMORE	PT
COURSE TOTAL			6	1		1					6	14	28.0		
CSIS 174B MICROCOMPUTER DATABASE PKGS															
4228N	8	4.0	9	2	1		1					13	23.8	QUINN	
4229	8	4.0	2			1	2		1		8	14	11.0	FITZPATRICK	PT
6930 **	4	0.0	6									6	0.0	KLINGER	
COURSE TOTAL			11	2	1	1	3		1		8	27	34.8		
CSIS 175B MICROCOMPUTER ELEC SPREADSHEET															
4231	8	4.0	8	5			1	1			8	23	27.4	DE-MARCO	PT
6932 **	4	0.0	6									6	0.0	KLINGER	
COURSE TOTAL			8	5			1	1			8	23	27.4		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4233		2.0			1						1	2	4.0	RICHARDS	
COURSE TOTAL					1						1	2	4.0		
CSIS 177C PRESENTATION GRAPHICS															
4236		3.0	6		2	1	2				14	25	75.0	HOTZ	
COURSE TOTAL			6		2	1	2				14	25	75.0		
CSIS 186A P C OPERATING SYSTEMS															
6934 **	1	0.0							5			5	0.0	KLINGER	
COURSE TOTAL													0.0		
CSIS 186B P C OPERATING SYSTEMS															
6936 **	1	0.0							5			5	0.0	KLINGER	
COURSE TOTAL													0.0		
CSIS 186C P C OPERATING SYSTEMS															
6937 **	1	0.0							5			5	0.0	KLINGER	
COURSE TOTAL													0.0		
CSIS 190 DIGITAL MULTIMEDIA I															
4248N		6.0	7	1				2			1	11	66.0	CALIGIURI	PT
COURSE TOTAL			7	1				2			1	11	66.0		
CSIS 195 VIDEO EDITING ON THE PC															
4249N		3.0	10	5	1		5				11	32	93.0	BEKHTYAR	PT
COURSE TOTAL			10	5	1		5				11	32	93.0		
CSIS 196 INTERACT MULTIMEDIA AUTHORING															
4250		3.0	4		1			3		1	2	11	33.0	CALIGIURI	PT
COURSE TOTAL			4		1			3		1	2	11	33.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 198 SUPERVISED TUTORING - CSIS															
4251 **	16	0.0									22	22	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 199 SPECIAL STUDIES IN CSIS															
4277 **		6.0	2									2	0.0	ENOWITZ	
COURSE TOTAL													0.0		
CSIS 220 SYSTEMS ANALYSIS & DESIGN															
4252N		3.0	24	4			1				1	30	90.0	BEHNKE	PT
COURSE TOTAL			24	4			1				1	30	90.0		
CSIS 249 NETWORK ANALYSIS AND DESIGN															
6938 **	4	0.0	5	4	2							11	0.0	LOACH	PT
COURSE TOTAL													0.0		
CSIS 251A INTERMEDIATE COMPUTER GRAPHICS															
4254N		3.0	6	11			2		1		2	22	66.0	BEKHTYAR	PT
COURSE TOTAL			6	11			2		1		2	22	66.0		
CSIS 274B ADVANCED DATABASE PACKAGES															
4255N	8	4.0	8	1	2						1	12	20.1	QUINN	
4256	8	2.0	4	1			4	4	3		3	19	14.6	FITZPATRICK	PT
COURSE TOTAL			12	2	2		4	4	3		4	31	34.7		
CSIS 275B ADV ELECTRONIC SPREADSHEET PKG															
4258	8	4.0	8	3			3	2	3		1	20	34.7	DE-MARCO	PT
COURSE TOTAL			8	3			3	2	3		1	20	34.7		
CSIS 280 JOB SEARCH ASSISTANCE															
4259N		2.0	29	4			1					34	68.0	ENOWITZ	XP
6943 **	10	0.0	4	10	6	2	2				1	25	0.0	ENOWITZ	XP
COURSE TOTAL			29	4			1					34	68.0		
CSIS 281 DIRECTED WORK EXP IN CSIS															
4260 **		0.0	30				1	3				34	0.0	ENOWITZ	
6946 **	9	0.0	7					2				9	0.0	GELB	
6947 **	9	0.0	13				1					14	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 282 DIRECTED WORK EXP IN CSIS															
4262 **		0.0	5				1					6	0.0	ENOWITZ	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4264		6.0	5	6	4	1	2				7	25	144.0	QUALLS	
4265		6.0	7	4	7		3				2	23	138.0	QUALLS	
COURSE TOTAL			12	10	11	1	5				9	48	282.0		

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	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 296 PROGRAMMING WITH C															
4266		6.0	3	3	2	1	1				11	21	126.0	AYOUB	PT
COURSE TOTAL			3	3	2	1	1				11	21	126.0		
CSIS 297 INTERMEDIATE C PROGRAMMING															
4267N		6.0	7	4	2						3	16	96.0	WHITESIDE	PT
COURSE TOTAL			7	4	2						3	16	96.0		
CSIS 299 INTERMEDIATE UNIX															
4272		3.0	1	8					1	1	3	14	42.0	QUALLS	
4274		3.0	13	2	2						8	25	78.0	MILES	PT
4276		3.0	7	1			2				12	22	63.0	CABRERA-JR	PT
6950	5	9.6		6	4							10	27.4	CABRERA-JR	PT
COURSE TOTAL			21	17	6		2		1	1	23	71	210.4		
SUBJECT TOTAL			696	356	154	57	143	18	29	6	543	2002	7676.2		

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 096 COMPUTER BASICS FOR THE OFFICE															
4347	16	2.0													
COURSE TOTAL									1	2	9	12	5.5	PRIGMORE	
									1	2	9	12	5.5		
CSIS 097 WINDOWS BASICS FOR THE OFFICE															
4349	16	2.0													
COURSE TOTAL									1	1	3	5	3.7	PRIGMORE	
									1	1	3	5	3.7		
CSIS 100 BASIC KEYBOARDING															
4351	16	3.0	6	4							5	15	27.4	HARLEY	
4352	16	3.0	6	1			5		1		7	20	35.7	ANSPACH	
4353	16	3.0	7	6			2				6	21	41.1	HARLEY	
4354	16	3.0	1		2	1	5				7	16	24.7	ANSPACH	
4355	16	3.0	1	1							6	8	5.5	ANSPACH	
4356	16	3.0	3	1		1	6	1			5	17	32.9	PRIGMORE	
COURSE TOTAL			24	13	2	2	18	1	1		36	97	167.3		
CSIS 105 INTRODUCTION TO COMPUTING															
4358		5.0	5	8	3		5				10	31	155.0	MAYNE-STAFFORD	
4360N		5.0	7	8	2	1	2		2		7	29	145.0	MAYNE-STAFFORD	
4362N		5.0	30	1					1		12	44	215.0	NORMAN	PT
COURSE TOTAL			42	17	5	1	7		3		29	104	515.0		
CSIS 110 PRINCIPLES/INFORMATION SYSTEMS															
4364		6.0	7	6	8		1				8	30	174.0	OLSON	PT
4366		6.0	23	4	1		2		1		6	37	222.0	PATCHETT	PT
4368		6.0	23	3		1					10	37	222.0	WILSON	PT
4369		6.0	11	1			1				1	14	84.0	PHALAN	PT
4370		6.0	4	5	6	2	2				11	30	180.0	DURKEE	PT
4372		6.0	6	5	7		8				7	33	198.0	LYCAN	PT
4374		6.0	14	11	7	1	1		1		5	40	240.0	MAYNE-STAFFORD	XP
4376		6.0	7	6	2	1	9				5	30	180.0	CORTEZ	PT
4378		6.0	9	13	10	4	3				3	42	252.0	QUINN	
4380		6.0	2	8	10	7	2				8	37	222.0	SMITH	PT
4382		6.0	10	12	10		3	1			7	43	258.0	QUINN	
4383		6.0	4	6	3	1	8	2			8	32	192.0	ALLEN	XP
4384		6.0	7	3	9	1	5				7	32	192.0	MCMILLAN	PT
4385N		6.0	11	5	1		1	4			6	28	168.0	GUZMAN	PT
4386N		6.0	3	6	3		5				4	21	126.0	ALLEN	
4387N		6.0	9	3	3	1	1				5	22	132.0	LINGVALL	PT
4388N		6.0	9	12	1	1	10	3			4	40	234.0	ALLEN	
6520 **	5	0.0	7	5	2						1	15	0.0	KLINGER	
COURSE TOTAL			159	109	81	20	62	10	2		105	548	3276.0		
CSIS 112 INTRO IBM PC DISK OPERATNG SYS															
4390		3.0	1	2			4		1		6	14	39.0	SELLERS	PT
4391		3.0	8	3	5			1			7	24	69.0	OLSON	PT
4392		3.0	6	5	4	3	3				6	27	81.0	GELB	
4393N		3.0	15	3	1						8	27	81.0	NORMAN	PT

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 112 INTRO IBM PC DISK OPERATNG SYS (CONT"D)															
6522 **	5	0.0	4	7	3						1	15	0.0	WEINBERG	
COURSE TOTAL			30	13	10	3	7	1	1		27	92	270.0		
CSIS 113 INTRODUCTION TO UNIX															
4395		3.0	9	2	4		1				6	22	66.0	COSTELLO	PT
4396		3.0	5	3		1	4	1			12	26	78.0	SFAKIANAKIS	PT
4397		3.0	10	6	1		1				4	22	66.0	QUALLS	
COURSE TOTAL			24	11	5	1	6	1			22	70	210.0		
CSIS 114 SMALL COMPUTER SYSTEMS															
4398		5.0	4	12	8	2	2				5	33	165.0	WATERS	PT
COURSE TOTAL			4	12	8	2	2				5	33	165.0		
CSIS 115 MICROCOMPUTER PROGRAM/BASIC															
4400		6.0	7	5	1	2					6	21	126.0	QUALLS	XP
COURSE TOTAL			7	5	1	2					6	21	126.0		
CSIS 119 PROGRAM DESIGN AND DEVELOPMENT															
4402		3.0	7	5	6	1	1	1			3	24	72.0	QUALLS	
4403		3.0	5	4	4		1				6	20	60.0	PARKER	PT
4404N		3.0	9	2	1		1	2			10	25	69.0	GUZMAN	PT
4405N		3.0	15	4	2		4				7	32	96.0	BEHNKE	PT
COURSE TOTAL			36	15	13	1	7	3			26	101	297.0		
CSIS 120 COMPREHNSIVE WORD LEVEL I															
4320	16	2.0		3	1						1	5	7.3	MCMANUS	
COURSE TOTAL				3	1						1	5	7.3		
CSIS 121 COMPREHNSIVE WORD LEVEL II															
4322	16	2.0		2								2	3.7	MCMANUS	
COURSE TOTAL				2								2	3.7		
CSIS 122 COMPREHNSIVE WORD LEVEL III															
4324	16	2.0	2									2	3.7	MCMANUS	
COURSE TOTAL			2									2	3.7		
CSIS 123 COMPREHNSIVE EXCEL LEVEL I															
4326	16	2.0	2	2	1		2				6	13	12.8	MCMANUS	
COURSE TOTAL			2	2	1		2				6	13	12.8		
CSIS 124 COMPREHNSIVE EXCEL LEVEL II															
4328	16	2.0	3				1				5	9	7.3	MCMANUS	
COURSE TOTAL			3				1				5	9	7.3		
CSIS 125 COMPREHNSIVE EXCEL LEVEL III															
4330 **	16	0.0									1	1	0.0	MCMANUS	
COURSE TOTAL													0.0		

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 126 COMPREHNSIVE ACCESS LEVEL I															
4332	16	2.0	8	2			2					12	21.9	MCMANUS	
COURSE TOTAL			8	2			2					12	21.9		
CSIS 127 COMPREHNSIVE ACCESS LEVEL II															
4334	16	2.0	6									6	11.0	MCMANUS	
COURSE TOTAL			6									6	11.0		
CSIS 128 COMPREHNSIVE ACCESS LEVEL III															
4336	16	2.0	3	1	1							5	9.1	MCMANUS	
COURSE TOTAL			3	1	1							5	9.1		
CSIS 129 COMPREHNSVE POWERPOINT LEVEL I															
4338	16	2.0	1	1							2	4	3.7	MCMANUS	
COURSE TOTAL			1	1							2	4	3.7		
CSIS 130 COMPRHNSVE POWERPOINT LEVEL II															
4340	16	2.0					1				1	2	1.8	MCMANUS	
COURSE TOTAL							1				1	2	1.8		
CSIS 131 COMPRHNSV POWERPOINT LEVEL III															
4342 **	16	0.0													
COURSE TOTAL											1	1	0.0	MCMANUS	
													0.0		
CSIS 132 INTRODUCTION TO THE INTERNET															
4407		2.5	8	5	3		4				4	24	60.0	FLORES	PT
4408		2.5	8	2							11	21	52.5	FITZPATRICK	PT
COURSE TOTAL			16	7	3		4				15	45	112.5		
CSIS 134 WEB PUBLISHING I															
4410		5.0	8	3	3	2	1		2		6	25	125.0	QUINN	
4411		5.0	11	5	1	1	4		1		1	24	120.0	FLORES	PT
4412N		5.0	3	8	4	2	5				5	27	135.0	WILSON	PT
6527 **	9	0.0	1	4	4		1					10	0.0	WEINBERG	
COURSE TOTAL			22	16	8	5	10		3		12	76	380.0		
CSIS 135 JAVASCRIPT PROGRAMMING															
4413N		5.0	11	9	2						2	24	120.0	PARKER	PT
6528 **	9	0.0	4	5							1	10	0.0	WILSON	PT
COURSE TOTAL			11	9	2						2	24	120.0		
CSIS 136 WEB PUBLISHING II															
4414N		5.0	6	3	4	2	2		2		5	24	120.0	EISENBERG	PT
6529 **	6	0.0	5	4								9	0.0	AGAMAH	PT
COURSE TOTAL			6	3	4	2	2		2		5	24	120.0		
CSIS 140 INTRODUCTION TO LAN MANAGEMENT															
4416N		6.0	4	7			5				4	20	120.0	UMBARGER	PT
6532 **	6	0.0	1	5	5	3						14	0.0	GELB	XP

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 140 INTRODUCTION TO LAN MANAGEMENT (CONT"D)															
COURSE TOTAL			4	7			5				4	20	120.0		
CSIS 141 NETWORK ANALYSIS/SYSTEMS INTGR															
4417N		4.0		4	2		1				3	10	40.0	HUSAR	PT
COURSE TOTAL				4	2		1				3	10	40.0		
CSIS 142 INTRODUCTION TO NETWORKING															
4418	8	4.0		4	3	5	8				2	22	36.6	GELB	XP
4419N	8	4.0	6	5	4	2	1	1			2	21	34.7	GELB	
6534 **	4	0.0	6	4	5	2		1			1	19	0.0	CARLETON	PT
COURSE TOTAL			6	9	7	7	9	1			4	43	71.3		
CSIS 143 INTRO TO LOCAL AREA NETWORKS															
4420	8	4.0	3	1	2	1	1	1			6	15	16.5	GELB	
4421N	8	4.0	5	5	2		1	1			3	17	25.6	GELB	
6535 **	5	0.0	5	6	3	1					2	17	0.0	CARLETON	PT
COURSE TOTAL			8	6	4	1	2	2			9	32	42.1		
CSIS 145 INTRODUCTION TO TCP/IP															
4425N	8	4.0	3	1	2	2	2				6	16	18.3	SEEGER	PT
6537 **	4	0.0	2	5	6	1					1	15	0.0	CARLETON	PT
COURSE TOTAL			3	1	2	2	2				6	16	18.3		
CSIS 151D INTRO TO COMPUTER GRAPHICS															
4426		3.0	7	4	1	1					5	18	54.0	MEDINA	PT
4427		3.0	3	5	7	2	1				3	21	63.0	CUDAHY	PT
4428		3.0	6	6	4	1	1				4	22	63.0	CUDAHY	PT
4429N		3.0	5	1			2		1	1	6	16	48.0	KEMP	PT
4430		3.0	6	6		1	1				13	27	81.0	HOTZ	XP
6539 **	5	0.0	5	5								10	0.0	CALIGIURI	PT
COURSE TOTAL			27	22	12	5	5		1	1	31	104	309.0		
CSIS 165 MICRO ASSEMBLY LANGUAGE PROG															
4433		6.0	4				1	3				8	48.0	SELLERS	PT
COURSE TOTAL			4				1	3				8	48.0		
CSIS 172 INTRO MICROCOMPUTER APPLICATNS															
4435		2.0	6	2							3	11	22.0	SMITH	PT
4436		2.0	3	1			3				6	13	26.0	DE-MARCO	PT
COURSE TOTAL			9	3			3				9	24	48.0		
CSIS 173B MICROCOMPUTER WORD PROCESSING															
4438		2.0	8	1			2				2	13	26.0	DE-MARCO	PT
COURSE TOTAL			8	1			2				2	13	26.0		
CSIS 174B MICROCOMPUTER DATABASE PKGS															
4442N	8	4.0	13	1	1		2				3	20	31.1	QUINN	XP
4443		4.0	5	2	1						6	14	52.0	HOTZ	

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 174B MICROCOMPUTER DATABASE PKGS (CONT"D)															
6541 **	4	0.0	2	5	2		1					10	0.0	WEINBERG	
COURSE TOTAL			18	3	2		2				9	34	83.1		
CSIS 175B MICROCOMPUTER ELEC SPREADSHEET															
4447		2.0	9	4		1					4	18	36.0	HOTZ	
COURSE TOTAL			9	4		1					4	18	36.0		
CSIS 176 COMPUTERIZED ACCT APPLICATION															
4457N		2.0	2	1	1						3	7	14.0	JUDKINS	
COURSE TOTAL			2	1	1						3	7	14.0		
CSIS 177A PRESENTATION GRAPHICS															
4459		3.0	10				3				8	21	63.0	FITZPATRICK	PT
COURSE TOTAL			10				3				8	21	63.0		
CSIS 185A PERSONAL COMPUTER FUNDAMENTALS															
4460	2	4.0							4	2		6	2.7	PATCHETT	PT
4461	2	4.0							3	1		4	1.8	SMERK	PT
COURSE TOTAL									7	3		10	4.5		
CSIS 186A P C OPERATING SYSTEMS															
4462	2	4.0							6	1		7	3.2	SMERK	PT
6544 **	1	0.0							10			10	0.0	KLINGER	
COURSE TOTAL									6	1		7	3.2		
CSIS 186B P C OPERATING SYSTEMS															
6546 **	1	0.0							10			10	0.0	KEMP	PT
COURSE TOTAL													0.0		
CSIS 190 DIGITAL MULTIMEDIA I															
4466N		6.0	2	6							3	11	66.0	SILVERSTEIN	PT
COURSE TOTAL			2	6							3	11	66.0		
CSIS 195 VIDEO EDITING ON THE PC															
4467N		3.0	8	13	2	1	2				3	29	87.0	BEKHTYAR	PT
COURSE TOTAL			8	13	2	1	2				3	29	87.0		
CSIS 196 INTERACT MULTIMEDIA AUTHORING															
4468		3.0	9	2				1			4	16	48.0	CALIGIURI	PT
COURSE TOTAL			9	2				1			4	16	48.0		
CSIS 198 SUPERVISED TUTORING - CSIS															
4469 **	16	0.0									38	38	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 249 NETWORK ANALYSIS AND DESIGN															
6550 **	5	0.0		7	7	1					1	16	0.0	SMITH	PT

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
CSIS 249 NETWORK ANALYSIS AND DESIGN (CONT"D)															
COURSE TOTAL													0.0		
CSIS 250 NETWORKS AND TELEPROCESSING															
4470N		3.0	2	11	8						1	22	66.0	ROYER	PT
COURSE TOTAL			2	11	8						1	22	66.0		
CSIS 251D INTERMEDIATE COMPUTER GRAPHICS															
4471N		3.0	6	11	1	1	2					21	63.0	BEKHTYAR	PT
COURSE TOTAL			6	11	1	1	2					21	63.0		
CSIS 274A ADVANCED DATABASE PACKAGES															
6551 **	4	0.0	1	3	4	1					1	10	0.0	WEINBERG	
COURSE TOTAL													0.0		
CSIS 274B ADVANCED DATABASE PACKAGES															
4472N	8	4.0	6	3	1				2		7	19	21.9	QUINN	XP
4473	8	4.0	5	1			4				3	13	18.3	HOTZ	
COURSE TOTAL			11	4	1		4		2		10	32	40.2		
CSIS 275B ADV ELECTRONIC SPREADSHEET PKG															
4474	8	4.0	8	3			3				1	15	25.6	HOTZ	
COURSE TOTAL			8	3			3				1	15	25.6		
CSIS 280 JOB SEARCH ASSISTANCE															
6554 **	8	0.0	10		5	1					1	17	0.0	ENOWITZ	
COURSE TOTAL													0.0		
CSIS 281 DIRECTED WORK EXP IN CSIS															
6557 **	8	0.0	15			1					2	18	0.0	GELB	
COURSE TOTAL													0.0		
CSIS 293 INTRO TO JAVA PROGRAMMING															
4477		6.0	13	3		1	2				5	24	144.0	QUALLS	
COURSE TOTAL			13	3		1	2				5	24	144.0		
CSIS 296 PROGRAMMING WITH C															
4478N		6.0	8	1							12	21	126.0	HOTZ	
COURSE TOTAL			8	1							12	21	126.0		
CSIS 299 INTERMEDIATE UNIX															
4485		3.0	4	6		1			2		4	17	51.0	QUALLS	
4486N		3.0	2	2	1		4	1		1	9	20	60.0	CABRERA	PT
6559 **	4	0.0	5	3	1							9	0.0	CALIGIURI	PT
COURSE TOTAL			6	8	1	1	4	1	2	1	13	37	111.0		
SUBJECT TOTAL			587	364	188	59	183	24	32	9	461	1907	7553.6		

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APPENDIX 6

Results of Student Survey

Survey Distribution List

Subject_Course Number_Section Number	N
CSIS_105 _4361	25
CSIS_110 _4368	37
CSIS_110 _4374	38
CSIS_110 _4375	35
CSIS_110 _4378	23
CSIS_110 _4382	41
CSIS_110 _4386	45
CSIS_112 _4391	23
CSIS_112 _4392	22
CSIS_114 _4398	15
CSIS_115A_4399	18
CSIS_119 _4402	25
CSIS_135 _4413	12
CSIS_136 _4414	12
CSIS_137 _4415	20
CSIS_146 _4426	10
CSIS_151D_4430	15
CSIS_160 _4434	25
CSIS_165 _4435	20
CSIS_190 _4462	7
CSIS_276 _4474	18
CSIS_293 _4476	20
	506

Sample Size Calculations

Population Size	767
Confidence Level	95%
Margin of Error	3%
Sample Size Needed	446

Grossmont College Computer and Information Science Department Student Survey
N=303

1. How many courses have you taken in this subject area at Grossmont College? (including this current course and any repeated courses).

	Frequency	Percent
One	163	53.8
Two	53	17.5
Three	27	8.9
More than three	60	19.8
Total	**303**	**100.0**

2. Is your major in this department?

	Frequency	Percent
Yes	128	43.0
No	115	38.6
Undecided	55	18.5
Total	**298**	**100.0**
No Response	5	
Total	303	

3. How did you find out about this class? (Mark all that apply)

	Frequency	Percent
Class Schedule/College catalog	216	72.0
Gorssmont College Counselor	70	23.3
Grossmont webpage (online)	50	16.7
Friend or family member	36	12.0
Grossmont College Instructor	15	5.0
Grossmont College presentation or special event	2	.7
Public media	1	.3
Work referral	1	.3

Note: Since respondents are able to select more than one option, the total percent may not be equal to 100. Percentages are based on the total number of respondents to this item (i.e., 300)

4. What is your reason(s) for taking this class? (Mark all that apply)

	Frequency	Percent
Required for major	158	52.7
General interest	99	33.0
Transfer	66	22.0
Would like to major in a related field	55	18.3
General education requirement	50	16.7
Prerequisite	50	16.7
Fits my schedule	36	12.0
Improve job skills	1	.3

Note: Since respondents are able to select more than one option, the total percent may not be equal to 100. Percentages are based on the total number of respondents to this item (i.e., 300)

5. Which of the following helped you learn the course material best? (Mark all that apply)

	Frequency	Percent
Lecture	182	60.9
Computer lab	126	42.1
Homework	97	32.4
Class discussion	66	22.1
Instructor/Class notes	59	19.7
Handouts	58	19.4
Computer presentations	57	19.1
Quizzes	56	18.7
Group work in class	48	16.1
Textbooks	30	10.0
Slides, transparencies	29	9.7
Instructor website	27	9.0
Videos/DVDs	21	7.0
Study groups	17	5.7
Tutoring	17	5.7
Meeting(s) with instructor	6	2.0
Other	2	.7

Note: Since respondents are able to select more than one option, the total percent may not be equal to 100. Percentages are based on the total number of respondents to this item (i.e., 299)

6a. Please indicate your lever of agreement with the following statements: The classrooms for this program are clean and in good repair.

	Frequency	Percent
Strongly Agree	196	64.7
Agree	95	31.4
Neutral	9	3.0
Strongly Disagree	3	1.0
Total	**303**	**100.0**

6b. Please indicate your lever of agreement with the following statements: The classroom equipment is maintained and up-to-date.

	Frequency	Percent
Strongly Agree	177	59.0
Agree	104	34.7
Neutral	14	4.7
Disagree	3	1.0
Strongly Disagree	2	.7
Total	**300**	**100.0**
No Response	3	
Total	303	

6c. Please indicate your lever of agreement with the following statements: The computer technology used in the classroom is up-to-date.

	Frequency	Percent
Strongly Agree	169	56.5
Agree	113	37.8
Neutral	10	3.3
Disagree	6	2.0
Strongly Disagree	1	.3
Total	**299**	**100.0**
No Response	4	
Total	303	

6d. Please indicate your lever of agreement with the following statements: Textbooks for this class were available in the bookstore when needed.

	Frequency	Percent
Strongly Agree	156	53.2
Agree	82	28.0
Neutral	16	5.5
Disagree	21	7.2
Strongly Disagree	18	6.1
Total	**293**	**100.0**
No Response	3	
Don't Know	7	
Total	303	

7. How satisfied are you with the availability of courses in this department?

	Frequency	Percent
Very satisfied	84	28.0
Satisfied	142	47.3
Neutral	50	16.7
Dissatisfied	19	6.3
Very dissatisfied	5	1.7
Total	**300**	**100.0**
No Response	3	
Total	303	

8a. What would be your preferred start time(s) for courses to be offered? (Weekdays).

	Frequency	Percent
Morning/ Afternoon (9am-3pm)	173	57.3
Evening:Mon.-Thurs. (4pm-9pm)	78	25.8
Early Mornings (7am-8pm)	59	19.5
No Preference	28	9.3
Evening: Friday (4pm-9pm)	24	7.9

Note: Since respondents are able to select more than one option, the total percent may not be equal to 100. Percentages are based on the total number of respondents to this item (i.e.,302)

8b. What would be your preferred start time(s) for courses to be offered?: Saturdays

	Frequency	Percent
Would not attend on Saturdays	135	44.7
Morning/ Afternoon (9am-3pm)	75	24.8
Early Mornings (7am-8pm)	43	14.2
No Preference	36	11.9
Evening (4pm-9pm)	17	5.6

Note: Since respondents are able to select more than one option, the total percent may not be equal to 100. Percentages are based on the total number of respondents to this item (i.e., 302)

8c. What would be your preferred start time(s) for courses to be offered?: Sundays (if offered)

	Frequency	Percent
Would not attend on Saturdays	185	61.5
Morning/ Afternoon (9am-3pm)	41	13.6
No Preference	35	11.6
Early Mornings (7am-8pm)	27	9.0
Evening (4pm-9pm)	12	4.0

Note: Since respondents are able to select more than one option, the total percent may not be equal to 100. Percentages are based on the total number of respondents to this item (i.e., 301)

9. Are you aware that you can earn a certificate or degree in this department?

	Frequency	Percent
Yes	219	74.0
No	77	26.0
Total	**296**	**100.0**
No Response	7	
Total	303	

10. Do you feel you were placed in the appropriate course(s) within this department this semester?

	Frequency	Percent
Yes	213	96.4
No	8	3.6
Total	**221**	**100.0**
No Response	7	
N/A- I was not advised of placement for a class in this department this semester	75	
Total	303	

11. Rate the extent to which the couse offered in this department prepared students for a job in the computer industry.

	Frequency	Percent
Excellent preparation	70	23.6
Good preparation	144	48.5
Average preparation	39	13.1
Poor preparation	5	1.7
No opinion	39	13.1
Total	**297**	**100.0**
No Response	6	
Total	303	

12. Do you intend to take advantage of the Work Experience (Internship) program in this department?

	Frequency	Percent
Yes	69	23.2
No	106	35.6
Don't know	123	41.3
Total	**298**	**100.0**
No Response	5	
Total	303	

13. Which of the following course delivery options do you prefer?

	Frequency	Percent
Online services	27	9.1
Fate-to-face classes	207	69.7
Hybrid classes (some hours online and some in the classroom)	63	21.2
Total	**297**	**100.0**
No Response	6	
Total	303	

	Frequency	Percent
Often: 2-4 times per week	14	13.2
Sometimes: once per week	23	21.7
Rarely: 1-2 times per week	69	65.1
Total	**106**	**100.0**
No Response	16	
Never	181	
Total	303	

14b. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	9	8.9
Sometimes: once per week	19	18.8
Rarely: 1-2 times per week	73	72.3
Total	**101**	**100.0**
No Response	14	
Never	188	
Total	303	

14c. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	10	5.1
Sometimes: once per week	41	20.9
Rarely: 1-2 times per week	145	74.0
Total	**196**	**100.0**
No Response	16	
Never	91	
Total	303	

14d. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	16	17.8
Sometimes: once per week	27	30.0
Rarely: 1-2 times per week	47	52.2
Total	**90**	**100.0**
No Response	16	
Never	197	
Total	303	

14e. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	7	15.2
Sometimes: once per week	8	17.4
Rarely: 1-2 times per week	31	67.4
Total	**46**	**100.0**
No Response	15	
Never	242	
Total	303	

14f. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	2	3.3
Sometimes: once per week	10	16.4
Rarely: 1-2 times per week	49	80.3
Total	**61**	**100.0**
No Response	16	
Never	226	
Total	303	

14g. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	68	40.5
Sometimes: once per week	54	32.1
Rarely: 1-2 times per week	46	27.4
Total	**168**	**100.0**
No Response	19	
Never	116	
Total	303	

14h. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	8	15.4
Sometimes: once per week	17	32.7
Rarely: 1-2 times per week	27	51.9
Total	**52**	**100.0**
No Response	18	
Never	233	
Total	303	

14i. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	68	32.2
Sometimes: once per week	73	34.6
Rarely: 1-2 times per week	70	33.2
Total	**211**	**100.0**
No Response	17	
Never	75	
Total	303	

14j. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	27	26.7
Sometimes: once per week	24	23.8
Rarely: 1-2 times per week	50	49.5
Total	**101**	**100.0**
No Response	16	
Never	186	
Total	303	

14k. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	4	6.6
Sometimes: once per week	5	8.2
Rarely: 1-2 times per week	52	85.2
Total	**61**	**100.0**
No Response	22	
Never	220	
Total	303	

14l. Please indicate how often you use each of the following campus resources:

	Frequency	Percent
Often: 2-4 times per week	22	26.5
Sometimes: once per week	20	24.1
Rarely: 1-2 times per week	41	49.4
Total	**83**	**100.0**
No Response	20	
Never	200	
Total	303	

15. Gender:

	Frequency	Percent
Male	205	70.0
Female	88	30.0
Total	**293**	**100.0**
No Response	10	
Total	303	

16. Age:

	Frequency	Percent
Under 20	86	29.2
20-24	117	39.7
25-29	34	11.5
30-49	38	12.9
50 or older	20	6.8
Total	**295**	**100.0**
No Response	8	
Total	303	

17. Ethnicity.

	Frequency	Percent
Asian	57	19.9
Black	12	4.2
Filipino	5	1.7
Hispanic	31	10.8
Native American	6	2.1
Pacific Islander	2	.7
Middle Eastern	15	5.2
White, Non-Hispanic and not or Middle Eastern descent	152	53.1
Other	6	2.1
Total	**286**	**100.0**
No Response	17	
Total	303	

17.Ethnicity (Other)

	Frequency
French	1

18. Primary Language.

	Frequency	Percent
English	212	73.4
Japanese	20	6.9
Spanish	18	6.2
Korean	17	5.9
Arabic/Chaldean	9	3.1
Kurdish	2	.7
Russian	2	.7
Chinese	1	.3
Other	8	2.8
Total	**289**	**100.0**
No Response	14	
Total	303	

18 Primary Language (other)

	Frequency
Italian	1
French	1

APPENDIX 7

Statistical Data: Outcomes Profile

Enrollment by Ethnicity

	Fall 2001		Fall 2002		Fall 2003		Fall 2004		Fall 2005	
Ethnicity	N	%	N	%	N	%	N	%	N	%
Asian	330	*12.4*	374	*15.9*	288	*13.9*	162	*11.1*	100	*9.1*
Black non-Hispanic	182	*6.9*	96	*4.1*	108	*5.2*	83	*5.7*	76	*6.9*
Filipino	68	*2.6*	42	*1.8*	63	*3.0*	34	*2.3*	21	*1.9*
Hispanic	310	*11.7*	265	*11.3*	260	*12.5*	183	*12.5*	123	*11.2*
American Indian/Alaskan Native	28	*1.1*	16	*0.7*	27	*1.3*	23	*1.6*	14	*1.3*
Other	91	*3.4*	88	*3.7*	59	*2.8*	51	*3.5*	18	*1.6*
Pacific Islander	25	*0.9*	19	*0.8*	30	*1.4*	13	*0.9*	12	*1.1*
White non-Hispanic	1,546	*58.3*	1,344	*57.1*	1,131	*54.5*	797	*54.4*	635	*57.9*
Unknown	71	*2.7*	111	*4.7*	109	*5.3*	119	*8.1*	97	*8.9*
Total	2,651	*100.0*	2,355	*100.0*	2,075	*100.0*	1,465	*100.0*	1,096	*100.0*

Success, No Success, and Withdrawal by Ethnicity

	Fall 2001								Fall 2002							
	Success		No Success		Withdrawal		Total		Success		No Success		Withdrawal		Total	
Ethnicity	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Asian	189	*71.6*	23	*8.7*	52	*19.7*	264	*100.0*	209	*70.8*	21	*7.1*	65	*22.0*	295	*100.0*
Black non-Hispanic	84	*53.2*	29	*18.4*	45	*28.5*	158	*100.0*	26	*33.8*	11	*14.3*	40	*51.9*	77	*100.0*
Filipino	27	*51.9*	16	*30.8*	9	*17.3*	52	*100.0*	17	*53.1*	4	*12.5*	11	*34.4*	32	*100.0*
Hispanic	156	*61.4*	37	*14.6*	61	*24.0*	254	*100.0*	129	*59.7*	25	*11.6*	62	*28.7*	216	*100.0*
American Indian/Alaskan Native	7	*36.8*	4	*21.1*	8	*42.1*	19	*100.0*	9	*69.2*	2	*15.4*	2	*15.4*	13	*100.0*
Other	48	*64.9*	10	*13.5*	16	*21.6*	74	*100.0*	43	*62.3*	9	*13.0*	17	*24.6*	69	*100.0*
Pacific Islander	15	*78.9*	1	*5.3*	3	*15.8*	19	*100.0*	9	*60.0*	1	*6.7*	5	*33.3*	15	*100.0*
White non-Hispanic	829	*64.9*	142	*11.1*	307	*24.0*	1,278	*100.0*	762	*67.0*	127	*11.2*	249	*21.9*	1,138	*100.0*
Unknown	40	*65.6*	10	*16.4*	11	*18.0*	61	*100.0*	45	*52.3*	20	*23.3*	21	*24.4*	86	*100.0*
Total	1,395	*64.0*	272	*12.5*	512	*23.5*	2,179	*100.0*	1,249	*64.3*	220	*11.3*	472	*24.3*	1,941	*100.0*

Course Retention by Ethnicity

	Fall 2001		Fall 2002		Fall 2003		Fall 2004		Fall 2005	
Ethnicity	N	%	N	%	N	%	N	%	N	%
Asian	212	*80.3*	230	*78.0*	188	*82.8*	104	*81.3*	79	*79.0*
Black non-Hispanic	113	*71.5*	37	*48.1*	50	*56.2*	36	*52.2*	51	*67.1*
Filipino	43	*82.7*	21	*65.6*	45	*81.8*	21	*65.6*	15	*71.4*
Hispanic	193	*76.0*	154	*71.3*	171	*75.3*	111	*72.1*	81	*66.4*
American Indian/Alaskan Native	11	*57.9*	11	*84.6*	16	*72.7*	13	*68.4*	9	*64.3*
Other	58	*78.4*	52	*75.4*	32	*66.7*	32	*72.7*	9	*50.0*
Pacific Islander	16	*84.2*	10	*66.7*	14	*56.0*	10	*83.3*	9	*75.0*
White non-Hispanic	971	*76.0*	889	*78.1*	719	*74.2*	500	*74.0*	454	*71.7*
Unknown	50	*82.0*	65	*75.6*	72	*75.0*	72	*70.6*	65	*67.0*
Total	1,667	*76.5*	1,469	*75.7*	1,307	*74.3*	899	*72.7*	772	*70.6*

Success, No Success, and Withdrawal by Gender

	Fall 2001								Fall 2002								Fall 2003							
	Success		No Success		Withdrawal		Total		Success		No Success		Withdrawal		Total		Success		No Success		Withdrawal		Total	
Gender	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Male	852	63.9	184	13.8	297	22.3	1,333	100.0	681	60.3	149	13.2	299	26.5	1,129	100.0	702	62.2	142	12.6	285	25.2	1,129	100.0
Female	543	64.2	88	10.4	215	25.4	846	100.0	567	70.1	69	8.5	173	21.4	809	100.0	387	62.6	69	11.2	162	26.2	618	100.0
Total	1,395	64.0	272	12.5	512	23.5	2,179	100.0	1,248	64.4	218	11.2	472	24.4	1,938	100.0	1,089	62.3	211	12.1	447	25.6	1,747	100.0

Course Retention by Gender

	Fall 2001		Fall 2002		Fall 2003		Fall 2004		Fall 2005	
Gender	N	%	N	%	N	%	N	%	N	%
Male	1,036	77.7	830	73.5	844	74.8	586	72.9	505	70.0
Female	631	74.6	636	78.6	456	73.8	306	73.2	259	71.7
Total	1,667	76.5	1,466	75.6	1,300	74.4	892	73.0	764	70.6

Fall 2004								Fall 2005							
Success		No Success		Withdrawal		Total		Success		No Success		Withdrawal		Total	
N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
457	*56.8*	129	*16.0*	218	*27.1*	804	*100.0*	404	*56.0*	101	*14.0*	216	*30.0*	721	*100.0*
243	*58.1*	63	*15.1*	112	26.8	418	*100.0*	200	*55.4*	59	*16.3*	102	*28.3*	361	*100.0*
700	*57.3*	192	*15.7*	330	*27.0*	1,222	*100.0*	604	*55.8*	160	*14.8*	318	*29.4*	1,082	*100.0*

Success, No Success, and Withdrawal by Age

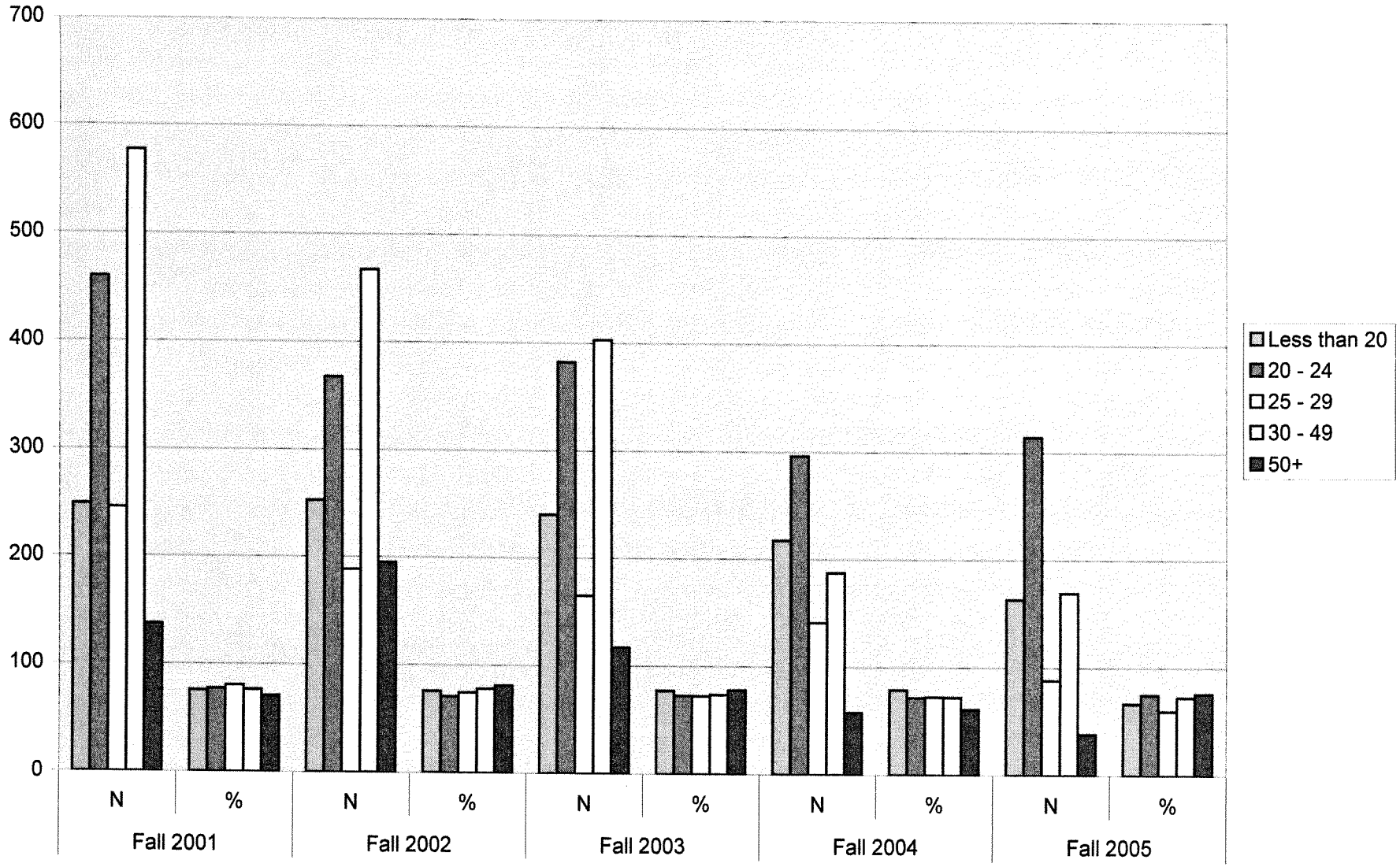
	Fall 2001								Fall 2002								Fall 2003							
	Success		No Success		Withdrawal		Total		Success		No Success		Withdrawal		Total		Success		No Success		Withdrawal		Total	
Age	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Less than 20	188	*57.3*	60	*18.3*	80	*24.4*	328	*100.0*	194	*58.3*	58	*17.4*	81	*24.3*	333	*100.0*	202	*65.2*	38	*12.3*	70	*22.6*	310	*100.0*
20 - 24	374	*62.8*	86	*14.4*	136	*22.8*	596	*100.0*	301	*58.1*	66	*12.7*	151	*29.2*	518	*100.0*	305	*58.2*	77	*14.7*	142	*27.1*	524	*100.0*
25 - 29	211	*69.2*	34	*11.1*	60	*19.7*	305	*100.0*	171	*67.9*	17	*6.7*	64	*25.4*	252	*100.0*	130	*57.0*	35	*15.4*	63	*27.6*	228	*100.0*
30 - 49	496	*65.6*	81	*10.7*	179	*23.7*	756	*100.0*	416	*69.6*	51	*8.5*	131	*21.9*	598	*100.0*	360	*65.9*	43	*7.9*	143	*26.2*	546	*100.0*
50+	126	*64.9*	11	*5.7*	57	*29.4*	194	*100.0*	167	*69.6*	28	*11.7*	45	*18.8*	240	*100.0*	99	*66.0*	18	*12.0*	33	*22.0*	150	*100.0*
Total	1,395	*64.0*	272	*12.5*	512	*23.5*	2,179	*100.0*	1,249	*64.3*	220	*11.3*	472	*24.3*	1,941	*100.0*	1,096	*62.3*	211	*12.0*	451	*25.7*	1,758	*100.0*

Course Retention by Age

	Fall 2001		Fall 2002		Fall 2003		Fall 2004		Fall 2005	
Age	N	%	N	%	N	%	N	%	N	%
Less than 20	248	*75.6*	252	*75.7*	240	*77.4*	217	*78.9*	163	*66.8*
20 - 24	460	*77.2*	367	*70.8*	382	*72.9*	296	*71.8*	314	*74.9*
25 - 29	245	*80.3*	188	*74.6*	165	*72.4*	141	*72.3*	88	*59.9*
30 - 49	577	*76.3*	467	*78.1*	403	*73.8*	187	*72.2*	169	*72.5*
50+	137	*70.6*	195	*81.3*	117	*78.0*	58	*61.1*	38	*76.0*
Total	1,667	*76.5*	1,469	*75.7*	1,307	*74.3*	899	*72.7*	772	*70.6*

Fall 2004								Fall 2005							
Success		No Success		Withdrawal		Total		Success		No Success		Withdrawal		Total	
N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
158	*57.5*	59	*21.5*	58	*21.1*	275	*100.0*	127	*52.0*	36	*14.8*	81	*33.2*	244	*100.0*
240	*58.3*	56	*13.6*	116	*28.2*	412	*100.0*	243	*58.0*	71	*16.9*	105	*25.1*	419	*100.0*
108	*55.4*	33	*16.9*	54	*27.7*	195	*100.0*	70	*47.6*	18	*12.2*	59	*40.1*	147	*100.0*
154	*59.5*	33	*12.7*	72	*27.8*	259	*100.0*	136	*58.4*	33	*14.2*	64	*27.5*	233	*100.0*
47	*49.5*	11	*11.6*	37	*38.9*	95	*100.0*	34	*68.0*	4	*8.0*	12	*24.0*	50	*100.0*
707	*57.2*	192	*15.5*	337	*27.3*	1,236	*100.0*	610	*55.8*	162	*14.8*	321	*29.4*	1,093	*100.0*

Course Retention by Age



APPENDIX 8

Efficiency Report

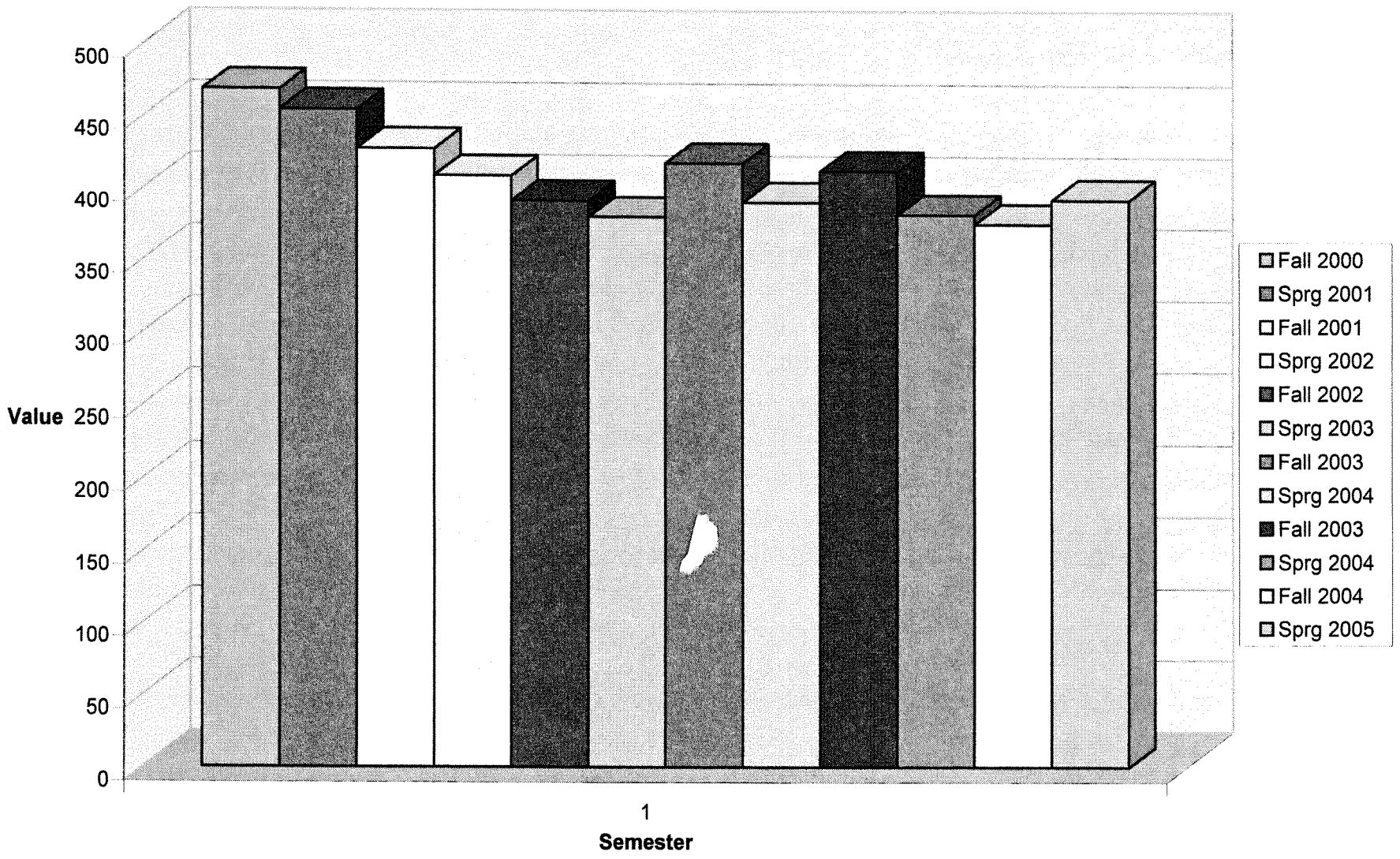
Grossmont College
Efficiency
(Earned WSCH/FTEF)

GC Efficiency

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
ANTH	670	610	555	719	668	700	685	706	698	601	647	581
AOJ	444	412	487	487	540	538	570	569	560	524	483	478
ARBC	405	390	383	325	345	295	351	410	350	298	365	331
ART	524	514	514	491	506	516	505	500	485	459	447	430
ASL	464	455	430	473	417	449	466	433	363	363	354	386
ASTR	626	440	631	612	592	565	547	565	545	504	514	451
BIO	638	634	673	696	763	720	760	758	729	765	723	692
BOT	N/A	N/A	462	446	491	500	552	386	364	341	350	257
BUS	483	459	453	512	543	555	573	530	505	468	469	472
CA	N/A	N/A	433	426	296	377	350	399	401	387	362	371
CCS	423	498	491	483	488	476	539	483	425	415	482	473
CD	501	451	500	509	547	522	511	523	530	502	525	430
CHEM	451	463	454	489	530	533	559	562	518	530	556	526
CHIN	N/A	N/A	N/A	N/A	450	435	255	435	465	360	405	450
COMM	461	437	445	446	460	431	464	437	435	425	417	386
CSIS	469	455	428	410	392	381	419	392	414	384	377	395
CVTE	386	368	285	265	360	329	366	339	385	357	357	346
DANC	404	419	423	454	411	480	395	444	443	419	429	376
ECON	795	667	747	745	736	736	778	747	649	639	614	765
ED	300	353	150	269	379	161	210	210	195	270	203	268
ENGL	375	346	361	344	381	369	366	354	354	335	345	311
ES	531	463	564	509	573	484	535	495	536	460	481	435
ESL	368	366	378	381	401	375	375	351	350	331	326	322
FACS	515	478	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FREN	371	375	367	370	347	367	380	384	347	337	318	305
FS	N/A	N/A	581	457	623	534	608	656	540	566	477	471
GEOG	558	535	567	568	585	543	583	532	530	498	482	447
GEOL	533	480	456	495	480	485	490	422	376	371	411	343
GERM	337	369	315	345	379	424	456	392	367	377	315	359
HED	614	625	737	725	871	776	848	799	819	734	694	765
HESC	293	282	294	327	381	516	510	254	473	159	609	256
HIST	532	537	552	591	570	618	614	601	605	561	545	499
HUM	553	528	535	610	576	534	526	515	466	448	392	371
ITAL	526	480	435	350	300	465	503	458	465	420	420	285
JAPN	417	366	408	353	437	341	433	468	471	444	473	443
LIR	N/A	N/A	N/A	N/A	N/A	N/A	373	N/A	164	373	239	294
MATH	593	526	592	572	629	584	613	565	593	499	545	462
MCOM	416	422	386	396	402	421	391	405	395	399	363	375
MM	N/A	N/A	255	270	N/A	291	N/A	206	N/A	137	N/A	N/A
MUS	459	485	473	464	462	491	465	499	472	487	430	414
NURS	278	334	271	248	247	228	253	235	250	254	207	241
OCEA	485	443	528	424	495	453	509	547	473	518	518	536
OTA	335	305	220	122	187	212	245	238	241	218	303	390
PDC	470	398	470	470	452	386	416	391	438	342	431	331
PDSS	613	629	739	640	1739	849	842	1631	802	1577	1730	1486
PHIL	555	552	541	594	560	588	595	594	539	490	468	422
PHYC	422	405	405	378	482	444	444	402	452	387	403	371
POSC	613	575	596	627	665	622	641	638	637	602	526	508
PSC	578	464	572	486	609	492	572	648	600	568	512	414

Grossmont College
Efficiency
(Earned WSCH/FTEF)

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
PSY	686	624	651	673	704	709	684	638	627	622	579	545
RELG	671	660	564	675	520	621	483	576	515	591	413	413
RESP	201	159	173	158	166	150	182	144	209	184	230	188
RUSS	324	360	234	271	349	344	335	330	335	297	271	230
SCI	538	474	422	499	508	579	598	489	505	394	515	384
SLPA	N/A	N/A	225	255	262	195	220	195	268	215	208	184
SOC	644	534	673	630	716	668	680	681	662	568	603	487
SPAN	397	363	384	401	402	384	397	388	362	352	333	330
SPDV	85	96	109	100	103	112	83	108	68	88	58	92
THTR	329	319	324	338	308	312	309	303	313	295	299	287
Total	479	453	470	468	493	478	492	472	474	442	440	411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300
Value 250
200
150
100
50
0
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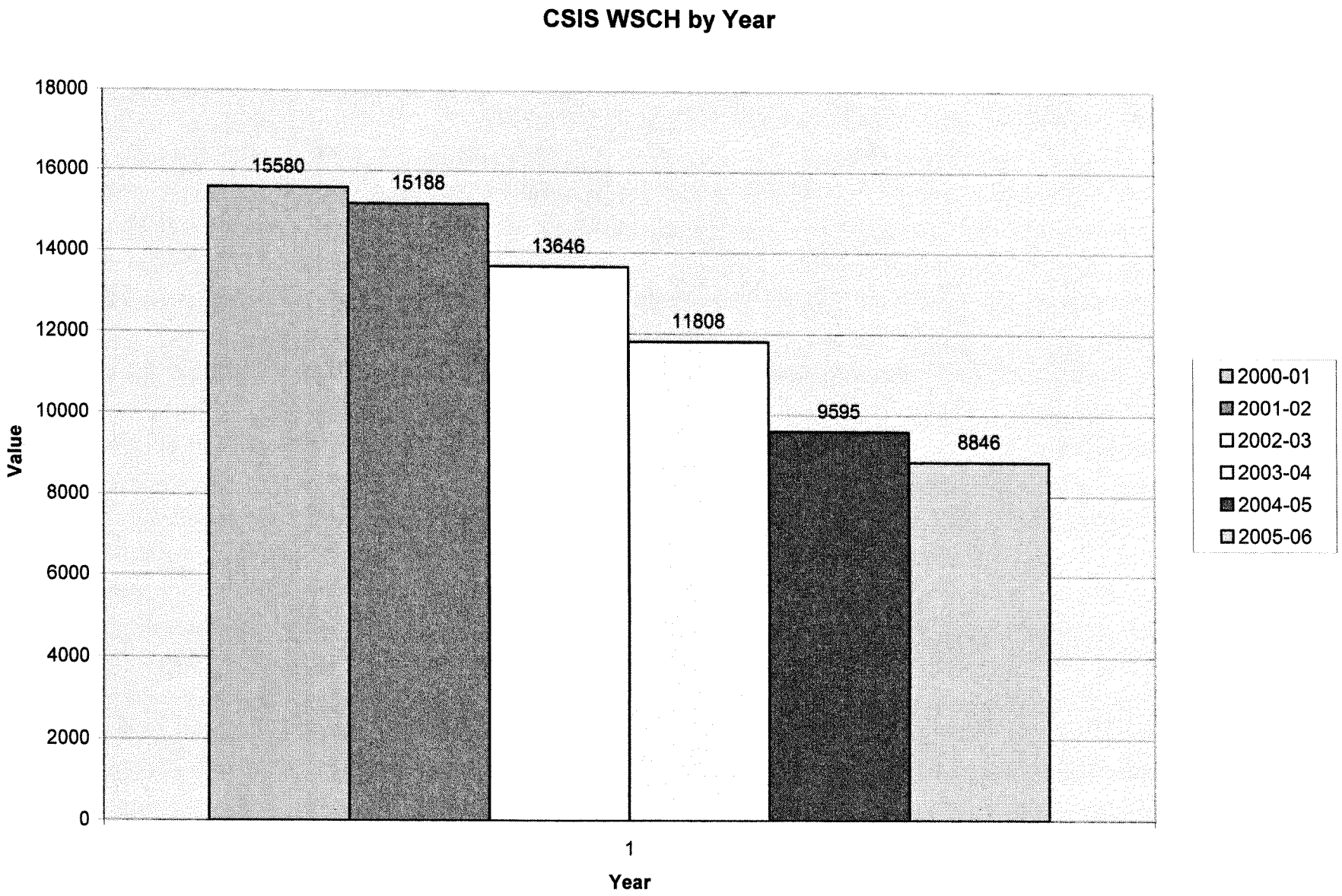
Semester
Fall 2000
Sprg 2001
Fall 2001
Sprg 2002
Fall 2002
Sprg 2003
Fall 2003
Sprg 2004
Fall 2003
Sprg 2004
Fall 2004
Sprg 2005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14000
12000
10000
8000
6000
4000
2000
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11808
9595
8846
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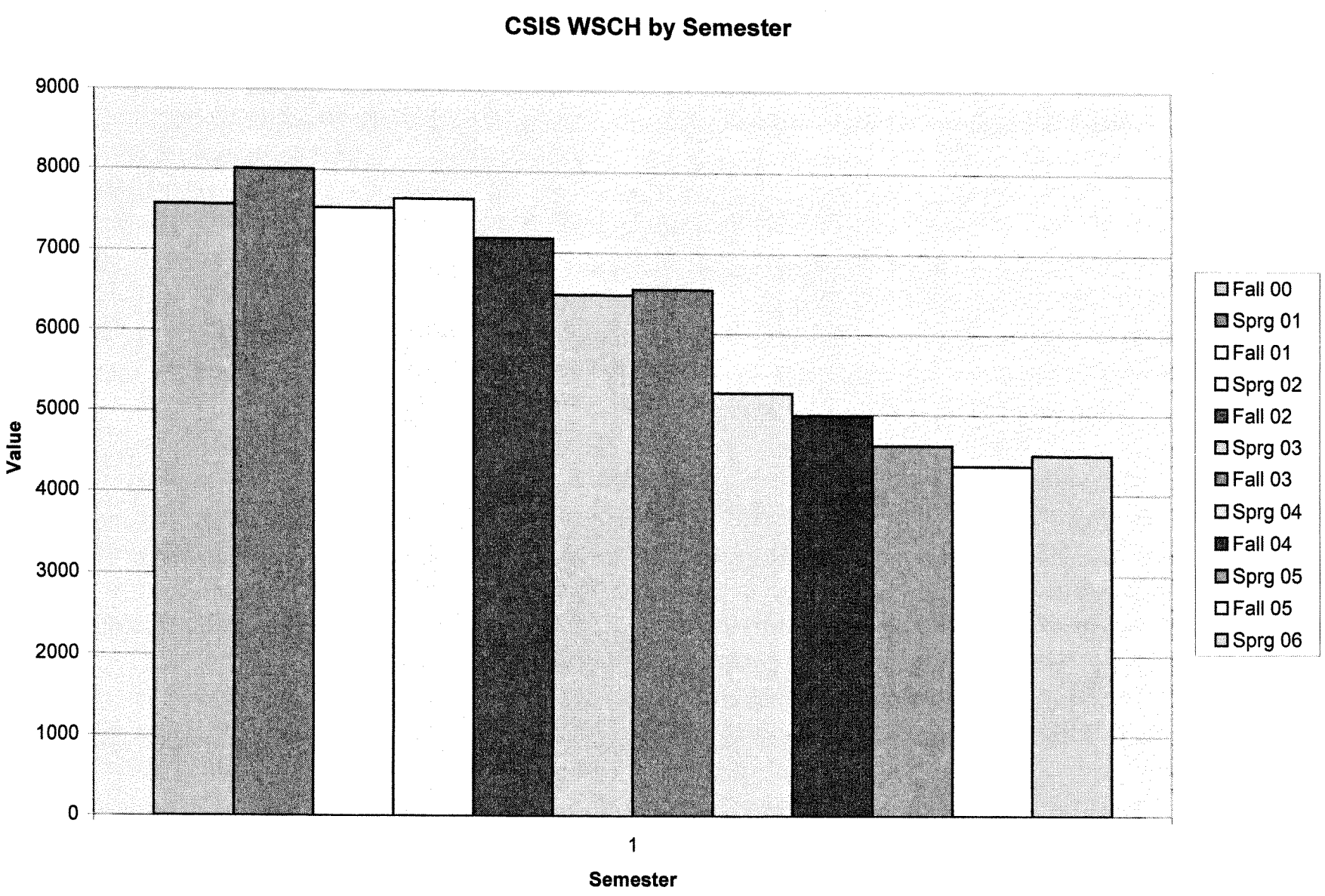
Year
2000-01
2001-02
2002-03
2003-04
2004-05
2005-06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8000
7000
6000
5000
4000
3000
2000
1000
0
Value
1
Semester
Fall 00
Sprg 01
Fall 01
Sprg 02
Fall 02
Sprg 03
Fall 03
Sprg 04
Fall 04
Sprg 05
Fall 05
Sprg 06

Grossmont College WSCH Report

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
ANTH	3195	3423	3423	3342	2838	3036
AOJ	6869	7895	9237	10421	12206	11000
ARBC	530	580	594	714	992	1066
ART	15470	16824	17294	17075	16571	16350
ASL	1898	1949	2132	2191	2323	3430
ASTR	2127	2514	2544	2445	2517	2382
BIO	18105	19905	20928	21990	22088	22167
BOT	N/A	4304	5249	4534	4981	4471
BUS	17201	13612	14351	13582	11386	10887
CA	N/A	229	250	277	289	220
CCS	3228	3602	3470	3356	2688	2769
CD	6824	7708	7985	7603	7647	6683
CHEM	7500	8475	8828	9760	9278	9137
CHIN	N/A	N/A	295	230	275	285
COMM	12580	12495	12398	12764	13066	12533
CSIS	15580	15188	13646	11808	9595	8846
CVTE	4219	3221	4025	4385	4420	4374
DANC	3512	3797	4071	3773	3979	3618
ECON	6273	6564	6333	6561	5667	7578
ED	201	299	216	126	147	188
ENGL	27861	29775	31762	31953	32279	33840
ES	19017	21100	21604	20583	20785	19109
ESL	7684	8933	9305	8633	7703	7386
FACS	2265	N/A	N/A	N/A	N/A	N/A
FREN	2135	2111	2045	2187	1957	1786
FS	N/A	953	1032	1011	885	948
GEOG	4944	5106	4971	4575	4527	3564
GEOL	1421	1534	1490	1636	1474	1678
GERM	1787	1891	2030	2147	1882	1840
HED	3222	5216	5843	6003	5904	5223
HESC	711	1111	1086	556	566	871
HIST	11121	14172	15073	14832	14781	14050
HUM	3243	3543	3330	3228	2928	2420
ITAL	670	640	610	640	590	470
JAPN	1165	1338	1470	1444	1462	1646
LIR	N/A	N/A	N/A	N/A	36	55
MATH	38315	42000	43778	42825	43479	41258
MCOM	5834	5861	5988	5772	6195	5400
MM	N/A	105	102	N/A	48	N/A
MUS	9694	10247	10899	11232	11313	10385
NURS	8756	8413	8163	9132	7117	7048
OCEA	1113	1227	1236	1316	1338	1422
OTA	615	390	429	494	495	685
PDC	1672	1593	1187	1082	1170	1325
PDSS	497	459	382	368	353	357
PHIL	5976	6347	6177	5826	5448	4797
PHYC	2316	2250	2748	2508	2484	2298
POSC	3965	4638	4908	4731	4765	4006
PSC	990	1005	948	1029	1110	879
PSY	11202	11590	12379	12167	11504	10099
RELG	1065	1239	1245	1155	1209	990

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
RESP	1548	1476	1556	1651	2475	3020
RUSS	521	606	900	731	758	768
SCI	1512	1389	1521	1401	1158	1155
SLPA	N/A	158	296	192	387	339
SOC	6105	6632	7473	6669	6966	6519
SPAN	12863	13697	12878	12613	12045	11191
SPDV	149	161	165	147	120	116
THTR	3826	3960	3427	3521	3799	3548
Total	331089	355446	367702	362921	356443	343512

Grossmont College WSCH Report

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
ANTH	1608	1587	1554	1869	1602	1821	1506	1836	1395	1443	1293	1743
AOJ	3324	3545	3884	4011	4571	4666	5108	5313	6084	6121	5273	5727
ARBC	270	260	255	325	299	295	304	410	536	456	559	507
ART	7421	8049	8408	8417	8649	8645	8550	8525	8312	8259	8448	7902
ASL	989	909	1004	945	1055	1077	1087	1104	1090	1233	1678	1752
ASTR	1158	969	1167	1347	1302	1242	1203	1242	1308	1209	1233	1149
BIO	9004	9101	9714	10191	11063	9865	11171	10819	10717	11371	11113	11054
BOT	N/A	N/A	2156	2148	2682	2567	2611	1924	2585	2396	2551	1920
BUS	9140	8061	6486	7126	7111	7240	6984	6598	5802	5584	5437	5450
CA	N/A	N/A	58	171	99	151	117	160	134	155	121	99
CCS	1437	1791	1572	2030	1661	1809	1616	1740	1359	1329	1446	1323
CD	3609	3215	3732	3976	4175	3811	3903	3700	3979	3668	3578	3104
CHEM	3585	3915	4062	4413	4513	4315	4927	4833	4463	4815	4557	4580
CHIN	N/A	N/A	N/A	N/A	150	145	85	145	155	120	135	150
COMM	6102	6478	5798	6697	6086	6312	6322	6442	6192	6873	6066	6467
CSIS	7569	8011	7536	7653	7175	6471	6545	5263	4984	4611	4354	4492
CVTE	2077	2142	1618	1603	1977	2048	2202	2183	2189	2231	2154	2220
DANC	1567	1945	1662	2136	1893	2178	1818	1956	1814	2165	1757	1861
ECON	3339	2934	3285	3279	3240	3093	3423	3138	2985	2682	3255	4323
ED	60	141	30	269	152	65	42	84	39	108	81	107
ENGL	14949	12912	15496	14279	17204	14558	16896	15057	17129	15149	18170	15670
ES	9888	9129	10743	10358	11719	9886	10685	9898	10980	9805	9980	9129
ESL	3738	3946	4386	4547	4905	4400	4545	4088	3934	3769	3676	3710
FACS	927	1338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FREN	1062	1073	1051	1060	993	1052	1087	1100	993	964	912	874
FS	N/A	N/A	465	488	498	534	486	525	432	453	477	471
GEOG	2481	2463	2607	2499	2691	2280	2448	2127	2334	2193	1686	1878
GEOL	693	728	684	850	624	866	735	901	664	810	808	870
GERM	854	933	902	989	958	1072	1155	992	929	953	860	980
HED	1596	1626	2556	2660	3050	2793	2967	3036	3114	2790	2775	2448
HESC	293	419	778	333	734	353	408	148	473	93	609	263
HIST	5319	5802	6849	7323	7405	7669	7617	7215	7263	7518	6867	7183
HUM	1659	1584	1713	1830	1728	1602	1683	1545	1584	1344	1332	1088
ITAL	350	320	290	350	300	310	335	305	310	280	280	190
JAPN	555	610	680	658	902	568	664	780	722	740	819	827
LIR	N/A	N/A	N/A	N/A	N/A	N/A	25	N/A	11	25	16	39
MATH	19992	18324	21166	20834	22712	21067	22447	20377	23207	20272	21890	19368
MCOM	3019	2815	2869	2992	2893	3095	2812	2960	2853	3342	2563	2837
MM	N/A	N/A	51	54	N/A	102	N/A	72	N/A	48	N/A	N/A
MUS	4459	5235	5035	5212	5338	5561	5389	5843	5613	5700	5282	5103
NURS	3587	5168	4032	4382	4169	3994	4542	4590	2950	4167	2915	4133
OCEA	582	531	633	594	693	543	687	629	639	699	699	723
OTA	381	234	280	110	238	191	312	182	306	189	386	299
PDC	840	832	819	775	698	490	547	535	645	526	763	562
PDSS	246	251	246	213	193	189	187	181	178	175	192	165
PHIL	3327	2649	3138	3209	3357	2820	3093	2733	2802	2646	2436	2361
PHYC	1182	1134	1134	1116	1350	1398	1242	1266	1266	1218	1128	1170
POSC	2085	1880	2382	2256	2793	2115	2691	2040	2676	2089	2211	1795
PSC	549	441	543	462	579	369	543	486	570	540	486	393
PSY	5784	5418	5747	5843	6080	6299	6146	6021	5887	5617	5319	4780

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
RELG	537	528	564	675	624	621	579	576	618	591	495	495
RESP	773	775	754	722	763	793	879	772	1196	1279	1519	1501
RUSS	281	240	281	325	488	412	335	396	402	356	415	353
SCI	753	759	591	798	711	810	717	684	606	552	618	537
SLPA	N/A	N/A	90	68	140	156	88	104	215	172	167	172
SOC	3219	2886	3231	3401	3864	3609	3399	3270	3444	3522	3498	3021
SPAN	6399	6464	6619	7078	6625	6254	6550	6063	6141	5904	5599	5592
SPDV	75	74	84	77	79	86	64	83	52	68	45	71
THTR	1993	1833	1867	2093	1691	1736	1744	1777	1986	1813	1901	1647

Total	166684	164405	175333	180114	189239	178463	186251	176768	181245	175198	174882	168630

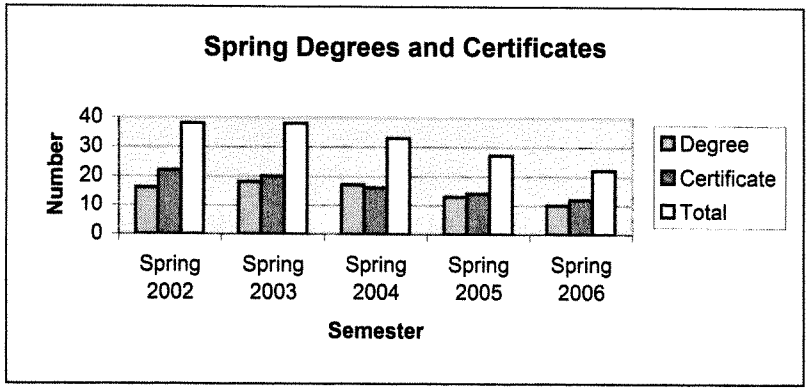
APPENDIX 9

Degrees and Certificates Awarded

Degrees & Certificates (Fall)					
	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005
Degree	9	3	9	2	4
Certificate	10	8	10	5	4
Total	19	11	19	7	8

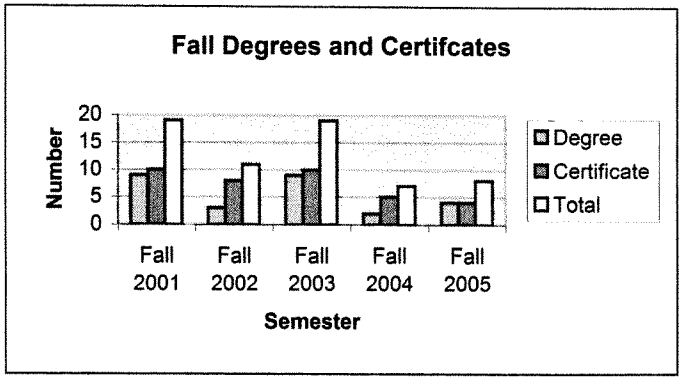
Degrees & Certificates (Spring)					
	Spring 2002	Spring 2003	Spring 2004	Spring 2005	Spring 2006
Degree	16	18	17	13	10
Certificate	22	20	16	14	12
Total	38	38	33	27	22

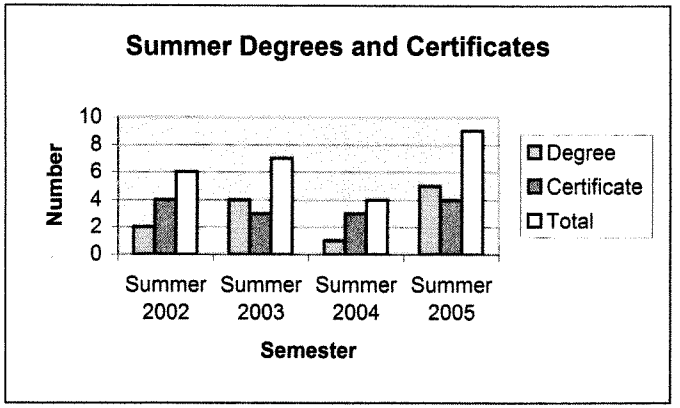
Degrees & Certificates (Summer)				
	Summer 2002	Summer 2003	Summer 2004	Summer 2005
Degree	2	4	1	5
Certificate	4	3	3	4
Total	6	7	4	9



Types of Degrees & Certificates Awarded Between Fall 2001 and Spring 2006

Major Code	Description
51034	CSIS-Small Comp Program & Systems
51037	CSIS-Local Area Netwrk Supprt Spec
51038	CSIS-Computer Science
51039	CSIS-Small Computer Specialist
51040	CSIS-Computer Programming
51042	CSIS-Web Master
57108	CSIS-Micro Application Spec Assist





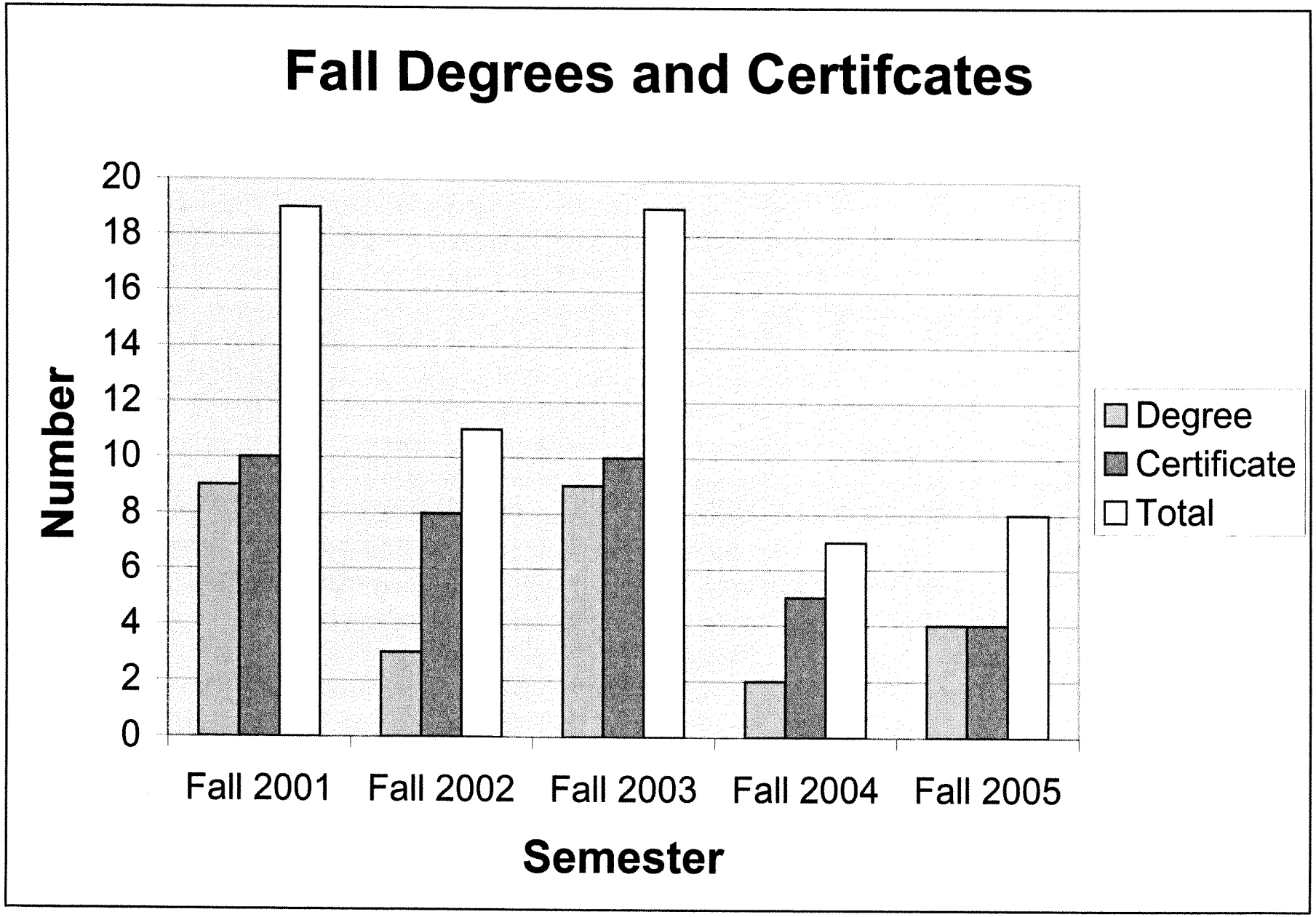
Degrees & Certificates (Fall)					
	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005
Degree	9	3	9	2	4
Certificate	10	8	10	5	4
Total	19	11	19	7	8

Degrees & Certificates (Spring)					
	Spring 2002	Spring 2003	Spring 2004	Spring 2005	Spring 2006
Degree	16	18	17	13	10
Certificate	22	20	16	14	12
Total	38	38	33	27	22

Degrees & Certificates (Summer)				
	Summer 2002	Summer 2003	Summer 2004	Summer 2005
Degree	2	4	1	5
Certificate	4	3	3	4
Total	6	7	4	9

Types of Degrees & Certificates Awarded Between Fall 2001 and Spring 2006

Major Code	Description
51034	CSIS-Small Comp Program & Systems
51037	CSIS-Local Area Netwrk Supprt Spec
51038	CSIS-Computer Science
51039	CSIS-Small Computer Specialist
51040	CSIS-Computer Programming
51042	CSIS-Web Master
57108	CSIS-Micro Application Spec Assist


Fall Degrees and Certifcates
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16
14
12
10
8
6
4
2
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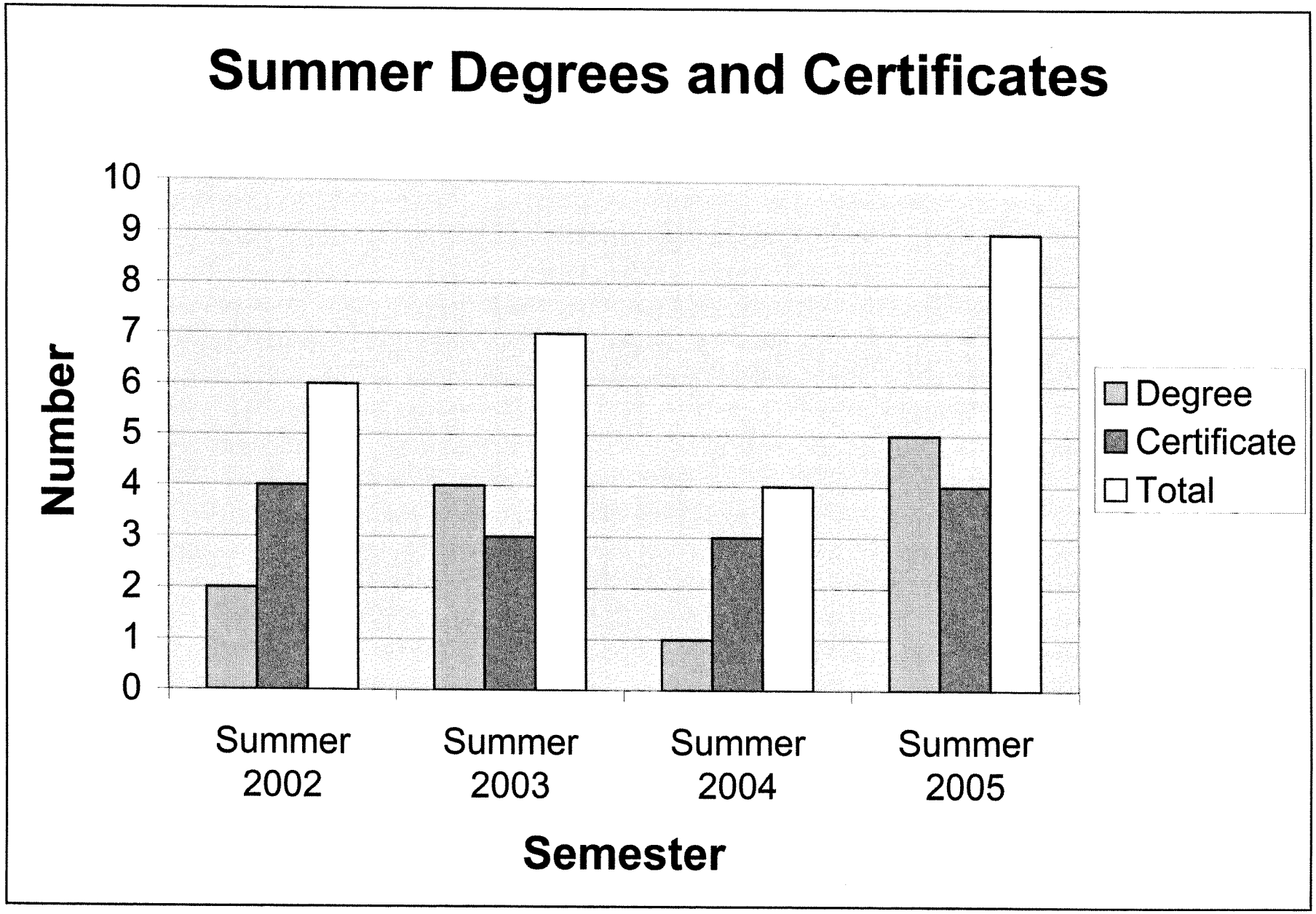
Number
Degree
Certificate
Total
Fall 2001
Fall 2002
Fall 2003
Fall 2004
Fall 2005
Semester


Summer Degrees and Certificates
Number
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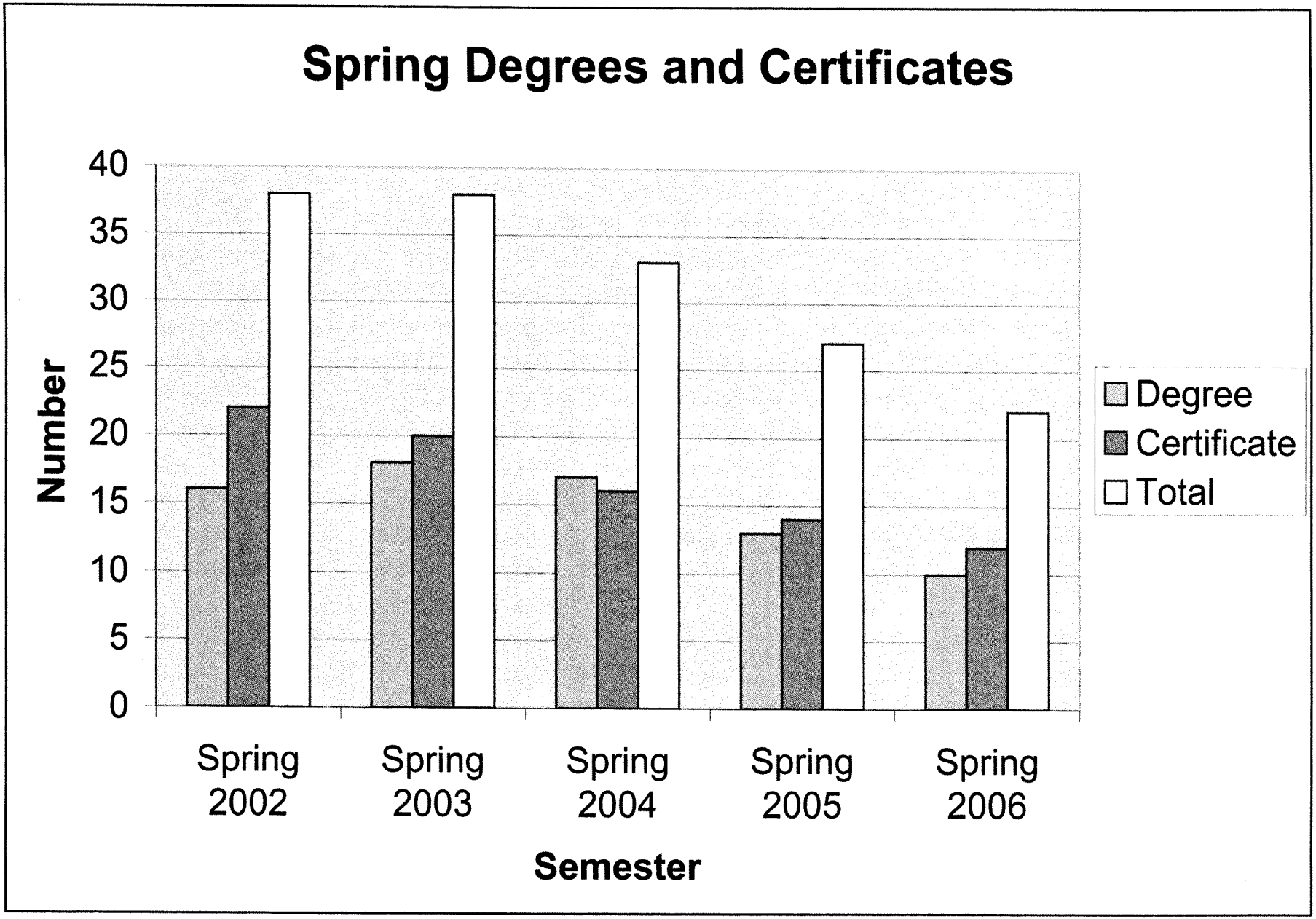
9
8
7
6
5
4
3
2
1
0
Summer 2002
Summer 2003
Summer 2004
Summer 2005
Semester
Degree
Certificate
Total


Spring Degrees and Certificates
40
35
30
25
20
15
10
5
0
Number
Spring 2002
Spring 2003
Spring 2004
Spring 2005
Spring 2006
Semester
Degree
Certificate
Total

APPENDIX 10

Sabbaticals, Conference, Workshop and Staff Development Activities

APPENDIX 10

10. Sabbaticals, Conference, Workshop and Staff Development Activities

Name	Activity	Relevance
Barbara Smith	Personal Computer Security Awareness	An overview of PC security issues.
	Thomson Technology: Workshop on vista and Office 2007	Overview and practical tips in regard to the new Windows Vista operating system, Microsoft Office 2007
Coursework	CSIS 151D – Intro to Photoshop	Upgrade skills
	ED 214 – Online Education	
	TEFL Certificate Course in Teaching English as A Foreign Language	This 4-week combination of online study and practical teaching experience at the TEFL Teache Training Centre in Barcelona, Spain
Steve Eisenberg	@ONE "Podcasting: Creating and Publishing Content Online"	3 Day Workshop June 13-15 2006 San Diego City College
George Sfakianakis	Panel Participation National University Technical conference	Instructor panel on how to create an online course
Karl Flores	Consumer Electronics Seminar	Hands on work shop to see latest developments i technology
	National Association of Broadcasters	Latest technology aimed at broadcasting
	Computer Security Institute	Workshops on the IT security industry
	Sun Microsystems	Hardware issues pertaining to computers
	Video development	Created video for the Pacific Life Holiday bowl. Wrote and edited 10-30 commercials
Don Dean	Completed Masters degree in Education in Technology	
	Summer Internship with Bank of America	Instruction in corporate online training
	Great teachers seminar – Hawaii	New approaches to online education
	Seminars in Advanced Teaching with Video,	3D animation and engaging of learner using gami

	and Gaming	techniques for education
Dave Olsen	Robotics Training E-commerce Instruction	New and emerging technologies
Michael Wilson	Training	UCSD coursework 3D conference and Expo Lynda.com Training
Jim Hotz	Sabbatical Fall 2002 Conferences	A study of the .NET framework on which the CSIS 115ABCD courses were developed. Using the sai technology to modify CSIS 134 and 136 Course Technology Conference Tech Ed Multimedia Training Security Training
Diane Mayne-Stafford	Conferences and training	Course Technology Conference Suse Linux Training Prentice Hall Annual Training and Conference Tech Ed
Clifton Quinn	Sabbatical Spring 2006 Conferences	Attended three industry-specific conferences, visit computer faculty from many colleges, three cours in the field Web Development field, became a certified "Webmaster". Course Technology Conference Tech Ed
Janet Gelb	Sabbatical Fall 2005 Conferences and Workshops	Research and analysis of existing security curriculum. Establish a Business Advisory Counci industry professionals involved in the implementa of the IT security infrastructure Course Technology Conference Prentice Hall Annual Training and Conference Video and graphics symposium Vocational Education Leadership Conference Tech Ed

		Security Training
Ronald Norman	Training	Security Training Computer and internet Security Awareness
Mike Qualls	Sabbatical Fall 2003	Combined research, education, working with local company, and curriculum development. The subject of the sabbatical was Oracle Wel Application development using Java. The curriculum developed was a mini-certificate in Oracle Web App Development.
	Conferences and Workshops	Ed Tech Emerging Technologies Conference

APPENDIX 11

Departmental Equivalencies

GROSSMONT-CUYAMACA COMMUNITY COLLEGE DISTRICT

CLASS TITLE: INSTRUCTIONAL COMPUTER LAB TECHNICIAN **RANGE 33**

SUMMARY:

Under the direction of an assigned supervisor, perform a variety of highly specialized technical support in the installation, and maintenance of computer networks and devices, network topology, computer hardware and software in local and wide area network as well as wireless, throughout the Computer and Information Science Department. Work with project teams comprised of faculty, instructional lab aides, network administrators, staff and student worker. Supports Windows 2003 Server, Macintosh, SQL Server, Novell Netware and UNIX and Linux systems.

ESSENTIAL FUNCTIONS:

Assist instructors or other college support staff in preparation of instructional materials or equipment for classrooms and labs.

Provide instruction and assistance to faculty and staff, in resolution of software, hardware, and network problems and oversee the daily operation of instructional computer labs.

Participate and attend regular district-wide technical support meetings.

Order supplies for instructional computer labs, faculty and staff; paper, tone, and cleaning supplies.

Assist students in the classroom, laboratory, or other instructional environment to ensure proper use and care of instructional materials and equipment.

Install, configure and backup system files and drives on servers minimizing downtime in case of a hardware or software failure.

Maintain all Cisco equipment and serve as asset manager for Cisco Networking Academy program if provided at the college. Duties include inventory of all Cisco network equipment; work closely with the purchasing department renewing contracts (SmartNet) on a yearly basis. Evaluate and recommend the purchase of networking equipment, software and servers. Communicate and work with TAC (Technical Assistance Center) to resolve any technical issues.

Communicate and work with vendors, faculty, and staff and various district departments and personnel to answer questions, resolve problems and provide information concerning network operation, faculty computers, instructional lab operation and technical network issues or refer complex problems to Information Systems.

Operate a variety of tools including network management systems, fiber, copper and cable testers, drills, and other hand tools.

Evaluate, recommend and prepare all purchase requests relating to instructional computer labs, to include upgrades to instructional computer labs, faculty desktop workstations, faculty, laptops, projectors, printers, hard drives, monitors and software for instructional computer labs.

Maintain and set-up labs. Install and configure new workstations, servers, laptops, and standalone computers for the instructional computer labs and faculty. Insure proper software and hardware availability for students with disabilities. Configure and monitor switches, routers, and DSL link for connectivity. Install and support wireless networks. Create and maintain computer lab images and carry out computer lab cloning methodologies. Work with vendors in providing installation, support, and maintenance and in solving technical and software problems. Maintain network topology including hardware, software, LAN/WAN, Internet/Intranet components. Maintain a variety of records, logs, files and drawings related to the network and computer operations.

Create and monitor student and faculty accounts on server; monitor network security to ensure continuous operations of file server in compliance with software licenses.

Order, manage, and maintain all instructional application and tutorial software and hardware and warranties. Maintain and renew all software licenses according to District policy.

Monitor network server status; install, configure and operate common office application software in a network environment; perform adjustments in software configurations.

Hire, train, schedule and supervise hourly student workers. Work with project teams consisting of student works, instructional lab aides, faculty, network administrators, and department chairs.

Monitor and track student lab use; design, evaluate and revise procedures for efficient operation of the center; coordinate installation of tutorial applications; train tutors in their use.

Assist in development of Center's budget.

Monitor expenditure and prepare projections as needed.

Prepare periodic administrative reports related to budget expenditures, program review, and center operations.

Create and maintain the department website and coordinate with the department chair on its content.

Model and monitor adherence to appropriate safety rules and precautions.

Operate computer, terminal, printer, and specialized equipment for area of assignment.

Operate a variety of equipment routinely used in area of assignment.

Perform related duties as assigned.

SECONDARY FUNCTIONS:

Troubleshoot network equipment for off-site Cisco Academy classes.

Assist in coordinating use of lab and other educational facilities assuring the availability of appropriate supplies and equipment.

Ensure security of the lab and monitor condition of tables, chairs, mice, monitors, keyboards, and other equipment used in the lab so that they are in operable and safe condition.

Familiarize students with area of assignment, assisting them to facilitate the learning process.

Provide after hours support including on-call and on-call site response as required.

Administrator for the CIS MSDNAA program (The MSDN Academic Alliance is an annual membership program for technical departments in the area of Computer Science, Engineering, and Information Systems.) supporting faculty and staff.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Accessibility software, hardware, issues for students with disabilities, including the internet, applications software, operating systems, virus and network performance software.

LAN/WAN topology, protocol, network security and specifications.

Network/wireless equipment and installation, support, maintenance and specification, including technical understanding of hardware and software diagnostics.

Working knowledge of a variety of Windows 98, XP, 2003 server, UNIX, Linux, as well as Visio 2003, NetSupport School, Red Canyon, Network monitoring software, HTML, FTP, telnet, dos, Insight/IFAS and all software taught in the instructional computer labs.

Modern principles, practices, procedures and equipment used in assigned area.

Application of instructional/tutorial procedures and practices for assigned area.

Technical aspects in field of specialty.

Correct English usage, grammar, spelling, punctuation and vocabulary.

Interpersonal skills using tact, patience and courtesy.

ABILITY TO:

Learn policies, procedures, activities, programs, along with other state and federal laws, as required in assigned area.

Operate and install personal computers, laptops, peripheral equipment, network/wireless systems and equipment, appropriate cabling, switches, and routers.

Obtain licensing required in assigned area.

Implement secure and accessible networked computer systems and related equipment.

Identify and resolve network performance and security issues.

Install operating systems and latest patches; Windows, SQL Server, Novell Netware, UNIX, LINUX.

Install and upgrade IOS's for a variety of Cisco routers and switches

Work from and maintain drawings, specifications, plans, and charts.

Maintain currency of qualifications for area of assignment.

Maintain and repair network and other educational equipment to ensure proper working order.

Work independently with little direction; plan and organize work to meet schedules and time lines.

Perform a variety of lab tests and demonstrations to ensure appropriate use of equipment used in assigned area.

Understand and follow oral and written instructions.

Maintain records and files.

Follow departmental policies and procedures.

Communicate effectively both orally and in writing to students, staff, instructors, and the public.

Establish and maintain cooperative and effective working relationships with others.

Train and provide work direction to others.

EDUCATION AND EXPERIENCE:

Graduation from high school and any combination of education and experience equivalent to at least three years of successful work experience in the field of computer science, or a 2-year degree in Computer Science. At least one year of the work experience should be in network management and helpdesk support. Knowledge of TCP/IP, LAN/WAN and PC repair, Cisco routers/switches/wireless network equipment.

WORKING CONDITIONS:

Instructional lab or classroom environment, subject to lifting, moving and installing computer and network equipment. May be subject to frequent standing and occasional lifting, bending and stooping. May be required to lift up to 50 pounds.

Est. 10/01
Rev. 06/05
Rev. 11/05

Appendix K-1

GROSSMONT-CUYAMACA COMMUNITY COLLEGE DISTRICT
JOB DESCRIPTION

FULL-TIME INSTRUCTOR (REGULAR AND CONTRACT)

I. General Responsibilities

Under administrative leadership, it is the responsibility of the regular/contract college instructor to participate in the planning, implementation, and evaluation of educational programs, courses, and other experiences that will directly result in the educational growth of the students and support advancement of the visions, missions, and values of the colleges and District.

II. Specific Responsibilities

Responsibilities designated with an asterisk are primary to the faculty role. All other listed professional responsibilities are examples of activities which are part of the unique role of each faculty member and is reflective of their individual expertise and interests.

A. Classroom responsibilities

*1. Meet classes/laboratories on days and times assigned.

*2. Develop and implement instruction for each class/laboratory period which is consistent with the official course outline.

*3. Develop, and distribute during the first week of class, a written syllabus for each course to communicate to students course objectives, grading criteria and classroom policies.

*4. Demonstrate respect for student rights as specified in District policy and applicable laws.

*5. Submit requisitions for textbooks and instructional materials in a timely manner.

*6. Refer students to tutoring and related student services when appropriate.

*7. Supervise students in off-campus activities when participation is expected as part of a course requirement or where such supervision is part of the instructor's load.

*8. Provide academic assistance and related services to students during scheduled office hours.

B. Evaluation of Students

*1. Periodically evaluate student progress toward meeting course objectives; advise the students of course objectives, methods of evaluation and the results of the evaluation.

*2. Return assignments and examination results in a timely fashion.

*3. Assign grades to students in the manner provided by District policy and administrative procedure and prescribed by the Education Code and Title V regulations for the State of California.

4. Participate in the credit by examination program where applicable.

5. Provide appropriate dean with assistance on the evaluation of student petitions.

Full-time Instructor (Regular and Contract) (cont'd.)

C. Curriculum

Participate in the development and review of curriculum as needed.

D. Student Advising

1. Advise students enrolled in the instructor's classes in such matters as:

   a. course content, scope and meaning;
   b. major course requirements for the degree or certificate;
   c. learning skills;
   d. collateral or enrichment reading or experience opportunities for further understanding of the courses or subject field;
   e. career alternatives/opportunities related to the subject field.

2. Participate as a faculty advisor to student organizations or clubs.

E. Professional Development

*1. Participate in required professional development activities.

2. Continue to develop professional skills and knowledge.

3. Participate in planning staff development programs.

4. Participate in institutional research activities and grants.

5. Assist in the planning, development and implementation of a professional intern or student teacher program.

6. Attend/participate in professional conferences, seminars or meetings.

F. Additional Responsibilities

*1. Regularly attend and participate in department/division meetings.

2. Attend commencement ceremonies and convocations.

3. Participate in the process of shared governance by contributing to the academic community through committee work on the department, division, college and/or district level, or participate in other significant nonclassroom college, district or community activities.

*4. Keep official records and collect data required by District policy and administrative procedures; submit records and data in accordance with college procedures.

5. Participate in supervision of student assistants and paraprofessionals.

6. Participate in articulation activities and the coordination of inter-

divisional and intra-divisional learning activities.

*7. Abide by departmental regulations concerning the proper use, care and security of equipment.

8. Advise management of unsafe conditions or potential hazards and recommend solutions.

Full-time Instructor (Regular and Contract) (cont'd.)

*9. Participate in advisory committee meetings when required by divisional programs.

*10. Report absences due to illness or for personal necessity to the division dean/director or designated officer; advise management of the intended date of return prior to the class meeting.

11. Provide recommendation for purchase of instructional supplies and equipment.

12. Consult with management on division personnel needs; assist with preparation of position descriptions and serve on screening/interviewing committees as needed.

*13. Participate in the tenuring process.

14. Participate in the evaluation of regular faculty and adjunct faculty.

G. Additional Responsibilities if assigned an intercollegiate athletic class through the Department of Exercise Science and Wellness.

*1. Actively identify and recruit qualified students to participate in the intercollegiate athletic program.

*2. Set and maintain standards for team discipline while fielding a competitive level team. Ensure all program participants comply with the state athletic constitution.

*3. Assist in the selection and supervision of assistant coaches.

*4. Conduct home athletic events as well as supervise team travel to off-campus competitions. Be responsible for all regular and post season activities/competitions.

*5. Stay abreast of contemporary sport coaching techniques, strategies and rule changes for the sport assigned.

*6. Assist students in maintaining eligibility and facilitate their participation in the academic support program.

*7. Provide information regarding the program in general, including scores and statistics, to the press, the campus and the community at large.

*8. Work with the Athletic Director in the development of the sport schedule and budget.

*9. Participate in fund-raising activities.

*10. Adhere to all college and district procedures regarding aspects of purchasing, money handling, travel requests, vehicle use, driving requirements, and other fiscal or travel related issues..

*11. Actively work to reduce any injury or liability to students and others, including keeping authorities apprised of the condition of practice facilities; work directly with the Athletic Trainers and work collaboratively with the grounds and maintenance personnel.

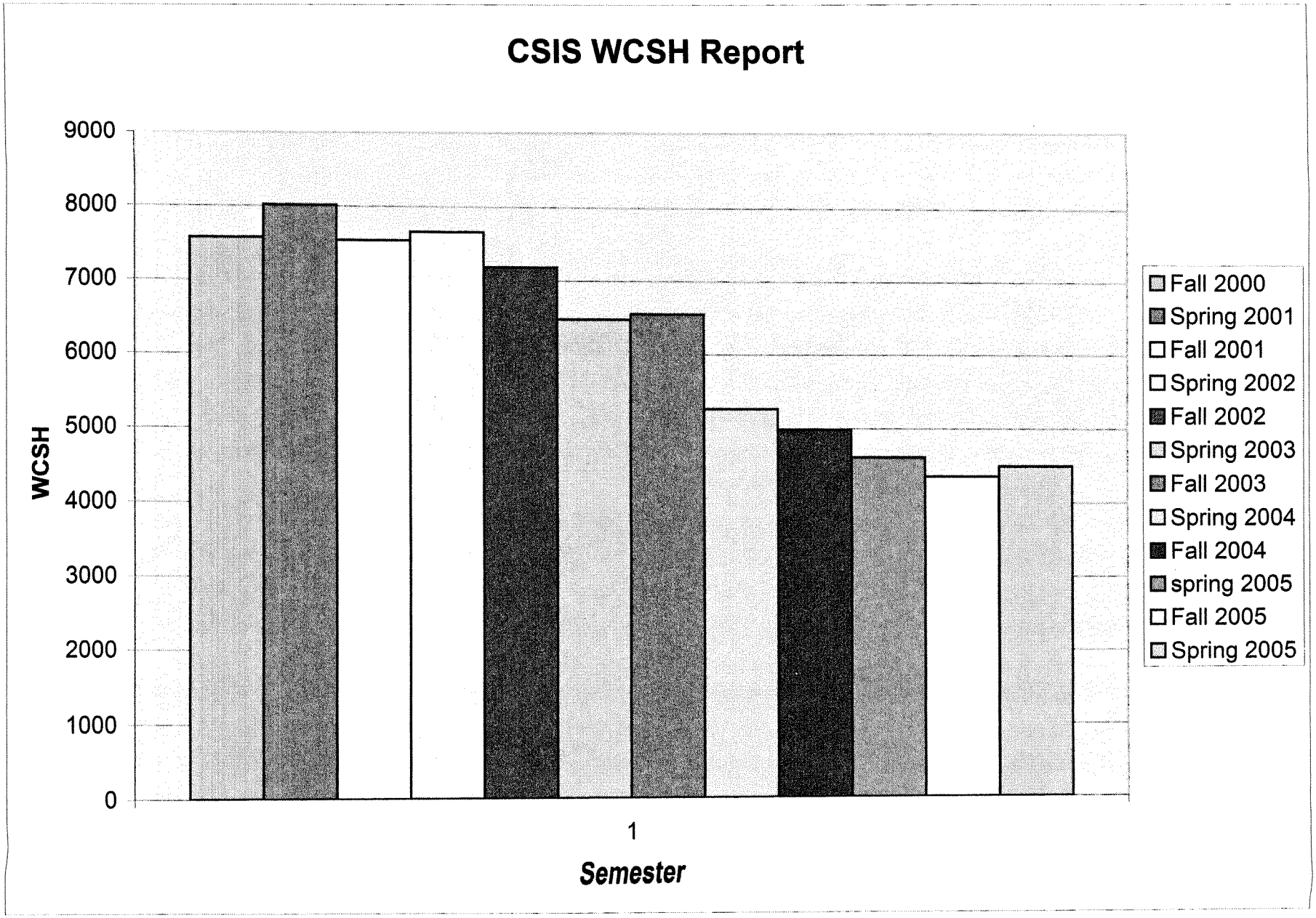
*12. Meet all coaching responsibilities as outlined in each college's Coaches' Handbook.

*13. Display positive coaching ethics and conduct in professional relationships on campus and with the public.

rev. 02/04

APPENDIX 12

Subject WSCH Analysis Report


CSIS WCSH Report
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Semester
Fall 2000
Spring 2001
Fall 2001
Spring 2002
Fall 2002
Spring 2003
Fall 2003
Spring 2004
Fall 2004
spring 2005
Fall 2005
Spring 2005

Grossmont College WSCH Report

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
ANTH	1608	1587	1554	1869	1602	1821	1506	1836	1395	1443	1293	1743
AOJ	3324	3545	3884	4011	4571	4666	5108	5313	6084	6121	5273	5727
ARBC	270	260	255	325	299	295	304	410	536	456	559	507
ART	7421	8049	8408	8417	8649	8645	8550	8525	8312	8259	8448	7902
ASL	989	909	1004	945	1055	1077	1087	1104	1090	1233	1678	1752
ASTR	1158	969	1167	1347	1302	1242	1203	1242	1308	1209	1233	1149
BIO	9004	9101	9714	10191	11063	9865	11171	10819	10717	11371	11113	11054
BOT	N/A	N/A	2156	2148	2682	2567	2611	1924	2585	2396	2551	1920
BUS	9140	8061	6486	7126	7111	7240	6984	6598	5802	5584	5437	5450
CA	N/A	N/A	58	171	99	151	117	160	134	155	121	99
CCS	1437	1791	1572	2030	1661	1809	1616	1740	1359	1329	1446	1323
CD	3609	3215	3732	3976	4175	3811	3903	3700	3979	3668	3578	3104
CHEM	3585	3915	4062	4413	4513	4315	4927	4833	4463	4815	4557	4580
CHIN	N/A	N/A	N/A	N/A	150	145	85	145	155	120	135	150
COMM	6102	6478	5798	6697	6086	6312	6322	6442	6192	6873	6066	6467
CSIS	7569	8011	7536	7653	7175	6471	6545	5263	4984	4611	4354	4492
CVTE	2077	2142	1618	1603	1977	2048	2202	2183	2189	2231	2154	2220
DANC	1567	1945	1662	2136	1893	2178	1818	1956	1814	2165	1757	1861
ECON	3339	2934	3285	3279	3240	3093	3423	3138	2985	2682	3255	4323
ED	60	141	30	269	152	65	42	84	39	108	81	107
ENGL	14949	12912	15496	14279	17204	14558	16896	15057	17129	15149	18170	15670
ES	9888	9129	10743	10358	11719	9886	10685	9898	10980	9805	9980	9129
ESL	3738	3946	4386	4547	4905	4400	4545	4088	3934	3769	3676	3710
FACS	927	1338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FREN	1062	1073	1051	1060	993	1052	1087	1100	993	964	912	874
FS	N/A	N/A	465	488	498	534	486	525	432	453	477	471
GEOG	2481	2463	2607	2499	2691	2280	2448	2127	2334	2193	1686	1878
GEOL	693	728	684	850	624	866	735	901	664	810	808	870
GERM	854	933	902	989	958	1072	1155	992	929	953	860	980
HED	1596	1626	2556	2660	3050	2793	2967	3036	3114	2790	2775	2448
HESC	293	419	778	333	734	353	408	148	473	93	609	263
HIST	5319	5802	6849	7323	7405	7669	7617	7215	7263	7518	6867	7183
HUM	1659	1584	1713	1830	1728	1602	1683	1545	1584	1344	1332	1088
ITAL	350	320	290	350	300	310	335	305	310	280	280	190
JAPN	555	610	680	658	902	568	664	780	722	740	819	827
LIR	N/A	N/A	N/A	N/A	N/A	N/A	25	N/A	11	25	16	39

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
MATH	19992	18324	21166	20834	22712	21067	22447	20377	23207	20272	21890	19368
MCOM	3019	2815	2869	2992	2893	3095	2812	2960	2853	3342	2563	2837
MM	N/A	N/A	51	54	N/A	102	N/A	72	N/A	48	N/A	N/A
MUS	4459	5235	5035	5212	5338	5561	5389	5843	5613	5700	5282	5103
NURS	3587	5168	4032	4382	4169	3994	4542	4590	2950	4167	2915	4133
OCEA	582	531	633	594	693	543	687	629	639	699	699	723
OTA	381	234	280	110	238	191	312	182	306	189	386	299
PDC	840	832	819	775	698	490	547	535	645	526	763	562
PDSS	246	251	246	213	193	189	187	181	178	175	192	165
PHIL	3327	2649	3138	3209	3357	2820	3093	2733	2802	2646	2436	2361
PHYC	1182	1134	1134	1116	1350	1398	1242	1266	1266	1218	1128	1170
POSC	2085	1880	2382	2256	2793	2115	2691	2040	2676	2089	2211	1795
PSC	549	441	543	462	579	369	543	486	570	540	486	393
PSY	5784	5418	5747	5843	6080	6299	6146	6021	5887	5617	5319	4780
RELG	537	528	564	675	624	621	579	576	618	591	495	495
RESP	773	775	754	722	763	793	879	772	1196	1279	1519	1501
RUSS	281	240	281	325	488	412	335	396	402	356	415	353
SCI	753	759	591	798	711	810	717	684	606	552	618	537
SLPA	N/A	N/A	90	68	140	156	88	104	215	172	167	172
SOC	3219	2886	3231	3401	3864	3609	3399	3270	3444	3522	3498	3021
SPAN	6399	6464	6619	7078	6625	6254	6550	6063	6141	5904	5599	5592
SPDV	75	74	84	77	79	86	64	83	52	68	45	71
THTR	1993	1833	1867	2093	1691	1736	1744	1777	1986	1813	1901	1647
Total	166684	164405	175333	180114	189239	178463	186251	176768	181245	175198	174882	168630

Grossmont College WSCH Report

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
ANTH	3195	3423	3423	3342	2838	3036
AOJ	6869	7895	9237	10421	12206	11000
ARBC	530	580	594	714	992	1066
ART	15470	16824	17294	17075	16571	16350
ASL	1898	1949	2132	2191	2323	3430
ASTR	2127	2514	2544	2445	2517	2382
BIO	18105	19905	20928	21990	22088	22167
BOT	N/A	4304	5249	4534	4981	4471
BUS	17201	13612	14351	13582	11386	10887
CA	N/A	229	250	277	289	220
CCS	3228	3602	3470	3356	2688	2769
CD	6824	7708	7985	7603	7647	6683
CHEM	7500	8475	8828	9760	9278	9137
CHIN	N/A	N/A	295	230	275	285
COMM	12580	12495	12398	12764	13066	12533
CSIS	15580	15188	13646	11808	9595	8846
CVTE	4219	3221	4025	4385	4420	4374
DANC	3512	3797	4071	3773	3979	3618
ECON	6273	6564	6333	6561	5667	7578
ED	201	299	216	126	147	188
ENGL	27861	29775	31762	31953	32279	33840
ES	19017	21100	21604	20583	20785	19109
ESL	7684	8933	9305	8633	7703	7386
FACS	2265	N/A	N/A	N/A	N/A	N/A
FREN	2135	2111	2045	2187	1957	1786
FS	N/A	953	1032	1011	885	948
GEOG	4944	5106	4971	4575	4527	3564
GEOL	1421	1534	1490	1636	1474	1678
GERM	1787	1891	2030	2147	1882	1840
HED	3222	5216	5843	6003	5904	5223
HESC	711	1111	1086	556	566	871
HIST	11121	14172	15073	14832	14781	14050
HUM	3243	3543	3330	3228	2928	2420
ITAL	670	640	610	640	590	470
JAPN	1165	1338	1470	1444	1462	1646
LIR	N/A	N/A	N/A	N/A	36	55
MATH	38315	42000	43778	42825	43479	41258

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
MCOM	5834	5861	5988	5772	6195	5400
MM	N/A	105	102	N/A	48	N/A
MUS	9694	10247	10899	11232	11313	10385
NURS	8756	8413	8163	9132	7117	7048
OCEA	1113	1227	1236	1316	1338	1422
OTA	615	390	429	494	495	685
PDC	1672	1593	1187	1082	1170	1325
PDSS	497	459	382	368	353	357
PHIL	5976	6347	6177	5826	5448	4797
PHYC	2316	2250	2748	2508	2484	2298
POSC	3965	4638	4908	4731	4765	4006
PSC	990	1005	948	1029	1110	879
PSY	11202	11590	12379	12167	11504	10099
RELG	1065	1239	1245	1155	1209	990
RESP	1548	1476	1556	1651	2475	3020
RUSS	521	606	900	731	758	768
SCI	1512	1389	1521	1401	1158	1155
SLPA	N/A	158	296	192	387	339
SOC	6105	6632	7473	6669	6966	6519
SPAN	12863	13697	12878	12613	12045	11191
SPDV	149	161	165	147	120	116
THTR	3826	3960	3427	3521	3799	3548
Total	331089	355446	367702	362921	356443	343512

Grossmc College
Efficiency
(Earned WSCH/FTEF)

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
ANTH	670	610	555	719	668	700	685	706	698	601	647	581
AOJ	444	412	487	487	540	538	570	569	560	524	483	478
ARBC	405	390	383	325	345	295	351	410	350	298	365	331
ART	524	514	514	491	506	516	505	500	485	459	447	430
ASL	464	455	430	473	417	449	466	433	363	363	354	386
ASTR	626	440	631	612	592	565	547	565	545	504	514	451
BIO	638	634	673	696	763	720	760	758	729	765	723	692
BOT	N/A	N/A	462	446	491	500	552	386	364	341	350	257
BUS	483	459	453	512	543	555	573	530	505	468	469	472
CA	N/A	N/A	433	426	296	377	350	399	401	387	362	371
CCS	423	498	491	483	488	476	539	483	425	415	482	473
CD	501	451	500	509	547	522	511	523	530	502	525	430
CHEM	451	463	454	489	530	533	559	562	518	530	556	526
CHIN	N/A	N/A	N/A	N/A	450	435	255	435	465	360	405	450
COMM	461	437	445	446	460	431	464	437	435	425	417	386
CSIS	469	455	428	410	392	381	419	392	414	384	377	395
CVTE	386	368	285	265	360	329	366	339	385	357	357	346
DANC	404	419	423	454	411	480	395	444	443	419	429	376
ECON	795	667	747	745	736	736	778	747	649	639	614	765
ED	300	353	150	269	379	161	210	210	195	270	203	268
ENGL	375	346	361	344	381	369	366	354	354	335	345	311
ES	531	463	564	509	573	484	535	495	536	460	481	435
ESL	368	366	378	381	401	375	375	351	350	331	326	322
FACS	515	478	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FREN	371	375	367	370	347	367	380	384	347	337	318	305
FS	N/A	N/A	581	457	623	534	608	656	540	566	477	471
GEOG	558	535	567	568	585	543	583	532	530	498	482	447
GEOL	533	480	456	495	480	485	490	422	376	371	411	343
GERM	337	369	315	345	379	424	456	392	367	377	315	359
HED	614	625	737	725	871	776	848	799	819	734	694	765
HESC	293	282	294	327	381	516	510	254	473	159	609	256
HIST	532	537	552	591	570	618	614	601	605	561	545	499
HUM	553	528	535	610	576	534	526	515	466	448	392	371
ITAL	526	480	435	350	300	465	503	458	465	420	420	285
JAPN	417	366	408	353	437	341	433	468	471	444	473	443
LIR	N/A	N/A	N/A	N/A	N/A	N/A	373	N/A	164	373	239	294

Grossmc College
Efficiency
(Earned WSCH/FTEF)

	2000 - Fall	2001 - Spring	2001 - Fall	2002 - Spring	2002 - Fall	2003 - Spring	2003 - Fall	2004 - Spring	2004 - Fall	2005 - Spring	2005 - Fall	2006 - Spring
MATH	593	526	592	572	629	584	613	565	593	499	545	462
MCOM	416	422	386	396	402	421	391	405	395	399	363	375
MM	N/A	N/A	255	270	N/A	291	N/A	206	N/A	137	N/A	N/A
MUS	459	485	473	464	462	491	465	499	472	487	430	414
NURS	278	334	271	248	247	228	253	235	250	254	207	241
OCEA	485	443	528	424	495	453	509	547	473	518	518	536
OTA	335	305	220	122	187	212	245	238	241	218	303	390
PDC	470	398	470	470	452	386	416	391	438	342	431	331
PDSS	613	629	739	640	1739	849	842	1631	802	1577	1730	1486
PHIL	555	552	541	594	560	588	595	594	539	490	468	422
PHYC	422	405	405	378	482	444	444	402	452	387	403	371
POSC	613	575	596	627	665	622	641	638	637	602	526	508
PSC	578	464	572	486	609	492	572	648	600	568	512	414
PSY	686	624	651	673	704	709	684	638	627	622	579	545
RELG	671	660	564	675	520	621	483	576	515	591	413	413
RESP	201	159	173	158	166	150	182	144	209	184	230	188
RUSS	324	360	234	271	349	344	335	330	335	297	271	230
SCI	538	474	422	499	508	579	598	489	505	394	515	384
SLPA	N/A	N/A	225	255	262	195	220	195	268	215	208	184
SOC	644	534	673	630	716	668	680	681	662	568	603	487
SPAN	397	363	384	401	402	384	397	388	362	352	333	330
SPDV	85	96	109	100	103	112	83	108	68	88	58	92
THTR	329	319	324	338	308	312	309	303	313	295	299	287
Total	479	453	470	468	493	478	492	472	474	442	440	411

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CA 280	130630	.067	20.00	298.50	18.00	268.65	90.00
******* CA		.267	110.00	411.98	99.00	370.78	90.00
CD 101	130500	.067	30.00	447.76	19.00	283.58	63.33
CD 106	130500	.150	60.00	400.00	96.00	640.00	160.00
CD 123	130500	.200	135.00	675.00	114.00	570.00	84.44
CD 125	130500	2.800	1950.00	696.42	1428.00	510.00	73.23
CD 127	130500	.400	270.00	675.00	126.00	315.00	46.66
CD 129	130500	.400	270.00	675.00	120.00	300.00	44.44
CD 130	130500	.200	135.00	675.00	156.00	780.00	115.55
CD 131	130500	.600	435.00	725.00	234.00	390.00	53.79
CD 132	130500	.200	60.00	300.00	51.00	255.00	85.00
CD 134	130500	.200	135.00	675.00	63.00	315.00	46.66
CD 141	130500	.200	135.00	675.00	114.00	570.00	84.44
CD 143	130500	.200	135.00	675.00	48.00	240.00	35.55
CD 145	130500	.200	111.00	555.00	36.00	180.00	32.43
CD 199	130500		3.00	3.00	3.00	3.00	100.00
CD 299	130500	.600	345.00	575.00	177.00	295.00	51.30
******* CD		6.417	4209.00	655.91	2785.00	434.00	66.16
CSIS105	070100	.566	355.00	627.20	245.00	432.86	69.01
CSIS110	070100	2.800	1950.00	696.42	1728.00	617.14	88.61
CSIS112	070100	.400	144.00	360.00	120.00	300.00	83.33
CSIS113	070100	.200	90.00	450.00	63.00	315.00	70.00
CSIS114	070100	.283	140.00	494.69	50.00	176.67	35.71
CSIS115C	070100	.350	270.00	771.42	72.00	205.71	26.66
CSIS119	070100	.400	144.00	360.00	126.00	315.00	87.50
CSIS132	070100	.142	60.00	422.53	37.50	264.08	62.50
CSIS134	070100	.283	250.00	883.39	150.00	530.03	60.00
CSIS135	070100	.283	120.00	424.02	55.00	194.34	45.83
CSIS137	070100	.283	120.00	424.02	65.00	229.68	54.16
CSIS138	070100	.283	120.00	424.02	60.00	212.01	50.00
CSIS140	070100	.350	144.00	411.42	78.00	222.85	54.16
CSIS151A	070100	.200	72.00	360.00	78.00	390.00	108.33
CSIS151D	070100	.600	294.00	490.00	216.00	360.00	73.46
CSIS160	070100	.200	72.00	360.00	81.00	405.00	112.50
CSIS190	070100	.350	144.00	411.42	78.00	222.85	54.16
CSIS195	070100	.178	72.00	404.49	30.00	168.53	41.66
CSIS280	070100	.133	40.00	300.75	16.00	120.30	40.00
CSIS293	070100	.700	288.00	411.42	276.00	394.28	95.83
CSIS296	070100	.350	144.00	411.42	132.00	377.14	91.66
CSIS297	070100	.350	144.00	411.42	66.00	188.57	45.83
CSIS299	070100	.200	84.00	420.00	27.00	135.00	32.14
******* CSIS		9.884	5261.00	532.27	3849.50	389.46	73.17
CVTE107	121300	.067	16.00	238.80	16.00	238.80	100.00
CVTE110	121300	.133	120.00	902.25	102.00	766.91	85.00
CVTE111	121300	.267	240.00	898.87	200.00	749.06	83.33
CVTE112	121300	1.033	480.00	464.66	408.00	394.96	85.00
CVTE113	121300	.517	240.00	464.21	204.00	394.58	85.00

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 100	210500	.233	138.38	593.90	67.65	290.34	48.88
AOJ 101	210500	.083	44.44	535.42	11.85	142.77	26.66
AOJ 104	210500	.873	717.19	821.24	191.25	218.99	26.66
AOJ 107	210500	.979	595.31	607.89	595.31	607.89	100.00
AOJ 110	210500	.400	261.00	652.50	147.00	367.50	56.32
AOJ 142	210500	.200	135.00	675.00	48.00	240.00	35.55
AOJ 250B	210500	.100	55.50	555.00	24.00	240.00	43.24
******* AOJ		2.868	1946.82	678.66	1085.06	378.25	55.73
BUS 086	051400	.268			10.50	39.17	1050.00
BUS 120	050200	.534	300.00	561.79	248.00	464.41	82.66
BUS 121	050200	.534	400.00	749.06	260.00	486.89	65.00
BUS 252	050900	.100	72.00	720.00	40.50	405.00	56.25
BUS 256	050800	.133	99.69	749.54	55.83	419.77	56.00
BUS 257	050800	.100	72.00	720.00	37.50	375.00	52.08
******* BUS		1.669	943.69	565.42	652.33	390.85	69.12
CD 125	130500	.400	330.00	825.00	171.00	427.50	51.81
CD 138	130500	.200	67.50	337.50	45.00	225.00	66.66
CD 199	130500		.50	.50	.50	.50	100.00
CD 299	130500	.201	149.07	741.64	102.69	510.89	68.88
******* CD		.801	547.07	682.98	319.19	398.48	58.34
CSIS110	070100	.700	540.00	771.42	294.00	420.00	54.44
CSIS142	070100	.133	100.00	751.87	56.00	421.05	56.00
CSIS143	070100	.133	100.00	751.87	46.00	345.86	46.00
CSIS144	070100	.133	100.00	751.87	38.00	285.71	38.00
CSIS145	070100	.133	100.00	751.87	46.00	345.86	46.00
CSIS172	070100	.133	100.00	751.87	58.00	436.09	58.00
CSIS173B	070100	.133	100.00	751.87	104.00	781.95	104.00
******* CSIS		1.498	1140.00	761.01	642.00	428.57	56.31
CVTE225	121300	.150	75.00	500.00	57.00	380.00	76.00
******* CVTE		.150	75.00	500.00	57.00	380.00	76.00
HESC205	219900	.200	150.00	750.00	30.00	150.00	20.00
HESC206	219900	.200	150.00	750.00	48.00	240.00	32.00
HESC299	219900	.533	280.00	525.03	184.00	345.02	65.71
******* HESC		.933	580.00	621.45	262.00	280.72	45.17
NURS110	123010	.528	220.50	417.61	270.68	512.65	122.75
NURS118	123010	.067	40.00	597.01	46.00	686.56	115.00
NURS119	123010	.067	40.00	597.01	38.00	567.16	95.00
NURS130	123010	1.525	360.00	236.06	369.00	241.96	102.50
NURS132	123010	1.600	360.00	225.00	351.00	219.37	97.50
NURS211	123010	2.093	350.33	167.34	363.30	173.53	103.70
NURS220	123010	1.262	360.00	285.14	324.00	256.63	90.00
NURS222	123010	1.825	360.00	197.26	288.00	157.80	80.00
NURS230	123010	1.391	389.25	279.71	376.28	270.39	96.66

REPORT INCLUDES: GROSSMONT COLLEGE ONLY *** ALL SHORT RM CLASSES ***

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CA 167	130630	.200	135.00	675.00	72.00	360.00	53.33
******* CA		.200	135.00	675.00	72.00	360.00	53.33
CD 103	130500	.067	50.00	746.26	21.00	313.43	42.00
CD 106	130500	.150	66.00	440.00	111.00	740.00	168.18
CD 123	130500	.200	135.00	675.00	111.00	555.00	82.22
CD 124	130500	.200	135.00	675.00	99.00	495.00	73.33
CD 125	130500	2.400	1713.00	713.75	1473.00	613.75	85.98
CD 127	130500	.200	135.00	675.00	102.00	510.00	75.55
CD 129	130500	.400	270.00	675.00	138.00	345.00	51.11
CD 130	130500	.200	135.00	675.00	141.00	705.00	104.44
CD 131	130500	.600	420.00	700.00	318.00	530.00	75.71
CD 132	130500	.200	75.00	375.00	36.00	180.00	48.00
CD 134	130500	.200	150.00	750.00	90.00	450.00	60.00
CD 136	130500	.200	75.00	375.00	57.00	285.00	76.00
CD 141	130500	.200	135.00	675.00	84.00	420.00	62.22
CD 143	130500	.200	135.00	675.00	102.00	510.00	75.55
CD 145	130500	.200	135.00	675.00	66.00	330.00	48.88
CD 299	130500	.200	135.00	675.00	75.00	375.00	55.55
******* CD		5.817	3899.00	670.27	3024.00	519.85	77.55
CSIS105	070100	.566	385.00	680.21	205.00	362.19	53.24
CSIS110	070100	2.800	1920.00	685.71	1554.00	555.00	80.93
CSIS112	070100	.400	144.00	360.00	114.00	285.00	79.16
CSIS113	070100	.400	162.00	405.00	87.00	217.50	53.70
CSIS114	070100	.283	120.00	424.02	65.00	229.68	54.16
CSIS115A	070100	.350	144.00	411.42	120.00	342.85	83.33
CSIS119	070100	.400	144.00	360.00	117.00	292.50	81.25
CSIS134	070100	.283	250.00	883.39	215.00	759.71	86.00
CSIS135	070100	.283	120.00	424.02	90.00	318.02	75.00
CSIS137	070100	.283	120.00	424.02	80.00	282.68	66.66
CSIS141	070100	.217	112.00	516.12	40.00	184.33	35.71
CSIS151A	070100	.200	72.00	360.00	57.00	285.00	79.16
CSIS151D	070100	.600	294.00	490.00	225.00	375.00	76.53
CSIS160	070100	.200	72.00	360.00	72.00	360.00	100.00
CSIS165	070100	.350	144.00	411.42	126.00	360.00	87.50
CSIS190	070100	.350	144.00	411.42	102.00	291.42	70.83
CSIS195	070100	.167	72.00	431.13	42.00	251.49	58.33
CSIS251D	070100	.200	72.00	360.00	48.00	240.00	66.66
CSIS276	070100	.200	72.00	360.00	42.00	210.00	58.33
CSIS293	070100	.700	288.00	411.42	204.00	291.42	70.83
CSIS296	070100	.350	144.00	411.42	114.00	325.71	79.16
CSIS299	070100	.200	84.00	420.00	60.00	300.00	71.42
******* CSIS		9.782	5079.00	519.21	3779.00	386.32	74.40
CVTE100	121300	.133	120.00	902.25	102.00	766.91	85.00
CVTE101	121300	.267	240.00	898.87	204.00	764.04	85.00
CVTE102	121300	1.033	480.00	464.66	408.00	394.96	85.00
CVTE103	121300	.517	240.00	464.21	204.00	394.58	85.00
CVTE200	121300	.433	150.00	346.42	171.00	394.91	114.00

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 102	210500	.307	225.00	730.75	54.00	175.38	24.00
AOJ 103	210500	.446	325.00	728.04	91.00	203.85	28.00
AOJ 107	210500	.979	828.00	845.32	310.50	316.99	37.50
AOJ 110	210500	.400	300.00	750.00	207.00	517.50	69.00
AOJ 262B	210500	.067	50.00	746.26	12.00	179.10	24.00
******* AOJ		2.200	1728.00	785.16	674.50	306.47	39.03
BOT 164	051400	.133	60.00	451.12	38.00	285.71	63.33
******* BOT		.133	60.00	451.12	38.00	285.71	63.33
BUS 120	050200	.534	400.00	749.06	380.00	711.61	95.00
BUS 121	050200	.534	400.00	749.06	316.00	591.76	79.00
BUS 251	050990	.133	60.00	448.76	68.00	508.60	113.33
******* BUS		1.201	860.00	715.65	764.00	635.76	88.83
CA 163	130630	.067	25.00	373.13	20.00	298.50	80.00
CA 166	130630	.067	40.00	597.01	29.00	432.83	72.50
******* CA		.134	65.00	485.07	49.00	365.67	75.38
CD 125	130500	.200	180.00	900.00	135.00	675.00	75.00
CD 136	130500	.200	135.00	675.00	84.00	420.00	62.22
CD 137	130500	.200	153.00	765.00	78.20	391.00	51.11
CD 174	130500	.200	82.50	412.50	116.25	581.25	140.90
CD 299	130500	.200	135.00	675.00	141.00	705.00	104.44
******* CD		1.000	685.50	685.50	554.45	554.45	80.88
CSIS110	070100	.700	270.00	385.71	201.00	287.14	74.44
CSIS142	070100	.266	112.00	421.05	78.00	293.23	69.64
CSIS143	070100	.263	112.00	425.85	70.00	266.15	62.50
CSIS172	070100	.133	100.00	751.87	28.00	210.52	28.00
CSIS174B	070100	.133	100.00	751.87	86.00	646.61	86.00
CSIS175B	070100	.133	100.00	751.87	90.00	676.69	90.00
CSIS299	070100	.133	56.00	421.05	22.00	165.41	39.28
******* CSIS		1.761	850.00	482.68	575.00	326.51	67.64
HESC099	219900	.200	150.00	750.00	168.00	840.00	112.00
HESC110	219900	.200	149.06	745.30	166.95	834.75	112.00
HESC150	219900	.200	168.75	843.75	114.75	573.75	68.00
******* HESC		.600	467.81	779.68	449.70	749.50	96.12
NURS118	120300	.067	35.00	522.38	17.00	253.73	48.57
NURS119	120300	.067	35.00	522.38	26.00	388.05	74.28
NURS130	120300	.800	180.00	225.00	180.00	225.00	100.00
NURS132	120300	1.900	459.00	241.57	342.00	180.00	74.50
NURS201	120300	.089	52.50	589.88	60.00	674.15	114.28
NURS205	120300	1.111	150.00	134.95	175.00	157.44	116.66
NURS220	120300	1.600	324.00	202.50	288.00	180.00	88.88
NURS222	120300	1.600	324.00	202.50	324.00	202.50	100.00

REPORT INCLUDES: GROSSMONT COLLEGE ONLY *** ALL SHORT TERM CLASSES ***

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CA 280	130630	.067	20.00	298.50	19.00	283.58	95.00
******* CA		.267	110.00	411.98	94.00	352.05	85.45
CD 102	130500	.067	30.00	447.76	15.00	223.88	50.00
CD 109	130500	.150	60.00	400.00	72.00	480.00	120.00
CD 111	130500	.150	60.00	400.00	27.00	180.00	45.00
CD 123	130500	.200	135.00	675.00	126.00	630.00	93.33
CD 125	130500	2.800	1935.00	691.07	1503.00	536.78	77.67
CD 126	130500	.200	135.00	675.00	114.00	570.00	84.44
CD 127	130500	.400	270.00	675.00	168.00	420.00	62.22
CD 128	130500	.200	135.00	675.00	96.00	480.00	71.11
CD 129	130500	.200	105.00	525.00	63.00	315.00	60.00
CD 130	130500	.200	150.00	750.00	174.00	870.00	116.00
CD 131	130500	.600	420.00	700.00	330.00	550.00	78.57
CD 132	130500	.200	60.00	300.00	45.00	225.00	75.00
CD 134	130500	.200	135.00	675.00	129.00	645.00	95.55
CD 141	130500	.200	135.00	675.00	72.00	360.00	53.33
CD 143	130500	.200	135.00	675.00	135.00	675.00	100.00
CD 145	130500	.200	111.00	555.00	57.00	285.00	51.35
CD 174	130500	.200	75.00	375.00	45.00	225.00	60.00
CD 199	130500		3.00	3.00	3.00	3.00	100.00
******* CD		6.367	4089.00	642.21	3174.00	498.50	77.62
CSIS105	070100	.566	355.00	627.20	185.00	326.85	52.11
CSIS110	070100	2.800	1920.00	685.71	1536.00	548.57	80.00
CSIS112	070100	.400	144.00	360.00	99.00	247.50	68.75
CSIS113	070100	.200	90.00	450.00	54.00	270.00	60.00
CSIS114	070100	.283	140.00	494.69	85.00	300.35	60.71
CSIS119	070100	.400	144.00	360.00	114.00	285.00	79.16
CSIS132	070100	.142	60.00	422.53	40.00	281.69	66.66
CSIS134	070100	.566	370.00	653.71	305.00	538.86	82.43
CSIS135	070100	.283	120.00	424.02	100.00	353.35	83.33
CSIS136	070100	.283	120.00	424.02	75.00	265.01	62.50
CSIS137	070100	.283	120.00	424.02	95.00	335.68	79.16
CSIS138	070100	.283	120.00	424.02	70.00	247.34	58.33
CSIS140	070100	.350	144.00	411.42	90.00	257.14	62.50
CSIS151A	070100	.200	72.00	360.00	48.00	240.00	66.66
CSIS151D	070100	.600	294.00	490.00	225.00	375.00	76.53
CSIS160	070100	.200	72.00	360.00	72.00	360.00	100.00
CSIS190	070100	.350	144.00	411.42	78.00	222.85	54.16
CSIS195	070100	.167	72.00	431.13	48.00	287.42	66.66
CSIS220	070100	.200	120.00	600.00	42.00	210.00	35.00
CSIS280	070100	.133	40.00	300.75	30.00	225.56	75.00
CSIS293	070100	.700	288.00	411.42	204.00	291.42	70.83
CSIS296	070100	.350	144.00	411.42	144.00	411.42	100.00
CSIS297	070100	.350	144.00	411.42	60.00	171.42	41.66
******* CSIS		10.089	5237.00	519.08	3799.00	376.54	72.54
CVTE107	121300	.067	25.00	373.13	22.00	328.35	88.00
CVTE110	121300	.133	120.00	902.25	98.00	736.84	81.66

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 100	210500	.208	138.38	665.28	95.33	458.31	68.89
AOJ 101	210500	.083	44.44	535.42	25.18	303.37	56.66
AOJ 104	210500	.950	717.19	754.93	270.94	285.20	37.77
AOJ 107	210500	.979	605.31	618.29	665.84	680.12	109.99
AOJ 110	210500	.400	261.00	652.50	174.00	435.00	66.66
AOJ 142	210500	.200	135.00	675.00	75.00	375.00	55.55
******* AOJ		2.820	1901.32	674.22	1306.29	463.22	68.70
BUS 120	050200	.534	300.00	561.79	296.00	554.30	98.66
BUS 121	050200	.534	400.00	749.06	356.00	666.66	89.00
BUS 252	050900	.100	72.00	720.00	27.00	270.00	37.50
BUS 256	050800	.133	99.69	749.54	31.90	239.84	31.99
BUS 257	050800	.100	36.00	360.00	13.50	135.00	37.50
******* BUS		1.401	907.69	647.88	724.40	517.05	79.80
CA 163	130630	.067	35.00	522.38	35.00	522.38	100.00
CA 166	130630	.067	35.00	522.38	26.00	388.05	74.28
******* CA		.134	70.00	522.38	61.00	455.22	87.14
CD 125	130500	.200	180.00	900.00	174.00	870.00	96.66
CD 129	130500	.200	135.00	675.00	81.00	405.00	60.00
CD 137	130500	.200	135.00	675.00	105.00	525.00	77.77
CD 299	130500	.133	90.00	676.69	50.00	375.93	55.55
******* CD		.733	540.00	736.69	410.00	559.34	75.92
CSIS110	070100	.700	540.00	771.42	438.00	625.71	81.11
CSIS142	070100	.266	104.00	390.97	74.00	278.19	71.15
CSIS143	070100	.266	104.00	390.97	50.00	187.96	48.07
CSIS172	070100	.133	100.00	751.87	48.00	360.90	48.00
CSIS173B	070100	.133	100.00	751.87	96.00	721.80	96.00
CSIS174B	070100	.133	48.00	360.90	22.00	165.41	45.83
CSIS274B	070100	.133	48.00	360.90	20.00	150.37	41.66
CSIS299	070100	.266	112.00	421.05	64.00	240.60	57.14
******* CSIS		2.030	1156.00	569.45	812.00	400.00	70.24
CVTE225	121300	.150	75.00	500.00	39.00	260.00	52.00
CVTE299	121300	.200	225.00	1125.00	75.00	375.00	33.33
******* CVTE		.350	300.00	857.14	114.00	325.71	38.00
HESC205	219900	.200	150.00	750.00	39.00	195.00	26.00
HESC206	219900	.200	150.00	750.00	51.00	255.00	34.00
******* HESC		.400	300.00	750.00	90.00	225.00	30.00
NURS110	123010	.542	212.50	391.84	243.75	449.47	114.70
NURS117	123010	.066	30.00	454.54	29.50	446.96	98.33
NURS118	123010	.067	18.00	268.65	23.00	343.28	127.77
NURS119	123010	.067	35.00	522.38	38.00	567.16	108.57
NURS130	123010	1.600	360.00	225.00	324.00	202.50	90.00
NURS132	123010	1.600	360.00	225.00	333.00	208.12	92.50

RUN ON: [illegible] SUBJECT W[illegible]SIS
REPORT IN[illegible]DES: GROSSMONT COLLEGE ONLY *** ALL SHORT [illegible]RM CLASSES ***

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
BUS 258	050990	.200	108.00	540.00	39.00	195.00	36.11
******* BUS		10.821	7255.00	670.45	5408.00	499.76	74.54
CA 167	130630	.200	135.00	675.00	87.00	435.00	64.44
******* CA		.200	135.00	675.00	87.00	435.00	64.44
CD 101	130510	.067	50.00	746.26	24.00	358.20	48.00
CD 108	130510	.150	66.00	440.00	93.00	620.00	140.90
CD 110	130510	.150	66.00	440.00	33.00	220.00	50.00
CD 123	130510	.200	135.00	675.00	105.00	525.00	77.77
CD 124	130510	.200	135.00	675.00	99.00	495.00	73.33
CD 125	130510	2.400	1713.00	713.75	1536.00	640.00	89.66
CD 126	130510	.400	270.00	675.00	198.00	495.00	73.33
CD 127	130510	.200	135.00	675.00	102.00	510.00	75.55
CD 128	130510	.200	135.00	675.00	72.00	360.00	53.33
CD 129	130510	.200	135.00	675.00	117.00	585.00	86.66
CD 130	130510	.200	165.00	825.00	138.00	690.00	83.63
CD 131	130510	.600	420.00	700.00	342.00	570.00	81.42
CD 134	130510	.200	150.00	750.00	108.00	540.00	72.00
CD 136	130510	.200	66.00	330.00	63.00	315.00	95.45
CD 137	130510	.200	135.00	675.00	63.00	315.00	46.66
CD 141	130510	.200	135.00	675.00	84.00	420.00	62.22
CD 143	130510	.200	135.00	675.00	111.00	555.00	82.22
CD 145	130510	.200	135.00	675.00	66.00	330.00	48.88
CD 160	130510	.200	135.00	675.00	39.00	195.00	28.88
CD 175	130510	.200	135.00	675.00	102.00	510.00	75.55
CD 199	130510		18.00	18.00	18.00	18.00	100.00
******* CD		6.567	4469.00	680.52	3513.00	534.94	78.60
CSIS105	070300	.566	385.00	680.21	290.00	512.36	75.32
CSIS110	070300	3.500	2460.00	702.85	2046.00	584.57	83.17
CSIS112	070300	.600	219.00	365.00	177.00	295.00	80.82
CSIS113	070300	.400	162.00	405.00	96.00	240.00	59.25
CSIS114	070300	.283	120.00	424.02	100.00	353.35	83.33
CSIS119	070300	.400	144.00	360.00	138.00	345.00	95.83
CSIS134	070300	.566	370.00	653.71	275.00	485.86	74.32
CSIS135	070300	.283	120.00	424.02	70.00	247.34	58.33
CSIS136	070300	.283	120.00	424.02	100.00	353.35	83.33
CSIS137	070300	.283	120.00	424.02	110.00	388.69	91.66
CSIS141	070300	.217	112.00	516.12	56.00	258.06	50.00
CSIS151A	070300	.200	72.00	360.00	66.00	330.00	91.66
CSIS151D	070300	.600	294.00	490.00	219.00	365.00	74.48
CSIS160	070300	.200	72.00	360.00	72.00	360.00	100.00
CSIS165	070300	.350	144.00	411.42	66.00	188.57	45.83
CSIS190	070300	.350	144.00	411.42	144.00	411.42	100.00
CSIS195	070300	.178	72.00	404.49	69.00	387.64	95.83
CSIS251D	070300	.200	72.00	360.00	54.00	270.00	75.00
CSIS276	070300	.200	72.00	360.00	69.00	345.00	95.83
CSIS293	070300	.700	288.00	411.42	270.00	385.71	93.75
CSIS296	070300	.350	144.00	411.42	114.00	325.71	79.16

IVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 102	210500	.308	144.00	467.53	117.00	379.87	81.25
AOJ 103	210500	.446	227.50	509.06	195.00	436.33	85.71
AOJ 107	210500	.945	726.00	767.60	703.31	743.61	96.87
AOJ 110	210500	.400	261.00	652.50	171.00	427.50	65.51
AOJ 250D	210500	.100	58.50	585.00	19.01	190.10	32.49
AOJ 262A	210500	.067	50.00	746.26	18.00	268.65	36.00
****** AOJ		2.267	1467.00	646.91	1223.32	539.45	83.38
BUS 120	050200	.267	200.00	749.06	228.00	853.93	114.00
BUS 121	050200	.267	100.00	374.53	108.00	404.49	108.00
BUS 251	050990	.134	69.38	517.76	57.81	431.41	83.32
****** BUS		.668	369.38	552.96	393.81	589.53	106.61
CA 163	130630	.067	25.00	373.13	22.00	328.35	88.00
CA 166	130630	.067	40.00	597.01	25.00	373.13	62.50
****** CA		.134	65.00	485.07	47.00	350.74	72.30
CD 125	130510	.400	330.00	825.00	255.00	637.50	77.27
CD 128	130510	.200	135.00	675.00	117.00	585.00	86.66
****** CD		.600	465.00	775.00	372.00	620.00	80.00
CSIS142	070300	.266	112.00	421.05	90.00	338.34	80.35
CSIS143	070300	.266	112.00	421.05	76.00	285.71	67.85
CSIS144	070300	.133	56.00	421.05	18.00	135.33	32.14
CSIS145	070300	.133	56.00	421.05	18.00	135.33	32.14
CSIS172	070300	.133	100.00	751.87	66.00	496.24	66.00
CSIS173B	070300	.133	100.00	751.87	44.00	330.82	44.00
CSIS175B	070300	.133	50.00	375.93	31.00	233.08	62.00
CSIS299	070300	.133	56.00	421.05	40.00	300.75	71.42
****** CSIS		1.330	642.00	482.70	383.00	287.96	59.65
HESC110	219900	.200	150.00	750.00	129.00	645.00	86.00
HESC150	219900	.200	168.75	843.75	155.25	776.25	92.00
HESC299	219900	.200	105.00	525.00	36.00	180.00	34.28
****** HESC		.600	423.75	706.25	320.25	533.75	75.57
NURS118	120300	.067	35.00	522.38	28.00	417.91	80.00
NURS119	120300	.067	35.00	522.38	35.00	522.38	100.00
NURS140	120300	.266	140.00	526.31	80.00	300.75	57.14
NURS205	120300	.993	180.00	181.26	156.00	157.09	86.66
NURS299	120300	5.476	1645.00	300.36	1146.00	209.25	69.66
****** NURS		6.869	2035.00	296.23	1445.00	210.34	71.00
RESP112	121000	1.200	135.00	112.50	129.00	107.50	95.55
****** RESP		1.200	135.00	112.50	129.00	107.50	95.55

REPORT INCLUDES: GROSSMONT COLLEGE ONLY *** ALL SHORT TERM CLASSES ***

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
******* CA		.267	110.00	411.98	99.00	370.78	90.00
CD 103	130510	.067	30.00	447.76	43.00	641.79	143.33
CD 107	130510	.150	60.00	400.00	69.00	460.00	115.00
CD 110	130510	.150	60.00	400.00	21.00	140.00	35.00
CD 123	130510	.200	108.00	540.00	90.00	450.00	83.33
CD 124	130510	.200	150.00	750.00	147.00	735.00	98.00
CD 125	130510	2.200	1530.00	695.45	1374.00	624.54	89.80
CD 126	130510	.400	270.00	675.00	201.00	502.50	74.44
CD 127	130510	.400	270.00	675.00	126.00	315.00	46.66
CD 128	130510	.200	135.00	675.00	129.00	645.00	95.55
CD 129	130510	.400	270.00	675.00	168.00	420.00	62.22
CD 130	130510	.200	150.00	750.00	105.00	525.00	70.00
CD 131	130510	.600	390.00	650.00	351.00	585.00	90.00
CD 132	130510	.200	60.00	300.00	60.00	300.00	100.00
CD 134	130510	.200	150.00	750.00	102.00	510.00	68.00
CD 138	130510	.200	108.00	540.00	81.00	405.00	75.00
CD 141	130510	.200	135.00	675.00	123.00	615.00	91.11
CD 145	130510	.200	108.00	540.00	42.00	210.00	38.88
CD 174	130510	.200	75.00	375.00	96.00	480.00	128.00
******* CD		6.367	4059.00	637.50	3328.00	522.69	81.99
CSIS105	070300	.566	355.00	627.20	190.00	335.68	53.52
CSIS110	070300	4.200	2820.00	671.42	2208.00	525.71	78.29
CSIS112	070300	.400	144.00	360.00	99.00	247.50	68.75
CSIS113	070300	.400	222.00	555.00	123.00	307.50	55.40
CSIS114	070300	.283	140.00	494.69	65.00	229.68	46.42
CSIS119	070300	.600	282.00	470.00	222.00	370.00	78.72
CSIS132	070300	.142	60.00	422.53	37.50	264.08	62.50
CSIS134	070300	.566	370.00	653.71	285.00	503.53	77.02
CSIS135	070300	.283	120.00	424.02	80.00	282.68	66.66
CSIS136	070300	.283	120.00	424.02	95.00	335.68	79.16
CSIS137	070300	.283	120.00	424.02	105.00	371.02	87.50
CSIS138	070300	.283	120.00	424.02	90.00	318.02	75.00
CSIS151A	070300	.200	72.00	360.00	69.00	345.00	95.83
CSIS151D	070300	.600	294.00	490.00	225.00	375.00	76.53
CSIS165	070300	.350	144.00	411.42	90.00	257.14	62.50
CSIS190	070300	.350	144.00	411.42	108.00	308.57	75.00
CSIS195	070300	.178	72.00	404.49	60.00	337.07	83.33
CSIS220	070300	.200	90.00	450.00	24.00	120.00	26.66
CSIS251A	070300	.200	72.00	360.00	66.00	330.00	91.66
CSIS280	070300	.133	40.00	300.75	24.00	180.45	60.00
CSIS293	070300	.700	288.00	411.42	276.00	394.28	95.83
CSIS296	070300	.350	144.00	411.42	120.00	342.85	83.33
CSIS297	070300	.350	144.00	411.42	108.00	308.57	75.00
CSIS299	070300	.200	72.00	360.00	57.00	285.00	79.16
******* CSIS		12.100	6449.00	532.97	4826.50	398.88	74.84
CVTE107	121300	.067	25.00	373.13	29.00	432.83	116.00
CVTE110	121300	.133	120.00	902.25	94.00	706.76	78.33
CVTE111	121300	.267	240.00	898.87	188.00	704.11	78.33

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 100	210500	.233	138.38	593.90	126.08	541.11	91.11
AOJ 101	210500	.083	59.25	713.85	33.58	404.57	56.67
AOJ 110	210500	.200	150.00	750.00	81.00	405.00	54.00
AOJ 142	210500	.200	150.00	750.00	102.00	510.00	68.00
AOJ 251A	210500	.167	100.00	598.80	87.50	523.95	87.50
AOJ 251B	210500	.167	80.00	479.04	75.00	449.10	93.75
AOJ 299	210500	.949	721.97	760.12	385.05	405.40	53.33
******* AOJ		1.999	1399.60	699.86	890.21	445.14	63.60
BUS 086	051400	.267	20.00	74.85	52.00	194.61	260.00
BUS 120	050200	.267	200.00	749.06	212.00	794.00	106.00
BUS 121	050200	.267	200.00	749.06	192.00	719.10	96.00
BUS 252	050900	.100	72.00	720.00	34.50	345.00	47.91
BUS 256	050990	.133	99.69	749.54	47.85	359.77	47.99
BUS 257	050990	.100	36.00	360.00	19.50	195.00	54.16
******* BUS		1.134	627.69	553.42	557.85	491.84	88.87
CA 163	130630	.067	35.00	522.38	33.00	492.53	94.28
CA 166	130630	.067	35.00	522.38	28.00	417.91	80.00
******* CA		.134	70.00	522.38	61.00	455.22	87.14
CD 125	130510	.400	315.00	787.50	213.00	532.50	67.61
CD 128	130510	.200	135.00	675.00	117.00	585.00	86.66
CD 299	130510	.067	45.00	671.64	31.00	462.68	68.88
******* CD		.667	495.00	742.12	361.00	541.22	72.92
CSIS142	070300	.266	104.00	390.97	92.00	345.86	88.46
CSIS143	070300	.266	104.00	390.97	82.00	308.27	78.84
CSIS144	070300	.133	48.00	360.90	28.00	210.52	58.33
CSIS145	070300	.133	48.00	360.90	34.00	255.63	70.83
CSIS172	070300	.133	100.00	751.87	34.00	255.63	34.00
CSIS173B	070300	.133	100.00	751.87	88.00	661.65	88.00
CSIS174B	070300	.133	48.00	360.90	38.00	285.71	79.16
CSIS274B	070300	.133	48.00	360.90	40.00	300.75	83.33
******* CSIS		1.330	600.00	451.12	436.00	327.81	72.66
CVTE225	121300	.150	75.00	500.00	78.00	520.00	104.00
******* CVTE		.150	75.00	500.00	78.00	520.00	104.00
HESC205	219900	.200	150.00	750.00	75.00	375.00	50.00
HESC206	219900	.200	150.00	750.00	72.00	360.00	48.00
******* HESC		.400	300.00	750.00	147.00	367.50	49.00
NURS110	120300	.383	174.57	455.79	139.65	364.62	79.99
NURS117	120300	.066	35.00	530.30	21.00	318.18	60.00
NURS119	120300	.067	36.00	537.31	13.00	194.02	36.11
NURS133	120300	1.684	384.00	228.00	358.80	213.03	93.43
NURS135	120300	1.685	359.25	213.12	335.25	198.89	93.31
NURS137	120300	1.638	359.25	219.20	323.33	197.28	90.00

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
BUS 253	050990	.200	144.00	720.00	75.00	375.00	52.08
BUS 258	050990	.200	144.00	720.00	54.00	270.00	37.50
******* BUS		11.520	7329.00	636.19	6498.00	564.06	88.66
CA 167	130630	.200	135.00	675.00	60.00	300.00	44.44
******* CA		.200	135.00	675.00	60.00	300.00	44.44
CD 102	130510	.067	50.00	746.26	19.00	283.58	38.00
CD 106	130510	.150	66.00	440.00	51.00	340.00	77.27
CD 113	130510	.150	66.00	440.00	48.00	320.00	72.72
CD 123	130510	.200	105.00	525.00	78.00	390.00	74.28
CD 124	130510	.200	135.00	675.00	108.00	540.00	80.00
CD 125	130510	2.200	1689.00	767.72	1476.00	670.90	87.38
CD 126	130510	.400	270.00	675.00	177.00	442.50	65.55
CD 127	130510	.200	135.00	675.00	132.00	660.00	97.77
CD 128	130510	.400	270.00	675.00	228.00	570.00	84.44
CD 129	130510	.200	135.00	675.00	93.00	465.00	68.88
CD 130	130510	.200	111.00	555.00	108.00	540.00	97.29
CD 131	130510	.400	285.00	712.50	258.00	645.00	90.52
CD 132	130510	.200	66.00	330.00	24.00	120.00	36.36
CD 134	130510	.200	135.00	675.00	78.00	390.00	57.77
CD 136	130510	.200	135.00	675.00	72.00	360.00	53.33
CD 137	130510	.200	108.00	540.00	81.00	405.00	75.00
CD 141	130510	.200	135.00	675.00	114.00	570.00	84.44
CD 143	130510	.200	135.00	675.00	84.00	420.00	62.22
CD 145	130510	.200	135.00	675.00	84.00	420.00	62.22
CD 153	130510	.200	111.00	555.00	57.00	285.00	51.35
CD 162	130510	.400	210.00	525.00	144.00	360.00	68.57
******* CD		6.767	4487.00	663.07	3514.00	519.28	78.31
CSIS105	070300	.849	440.00	518.25	310.00	365.13	70.45
CSIS110	070300	4.550	3120.00	685.71	2592.00	569.67	83.07
CSIS112	070300	.600	228.00	380.00	207.00	345.00	90.78
CSIS113	070300	.600	234.00	390.00	189.00	315.00	80.76
CSIS114	070300	.283	120.00	424.02	95.00	335.68	79.16
CSIS119	070300	.600	282.00	470.00	198.00	330.00	70.21
CSIS132	070300	.142	60.00	422.53	50.00	352.11	83.33
CSIS134	070300	.566	370.00	653.71	345.00	609.54	93.24
CSIS135	070300	.283	120.00	423.57	125.00	441.22	104.16
CSIS136	070300	.283	150.00	530.03	70.00	247.34	46.66
CSIS137	070300	.283	120.00	424.02	110.00	388.69	91.66
CSIS140	070300	.350	144.00	411.42	138.00	394.28	95.83
CSIS141	070300	.217	96.00	442.39	48.00	221.19	50.00
CSIS151A	070300	.200	72.00	360.00	66.00	330.00	91.66
CSIS151D	070300	.800	366.00	457.50	321.00	401.25	87.70
CSIS160	070300	.200	72.00	360.00	72.00	360.00	100.00
CSIS165	070300	.350	144.00	411.42	174.00	497.14	120.83
CSIS190	070300	.350	144.00	411.42	108.00	308.57	75.00
CSIS195	070300	.167	72.00	431.13	63.00	377.24	87.50
CSIS293	070300	.700	288.00	411.42	222.00	317.14	77.08

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CSIS296	070300	.350	144.00	411.42	132.00	377.14	91.66
CSIS299	070300	.200	72.00	360.00	48.00	240.00	66.66
******* CSIS		12.923	6858.00	530.66	5683.00	439.74	82.86
CVTE100	121300	.133	120.00	902.25	106.00	796.99	88.33
CVTE101	121300	.267	240.00	898.87	212.00	794.00	88.33
CVTE102	121300	1.033	480.00	464.66	424.00	410.45	88.33
CVTE103	121300	.517	240.00	464.21	212.00	410.05	88.33
CVTE200	121300	.433	200.00	461.89	186.00	429.56	93.00
CVTE201	121300	.350	108.00	308.57	108.00	308.57	100.00
CVTE202	121300	.350	102.00	291.42	108.00	308.57	105.88
CVTE203	121300	.350	102.00	291.42	72.00	205.71	70.58
CVTE205	121300	2.400	750.00	312.50	720.00	300.00	96.00
CVTE208	121300	.183	75.00	409.83	54.00	295.08	72.00
******* CVTE		6.016	2417.00	401.76	2202.00	366.02	91.10
FS 110	130400	.200	120.00	600.00	150.00	750.00	125.00
FS 115	130400	.200	135.00	675.00	114.00	570.00	84.44
FS 120	130400	.400	246.00	615.00	222.00	555.00	90.24
******* FS		.800	501.00	626.25	486.00	607.50	97.00
HESC110	219900	.200	90.00	450.00	84.00	420.00	93.33
HESC150	219900	.200	90.00	450.00	51.00	255.00	56.66
******* HESC		.400	180.00	450.00	135.00	337.50	75.00
NURS120	120300	3.380	810.00	239.60	796.50	235.60	98.33
NURS201	120300	.089	49.50	556.17	45.00	505.61	90.90
NURS203	120300	1.583	480.00	303.22	408.00	257.73	85.00
NURS255A	120300	.225	292.50	1300.00	256.50	1140.00	87.69
NURS265A	120300	.225	157.50	700.00	108.00	480.00	68.57
******* NURS		5.502	1789.50	325.20	1614.00	293.31	90.19
OTA 100	121800	.133	70.00	526.31	44.00	330.82	62.85
OTA 101	121800	.217	140.00	645.16	68.00	313.36	48.57
OTA 110	121800	.350	210.00	600.00	90.00	257.14	42.85
OTA 210	121800	.222	96.00	432.43	44.00	198.19	45.83
OTA 220	121800	.283	120.00	424.02	55.00	194.34	45.83
OTA 230	121800	.067	24.00	358.20	11.00	164.17	45.83
******* OTA		1.272	660.00	518.86	312.00	245.28	47.27
RESP105	121000	.267	140.00	524.34	88.00	329.58	62.85
RESP108	121000	.800	270.00	337.50	198.00	247.50	73.33
RESP114	121000	.133	70.00	526.31	46.00	345.86	65.71
RESP115	121000	.267	120.00	449.43	88.00	329.58	73.33
RESP208	121000	.650	225.00	346.15	165.00	253.84	73.33
RESP222	121000	2.100	315.00	150.00	231.00	110.00	73.33
******* RESP		4.217	1140.00	270.33	816.00	193.50	71.57
SLPA100	122000	.267	140.00	524.34	56.00	209.73	40.00
SLPA115	122000	.133	60.00	451.12	32.00	240.60	53.33

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 102	210500	.308	144.00	467.53	117.00	379.87	81.25
AOJ 103	210500	.447	227.50	508.94	221.00	494.40	97.14
AOJ 110	210500	.200	150.00	750.00	114.00	570.00	76.00
AOJ 262B	210500	.067	62.50	932.83	12.50	186.56	20.00
******* AOJ		1.022	584.00	571.42	464.50	454.50	79.53
BUS 120	050200	.267	200.00	749.06	216.00	808.98	108.00
BUS 121	050200	.267	200.00	749.06	212.00	794.00	106.00
BUS 251	050990	.133	60.00	451.12	58.00	436.09	96.66
******* BUS		.667	460.00	689.65	486.00	728.63	105.65
CA 163	130630	.067	25.00	373.13	29.00	432.83	116.00
CA 166	130630	.067	40.00	597.01	28.00	417.91	70.00
******* CA		.134	65.00	485.07	57.00	425.37	87.69
CD 125	130510	.400	330.00	825.00	213.00	532.50	64.54
CD 138	130510	.200	160.00	800.00	56.00	280.00	35.00
CD 160	130510	.200	270.00	1350.00	102.00	510.00	37.77
******* CD		.800	760.00	950.00	371.00	463.75	48.81
CSIS105	070300	.283			109.73	387.73	10973.00
CSIS132	070300	.142			55.00	387.32	5500.00
CSIS142	070300	.399	108.00	270.67	110.00	275.68	101.85
CSIS143	070300	.266	108.00	406.01	46.00	172.93	42.59
CSIS145	070300	.133	48.00	360.90	38.00	285.71	79.16
CSIS173B	070300	.133	100.00	751.87	98.00	736.84	98.00
CSIS174B	070300	.266	100.00	375.93	95.65	359.58	95.65
CSIS175B	070300	.133	50.00	375.93	12.00	90.22	24.00
CSIS186A	070300	.033			11.00	333.33	1100.00
CSIS186B	070300	.033			11.00	333.33	1100.00
CSIS274B	070300	.266	100.00	375.93	84.00	315.78	84.00
CSIS275B	070300	.133	100.00	751.87	30.00	225.56	30.00
CSIS280	070300	.133			43.86	329.77	4386.00
CSIS299	070300	.342			117.86	344.61	11786.00
******* CSIS		2.695	714.00	264.93	862.10	319.88	120.74
HESC110	219900	.200	150.00	750.00	153.00	765.00	102.00
HESC150	219900	.200	150.00	750.00	120.00	600.00	80.00
******* HESC		.400	300.00	750.00	273.00	682.50	91.00
NURS118	120300	.201	189.25	941.54	135.55	674.37	71.62
NURS119	120300	.201	250.00	1243.78	149.00	741.29	59.60
NURS135	120300	.838	180.00	214.69	174.00	207.53	96.66
NURS140	120300	.266	140.00	526.31	104.00	390.97	74.28
NURS205	120300	.993	180.00	181.26	186.00	187.31	103.33
NURS223	120300	4.781	1049.13	219.41	999.25	208.98	95.24
NURS225	120300	3.687	805.00	218.31	828.00	224.54	102.85
******* NURS		10.968	2793.38	254.67	2575.80	234.84	92.21

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CA 299	130630	.200	90.00	450.00	72.00	360.00	80.00
******* CA		.267	110.00	411.98	100.00	374.53	90.90
CD 101	130510	.067	30.00	447.76	21.00	313.43	70.00
CD 109	130510	.150	15.00	100.00	15.00	100.00	100.00
CD 112	130510	.150	60.00	400.00	36.00	240.00	60.00
CD 125	130510	2.400	1725.00	718.75	1359.00	566.25	78.78
CD 126	130510	.400	270.00	675.00	255.00	637.50	94.44
CD 127	130510	.200	135.00	675.00	129.00	645.00	95.55
CD 129	130510	.400	270.00	675.00	225.00	562.50	83.33
CD 130	130510	.200	150.00	750.00	132.00	660.00	88.00
CD 131	130510	.600	405.00	675.00	324.00	540.00	80.00
CD 132	130510	.200	60.00	300.00	51.00	255.00	85.00
CD 134	130510	.200	150.00	750.00	96.00	480.00	64.00
CD 136	130510	.200	135.00	675.00	54.00	270.00	40.00
CD 141	130510	.200	135.00	675.00	99.00	495.00	73.33
CD 143	130510	.200	150.00	750.00	129.00	645.00	86.00
CD 145	130510	.200	108.00	540.00	60.00	300.00	55.55
CD 160	130510	.400	240.00	600.00	186.00	465.00	77.50
CD 299	130510	.200	111.00	555.00	78.00	390.00	70.27
******* CD		6.367	4149.00	651.64	3249.00	510.28	78.30
CSIS105	070300	.849	600.00	706.71	345.00	406.36	57.50
CSIS110	070300	4.900	3210.00	655.10	2526.00	515.51	78.69
CSIS112	070300	.600	264.00	440.00	177.00	295.00	67.04
CSIS113	070300	.600	294.00	490.00	207.00	345.00	70.40
CSIS114	070300	.283	200.00	706.71	70.00	247.34	35.00
CSIS119	070300	.600	252.00	420.00	174.00	290.00	69.04
CSIS132	070300	.142	60.00	422.53	57.50	404.92	95.83
CSIS134	070300	.566	370.00	653.71	305.00	538.86	82.43
CSIS135	070300	.283	120.00	424.02	90.00	318.02	75.00
CSIS136	070300	.283	120.00	424.02	80.00	282.68	66.66
CSIS137	070300	.283	120.00	424.02	85.00	300.35	70.83
CSIS138	070300	.283	120.00	424.02	110.00	388.69	91.66
CSIS140	070300	.350	144.00	411.42	66.00	188.57	45.83
CSIS151A	070300	.200	72.00	360.00	72.00	360.00	100.00
CSIS151D	070300	.800	366.00	457.50	300.00	375.00	81.96
CSIS160	070300	.200	72.00	360.00	54.00	270.00	75.00
CSIS190	069900	.350	144.00	411.42	96.00	274.28	66.66
CSIS195	070300	.178	72.00	404.49	78.00	438.20	108.33
CSIS220	070300	.200	90.00	450.00	36.00	180.00	40.00
CSIS251A	070300	.200	72.00	360.00	54.00	270.00	75.00
CSIS270	070300	.200	72.00	360.00	36.00	180.00	50.00
CSIS280	070300	.133	60.00	451.12	54.00	406.01	90.00
CSIS293	070300	.700	288.00	411.42	282.00	402.85	97.91
CSIS296	070300	.350	144.00	411.42	120.00	342.85	83.33
CSIS297	070300	.350	144.00	411.42	60.00	171.42	41.66
CSIS299	070300	.400	144.00	360.00	105.00	262.50	72.91
******* CSIS		14.283	7614.00	533.08	5639.50	394.84	74.06

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 100	210500	.208	116.44	559.80	116.44	559.80	100.00
AOJ 101	210500	.083	37.03	446.14	31.11	374.81	84.01
AOJ 104	210500	.966	718.88	743.64	175.73	181.78	24.44
AOJ 110	210500	.200	150.00	750.00	84.00	420.00	56.00
AOJ 199	210500		1.50	1.50	1.50	1.50	100.00
AOJ 250B	210500	.100	60.00	600.00	39.00	390.00	65.00
AOJ 262A	210500	.067	45.00	671.64	13.00	194.02	28.88
******* AOJ		1.624	1128.85	694.80	460.78	283.60	40.81
BOT 101A	051400	.163			111.00	680.98	11100.00
BOT 102	051400				3.00	3.00	300.00
******* BOT		.163			114.00	699.38	11400.00
BUS 086	051400	.536	22.50	41.97	79.50	148.32	353.33
BUS 120	050200	.267	200.00	749.06	184.00	689.13	92.00
BUS 121	050200	.267	200.00	749.06	168.00	629.21	84.00
BUS 252	050900	.100	72.00	720.00	51.00	510.00	70.83
BUS 256	050990	.133	68.75	516.91	37.13	279.17	54.00
BUS 257	050990	.100	36.00	360.00	26.25	262.50	72.91
******* BUS		1.403	599.25	427.12	545.88	389.08	91.09
CA 163	130630	.067	35.00	522.38	26.00	388.05	74.28
CA 166	130630	.067	35.00	522.38	25.00	373.13	71.42
******* CA		.134	70.00	522.38	51.00	380.59	72.85
CD 125	130510	.400	330.00	825.00	204.00	510.00	61.81
CD 128	130510	.200	135.00	675.00	132.00	660.00	97.77
CD 138	130510	.200	189.00	945.00	157.50	787.50	83.33
CD 299	130510	.134	90.00	671.64	68.00	507.46	75.55
******* CD		.934	744.00	796.57	561.50	601.17	75.47
CSIS105	070300	.283			99.75	352.47	9975.00
CSIS132	070300	.142			50.25	353.87	5025.00
CSIS142	070300	.399	128.00	320.80	136.00	340.85	106.25
CSIS143	070300	.266	104.00	390.97	66.00	248.12	63.46
CSIS144	070300	.133	48.00	360.90	30.00	225.56	62.50
CSIS145	070300	.133	48.00	360.90	30.00	225.56	62.50
CSIS172	070300	.133	100.00	751.87	56.00	421.05	56.00
CSIS173B	070300	.133	100.00	751.87	78.00	586.46	78.00
CSIS174B	070300	.266	48.00	180.45	60.00	225.56	125.00
CSIS186A	070300	.033			10.00	303.03	1000.00
CSIS186B	070300	.033			10.00	303.03	1000.00
CSIS274B	070300	.266	48.00	180.45	62.00	233.08	129.16
CSIS280	070300	.133			39.00	293.23	3900.00
CSIS299	070300	.342			104.38	305.20	10438.00
******* CSIS		2.695	624.00	231.53	831.38	308.48	133.23
CVTE225	121300	.150	75.00	500.00	66.00	440.00	88.00

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
******* BUS		12.054	7636.00	633.48	6776.00	562.13	88.73
CA 299	130630	.200	90.00	450.00	63.00	315.00	70.00
******* CA		.200	90.00	450.00	63.00	315.00	70.00
CD 104	130510	.067	30.00	447.76	25.00	373.13	83.33
CD 109	130510	.150	66.00	440.00	63.00	420.00	95.45
CD 111	130510	.150	66.00	440.00	48.00	320.00	72.72
CD 123	130510	.200	111.00	555.00	105.00	525.00	94.59
CD 124	130510	.400	285.00	712.50	165.00	412.50	57.89
CD 125	130510	2.800	2169.00	774.64	1725.00	616.07	79.52
CD 126	130510	.400	270.00	675.00	180.00	450.00	66.66
CD 127	130510	.200	135.00	675.00	123.00	615.00	91.11
CD 128	130510	.200	135.00	675.00	135.00	675.00	100.00
CD 129	130510	.200	135.00	675.00	111.00	555.00	82.22
CD 130	130510	.200	111.00	555.00	111.00	555.00	100.00
CD 131	130510	.400	270.00	675.00	264.00	660.00	97.77
CD 132	130510	.200	66.00	330.00	36.00	180.00	54.54
CD 134	130510	.400	285.00	712.50	165.00	412.50	57.89
CD 137	130510	.200	150.00	750.00	153.00	765.00	102.00
CD 141	130510	.200	135.00	675.00	114.00	570.00	84.44
CD 145	130510	.200	111.00	555.00	72.00	360.00	64.86
******* CD		6.567	4530.00	689.81	3595.00	547.43	79.35
CSIS105	070300	1.132	720.00	636.04	480.00	424.02	66.66
CSIS110	070300	5.950	3798.00	638.31	2940.00	494.11	77.40
CSIS112	070300	.600	228.00	380.00	192.00	320.00	84.21
CSIS113	070300	.600	216.00	360.00	210.00	350.00	97.22
CSIS114	070300	.283	120.00	424.02	105.00	371.02	87.50
CSIS115	070300	.350	144.00	411.42	66.00	188.57	45.83
CSIS119	070300	.600	282.00	470.00	180.00	300.00	63.82
CSIS132	070300	.142	60.00	422.53	37.50	264.08	62.50
CSIS134	070300	.849	360.00	424.02	310.00	365.13	86.11
CSIS135	070300	.283	120.00	424.02	110.00	388.69	91.66
CSIS136	070300	.283	150.00	530.03	95.00	335.68	63.33
CSIS137	070300	.283	120.00	424.02	110.00	388.69	91.66
CSIS140	070300	.350	144.00	411.42	78.00	222.85	54.16
CSIS141	070300	.217	96.00	442.39	48.00	221.19	50.00
CSIS151D	070300	.800	366.00	457.50	297.00	371.25	81.14
CSIS160	070300	.200	72.00	360.00	39.00	195.00	54.16
CSIS165	070300	.350	144.00	411.42	174.00	497.14	120.83
CSIS173B	070300	.133	100.00	751.87	48.00	360.90	48.00
CSIS175B	070300	.133	100.00	751.87	36.00	270.67	36.00
CSIS190	069900	.350	144.00	411.42	162.00	462.85	112.50
CSIS195	070300	.167	72.00	431.13	69.00	413.17	95.83
CSIS251D	070300	.200	72.00	360.00	69.00	345.00	95.83
CSIS293	070300	.700	288.00	411.42	276.00	394.28	95.83
CSIS294	070300	.350	144.00	411.42	84.00	240.00	58.33
CSIS296	070300	.350	144.00	411.42	138.00	394.28	95.83
CSIS299	070300	.200	72.00	360.00	45.00	225.00	62.50

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 102	210500	.287	144.00	500.86	85.50	297.39	59.37
AOJ 103	210500	.440	226.41	513.86	109.97	249.59	48.57
AOJ 110	210500	.200	150.00	750.00	81.00	405.00	54.00
AOJ 240	210500	.200	118.13	590.65	44.63	223.15	37.78
AOJ 262B	210500	.067	50.00	746.26	17.00	253.73	34.00
AOJ 262C	210500	.067	50.00	746.26	21.00	313.43	42.00
AOJ 262D	210500	.067	50.00	746.26	18.00	268.65	36.00
******* AOJ		1.329	788.54	593.28	377.10	283.72	47.82
BOT 101A	051400	.326			243.00	745.39	24300.00
******* BOT		.326			243.00	745.39	24300.00
BUS 120	050200	.267	100.00	374.53	90.00	337.07	90.00
BUS 121	050200	.267	100.00	374.53	90.00	337.07	90.00
BUS 128	050100	.250	96.00	384.00	69.00	276.00	71.87
BUS 164	051400	.133	30.00	225.56	28.00	210.52	93.33
BUS 251	050990	.133	60.00	451.12	58.00	436.09	96.66
******* BUS		1.050	386.00	367.61	335.00	319.04	86.78
CA 163	130630	.067	25.00	373.13	19.00	283.58	76.00
******* CA		.067	25.00	373.13	19.00	283.58	76.00
CD 125	130510	.200	105.00	525.00	78.00	390.00	74.28
CD 129	130510	.200	135.00	675.00	111.00	555.00	82.22
CD 148	130510	.200	135.00	675.00	114.00	570.00	84.44
CD 168	130510	.067	40.00	597.01	35.00	522.38	87.50
CD 169	130510	.067	45.00	671.64	35.00	522.38	77.77
CD 299	130510	.300	204.72	682.40	192.24	640.80	93.90
******* CD		1.034	664.72	642.86	565.24	546.65	85.03
CSIS105	070300	.283			120.00	424.02	12000.00
CSIS132	070300	.142			55.00	387.32	5500.00
CSIS142	070300	.399	96.00	240.60	106.00	265.66	110.41
CSIS143	070300	.266	96.00	360.90	48.00	180.45	50.00
CSIS144	070300	.133	48.00	360.90	32.00	240.60	66.66
CSIS145	070300	.133	48.00	360.90	32.00	240.60	66.66
CSIS174B	070300	.266	100.00	375.93	87.71	329.73	87.71
CSIS186A	070300	.033			11.50	348.48	1150.00
CSIS186B	070300	.033			11.50	348.48	1150.00
CSIS274B	070300	.266	100.00	375.93	97.73	367.40	97.73
CSIS275B	070300	.133	100.00	751.87	54.00	406.01	54.00
CSIS299	070300	.342			120.86	353.39	12086.00
******* CSIS		2.429	588.00	242.07	776.30	319.59	132.02
HESC110	219900	.200	75.00	375.00	84.00	420.00	112.00
HESC150	219900	.200	75.00	375.00	51.00	255.00	68.00
HESC299	219900	1.025	412.50	402.43	346.50	338.04	84.00
******* HESC		1.425	562.50	394.73	481.50	337.89	85.60

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CA 280	130630	.067	20.00	298.50	20.00	298.50	100.00
CA 299	130630	.200	90.00	450.00	81.00	405.00	90.00
******* CA		.267	110.00	411.98	101.00	378.27	91.81
CD 106	130510	.150	66.00	440.00	51.00	340.00	77.27
CD 112	130510	.150	60.00	400.00	51.00	340.00	85.00
CD 123	130510	.200	135.00	675.00	81.00	405.00	60.00
CD 125	130510	2.400	1944.00	810.00	1275.00	531.25	65.58
CD 126	130510	.400	270.00	675.00	228.00	570.00	84.44
CD 127	130510	.400	270.00	675.00	189.00	472.50	70.00
CD 128	130510	.200	135.00	675.00	123.00	615.00	91.11
CD 129	130510	.400	270.00	675.00	177.00	442.50	65.55
CD 130	130510	.200	150.00	750.00	108.00	540.00	72.00
CD 131	130510	.600	405.00	675.00	321.00	535.00	79.25
CD 134	130510	.400	261.00	652.50	222.00	555.00	85.05
CD 136	130510	.200	150.00	750.00	123.00	615.00	82.00
CD 138	130510	.200	108.00	540.00	111.00	555.00	102.77
CD 141	130510	.200	135.00	675.00	78.00	390.00	57.77
CD 143	130510	.200	108.00	540.00	48.00	240.00	44.44
CD 145	130510	.200	108.00	540.00	96.00	480.00	88.88
CD 199	130510		21.00	21.00	30.00	30.00	142.85
******* CD		6.500	4596.00	707.07	3312.00	509.53	72.06
CSIS105	070300	1.132	720.00	636.04	595.00	525.61	82.63
CSIS110	070300	5.600	3684.00	657.85	3018.00	538.92	81.92
CSIS112	070300	.800	336.00	420.00	273.00	341.25	81.25
CSIS113	070300	.600	216.00	360.00	207.00	345.00	95.83
CSIS114	070300	.283	200.00	706.71	115.00	406.36	57.50
CSIS115	070300	.350	144.00	411.42	132.00	377.14	91.66
CSIS119	070300	.600	276.00	460.00	240.00	400.00	86.95
CSIS132	070300	.284	120.00	422.53	92.50	325.70	77.08
CSIS134	070300	.566	240.00	424.02	270.00	477.03	112.50
CSIS135	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS136	070300	.283	120.00	424.02	95.00	335.68	79.16
CSIS138	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS140	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS141	070300	.217	96.00	442.39	76.00	350.23	79.16
CSIS151D	070300	.800	366.00	457.50	288.00	360.00	78.68
CSIS155	070300	.350	144.00	411.42	54.00	154.28	37.50
CSIS172	070300	.266	148.00	556.39	96.00	360.90	64.86
CSIS173B	070300	.133	100.00	751.87	28.00	210.52	28.00
CSIS177C	070300	.200	150.00	750.00	75.00	375.00	50.00
CSIS190	069900	.350	144.00	411.42	138.00	394.28	95.83
CSIS195	070300	.178	72.00	404.49	93.00	522.47	129.16
CSIS196	070300	.178	90.00	505.61	33.00	185.39	36.66
CSIS199	070300		12.00	12.00			
CSIS220	070300	.200	90.00	450.00	90.00	450.00	100.00
CSIS251A	070300	.200	72.00	360.00	66.00	330.00	91.66
CSIS280	070300	.133	60.00	451.12	68.00	511.27	113.33
CSIS293	070300	.700	288.00	411.42	282.00	402.85	97.91

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CSIS296	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS297	070300	.350	144.00	411.42	96.00	274.28	66.66
CSIS299	070300	.600	216.00	360.00	183.00	305.00	84.72
******* CSIS		16.619	8776.00	528.07	7195.50	432.96	81.99
CVTE107	121300	.067	25.00	373.13	15.00	223.88	60.00
CVTE110	121300	.133	120.00	902.25	78.00	586.46	65.00
CVTE111	121300	.267	240.00	898.87	156.00	584.26	65.00
CVTE112	121300	1.033	480.00	464.66	304.00	294.28	63.33
CVTE113	121300	.517	240.00	464.21	156.00	301.74	65.00
CVTE210	121300	.583	300.00	514.57	155.00	265.86	51.66
CVTE211	121300	.350	120.00	342.85	90.00	257.14	75.00
CVTE212	121300	.350	90.00	257.14	48.00	137.14	53.33
CVTE213	121300	.350	120.00	342.85	60.00	171.42	50.00
CVTE215	121300	2.175	900.00	413.79	480.00	220.68	53.33
CVTE299	121300	.067	50.00	746.26	10.00	149.25	20.00
******* CVTE		5.892	2685.00	455.70	1552.00	263.40	57.80
FS 110	130400	.200	120.00	600.00	111.00	555.00	92.50
FS 115	130400	.200	120.00	600.00	102.00	510.00	85.00
FS 120	130400	.400	270.00	675.00	213.00	532.50	78.88
FS 299	130400	.267	155.00	580.52	62.00	232.20	40.00
******* FS		1.067	665.00	623.24	488.00	457.35	73.38
HESC110	219900	.200	120.00	600.00	120.00	600.00	100.00
HESC150	219900	.200	120.00	600.00	75.00	375.00	62.50
HESC205	219900	.133	80.00	601.50	30.00	225.56	37.50
HESC206	219900	.200	120.00	600.00	45.00	225.00	37.50
******* HESC		.733	440.00	600.27	270.00	368.34	61.36
MM 299	069900	.200	60.00	300.00	54.00	270.00	90.00
******* MM		.200	60.00	300.00	54.00	270.00	90.00
NURS118	120300	.133			58.00	436.09	5800.00
NURS120	120300	.978	270.00	275.84	270.00	275.84	100.00
NURS131	120300	.099	90.00	909.09	85.50	863.63	95.00
NURS155B	120300	.225	270.00	1200.00	270.00	1200.00	100.00
NURS199	120300		6.00	6.00	6.00	6.00	100.00
NURS255B	120300	.225	270.00	1200.00	108.00	480.00	40.00
NURS265B	120300	.225	157.50	700.00	85.50	380.00	54.28
******* NURS		1.885	1063.50	563.95	883.00	468.23	83.02
OTA 100	121800	.133	70.00	526.31	32.00	240.60	45.71
OTA 120	121800	.133	70.00	526.31	12.00	90.22	17.14
OTA 130	121800	.350	210.00	600.00	36.00	102.85	17.14
OTA 140	121800	.283	175.00	618.37	30.00	106.00	17.14
******* OTA		.899	525.00	583.98	110.00	122.35	20.95
RESP116	121000	.200	108.00	540.00	45.00	225.00	41.66
RESP118	121000	.425	135.00	317.64	105.00	247.05	77.77

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 101	210500	.312	157.50	504.64	125.00	400.51	79.36
AOJ 104	210500	.993	759.38	764.19	236.25	237.74	31.11
AOJ 199	210500		1.13	1.13	1.13	1.13	100.00
AOJ 250C	210500	.100	37.50	375.00	28.50	285.00	76.00
******* AOJ		1.405	955.51	679.69	390.88	278.04	40.90
BOT 124	051400				14.00	14.00	1400.00
******* BOT					14.00	14.00	1400.00
BUS 086	051400	.268	15.00	55.97	12.00	44.77	80.00
BUS 120	050200	.267	200.00	749.06	208.00	779.02	104.00
BUS 121	050200	.267	200.00	749.06	176.00	659.17	88.00
BUS 164	051400	.133	60.00	451.12	32.00	240.60	53.33
BUS 252	050900	.100	72.00	720.00	52.50	525.00	72.91
BUS 256	050990	.133	100.00	751.87	66.00	496.24	66.00
BUS 257	050990	.100	72.00	720.00	51.00	510.00	70.83
******* BUS		1.268	719.00	567.03	597.50	471.21	83.10
CA 163	130630	.067	35.00	522.38	36.00	537.31	102.85
CA 166	130630	.067	35.00	522.38	34.00	507.46	97.14
******* CA		.134	70.00	522.38	70.00	522.38	100.00
CD 103	130510	.067	22.00	328.35	18.00	268.65	81.81
CD 125	130510	.400	315.00	787.50	249.00	622.50	79.04
CD 127	130510	.200	135.00	675.00	114.00	570.00	84.44
CD 128	130510	.200	135.00	675.00	129.00	645.00	95.55
CD 299	130510	.316	237.38	749.77	97.50	307.95	41.07
******* CD		1.183	844.38	713.39	607.50	513.26	71.94
CSIS142	070300	.399	108.00	270.67	108.00	270.67	100.00
CSIS143	070300	.399	108.00	270.67	88.00	220.55	81.48
CSIS144	070300	.133	36.00	270.67	20.00	150.37	55.55
CSIS145	070300	.133	36.00	270.67	30.00	225.56	83.33
CSIS174B	070300	.266	148.00	556.39	54.00	203.00	36.48
CSIS175B	070300	.133	100.00	751.87	44.00	330.82	44.00
CSIS274B	070300	.266	98.00	368.42	43.00	161.65	43.87
CSIS275B	070300	.133	100.00	751.87	40.00	300.75	40.00
CSIS299	070300	.200			30.00	150.00	3000.00
******* CSIS		2.062	734.00	355.96	457.00	221.62	62.26
CVTE225	121300	.150	69.00	460.00	51.00	340.00	73.91
******* CVTE		.150	69.00	460.00	51.00	340.00	73.91
HESC150	219900	.200	60.00	300.00	28.50	142.50	47.50
******* HESC		.200	60.00	300.00	28.50	142.50	47.50
NURS133	120300	1.592	384.00	241.06	351.60	220.72	91.56
NURS135	120300	1.686	384.00	227.75	345.60	204.98	90.00
NURS137	120300	1.684	384.00	227.97	351.60	208.73	91.56

REPORT INCLUDES: GROSSMONT COLLEGE ONLY *** ALL SHORT TERM CLASSES ***

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
BUS 216	051400	.566	200.00	353.35	135.00	238.51	67.50
BUS 250	050990	.200	150.00	750.00	87.00	435.00	58.00
BUS 253	050990	.200	150.00	750.00	123.00	615.00	82.00
BUS 258	050990	.200	96.00	480.00	81.00	405.00	84.37
******* BUS		13.270	8244.00	621.25	6154.00	463.75	74.64
CA 166	130630	.067	25.00	373.13	28.00	417.91	112.00
******* CA		.067	25.00	373.13	28.00	417.91	112.00
CD 109	130510	.150	66.00	440.00	30.00	200.00	45.45
CD 111	130510	.150	66.00	440.00	54.00	360.00	81.81
CD 123	130510	.200	108.00	540.00	87.00	435.00	80.55
CD 124	130510	.200	135.00	675.00	81.00	405.00	60.00
CD 125	130510	2.400	1884.00	785.00	1536.00	640.00	81.52
CD 126	130510	.600	405.00	675.00	234.00	390.00	57.77
CD 127	130510	.200	135.00	675.00	135.00	675.00	100.00
CD 128	130510	.200	135.00	675.00	123.00	615.00	91.11
CD 129	130510	.400	270.00	675.00	171.00	427.50	63.33
CD 130	130510	.200	111.00	555.00	93.00	465.00	83.78
CD 131	130510	.600	405.00	675.00	234.00	390.00	57.77
CD 132	130510	.200	66.00	330.00	48.00	240.00	72.72
CD 134	130510	.200	135.00	675.00	66.00	330.00	48.88
CD 137	130510	.200	150.00	750.00	147.00	735.00	98.00
CD 141	130510	.200	135.00	675.00	81.00	405.00	60.00
CD 145	130510	.200	111.00	555.00	45.00	225.00	40.54
CD 299	130510	.200	135.00	675.00	117.00	585.00	86.66
******* CD		6.500	4452.00	684.92	3282.00	504.92	73.71
CSIS105	070300	.849	600.00	706.71	515.00	606.59	85.83
CSIS110	070300	5.950	3864.00	649.41	3276.00	550.58	84.78
CSIS112	070300	.800	300.00	375.00	270.00	337.50	90.00
CSIS113	070300	.600	216.00	360.00	210.00	350.00	97.22
CSIS114	070300	.283	200.00	706.71	165.00	583.03	82.50
CSIS115	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS119	070300	.800	372.00	465.00	297.00	371.25	79.83
CSIS132	070300	.284	120.00	422.53	112.50	396.12	93.75
CSIS134	070300	.849	390.00	459.36	380.00	447.58	97.43
CSIS135	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS136	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS140	070300	.350	144.00	411.42	120.00	342.85	83.33
CSIS141	070300	.217	104.00	479.26	40.00	184.33	38.46
CSIS151D	070300	1.000	438.00	438.00	309.00	309.00	70.54
CSIS165	070300	.350	144.00	411.42	48.00	137.14	33.33
CSIS172	070300	.266	148.00	556.39	102.00	383.45	68.91
CSIS173B	070300	.133	100.00	751.87	38.00	285.71	38.00
CSIS174B	070300	.133	200.00	1503.75	68.00	511.27	34.00
CSIS175B	070300	.133	100.00	751.87	50.00	375.93	50.00
CSIS177A	070300	.200	150.00	750.00	63.00	315.00	42.00
CSIS190	069900	.350	144.00	411.42	138.00	394.28	95.83
CSIS195	070300	.167	72.00	431.13	87.00	520.95	120.83

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CSIS196	070300	.167	72.00	431.13	48.00	287.42	66.66
CSIS250	070300	.200	150.00	750.00	66.00	330.00	44.00
CSIS251D	070300	.200	72.00	360.00	63.00	315.00	87.50
CSIS293	070300	.350	144.00	411.42	144.00	411.42	100.00
CSIS296	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS299	070300	.400	144.00	360.00	111.00	277.50	77.08
******* CSIS		16.297	8916.00	547.09	7212.50	442.56	80.89
CVTE100	121300	.133	120.00	902.25	86.00	646.61	71.66
CVTE101	121300	.267	240.00	898.87	172.00	644.19	71.66
CVTE102	121300	1.033	480.00	464.66	344.00	333.01	71.66
CVTE103	121300	.517	240.00	464.21	172.00	332.68	71.66
CVTE200	121300	.583	225.00	385.93	160.00	274.44	71.11
CVTE201	121300	.350	108.00	308.57	102.00	291.42	94.44
CVTE202	121300	.350	102.00	291.42	42.00	120.00	41.17
CVTE203	121300	.350	102.00	291.42	60.00	171.42	58.82
CVTE205	121300	2.100	750.00	357.14	480.00	228.57	64.00
******* CVTE		5.683	2367.00	416.50	1618.00	284.70	68.35
FS 110	130400	.200	120.00	600.00	114.00	570.00	95.00
FS 115	130400	.200	120.00	600.00	129.00	645.00	107.50
FS 120	130400	.400	246.00	615.00	198.00	495.00	80.48
FS 199	130400		21.00	21.00	24.00	24.00	114.28
******* FS		.800	507.00	633.75	465.00	581.25	91.71
HESC110	219900	.200	90.00	450.00	54.00	270.00	60.00
HESC150	219900	.200	90.00	450.00	84.00	420.00	93.33
******* HESC		.400	180.00	450.00	138.00	345.00	76.66
MM 299	069900	.200	51.00	255.00	51.00	255.00	100.00
******* MM		.200	51.00	255.00	51.00	255.00	100.00
NURS000	120300		37.00	37.00	37.00	37.00	100.00
NURS118	120300	.133	70.00	526.31	80.00	601.50	114.28
NURS120	120300	3.236	850.50	262.75	823.50	254.41	96.82
NURS155A	120300	.225	292.50	1300.00	193.50	860.00	66.15
NURS199	120300		18.00	18.00	18.00	18.00	100.00
NURS201	120300	.089	49.50	556.17	58.50	657.30	118.18
NURS203	120300	2.044	480.00	234.81	468.00	228.94	97.50
NURS205	120300	1.016	300.00	295.18	240.00	236.15	80.00
NURS255A	120300	.225	292.50	1300.00	238.50	1060.00	81.53
NURS265A	120300	.225	157.50	700.00	103.50	460.00	65.71
******* NURS		7.194	2547.50	354.09	2260.50	314.20	88.73
OTA 100	121800	.133	70.00	526.31	30.00	225.56	42.85
OTA 101	121800	.217	140.00	645.16	32.00	147.46	22.85
OTA 110	121800	.350	210.00	600.00	48.00	137.14	22.85
OTA 210	121800	.222	96.00	432.43	68.00	306.30	70.83
OTA 220	121800	.283	120.00	424.02	85.00	300.35	70.83
OTA 230	121800	.067	24.00	358.20	17.00	253.73	70.83

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** POSITIVE ATTENDANCE ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 299	210500	.093			37.88	403.83	3788.00
******* AOJ		.093			37.88	403.83	3788.00
CD 299	130510	.134	95.00	708.95	45.00	335.82	47.36
******* CD		.134	95.00	708.95	45.00	335.82	47.36
CSIS185A	070300	.066	24.00	363.63	10.00	151.51	41.66
CSIS186A	070300	.033	12.00	363.63	5.00	151.51	41.66
******* CSIS		.099	36.00	363.63	15.00	151.51	41.66
********** BUSINESS AND PROFESSIONAL STUDIES **********		.326	131.00	400.85	97.88	299.51	74.71

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 102	210500	.364	112.00	307.10	91.00	249.52	81.25
AOJ 103	210500	.470	190.97	406.31	109.13	232.19	57.14
AOJ 200	210500	.200	135.00	675.00	60.00	300.00	44.44
******* AOJ		1.034	437.97	423.28	260.13	251.40	59.39
BOT 299	051400	.067	30.00	447.76	4.00	59.70	13.33
******* BOT		.067	30.00	447.76	4.00	59.70	13.33
BUS 120	050200	.267	100.00	374.53	86.00	322.09	86.00
BUS 121	050200	.267	100.00	374.53	112.00	419.47	112.00
BUS 164	051400	.133	60.00	451.12	34.00	255.63	56.66
BUS 251	050990	.133	60.00	451.12	64.00	481.20	106.66
BUS 299	051400	.233	186.75	801.50	29.00	124.46	15.52
******* BUS		1.033	506.75	490.56	325.00	314.61	64.13
CA 163	130630	.067	25.00	373.13	30.00	447.76	120.00
******* CA		.067	25.00	373.13	30.00	447.76	120.00
CD 101	130510	.067	30.00	447.76	16.25	242.53	54.16
CD 125	130510	.200	105.00	525.00	99.00	495.00	94.28
CD 131	130510	.200	202.50	1012.50	112.50	562.50	55.55
CD 148	130510	.200	135.00	675.00	90.00	450.00	66.66
CD 299	130510	.166	112.22	676.02	87.27	525.72	77.76
******* CD		.833	584.72	701.94	405.02	486.21	69.26
CSIS142	070300	.266	96.00	360.90	84.00	315.78	87.50
CSIS143	070300	.266	96.00	360.90	62.00	233.08	64.58
CSIS145	070300	.133	48.00	360.90	26.00	195.48	54.16
CSIS174B	070300	.133	48.00	360.90	46.00	345.86	95.83
CSIS274B	070300	.266	148.00	556.39	56.00	210.52	37.83
CSIS275B	070300	.133	100.00	751.87	28.00	210.52	28.00
******* CSIS		1.197	536.00	447.78	302.00	252.29	56.34
HESC110	219900	.200	75.00	375.00	46.50	232.50	62.00
HESC299	219900	2.050	791.25	385.97	593.44	289.48	75.00
******* HESC		2.250	866.25	385.00	639.94	284.41	73.87
NURS223	120300	3.016	680.00	225.41	660.00	218.78	97.05
NURS225	120300	3.116	724.50	232.45	736.00	236.14	101.58
NURS299	120300	.268	80.00	298.50	55.00	205.22	68.75
******* NURS		6.401	1484.50	231.90	1451.00	226.67	97.74
RESP112	121000	.450	120.00	266.66	48.00	106.66	40.00
******* RESP		.450	120.00	266.66	48.00	106.66	40.00

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 102	210500	.287	144.00	500.86	85.50	297.39	59.37
AOJ 103	210500	.440	226.41	513.86	109.97	249.59	48.57
AOJ 110	210500	.200	150.00	750.00	81.00	405.00	54.00
AOJ 240	210500	.200	118.13	590.65	44.63	223.15	37.78
AOJ 262B	210500	.067	50.00	746.26	17.00	253.73	34.00
AOJ 262C	210500	.067	50.00	746.26	21.00	313.43	42.00
AOJ 262D	210500	.067	50.00	746.26	18.00	268.65	36.00
******* AOJ		1.329	788.54	593.28	377.10	283.72	47.82
BOT 101A	051400	.326			243.00	745.39	24300.00
******* BOT		.326			243.00	745.39	24300.00
BUS 120	050200	.267	100.00	374.53	90.00	337.07	90.00
BUS 121	050200	.267	100.00	374.53	90.00	337.07	90.00
BUS 128	050100	.250	96.00	384.00	69.00	276.00	71.87
BUS 164	051400	.133	30.00	225.56	28.00	210.52	93.33
BUS 251	050990	.133	60.00	451.12	58.00	436.09	96.66
******* BUS		1.050	386.00	367.61	335.00	319.04	86.78
CA 163	130630	.067	25.00	373.13	19.00	283.58	76.00
******* CA		.067	25.00	373.13	19.00	283.58	76.00
CD 125	130510	.200	105.00	525.00	78.00	390.00	74.28
CD 129	130510	.200	135.00	675.00	111.00	555.00	82.22
CD 148	130510	.200	135.00	675.00	114.00	570.00	84.44
CD 168	130510	.067	40.00	597.01	35.00	522.38	87.50
CD 169	130510	.067	45.00	671.64	35.00	522.38	77.77
CD 299	130510	.300	204.72	682.40	192.24	640.80	93.90
******* CD		1.034	664.72	642.86	565.24	546.65	85.03
CSIS105	070300	.283			120.00	424.02	12000.00
CSIS132	070300	.142			55.00	387.32	5500.00
CSIS142	070300	.399	96.00	240.60	106.00	265.66	110.41
CSIS143	070300	.266	96.00	360.90	48.00	180.45	50.00
CSIS144	070300	.133	48.00	360.90	32.00	240.60	66.66
CSIS145	070300	.133	48.00	360.90	32.00	240.60	66.66
CSIS174B	070300	.266	100.00	375.93	87.71	329.73	87.71
CSIS186A	070300	.033			11.50	348.48	1150.00
CSIS186B	070300	.033			11.50	348.48	1150.00
CSIS274B	070300	.266	100.00	375.93	97.73	367.40	97.73
CSIS275B	070300	.133	100.00	751.87	54.00	406.01	54.00
CSIS299	070300	.342			120.86	353.39	12086.00
******* CSIS		2.429	588.00	242.07	776.30	319.59	132.02
HESC110	219900	.200	75.00	375.00	84.00	420.00	112.00
HESC150	219900	.200	75.00	375.00	51.00	255.00	68.00
HESC299	219900	1.025	412.50	402.43	346.50	338.04	84.00
******* HESC		1.425	562.50	394.73	481.50	337.89	85.60

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CA 280	130630	.067	20.00	298.50	20.00	298.50	100.00
CA 299	130630	.200	90.00	450.00	81.00	405.00	90.00
******* CA		.267	110.00	411.98	101.00	378.27	91.81
CD 106	130510	.150	66.00	440.00	51.00	340.00	77.27
CD 112	130510	.150	60.00	400.00	51.00	340.00	85.00
CD 123	130510	.200	135.00	675.00	81.00	405.00	60.00
CD 125	130510	2.400	1944.00	810.00	1275.00	531.25	65.58
CD 126	130510	.400	270.00	675.00	228.00	570.00	84.44
CD 127	130510	.400	270.00	675.00	189.00	472.50	70.00
CD 128	130510	.200	135.00	675.00	123.00	615.00	91.11
CD 129	130510	.400	270.00	675.00	177.00	442.50	65.55
CD 130	130510	.200	150.00	750.00	108.00	540.00	72.00
CD 131	130510	.600	405.00	675.00	321.00	535.00	79.25
CD 134	130510	.400	261.00	652.50	222.00	555.00	85.05
CD 136	130510	.200	150.00	750.00	123.00	615.00	82.00
CD 138	130510	.200	108.00	540.00	111.00	555.00	102.77
CD 141	130510	.200	135.00	675.00	78.00	390.00	57.77
CD 143	130510	.200	108.00	540.00	48.00	240.00	44.44
CD 145	130510	.200	108.00	540.00	96.00	480.00	88.88
CD 199	130510		21.00	21.00	30.00	30.00	142.85
******* CD		6.500	4596.00	707.07	3312.00	509.53	72.06
CSIS105	070300	1.132	720.00	636.04	595.00	525.61	82.63
CSIS110	070300	5.600	3684.00	657.85	3018.00	538.92	81.92
CSIS112	070300	.800	336.00	420.00	273.00	341.25	81.25
CSIS113	070300	.600	216.00	360.00	207.00	345.00	95.83
CSIS114	070300	.283	200.00	706.71	115.00	406.36	57.50
CSIS115	070300	.350	144.00	411.42	132.00	377.14	91.66
CSIS119	070300	.600	276.00	460.00	240.00	400.00	86.95
CSIS132	070300	.284	120.00	422.53	92.50	325.70	77.08
CSIS134	070300	.566	240.00	424.02	270.00	477.03	112.50
CSIS135	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS136	070300	.283	120.00	424.02	95.00	335.68	79.16
CSIS138	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS140	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS141	070300	.217	96.00	442.39	76.00	350.23	79.16
CSIS151D	070300	.800	366.00	457.50	288.00	360.00	78.68
CSIS155	070300	.350	144.00	411.42	54.00	154.28	37.50
CSIS172	070300	.266	148.00	556.39	96.00	360.90	64.86
CSIS173B	070300	.133	100.00	751.87	28.00	210.52	28.00
CSIS177C	070300	.200	150.00	750.00	75.00	375.00	50.00
CSIS190	069900	.350	144.00	411.42	138.00	394.28	95.83
CSIS195	070300	.178	72.00	404.49	93.00	522.47	129.16
CSIS196	070300	.178	90.00	505.61	33.00	185.39	36.66
CSIS199	070300		12.00	12.00			
CSIS220	070300	.200	90.00	450.00	90.00	450.00	100.00
CSIS251A	070300	.200	72.00	360.00	66.00	330.00	91.66
CSIS280	070300	.133	60.00	451.12	68.00	511.27	113.33
CSIS293	070300	.700	288.00	411.42	282.00	402.85	97.91

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CSIS296	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS297	070300	.350	144.00	411.42	96.00	274.28	66.66
CSIS299	070300	.600	216.00	360.00	183.00	305.00	84.72
******* CSIS		16.619	8776.00	528.07	7195.50	432.96	81.99
CVTE107	121300	.067	25.00	373.13	15.00	223.88	60.00
CVTE110	121300	.133	120.00	902.25	78.00	586.46	65.00
CVTE111	121300	.267	240.00	898.87	156.00	584.26	65.00
CVTE112	121300	1.033	480.00	464.66	304.00	294.28	63.33
CVTE113	121300	.517	240.00	464.21	156.00	301.74	65.00
CVTE210	121300	.583	300.00	514.57	155.00	265.86	51.66
CVTE211	121300	.350	120.00	342.85	90.00	257.14	75.00
CVTE212	121300	.350	90.00	257.14	48.00	137.14	53.33
CVTE213	121300	.350	120.00	342.85	60.00	171.42	50.00
CVTE215	121300	2.175	900.00	413.79	480.00	220.68	53.33
CVTE299	121300	.067	50.00	746.26	10.00	149.25	20.00
******* CVTE		5.892	2685.00	455.70	1552.00	263.40	57.80
FS 110	130400	.200	120.00	600.00	111.00	555.00	92.50
FS 115	130400	.200	120.00	600.00	102.00	510.00	85.00
FS 120	130400	.400	270.00	675.00	213.00	532.50	78.88
FS 299	130400	.267	155.00	580.52	62.00	232.20	40.00
******* FS		1.067	665.00	623.24	488.00	457.35	73.38
HESC110	219900	.200	120.00	600.00	120.00	600.00	100.00
HESC150	219900	.200	120.00	600.00	75.00	375.00	62.50
HESC205	219900	.133	80.00	601.50	30.00	225.56	37.50
HESC206	219900	.200	120.00	600.00	45.00	225.00	37.50
******* HESC		.733	440.00	600.27	270.00	368.34	61.36
MM 299	069900	.200	60.00	300.00	54.00	270.00	90.00
******* MM		.200	60.00	300.00	54.00	270.00	90.00
NURS118	120300	.133			58.00	436.09	5800.00
NURS120	120300	.978	270.00	275.84	270.00	275.84	100.00
NURS131	120300	.099	90.00	909.09	85.50	863.63	95.00
NURS155B	120300	.225	270.00	1200.00	270.00	1200.00	100.00
NURS199	120300		6.00	6.00	6.00	6.00	100.00
NURS255B	120300	.225	270.00	1200.00	108.00	480.00	40.00
NURS265B	120300	.225	157.50	700.00	85.50	380.00	54.28
******* NURS		1.885	1063.50	563.95	883.00	468.23	83.02
OTA 100	121800	.133	70.00	526.31	32.00	240.60	45.71
OTA 120	121800	.133	70.00	526.31	12.00	90.22	17.14
OTA 130	121800	.350	210.00	600.00	36.00	102.85	17.14
OTA 140	121800	.283	175.00	618.37	30.00	106.00	17.14
******* OTA		.899	525.00	583.98	110.00	122.35	20.95
RESP116	121000	.200	108.00	540.00	45.00	225.00	41.66
RESP118	121000	.425	135.00	317.64	105.00	247.05	77.77

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 101	210500	.312	157.50	504.64	125.00	400.51	79.36
AOJ 104	210500	.993	759.38	764.19	236.25	237.74	31.11
AOJ 199	210500		1.13	1.13	1.13	1.13	100.00
AOJ 250C	210500	.100	37.50	375.00	28.50	285.00	76.00
******* AOJ		1.405	955.51	679.69	390.88	278.04	40.90
BOT 124	051400				14.00	14.00	1400.00
******* BOT					14.00	14.00	1400.00
BUS 086	051400	.268	15.00	55.97	12.00	44.77	80.00
BUS 120	050200	.267	200.00	749.06	208.00	779.02	104.00
BUS 121	050200	.267	200.00	749.06	176.00	659.17	88.00
BUS 164	051400	.133	60.00	451.12	32.00	240.60	53.33
BUS 252	050900	.100	72.00	720.00	52.50	525.00	72.91
BUS 256	050990	.133	100.00	751.87	66.00	496.24	66.00
BUS 257	050990	.100	72.00	720.00	51.00	510.00	70.83
******* BUS		1.268	719.00	567.03	597.50	471.21	83.10
CA 163	130630	.067	35.00	522.38	36.00	537.31	102.85
CA 166	130630	.067	35.00	522.38	34.00	507.46	97.14
******* CA		.134	70.00	522.38	70.00	522.38	100.00
CD 103	130510	.067	22.00	328.35	18.00	268.65	81.81
CD 125	130510	.400	315.00	787.50	249.00	622.50	79.04
CD 127	130510	.200	135.00	675.00	114.00	570.00	84.44
CD 128	130510	.200	135.00	675.00	129.00	645.00	95.55
CD 299	130510	.316	237.38	749.77	97.50	307.95	41.07
******* CD		1.183	844.38	713.39	607.50	513.26	71.94
CSIS142	070300	.399	108.00	270.67	108.00	270.67	100.00
CSIS143	070300	.399	108.00	270.67	88.00	220.55	81.48
CSIS144	070300	.133	36.00	270.67	20.00	150.37	55.55
CSIS145	070300	.133	36.00	270.67	30.00	225.56	83.33
CSIS174B	070300	.266	148.00	556.39	54.00	203.00	36.48
CSIS175B	070300	.133	100.00	751.87	44.00	330.82	44.00
CSIS274B	070300	.266	98.00	368.42	43.00	161.65	43.87
CSIS275B	070300	.133	100.00	751.87	40.00	300.75	40.00
CSIS299	070300	.200			30.00	150.00	3000.00
******* CSIS		2.062	734.00	355.96	457.00	221.62	62.26
CVTE225	121300	.150	69.00	460.00	51.00	340.00	73.91
******* CVTE		.150	69.00	460.00	51.00	340.00	73.91
HESC150	219900	.200	60.00	300.00	28.50	142.50	47.50
******* HESC		.200	60.00	300.00	28.50	142.50	47.50
NURS133	120300	1.592	384.00	241.06	351.60	220.72	91.56
NURS135	120300	1.686	384.00	227.75	345.60	204.98	90.00
NURS137	120300	1.684	384.00	227.97	351.60	208.73	91.56

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
BUS 216	051400	.566	200.00	353.35	135.00	238.51	67.50
BUS 250	050990	.200	150.00	750.00	87.00	435.00	58.00
BUS 253	050990	.200	150.00	750.00	123.00	615.00	82.00
BUS 258	050990	.200	96.00	480.00	81.00	405.00	84.37
******* BUS		13.270	8244.00	621.25	6154.00	463.75	74.64
CA 166	130630	.067	25.00	373.13	28.00	417.91	112.00
******* CA		.067	25.00	373.13	28.00	417.91	112.00
CD 109	130510	.150	66.00	440.00	30.00	200.00	45.45
CD 111	130510	.150	66.00	440.00	54.00	360.00	81.81
CD 123	130510	.200	108.00	540.00	87.00	435.00	80.55
CD 124	130510	.200	135.00	675.00	81.00	405.00	60.00
CD 125	130510	2.400	1884.00	785.00	1536.00	640.00	81.52
CD 126	130510	.600	405.00	675.00	234.00	390.00	57.77
CD 127	130510	.200	135.00	675.00	135.00	675.00	100.00
CD 128	130510	.200	135.00	675.00	123.00	615.00	91.11
CD 129	130510	.400	270.00	675.00	171.00	427.50	63.33
CD 130	130510	.200	111.00	555.00	93.00	465.00	83.78
CD 131	130510	.600	405.00	675.00	234.00	390.00	57.77
CD 132	130510	.200	66.00	330.00	48.00	240.00	72.72
CD 134	130510	.200	135.00	675.00	66.00	330.00	48.88
CD 137	130510	.200	150.00	750.00	147.00	735.00	98.00
CD 141	130510	.200	135.00	675.00	81.00	405.00	60.00
CD 145	130510	.200	111.00	555.00	45.00	225.00	40.54
CD 299	130510	.200	135.00	675.00	117.00	585.00	86.66
******* CD		6.500	4452.00	684.92	3282.00	504.92	73.71
CSIS105	070300	.849	600.00	706.71	515.00	606.59	85.83
CSIS110	070300	5.950	3864.00	649.41	3276.00	550.58	84.78
CSIS112	070300	.800	300.00	375.00	270.00	337.50	90.00
CSIS113	070300	.600	216.00	360.00	210.00	350.00	97.22
CSIS114	070300	.283	200.00	706.71	165.00	583.03	82.50
CSIS115	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS119	070300	.800	372.00	465.00	297.00	371.25	79.83
CSIS132	070300	.284	120.00	422.53	112.50	396.12	93.75
CSIS134	070300	.849	390.00	459.36	380.00	447.58	97.43
CSIS135	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS136	070300	.283	120.00	424.02	120.00	424.02	100.00
CSIS140	070300	.350	144.00	411.42	120.00	342.85	83.33
CSIS141	070300	.217	104.00	479.26	40.00	184.33	38.46
CSIS151D	070300	1.000	438.00	438.00	309.00	309.00	70.54
CSIS165	070300	.350	144.00	411.42	48.00	137.14	33.33
CSIS172	070300	.266	148.00	556.39	102.00	383.45	68.91
CSIS173B	070300	.133	100.00	751.87	38.00	285.71	38.00
CSIS174B	070300	.133	200.00	1503.75	68.00	511.27	34.00
CSIS175B	070300	.133	100.00	751.87	50.00	375.93	50.00
CSIS177A	070300	.200	150.00	750.00	63.00	315.00	42.00
CSIS190	069900	.350	144.00	411.42	138.00	394.28	95.83
CSIS195	070300	.167	72.00	431.13	87.00	520.95	120.83

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
CSIS196	070300	.167	72.00	431.13	48.00	287.42	66.66
CSIS250	070300	.200	150.00	750.00	66.00	330.00	44.00
CSIS251D	070300	.200	72.00	360.00	63.00	315.00	87.50
CSIS293	070300	.350	144.00	411.42	144.00	411.42	100.00
CSIS296	070300	.350	144.00	411.42	126.00	360.00	87.50
CSIS299	070300	.400	144.00	360.00	111.00	277.50	77.08
******* CSIS		16.297	8916.00	547.09	7212.50	442.56	80.89
CVTE100	121300	.133	120.00	902.25	86.00	646.61	71.66
CVTE101	121300	.267	240.00	898.87	172.00	644.19	71.66
CVTE102	121300	1.033	480.00	464.66	344.00	333.01	71.66
CVTE103	121300	.517	240.00	464.21	172.00	332.68	71.66
CVTE200	121300	.583	225.00	385.93	160.00	274.44	71.11
CVTE201	121300	.350	108.00	308.57	102.00	291.42	94.44
CVTE202	121300	.350	102.00	291.42	42.00	120.00	41.17
CVTE203	121300	.350	102.00	291.42	60.00	171.42	58.82
CVTE205	121300	2.100	750.00	357.14	480.00	228.57	64.00
******* CVTE		5.683	2367.00	416.50	1618.00	284.70	68.35
FS 110	130400	.200	120.00	600.00	114.00	570.00	95.00
FS 115	130400	.200	120.00	600.00	129.00	645.00	107.50
FS 120	130400	.400	246.00	615.00	198.00	495.00	80.48
FS 199	130400		21.00	21.00	24.00	24.00	114.28
******* FS		.800	507.00	633.75	465.00	581.25	91.71
HESC110	219900	.200	90.00	450.00	54.00	270.00	60.00
HESC150	219900	.200	90.00	450.00	84.00	420.00	93.33
******* HESC		.400	180.00	450.00	138.00	345.00	76.66
MM 299	069900	.200	51.00	255.00	51.00	255.00	100.00
******* MM		.200	51.00	255.00	51.00	255.00	100.00
NURS000	120300		37.00	37.00	37.00	37.00	100.00
NURS118	120300	.133	70.00	526.31	80.00	601.50	114.28
NURS120	120300	3.236	850.50	262.75	823.50	254.41	96.82
NURS155A	120300	.225	292.50	1300.00	193.50	860.00	66.15
NURS199	120300		18.00	18.00	18.00	18.00	100.00
NURS201	120300	.089	49.50	556.17	58.50	657.30	118.18
NURS203	120300	2.044	480.00	234.81	468.00	228.94	97.50
NURS205	120300	1.016	300.00	295.18	240.00	236.15	80.00
NURS255A	120300	.225	292.50	1300.00	238.50	1060.00	81.53
NURS265A	120300	.225	157.50	700.00	103.50	460.00	65.71
******* NURS		7.194	2547.50	354.09	2260.50	314.20	88.73
OTA 100	121800	.133	70.00	526.31	30.00	225.56	42.85
OTA 101	121800	.217	140.00	645.16	32.00	147.46	22.85
OTA 110	121800	.350	210.00	600.00	48.00	137.14	22.85
OTA 210	121800	.222	96.00	432.43	68.00	306.30	70.83
OTA 220	121800	.283	120.00	424.02	85.00	300.35	70.83
OTA 230	121800	.067	24.00	358.20	17.00	253.73	70.83

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** POSITIVE ATTENDANCE ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ	299 210500	.093			37.88	403.83	3788.00
******* AOJ		.093			37.88	403.83	3788.00
CD	299 130510	.134	95.00	708.95	45.00	335.82	47.36
******* CD		.134	95.00	708.95	45.00	335.82	47.36
CSIS185A	070300	.066	24.00	363.63	10.00	151.51	41.66
CSIS186A	070300	.033	12.00	363.63	5.00	151.51	41.66
******* CSIS		.099	36.00	363.63	15.00	151.51	41.66
********** BUSINESS AND PROFESSIONAL STUDIES **********		.326	131.00	400.85	97.88	299.51	74.71

DIVISION -- BUSINESS AND PROFESSIONAL STUDIES *** DAILY CENSUS CLASSES ***

SUBJECT	TOP	TOTAL FTEF	MAX WSCH	MAX WSCH/FTEF	EARNED WSCH	EARNED WSCH/FTEF	% OF MAX
AOJ 102	210500	.364	112.00	307.10	91.00	249.52	81.25
AOJ 103	210500	.470	190.97	406.31	109.13	232.19	57.14
AOJ 200	210500	.200	135.00	675.00	60.00	300.00	44.44
******* AOJ		1.034	437.97	423.28	260.13	251.40	59.39
BOT 299	051400	.067	30.00	447.76	4.00	59.70	13.33
******* BOT		.067	30.00	447.76	4.00	59.70	13.33
BUS 120	050200	.267	100.00	374.53	86.00	322.09	86.00
BUS 121	050200	.267	100.00	374.53	112.00	419.47	112.00
BUS 164	051400	.133	60.00	451.12	34.00	255.63	56.66
BUS 251	050990	.133	60.00	451.12	64.00	481.20	106.66
BUS 299	051400	.233	186.75	801.50	29.00	124.46	15.52
******* BUS		1.033	506.75	490.56	325.00	314.61	64.13
CA 163	130630	.067	25.00	373.13	30.00	447.76	120.00
******* CA		.067	25.00	373.13	30.00	447.76	120.00
CD 101	130510	.067	30.00	447.76	16.25	242.53	54.16
CD 125	130510	.200	105.00	525.00	99.00	495.00	94.28
CD 131	130510	.200	202.50	1012.50	112.50	562.50	55.55
CD 148	130510	.200	135.00	675.00	90.00	450.00	66.66
CD 299	130510	.166	112.22	676.02	87.27	525.72	77.76
******* CD		.833	584.72	701.94	405.02	486.21	69.26
CSIS142	070300	.266	96.00	360.90	84.00	315.78	87.50
CSIS143	070300	.266	96.00	360.90	62.00	233.08	64.58
CSIS145	070300	.133	48.00	360.90	26.00	195.48	54.16
CSIS174B	070300	.133	48.00	360.90	46.00	345.86	95.83
CSIS274B	070300	.266	148.00	556.39	56.00	210.52	37.83
CSIS275B	070300	.133	100.00	751.87	28.00	210.52	28.00
******* CSIS		1.197	536.00	447.78	302.00	252.29	56.34
HESC110	219900	.200	75.00	375.00	46.50	232.50	62.00
HESC299	219900	2.050	791.25	385.97	593.44	289.48	75.00
******* HESC		2.250	866.25	385.00	639.94	284.41	73.87
NURS223	120300	3.016	680.00	225.41	660.00	218.78	97.05
NURS225	120300	3.116	724.50	232.45	736.00	236.14	101.58
NURS299	120300	.268	80.00	298.50	55.00	205.22	68.75
******* NURS		6.401	1484.50	231.90	1451.00	226.67	97.74
RESP112	121000	.450	120.00	266.66	48.00	106.66	40.00
******* RESP		.450	120.00	266.66	48.00	106.66	40.00

GROSSMONT COLLEGE

Technology Plan 2004-2007

GROSSMONT COLLEGE

Computer Science Information Systems

Description

- Continue to support CSIS Department and College-wide faculty in developing state-of-the-art classes and experiences for our students.
- Continue to work collaboratively with other departments to develop new courses supporting technology across the curriculum.
- Continue to upgrade all CSIS classrooms with new computers at least every three years with top-of-the-line computer models. This policy has had the distinct advantage of allowing the "retired" CSIS lab computers to remain useful to other constituents in the College.
- A great deal of progress has been made in utilizing the three existing CSIS labs, for the traditional CSIS classes but with the development of new curriculum and a collaborative effort to develop new cross listed courses, which have specific needs, two new labs have been added. These labs will have an advantage to other departments who require some lab time but cannot maintain their own lab.
- There continues to be significant student pressure to add more open lab time for supervised tutoring labs which leaves very little free time for additional sections and scheduled maintenance. The addition of the two new labs will help alleviate this problem.
- Upgrade faculty office computers when necessary to match the configuration of the lab machines.
- To ease the utilization impact somewhat, the Department plans to continue to offer distance online or hybrid courses, or other collaborative learning opportunities.
- The convergence of computer technology with all forms of digital media presents new challenges and opportunities for the Department and the College, as a whole. New servers and digital communications technologies will be necessary during the next three years.
- There is an increase pressure from business and industry, and the community to develop Information/Network/Internet security courses. These courses will require a teaching lab facility that must be isolated from the campus network. CSIS is working closely with IS and ICS to accomplish this task.

Curriculum Impact

- Computer technology has arguably been the fastest changing area there is in our culture and economy. Over the past few years, even with the current downturn in the economy there is a continued need for advancement. Keeping the curriculum current to meet new emerging community needs, is a challenge not only in the area of curriculum development but also in the maintenance of our labs. Specifically, new programs in Internet technology (such as the Webmaster certificate) which have previously had high enrollments are now experiencing a downturn in student interest. Media networking, multimedia, video games programming, security, collaborative and distance learning, certification (such as the 3COM and proposed Linux and Microsoft certification programs), artificial intelligence and robotics are in development or are being updated, to enhance changes needed in our existing programs to meet student needs.
- In order to successfully enter the job market, it is essential that CSIS majors develop their skills and abilities using current technology and systems. State-of-the-art facilities and systems must be available to provide incentives for students to enroll in Grossmont programs. The proposed 3 year rollover process will allow the department to support current and projected systems and software found in industry, thus directly supporting and enhancing student success. In addition, faculty will be able to take advantage of new teaching modalities as we explore the challenge of making education accessible to all.

Approximate Number of Students Served

- CSIS has traditionally occupied about 5000-6000 seats per annum but due to the downturn in the economy we have seem a lower enrollment in many of our courses. The majority of these students are taking more than one class. This does not include students in other departments that use the CSIS labs. Although the CSIS department had seen an increase in FTES in the past, the last few years shows lower enrollments as the industry experienced a strong down turn after the crash of the DOT COM companies two years ago. It has become evident that unless we offer the skills business and industry are demanding, we will continue to see a downturn in student enrollment.
- The three on-campus CSIS labs were upgraded during the summer of 2002 as part of the three year rollover process. We have since upgraded the operating system to Windows XP, the industry standard, putting CSIS in a good position to offer the latest in current software applications such as Office 2003, Macromedia MX products and the latest versions of the Adobe products. Hardware and software tools, including all software maintenance agreements, will continue to be upgraded to provide our students with opportunities to gain the skills they will need in order to succeed in the classroom and in the workplace. During the summer of 2004 two(2) new labs will be added to the CSIS department.

Support Impact

- CSIS needs at least two new full time faculty and a number of new adjuncts, who are currently employed in the industry, to work with the new curriculum that is being developed.

- An additional classified support position is required to manage the increasing number of labs. New servers that will be purchased to support the new curriculum will be added and in need of departmental support. Currently, this is being done by faculty, with help from the lab specialist. As the number of servers increases and as more faculty are hired to teach in these areas, support must be centralized. IS and ICS have been supportive in helping the CSIS department attain our technical goals and requirements.

Year 1 (2004-2005)

Objective

- The CSIS department will continue to maintain currency by continually updating the existing courses and being able to offer new programs relevant to community needs in rapidly emerging areas of high technology. Keeping current in this explosive field requires significant expenditure of both time and money.
- We will continue to meet the needs of students in both job attainment and transfer to the four-year universities by continuing to develop course articulation with the four years universities and the UCSD extension program. Experience has proven that by not doing this on a continuing basis, results in lower enrollments. We must continue to move forward into new areas in order to attract new students both at the freshman level and re-entry adults.
- The CSIS Department continues, on an ongoing basis, to plan equipping the classrooms with new technology to support advanced and new course offerings. These classes will include expanded offerings in Internet support, management and security, and administration in networking including wireless technology and network security, databases, computer hardware, computer forensics and video games programming.
- Upgrade software and maintenance agreements in order to keep the software application current.
    1. MSDNAA membership
    2. Adobe Photoshop and Premiere maintenance renewal
    3. SQI server 2003
    4. Cold Fusion
    5. Renewal of Red Hat Enterprise Linux, Proxy, Workstations and server licenses.
- Upgrade CSIS classroom/Lab computers with top-of-the line models as part of the three year rollover plan.
- Maintain the faculty office computers to match the configuration of those in the lab resulting in greater productivity and ease with which faculty can transfer their courses to the CSIS classrooms.
- As the CSIS department continues to offer more online or hybrid courses, students in these classes are expected to require access from off-campus to the specialized servers and software in the labs.
- Continue to upgrade and maintain the CSIS website and to keep the student showcase area current with the latest student assignments as supplied by the instructors.

- Continue to collaborate with other departments on campus to offer cross listed courses

Action to Meet Objective

- As stronger support collaboration with CSIS, IS and ICC departments has become available, the Department has been able and will continue to implement the above objectives efficiently and successfully.
- CSIS will add two new labs, one to offer networking, including wireless and security, and hardware classes that cannot easily be supported in the present labs.
- The CSIS Department continues, on an ongoing basis, to plan on equipping our classrooms/labs with upgraded technology in order to support advanced and new course offerings. These classes will include expanded offerings to our existing courses and new classes in .NET, information security and wireless technology.
- The Department plans to acquire and configure the hardware and software server systems necessary to offer a true collaborative learning environment. Hosted on the Internet and modeled after currently available systems, the server will be used to meet the needs of distance learning students.
- The Local Area Network serving CSIS classrooms will be upgraded to allow IP Multicast, segmentation based on classroom requirements, and implementation of virtual LAN and wireless technologies. The purpose of the upgrade will be to support the technologies required to offer collaborative learning experiences as well as to take full advantage of new media. A streaming media (video, audio) server will be acquired, installed, and configured to allow the classroom presentation of new instructional materials. Initial candidates for study and evaluation include Microsoft's Netshow and Cisco's IP/TV. Titles and materials will be acquired to support current and new class offerings.
- As our online/hybrid course offerings expand, more faculty will need to be trained in distance learning management software. The CSIS department will continue to support faculty who are eager to develop new course content and online courses to add to our existing curriculum.
- The department will actively market our new programs to both the high school graduates and adult re-entry population in our ongoing recruiting efforts.
- Work in collaboration with local business and industry to develop a wireless technology and information security "attack and defend" lab and the curriculum to support this technology.

Year 2 (2005-2006)

Objective

- The CSIS Department continues, on an ongoing basis, to plan on equipping our classrooms/labs with upgraded technology in order to support advanced and new course offerings. These classes will include expanded offerings to our existing courses and new classes in .NET, information security and wireless technology.
- Continue to meet the needs of students for both employment and transfer to four year

universities by providing classes to support new industry and educational standards.

- Continue to support faculty with new technology and upgrade their office computers to meet the needs of the new and updated courses.
- Continue to expand online and hybrid courses in both new and existing curriculum.
- Explore new industry technologies and add new courses to support those technologies.
- Maintenance currency of the software library with maintenance agreements. Timely upgrades of lab hardware and servers is imperative to meet the needs of new and emerging technology.

Action to Meet Objective

- Hire a second lab specialist to maintain added servers and new hardware and software and the addition of new labs.
- As our online course offerings expand, faculty need to be trained in distance learning management software. The CSIS department will continue to support faculty who are eager to develop new course content to add to our existing curriculum.
- Actively market our new programs and recruit new students.
- Replace digital cameras, laser printers, scanners and multimedia hardware that are more than 3 years old with the latest generation and upgrade and purchase new software to support newly developed curriculum.
- Continue to keep our software maintenance agreements current.
- Replace and upgrade old software with the latest versions.
- Continue to work collaboratively with other departments to develop new cross-listed courses.

Year 3 (2006-2007)

Objective

- Upgrade tech office (529B) outdated hub to a switch which is compatible with IS standards (approx $700).
- The CSIS department will continue to support faculty who are eager to develop new course content to add to our existing curriculum by purchasing a new Windows Vista capable system for support of Windows Operating System course and new curriculum development.
- Upgrade MS Office 2003 with Office 2007 to meet industry standards.

Action to Meet Objective

- Purchase switch (approx. $700)
- Purchase laptop (approx. $2,500)

- Fund any expenses incurred by upgrading MS Office to version 2007.

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GROSSMONT COLLEGE

Technology Plan 2004-2007

GROSSMONT COLLEGE

Lab Rollover Schedule

Learning Center and # of machines	Funding Year: 03-04	Funding Year: 04-05	Funding Year: 05-06	Funding Year: 06-07	Funding Year: 07-08	Funding Year: 08-09	Funding Year: 09-10
BOT Lab A 70-126 (35)	Tech Mall					X	
BOT Flex 70-131 (72)	Tech Mall					X	
BOT Lab B 70-134 (25)	Tech Mall					X	
Bio 302, 321 (18)	8 rollover machines for instruments		Science building				
Chemistry 307B (10)		X	Science building				
Chemistry 312 (4)			Science building				
Chemistry 313 (28)			Science building				
CSIS 530 (24)		X					
CSIS 531 (24)		X					
CSIS 532 (40)		X					
CSIS 533 (28)		X					
CSIS 534 (30)		ROP purchased				X	
English Writing 70-119 (10)	Tech Mall						X
Eng/ESL Indep. Studies 70-122 (30)	Tech Mall						X
English Reading 545 (25)					X		
Health Prof 352C (30)	X			X			
Math Lab A 70-112 (32)					X		
Math Lab B 70-113 (32)					X		

Physics 333 (15)			X				
Tech Mall (178)	Tech Mall						X
Synergy 207 (24)	X			Digital Arts Bldg			

Table 2-Software Review Request

Summer/Fall Installation	February 28
Winter/Spring Installation	October 31

Table 3- Software Installation Request Schedule

FOR USE BEGINNING:	REQUEST TO ICS BY:
Fall Semester	Last Friday in July
Winter Intersession	First Friday in November
Spring Semester	First Friday in December
Summer Session	Last Friday in April

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BUSINESS AND PROFESSIONAL STUDIES

2003 Spring

Grossmont

Clusters appear under the division and subject of the head class.

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4200	0255		CSIS	105	TTh	700	750	535B	40	50	16	15		37 %	30 %	2.500	75.00	.2830	265
4201	0256		CSIS	105	F	1000	1150	538	40	46		CANC				.000 1	0.00		
4203	0257		CSIS	105	MW	1230 p	150 p	532	40	40	30	27		67 %	67 %	4.500	135.00	.2830	477
4204	0259		CSIS	105	TTh	700 p	820 p	532	40	40	39	27		67 %	67 %	4.500	135.00	.2830	477
6002			CSIS	105	MTWTh	830	1220 p	CTC2			19	20				3.040	99.75	.2830	352
	CSIS 105 Sections:			4												14.540	444.75	1.1320	392
4205	0261		CSIS	110	MWF	800	850	532	40	40	18	18		45 %	45 %	3.600	108.00	.3500	308
4206	0262		CSIS	110	MWF	800	850	535B	40	50	22	25		62 %	50 %	5.000	150.00	.3500	428
4207	0263		CSIS	110	TTh	800	915	535B	40	50	40	28	9	70 %	56 %	5.600	168.00	.3500	480
4208	0264		CSIS	110	MWF	900	950	573	40	48	24	24		60 %	50 %	4.800	144.00	.3500	411
4209	0265		CSIS	110	S	900	1150	535B	40	50	28	27		67 %	54 %	5.400	162.00	.3500	462
4210			CSIS	110	MW	1000	1250 p	525	30	30	27	28	7	93 %	93 %	5.600	168.00	.3500	480
4211	0266		CSIS	110	TTh	930	1045	535B	40	50	38	36	3	90 %	72 %	7.200	216.00	.3500	617
4212	0267		CSIS	110	TTh	1130	1245 p	525	30	30	28	31	4	103 %	103 %	6.200	186.00	.3500	531
4214	0269		CSIS	110	MW	100 p	220 p	533	30	30	30	30	6	100 %	100 %	6.000	180.00	.3500	514
4216	0271		CSIS	110	TTh	100 p	220 p	542	40	53	32	33	7	82 %	62 %	6.600	198.00	.3500	565
4219	0274		CSIS	110	TTh	400 p	520 p	532	40	40	40	38		95 %	95 %	7.600	228.00	.3500	651
4221	0276		CSIS	110	MW	700 p	815 p	551A	40	52	38	34	3	85 %	65 %	6.800	204.00	.3500	582
4223	0278		CSIS	110	TTh	700 p	820 p	582	40	50	40	30		75 %	60 %	6.000	180.00	.3500	514
4225			CSIS	110	TBA	TBA	TBA	WEB	45	9999	44	39	19	86 %	%	7.800	234.00	.3500	668
6005	0545		CSIS	110	DAILY	830	1020	CTC1				CANC	1			.000 8	0.00		
	CSIS 110 Sections:			14												84.200	2526.00	4.9000	515
4227			CSIS	112	F	900	1150	531	24	32	23	20		83 %	62 %	2.000	60.00	.2000	300
4229			CSIS	112	TTh	530 p	645 p	532	40	40	27	21		52 %	52 %	2.100	63.00	.2000	315
4230			CSIS	112	MW	1200 p	115 p	531	24	32	20	18	1	75 %	56 %	1.800	54.00	.2000	270
6009			CSIS	112	DAILY	130 p	320 p	CTC1				CANC				.000 8	0.00		
	CSIS 112 Sections:			3												5.900	177.00	.6000	295
4231			CSIS	113	S	1230 p	320 p	531	24	32	19	16		66 %	50 %	1.600	48.00	.2000	240
4232			CSIS	113	Th	130 p	420 p	531	24	32	21	25	6	104 %	78 %	2.500	75.00	.2000	375
4233			CSIS	113	TBA	TBA	TBA	WEB	50	9999	39	28	14	56 %	%	2.800	84.00	.2000	420
	CSIS 113 Sections:			3												6.900	207.00	.6000	345
4235			CSIS	114	S	900	150 p	CTC	40	31	18	14		35 %	45 %	2.333	70.00	.2830	247
6012			CSIS	114	DAILY	830	1220 p	CTC1			8	8	1			.000 8	40.00	.2830	141

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
		CSIS 114 Sections:		2												2.333	110.00	.5660	194
4239			CSIS	119	TTh	800	915	531	24	32	22	22		91 %	68 %	2.200	66.00	.2000	330
4241			CSIS	119	TTh	530 p	645 p	533	30	30	24	22		73 %	73 %	2.200	66.00	.2000	330
4243			CSIS	119	MW	700 p	820 p	533	30	30	17	14		46 %	46 %	1.400	42.00	.2000	210
		CSIS 119 Sections:		3												5.800	174.00	.6000	290
4271			CSIS	132	M	200 p	420 p	532	24	40	24	23	8	95 %	57 %	1.916	57.50	.1420	404
6015			CSIS	132	MTWTh	130 p	320 p	CTC2			19	20	1			1.531	50.25	.1420	353
		CSIS 132 Sections:		2												3.448	107.75	.2840	379
4273			CSIS	134	MW	930	1145	531	24	32	23	21	5	87 %	65 %	3.500	105.00	.2830	371
4275			CSIS	134	TBA	TBA	TBA	WEB	50	9999	44	40	9	80 %	%	6.666	200.00	.2830	706
		CSIS 134 Sections:		2												10.166	305.00	.5660	538
4277			CSIS	135	MW	430 p	645 p	530	24	24	23	18	4	75 %	75 %	3.000	90.00	.2830	318
		CSIS 135 Sections:		1												3.000	90.00	.2830	318
4279			CSIS	136	TTh	430 p	645 p	531	24	32	19	16		66 %	50 %	2.666	80.00	.2830	282
		CSIS 136 Sections:		1												2.666	80.00	.2830	282
4280			CSIS	137	S	900	150 p	CTC2	24		20	17	1	70 %		2.833	85.00	.2830	300
		CSIS 137 Sections:		1												2.833	85.00	.2830	300
4281			CSIS	138	TTh	430 p	650 p	530	24	24	24	22		91 %	91 %	3.666	110.00	.2830	388
		CSIS 138 Sections:		1												3.666	110.00	.2830	388
4283			CSIS	140	TTh	700 p	950 p	CTC1	24		16	11		45 %		2.200	66.00	.3500	188
6018			CSIS	140	DAILY	830	1220 p	CTC1			8	8				.000 8	48.00	.3500	137
		CSIS 140 Sections:		2												2.200	114.00	.7000	162
6021	0549		CSIS	141	MTWTh	830	1020	CTC1			8	8	1			.000 8	32.20	.2170	148
		CSIS 141 Sections:		1													32.20	.2170	148
4287			CSIS	142	TTh	500 p	650 p	CTC1	24		22	19	4	79 %		1.158	38.00	.1330	285
4291			CSIS	142	TBA	TBA	TBA	WEB	40	9999	34	30	9	75 %	%	1.828	60.00	.1330	451
6022			CSIS	142	MTWTh	130 p	320 p	CTC1			8	8				.000 8	16.00	.1330	120
6023			CSIS	142	MTWTh	1030	1220 p	CTC2			19	19				1.158	38.00	.1330	285
		CSIS 142 Sections:		4												4.144	152.00	.5320	285
4293			CSIS	143	TTh	500 p	650 p	CTC1	24		12	16	3	66 %		.975	32.00	.1330	240
4297			CSIS	143	TBA	TBA	TBA	WEB	28	9999	24	17	13	60 %	%	1.036	34.00	.1330	255

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
6024			CSIS	143	MTWTh	130 p	320 p	CTC1			8	8				.000 8	16.00	.1330	120
	CSIS 143 Sections:			3												2.011	82.00	.3990	205
4299			CSIS	144	M	600 p	950 p	CTC1	24		16	15		62 %		.914	30.00	.1330	225
6026			CSIS	144	DAILY	130 p	320 p	CTC1			8	8				.000 8	16.00	.1330	120
	CSIS 144 Sections:			2												.914	46.00	.2660	172
4301			CSIS	145	M	600 p	1020 p	CTC1	24		17	15	1	62 %		.914	30.00	.1330	225
6028			CSIS	145	DAILY	130 p	320 p	CTC1			8	7				.000 8	14.00	.1330	105
	CSIS 145 Sections:			2												.914	44.00	.2660	165
4303			CSIS	151A	W	600 p	900 p	CTC1	24		23	24	7	100 %		2.400	72.00	.2000	360
	CSIS 151A Sections:			1												2.400	72.00	.2000	360
4304			CSIS	151D	M	900	1150	530	24	24	23	22	1	91 %	91 %	2.200	66.00	.2000	330
4305			CSIS	151D	F	1230 p	320 p	530	24	24	17	21		87 %	87 %	2.100	63.00	.2000	315
4307			CSIS	151D	T	130 p	420 p	531	24	32	17	21		87 %	65 %	2.100	63.00	.2000	315
4309			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	49	36	5	72 %	%	3.600	108.00	.2000	540
	CSIS 151D Sections:			4												10.000	300.00	.8000	375
4313	4313	CSIS	159		TTh	330 p	450 p	CTC1	24			CANC				.000 1	0.00		
4700	4313	ED	159					CTC1	24			CANC				.000 1	0.00		
								Cluster total						%					
	CSIS 159 Sections:																		
4314			CSIS	160	F	900	1150	530	24	24	17	18		75 %	75 %	1.800	54.00	.2000	270
	CSIS 160 Sections:			1												1.800	54.00	.2000	270
4316			CSIS	172	TBA	TBA	TBA	WEB	50	9999	28	28		56 %	%	1.706	56.00	.1330	421
	CSIS 172 Sections:			1												1.706	56.00	.1330	421
4318			CSIS	173B	TBA	TBA	TBA	WEB	50	9999	23	39	9	78 %	%	2.377	78.00	.1330	586
	CSIS 173B Sections:			1												2.377	78.00	.1330	586
6030			CSIS	174B	MTWTh	830	1020	CTC2			19	19				1.158	38.00	.1330	285
4319	4319	CSIS	174B		MW	400 p	600 p	CTC1	24		12	10		41 %		.609	20.00	.1330	150
3649	4319	BUS	174B					CTC1	24		1	1		4 %		.061	2.00		
								Cluster total			**13**	**11**		45 %			22.00		165
	CSIS 174B Sections:			2												1.828	60.00	.2660	225
6034			CSIS	186A	MTWTh	130 p	320 p	CTC2			20	20				.304	10.00	.0330	303

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
		CSIS 186A Sections:			1											.304	10.00	.0330	303
6036			CSIS	186B	MTWTh	130 p	320 p	CTC2			19	20				.304	10.00	.0330	303
		CSIS 186B Sections:			1											.304	10.00	.0330	303
4330	4330		CSIS	190	MW	700 p	950 p	530	24	24	18	13	3	54 %	54 %	2.600	78.00	.3500	222
6400	4330		MM	190				530	24	24	5	3	1	12 %	12 %	.600	18.00		
								Cluster total			**23**	**16**		66 %	66 %		96.00		274
		CSIS 190 Sections:			1											3.200	96.00	.3500	274
4332			CSIS	195	T	700 p	950 p	530	24	24	20	26	1	108 %	108 %	2.600	78.00	.1780	438
		CSIS 195 Sections:			1											2.600	78.00	.1780	438
4333			CSIS	196	W	900	1150	530	24	24		CANC				.000 1	0.00		
		CSIS 196 Sections:																	
4336			CSIS	198	TBA	TBA	TBA	TBA			28	297	13			.000 2	0.00		
		CSIS 198 Sections:																	
4338			CSIS	213	TTh	930	1220 p	531	24	32		CANC				.000 1	0.00		
		CSIS 213 Sections:																	
4339			CSIS	217	TTh	515 p	735 p	CTC2			2	11				.000 8	55.00	.2830	194
		CSIS 217 Sections:			1												55.00	.2830	194
4340			CSIS	218	TTh	745 p	1005 p	CTC2				CANC				.000 8	0.00		
		CSIS 218 Sections:																	
4342			CSIS	220	Th	700 p	950 p	500	30	30	11	12		40 %	40 %	1.200	36.00	.2000	180
		CSIS 220 Sections:			1											1.200	36.00	.2000	180
4344			CSIS	230	MW	600 p	830 p	CTC2				5				.000 8	25.00	.2830	88
		CSIS 230 Sections:			1												25.00	.2830	88
6039	0550		CSIS	249	MTWTh	1030	1220 p	CTC1			8	8				.000 8	16.00	.1330	120
		CSIS 249 Sections:			1												16.00	.1330	120
4348			CSIS	251A	Th	700 p	950 p	531	24	32	12	18		75 %	56 %	1.800	54.00	.2000	270
		CSIS 251A Sections:			1											1.800	54.00	.2000	270
4349			CSIS	270	Th	700 p	950 p	530	24	24	10	12		50 %	50 %	1.200	36.00	.2000	180
		CSIS 270 Sections:			1											1.200	36.00	.2000	180
4350			CSIS	274B	MW	400 p	550 p	CTC1	24		11	12		50 %		.731	24.00	.1330	180

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
6041			CSIS	274B	MTWTh	830	1020	CTC2			19	19				1.158	38.00	.1330	285
	CSIS 274B Sections:			2												1.889	62.00	.2660	233
4355			CSIS	280	W	500 p	650 p	371	30	45	30	27	2	90 %	60 %	1.800	54.00	.1330	406
6043			CSIS	280	F	1230 p	320 p	342		70	19	20			28 %	1.188	39.00	.1330	293
6044			CSIS	280	F	TBA	TBA	CTC1			7	7				.000 8	14.00	.1330	105
	CSIS 280 Sections:			3												2.988	107.00	.3990	268
4357			CSIS	281	TBA	TBA	TBA	TBA	20		20	22		110 %		1.466	220.00		
	CSIS 281 Sections:			1												1.466	220.00		
4359			CSIS	282	TBA	TBA	TBA	TBA	20		6	8		40 %		.800	120.00		
	CSIS 282 Sections:			1												.800	120.00		
4363			CSIS	293	TTh	930	1220 p	530	24	24	22	26	6	108 %	108 %	5.200	156.00	.3500	445
4365			CSIS	293	MW	130 p	420 p	530	24	24	23	21	3	87 %	87 %	4.200	126.00	.3500	360
	CSIS 293 Sections:			2												9.400	282.00	.7000	402
4368			CSIS	296	MW	200 p	450 p	531	24	32	23	20	4	83 %	62 %	4.000	120.00	.3500	342
	CSIS 296 Sections:			1												4.000	120.00	.3500	342
4370			CSIS	297	MW	700 p	950 p	531	24	32	13	10		41 %	31 %	2.000	60.00	.3500	171
	CSIS 297 Sections:			1												2.000	60.00	.3500	171
4373			CSIS	299	S	900	1150	531	24	32	12	14		58 %	43 %	1.400	42.00	.2000	210
4375			CSIS	299	MW	530 p	645 p	531	24	32	22	21		87 %	65 %	2.100	63.00	.2000	315
4377			CSIS	299	W	200 p	420 p	532	40	40		CANC				.000 1	0.00		
6049	0554		CSIS	299	MTWTh	130 p	320 p	CTC2			19	19				1.737	57.00	.2000	285
6052	0555		CSIS	299	MTWTh	1030	1220 p	CTC1			19	19				1.444	47.38	.1420	333
	CSIS 299 Sections:			4												6.681	209.38	.7420	282

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4360	0252		CSIS	105	MW	430 p	520 p	583	40	56	20	22		55 %	39 %	3.666	110.00	.2830	388
4361	0253		CSIS	105	F	900	1150	532	24	40	22	22	5	91 %	55 %	3.666	110.00	.2830	388
4362			CSIS	105	TTh	700 p	910 p	531	24	32	22	18		75 %	56 %	3.000	90.00	.2830	318
6505			CSIS	105	MTWTh	830	1220 p	CTC2			22	22				3.344	109.73	.2830	387
	CSIS 105 Sections:			4												13.677	419.73	1.1320	370
4366	0258		CSIS	110	MWF	800	850	532	40	40	39	28		70 %	70 %	5.600	168.00	.3500	480
4368	0260		CSIS	110	TTh	800	915	535B	40	50	40	40	2	100 %	80 %	8.000	240.00	.3500	685
4372	0262		CSIS	110	S	900	1150	535B	40	50	18	21		52 %	42 %	4.200	126.00	.3500	360
4374	0264		CSIS	110	TTh	930	1045	535B	40	50	37	35	11	87 %	70 %	7.000	210.00	.3500	600
4375	0265		CSIS	110	MW	1000	1120	532	30	40	33	31	6	103 %	77 %	6.200	186.00	.3500	531
4378	0268		CSIS	110	MW	1230 p	145 p	579	40	56	43	47	9	117 %	83 %	9.400	282.00	.3500	805
4382	0270		CSIS	110	TTh	1230 p	145 p	535B	40	50	40	44	4	110 %	88 %	8.800	264.00	.3500	754
4383	0271		CSIS	110	MW	400 p	520 p	532	40	40	36	35		87 %	87 %	7.000	210.00	.3500	600
4384	0272		CSIS	110	TTh	400 p	520 p	532	40	40	23	21		52 %	52 %	4.200	126.00	.3500	360
4386	0274		CSIS	110	MW	700 p	815 p	551A	40	52	26	20		50 %	38 %	4.000	120.00	.3500	342
4387			CSIS	110	TTh	700 p	950 p	532	40	40	28	30		75 %	75 %	6.000	180.00	.3500	514
4388			CSIS	110	TBA	TBA	TBA	WEB	45	9999	45	48	17	106 %	%	9.600	288.00	.3500	822
4389			CSIS	110	TBA	TBA	TBA	WEB	45	9999	43	32	10	71 %	%	6.400	192.00	.3500	548
	CSIS 110 Sections:			13												86.400	2592.00	4.5500	569
4391			CSIS	112	F	900	1150	531	24	32	23	26		108 %	81 %	2.600	78.00	.2000	390
4392			CSIS	112	MW	1230 p	145 p	530	24	24	25	25	1	104 %	104 %	2.500	75.00	.2000	375
4393			CSIS	112	TTh	530 p	645 p	532	28	40	24	18		64 %	45 %	1.800	54.00	.2000	270
	CSIS 112 Sections:			3												6.900	207.00	.6000	345
4395			CSIS	113	S	1200 p	250 p	531	24	32	22	21		87 %	65 %	2.100	63.00	.2000	315
4396			CSIS	113	TTh	200 p	315 p	531	24	32	23	19		79 %	59 %	1.900	57.00	.2000	285
4397			CSIS	113	TBA	TBA	TBA	WEB	30	9999	30	23	7	76 %	%	2.300	69.00	.2000	345
	CSIS 113 Sections:			3												6.300	189.00	.6000	315
4398			CSIS	114	S	900	150 p	CTC1	24		21	19		79 %		3.166	95.00	.2830	335
	CSIS 114 Sections:			1												3.166	95.00	.2830	335
4400			CSIS	115	MW	900	1150	531	24	32		CANC				.000 1	0.00		
	CSIS 115 Sections:																		
4402			CSIS	119	TTh	800	915	530	24	24	22	21	1	87 %	87 %	2.100	63.00	.2000	315

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4404			CSIS	119	TTh	530 p	645 p	533	30	30	16	15		50 %	50 %	1.500	45.00	.2000	225
4405			CSIS	119	Th	700 p	950 p	535B	40	50	25	30		75 %	60 %	3.000	90.00	.2000	450
	CSIS 119 Sections:			3												6.600	198.00	.6000	330
4408			CSIS	132	T	1130	150 p	531	24	32	24	20		83 %	62 %	1.666	50.00	.1420	352
6522			CSIS	132	MTWTh	130 p	320 p	CTC2			22	22				1.676	55.00	.1420	387
	CSIS 132 Sections:			2												3.342	105.00	.2840	369
4410			CSIS	134	TTh	900	1120	531	24	32	25	24	1	100 %	75 %	4.000	120.00	.2830	424
4411			CSIS	134	TBA	TBA	TBA	WEB	50	9999	50	45		90 %	%	7.500	225.00	.2830	795
	CSIS 134 Sections:			2												11.500	345.00	.5660	609
4413			CSIS	135	TTh	700 p	920 p	533	24	30	23	25	4	104 %	83 %	4.166	125.00	.2833	441
	CSIS 135 Sections:			1												4.166	125.00	.2833	441
4414			CSIS	136	WF	900	1120	530	30	24		CANC				.000 1	0.00		
4415			CSIS	136	TTh	430 p	650 p	530	30	24	17	14		46 %	58 %	2.333	70.00	.2830	247
	CSIS 136 Sections:			1												2.333	70.00	.2830	247
4416			CSIS	137	S	900	150 p	530	24	24	24	22		91 %	91 %	3.666	110.00	.2830	388
	CSIS 137 Sections:			1												3.666	110.00	.2830	388
4417			CSIS	140	TTh	700 p	950 p	CTC1	24		24	23	3	95 %		4.600	138.00	.3500	394
	CSIS 140 Sections:			1												4.600	138.00	.3500	394
4418			CSIS	141	W	600 p	950 p	CTC1	24		16	12		50 %		1.600	48.00	.2170	221
	CSIS 141 Sections:			1												1.600	48.00	.2170	221
4419			CSIS	142	TTh	500 p	650 p	CTC1	24		22	20	2	83 %		1.219	40.00	.1330	300
4421			CSIS	142	TBA	TBA	TBA	WEB	30	9999	28	14	1	46 %	%	.853	28.00	.1330	210
6537			CSIS	142	MTWTh	1030	1220 p	CTC2			22	21				1.280	42.00	.1330	315
	CSIS 142 Sections:			3												3.352	110.00	.3990	275
4422			CSIS	143	TTh	500 p	700 p	CTC1	24		19	10	3	41 %		.609	20.00	.1330	150
4424			CSIS	143	TBA	TBA	TBA	WEB	30	9999	28	13	2	43 %	%	.792	26.00	.1330	195
	CSIS 143 Sections:			2												1.401	46.00	.2660	172
4425			CSIS	144	M	600 p	1020 p	CTC1	24			CANC				.000 1	0.00		
	CSIS 144 Sections:																		
4426			CSIS	145	M	600 p	1020 p	CTC1	24		12	19		79 %		1.158	38.00	.1330	285
	CSIS 145 Sections:			1												1.158	38.00	.1330	285

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4427			CSIS	151A	TTh	530 p	645 p	531	24	32	23	22	2	91 %	68 %	2.200	66.00	.2000	330
	CSIS 151A Sections:		1													2.200	66.00	.2000	330
4428			CSIS	151D	M	900	1150	530	24	24	25	27		112 %	112 %	2.700	81.00	.2000	405
4429			CSIS	151D	F	1200 p	250 p	530	24	24	20	24		100 %	100 %	2.400	72.00	.2000	360
4430			CSIS	151D	T	130 p	420 p	530	24	24	21	19		79 %	79 %	1.900	57.00	.2000	285
4431			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	47	37		74 %	%	3.700	111.00	.2000	555
	CSIS 151D Sections:		4													10.700	321.00	.8000	401
4432	4432		CSIS	159	TTh	330 p	450 p	CTC1	24			CANC				.000 1	0.00		
5187	4432		ED	159				CTC1	24			CANC				.000 1	0.00		
								Cluster total						%					
	CSIS 159 Sections:																		
4434			CSIS	160	F	1200 p	250 p	531	24	32	22	24	8	100 %	75 %	2.400	72.00	.2000	360
	CSIS 160 Sections:		1													2.400	72.00	.2000	360
4435			CSIS	165	MW	400 p	650 p	531	24	32	26	29	6	120 %	90 %	5.800	174.00	.3500	497
	CSIS 165 Sections:		1													5.800	174.00	.3500	497
4437			CSIS	172	TBA	TBA	TBA	WEB	50	9999		CANC				.000 1	0.00		
	CSIS 172 Sections:																		
4438			CSIS	173B	TBA	TBA	TBA	WEB	50	9999	20	49	8	98 %	%	2.986	98.00	.1330	736
	CSIS 173B Sections:		1													2.986	98.00	.1330	736
4443			CSIS	174B	TBA	TBA	TBA	WEB	50	9999	26	20		40 %	%	1.219	40.00	.1330	300
6551			CSIS	174B	MTWTh	830	1020	CTC2			22	21				1.696	55.65	.1330	418
	CSIS 174B Sections:		2													2.915	95.65	.2660	359
4447			CSIS	175B	TBA	TBA	TBA	WEB	50	9999	15	12		24 %	%	.365	12.00	.1330	90
	CSIS 175B Sections:		1													.365	12.00	.1330	90
6555			CSIS	186A	MTWTh	130 p	320 p	CTC2			22	22				.335	11.00	.0330	333
	CSIS 186A Sections:		1													.335	11.00	.0330	333
6558			CSIS	186B	MTWTh	130 p	320 p	CTC2			22	22				.335	11.00	.0330	333
	CSIS 186B Sections:		1													.335	11.00	.0330	333
4462	4462		CSIS	190	MW	700 p	950 p	530	24	24	9	10	6	41 %	41 %	2.000	60.00	.3500	171
6200	4462		MM	190				530	24	24	12	8	1	33 %	33 %	1.600	48.00		

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					Cluster total						**21**	**18**		75 %	75 %		108.00		308
	CSIS 190 Sections:			1												3.600	108.00	.3500	308
4463			CSIS	195	T	700 p	950 p	530	24	24	24	21		87 %	87 %	2.100	63.00	.1670	377
	CSIS 195 Sections:			1												2.100	63.00	.1670	377
4465			CSIS	198	TBA	TBA	TBA	TBA			75	336	15			.000 2	0.00		
	CSIS 198 Sections:																		
4467			CSIS	217	TTh	515 p	735 p	CTC2			1	6				.000 8	30.00	.2830	106
	CSIS 217 Sections:			1													30.00	.2830	106
4468			CSIS	218	TTh	745 p	1005 p	CTC2			1	8				.000 8	40.00	.2830	141
	CSIS 218 Sections:			1													40.00	.2830	141
4469			CSIS	230	MW	600 p	820 p	CTC2			1	6				.000 8	30.00	.2830	106
	CSIS 230 Sections:			1													30.00	.2830	106
4471			CSIS	251D	Th	700 p	950 p	530	24	24		CANC				.000 1	0.00		
	CSIS 251D Sections:																		
4473			CSIS	274B	TBA	TBA	TBA	WEB	50	9999	15	21		42 %	%	1.280	42.00	.1330	315
6566			CSIS	274B	DAILY	830	1020	CTC2			21	21				1.280	42.00	.1330	315
	CSIS 274B Sections:			2												2.560	84.00	.2660	315
4474			CSIS	275B	TBA	TBA	TBA	WEB	50	9999	10	15		30 %	%	.914	30.00	.1330	225
	CSIS 275B Sections:			1												.914	30.00	.1330	225
6570			CSIS	280	F	1230 p	310 p	CTC2			22	22				1.336	43.86	.1330	329
	CSIS 280 Sections:			1												1.336	43.86	.1330	329
6574			CSIS	281	TBA	TBA	TBA	TBA			21	18				1.200	90.00	.1962	458
	CSIS 281 Sections:			1												1.200	90.00	.1962	458
4476			CSIS	293	TTh	930	1220 p	530	24	24	21	17		70 %	70 %	3.400	102.00	.3500	291
4477			CSIS	293	MW	200 p	450 p	530	24	24	25	20		83 %	83 %	4.000	120.00	.3500	342
	CSIS 293 Sections:			2												7.400	222.00	.7000	317
4478			CSIS	294	TTh	700 p	950 p	531	24	32		CANC				.000 1	0.00		
	CSIS 294 Sections:																		
4480			CSIS	296	MW	700 p	950 p	531	24	32	26	22	3	91 %	68 %	4.400	132.00	.3500	377
	CSIS 296 Sections:			1												4.400	132.00	.3500	377

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4483			CSIS	299	S	900	1150	531	24	32		CANC				.000 1	0.00		
4485			CSIS	299	MW	530 p	645 p	530	24	24	19	16		66 %	66 %	1.600	48.00	.2000	240
6576	0550		CSIS	299	DAILY	1030	1220 p	CTC1			21	22				1.672	54.86	.1420	386
6578	0552		CSIS	299	MTWTh	130 p	320 p	CTC2			21	21				1.920	63.00	.2000	315
		CSIS 299 Sections:			3											5.192	165.86	.5420	306

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4203	0257		CSIS	105	MW	1230 p	150 p	532	40	40	29	25		62 %	62 %	4.166	125.00	.2830	441
4204	0259		CSIS	105	TTh	700 p	820 p	CTC1	31		16	13		41 %		2.166	65.00	.2830	229
	CSIS 105 Sections:			2												6.333	190.00	.5660	335
4205	0263		CSIS	110	TTh	800	915	535B	40	49	40	41	5	102 %	83 %	8.200	246.00	.3500	702
4206	0262		CSIS	110	MWF	900	950	535B	40	49	29	23		57 %	46 %	4.600	138.00	.3500	394
4208	0264		CSIS	110	S	900	1150	535B	40	49		CANC				.000 1	0.00		
4209	0265		CSIS	110	TTh	930	1045	535B	40	49	41	36	5	90 %	73 %	7.200	216.00	.3500	617
4211	0266		CSIS	110	MW	1100	1220 p	532	32	40	32	35	8	109 %	87 %	7.000	210.00	.3500	600
4212			CSIS	110	TTh	1130	220 p	CTC1	28		27	30		107 %		6.000	180.00	.3500	514
4214	0269		CSIS	110	TTh	100 p	220 p	542	40	49	37	37	3	92 %	75 %	7.400	222.00	.3500	634
4216	0271		CSIS	110	MW	200 p	320 p	532	40	40	40	28		70 %	70 %	5.600	168.00	.3500	480
4219	0274		CSIS	110	TTh	400 p	520 p	532	40	40	23	20		50 %	50 %	4.000	120.00	.3500	342
4221	0276		CSIS	110	MW	700 p	815 p	551A	40	52	25	22		55 %	42 %	4.400	132.00	.3500	377
4223	0278		CSIS	110	TTh	700 p	815 p	582	40	49	25	26		65 %	53 %	5.200	156.00	.3500	445
4224			CSIS	110	TBA	TBA	TBA	WEB	45	9999	41	26	9	57 %	%	5.200	156.00	.3500	445
4225			CSIS	110	TBA	TBA	TBA	WEB	45	9999	40	44	14	97 %	%	8.800	264.00	.3500	754
6001			CSIS	110	MTWTh	830	1220 p	CTC2			1	20				.000 8	120.75	.3500	345
	CSIS 110 Sections:			13												73.600	2328.75	4.5500	511
4227			CSIS	112	F	900	1150	531	24	32	22	18		75 %	56 %	1.800	54.00	.2000	270
4229			CSIS	112	MW	1130	1250 p	531	24	32	19	15		62 %	46 %	1.500	45.00	.2000	225
4230			CSIS	112	TTh	530 p	645 p	532	40	40		CANC				.000 1	0.00		
	CSIS 112 Sections:			2												3.300	99.00	.4000	247
4231			CSIS	113	S	1230 p	320 p	531	24	32	21	20		83 %	62 %	2.000	60.00	.2000	300
4232			CSIS	113	Th	130 p	420 p	531	24	32		CANC				.000 1	0.00		
4233			CSIS	113	TBA	TBA	TBA	WEB	50	9999	42	21	3	42 %	%	2.100	63.00	.2000	315
	CSIS 113 Sections:			2												4.100	123.00	.4000	307
4235			CSIS	114	S	900	150 p	CTC	28	31		CANC				.000 1	0.00		
4236			CSIS	114	S	900	150 p	CTC	28	31	14	13		46 %	41 %	2.166	65.00	.2830	229
	CSIS 114 Sections:			1												2.166	65.00	.2830	229
4237			CSIS	115	TTh	930	1220 p	531	24	32		CANC				.000 1	0.00		
	CSIS 115 Sections:																		
4239			CSIS	119	TTh	800	915	531	24	32	24	25	3	104 %	78 %	2.500	75.00	.2000	375

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4241			CSIS	119	TTh	530 p	645 p	532	40	40	32	30		75 %	75 %	3.000	90.00	.2000	450
4243			CSIS	119	MW	700 p	820 p	532	30	40	21	19		63 %	47 %	1.900	57.00	.2000	285
	CSIS 119 Sections:			3												7.400	222.00	.6000	370
4271			CSIS	132	T	100 p	320 p	530	24	24	16	15		62 %	62 %	1.250	37.50	.1420	264
	CSIS 132 Sections:			1												1.250	37.50	.1420	264
4273			CSIS	134	MW	900	1120	531	24	32	24	19		79 %	59 %	3.166	95.00	.2830	335
4275			CSIS	134	TBA	TBA	TBA	WEB	50	9999	45	38	5	76 %	%	6.333	190.00	.2830	671
	CSIS 134 Sections:			2												9.500	285.00	.5660	503
4277			CSIS	135	TTh	330 p	550 p	530	24	24	21	16		66 %	66 %	2.666	80.00	.2830	282
	CSIS 135 Sections:			1												2.666	80.00	.2830	282
4279			CSIS	136	TTh	430 p	645 p	531	24	32	23	19		79 %	59 %	3.166	95.00	.2830	335
	CSIS 136 Sections:			1												3.166	95.00	.2830	335
4280			CSIS	137	S	900	150 p	530	24	24	24	21		87 %	87 %	3.500	105.00	.2830	371
	CSIS 137 Sections:			1												3.500	105.00	.2830	371
4281			CSIS	138	MW	400 p	620 p	530	24	24	19	18		75 %	75 %	3.000	90.00	.2830	318
	CSIS 138 Sections:			1												3.000	90.00	.2830	318
4283			CSIS	140	TTh	700 p	950 p	CTC1	24			CANC				.000 1	0.00		
	CSIS 140 Sections:																		
4287			CSIS	142	TTh	500 p	650 p	CTC1	24		22	23	5	95 %		1.401	46.00	.1330	345
4291			CSIS	142	TBA	TBA	TBA	WEB	28	9999	27	23	5	82 %	%	1.401	46.00	.1330	345
6008			CSIS	142	TTh	130 p	320 p	CTC2			1	21				.000 8	42.00	.1330	315
	CSIS 142 Sections:			3												2.803	134.00	.3990	335
4293			CSIS	143	TTh	500 p	650 p	CTC1	24		19	18	1	75 %		1.097	36.00	.1330	270
4297			CSIS	143	TBA	TBA	TBA	WEB	28	9999	30	23		82 %	%	1.401	46.00	.1330	345
	CSIS 143 Sections:			2												2.499	82.00	.2660	308
4299			CSIS	144	M	600 p	1020 p	CTC1	24		15	14		58 %		.853	28.00	.1330	210
	CSIS 144 Sections:			1												.853	28.00	.1330	210
4301			CSIS	145	M	600 p	950 p	CTC1	24		12	17		70 %		1.036	34.00	.1330	255
	CSIS 145 Sections:			1												1.036	34.00	.1330	255
4303			CSIS	151A	W	600 p	900 p	CTC1	24		21	23	4	95 %		2.300	69.00	.2000	345

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	CSIS 151A Sections:			1												2.300	69.00	.2000	345
4304			CSIS	151D	M	900	1150	530	24	24	23	22		91 %	91 %	2.200	66.00	.2000	330
4305			CSIS	151D	F	1230 p	320 p	530	24	24	24	23		95 %	95 %	2.300	69.00	.2000	345
4307			CSIS	151D	T	130 p	420 p	531	24	32		CANC				.000 1	0.00		
4309			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	46	30	2	60 %	%	3.000	90.00	.2000	450
	CSIS 151D Sections:			3												7.500	225.00	.6000	375
4311	4311	CSIS		159	W	515 p	815 p	532	40	40		CANC				.000 1	0.00		
4700	4311	ED		159				532	40	40		CANC				.000 1	0.00		
								Cluster total						%	%				
	CSIS 159 Sections:																		
4313			CSIS	165	MW	400 p	650 p	531	24	32	23	15		62 %	46 %	3.000	90.00	.3500	257
	CSIS 165 Sections:			1												3.000	90.00	.3500	257
4316			CSIS	172	TBA	TBA	TBA	WEB	50	9999	17	17		34 %	%	1.036	34.00	.1330	255
	CSIS 172 Sections:			1												1.036	34.00	.1330	255
4318			CSIS	173B	TBA	TBA	TBA	WEB	50	9999	37	44	7	88 %	%	2.681	88.00	.1330	661
	CSIS 173B Sections:			1												2.681	88.00	.1330	661
6014	0540		CSIS	174B	MTWTh	830	1020	CTC2			1	22				.000 8	44.00	.1330	330
4319	4319	CSIS		174B	Th	600 p	950 p	530	24	24	17	16		66 %	66 %	.975	32.00	.1330	240
3649	4319	BUS		174B				530	24	24	3	3		12 %	12 %	.182	6.00		
								Cluster total			**20**	**19**		79 %	79 %		38.00		285
	CSIS 174B Sections:			2												1.158	82.00	.2660	308
4330	4330	CSIS		190	MW	700 p	950 p	530	24	24	13	9		37 %	37 %	1.800	54.00	.3500	154
6400	4330	MM		190				530	24	24	12	9		37 %	37 %	1.800	54.00		
								Cluster total			**25**	**18**		75 %	75 %		108.00		308
	CSIS 190 Sections:			1												3.600	108.00	.3500	308
4332			CSIS	195	T	700 p	950 p	530	24	24	25	20		83 %	83 %	2.000	60.00	.1780	337
	CSIS 195 Sections:			1												2.000	60.00	.1780	337
4336			CSIS	198	TBA	TBA	TBA	TBA			56	255	13			.000 2	0.00		
	CSIS 198 Sections:																		
4339			CSIS	218	MW	745 p	1005 p	CTC2			2	7				.000 8	35.00	.2830	123

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		CSIS 218 Sections:		1													35.00	.2830	123
4340			CSIS	219	MW	515 p	735 p	CTC2			1	4				.000 8	20.00	.2830	70
		CSIS 219 Sections:		1													20.00	.2830	70
4342			CSIS	220	Th	700 p	950 p	500	30	30	8	8		26 %	26 %	.800	24.00	.2000	120
		CSIS 220 Sections:		1												.800	24.00	.2000	120
4344			CSIS	230	TTh	600 p	830 p	CTC2			1	4				.000 8	20.00	.2830	70
		CSIS 230 Sections:		1													20.00	.2830	70
4348			CSIS	251A	Th	700 p	950 p	531	24	32	22	22		91 %	68 %	2.200	66.00	.2000	330
		CSIS 251A Sections:		1												2.200	66.00	.2000	330
6019			CSIS	274A	DAILY	830	1020	CTC2			1	21				.000 8	42.00	.1330	315
		CSIS 274A Sections:		1													42.00	.1330	315
4350			CSIS	274B	Th	600 p	950 p	530	24	24	14	20		83 %	83 %	1.219	40.00	.1330	300
		CSIS 274B Sections:		1												1.219	40.00	.1330	300
4355			CSIS	280	W	500 p	650 p	551A	20	52	15	12		60 %	23 %	.800	24.00	.1330	180
6022			CSIS	280	MW	130 p	320 p	CTC2			1	21				.000 8	42.00	.1330	315
		CSIS 280 Sections:		2												.800	66.00	.2660	248
4357			CSIS	281	TBA	TBA	TBA	TBA	20		14	14		70 %		.933	140.00	.1526	917
		CSIS 281 Sections:		1												.933	140.00	.1526	917
4363			CSIS	293	TTh	930	1220 p	530	24	24	21	21	5	87 %	87 %	4.200	126.00	.3500	360
4365			CSIS	293	MW	100 p	350 p	530	24	24	27	25	3	104 %	104 %	5.000	150.00	.3500	428
		CSIS 293 Sections:		2												9.200	276.00	.7000	394
4368			CSIS	296	MW	100 p	350 p	531	24	32	23	20	1	83 %	62 %	4.000	120.00	.3500	342
		CSIS 296 Sections:		1												4.000	120.00	.3500	342
4370			CSIS	297	MW	700 p	950 p	531	24	32	20	18		75 %	56 %	3.600	108.00	.3500	308
		CSIS 297 Sections:		1												3.600	108.00	.3500	308
4372			CSIS	299	M	630 p	820 p	532	20	40		CANC				.000 1	0.00		
4373			CSIS	299	S	900	1150	531	24	32		CANC				.000 1	0.00		
4375			CSIS	299	T	700 p	950 p	531	24	32	21	19	3	79 %	59 %	1.900	57.00	.2000	285
6027	0542		CSIS	299	MTWTh	1030	1220 p	CTC2				22				.000 8	88.55	.2170	408
6028	0543		CSIS	299	MTWTh	130 p	320 p	CTC2				22	1			.000 8	55.00	.1420	387

BUSINESS AND PROFESSIONAL STUDIES

2004 Spring

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Clusters appear under the division and subject of the head class.

Tied Section	Cluster Section	Head Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
CSIS 299 Sections:				3											1.900	200.55	.5590	358

BUSINESS AND PROFESSIONAL STUDIES

2004 Fall

Grossmont

Clusters appear under the division and subject of the head class.

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4360	0252		CSIS	105	MW	430 p	520 p	583	40	56	27	27		67 %	48 %	4.500	135.00	.2830	477
4361	0253		CSIS	105	F	900	1150	532	37	40	37	31	3	83 %	77 %	5.166	155.00	.2830	547
	CSIS 105 Sections:			2												9.666	290.00	.5660	512
4366	0258		CSIS	110	MWF	800	850	532	40	40		CANC				.000 1	0.00		
4368	0260		CSIS	110	TTh	800	915	535B	40	50	38	42	10	105 %	84 %	8.400	252.00	.3500	720
4372			CSIS	110	WF	900	1150	534	28			CANC				.000 1	0.00		
4374	0264		CSIS	110	MW	930	1050	532	40	40	42	38	1	95 %	95 %	7.600	228.00	.3500	651
4375	0265		CSIS	110	TTh	930	1045	535B	40	50	27	30	4	75 %	60 %	6.000	180.00	.3500	514
4378	0268		CSIS	110	MW	1230 p	145 p	579	40	56	41	39	5	97 %	69 %	7.800	234.00	.3500	668
4382	0270		CSIS	110	TTh	1230 p	145 p	535B	40	50	41	41	3	102 %	82 %	8.200	246.00	.3500	702
4383	0271		CSIS	110	MW	400 p	520 p	532	40	40	28	32		80 %	80 %	6.400	192.00	.3500	548
4386			CSIS	110	MW	700 p	950 p	532	40	40	19	19		47 %	47 %	3.800	114.00	.3500	325
4387	0275		CSIS	110	TTh	700 p	815 p	551A	40	52	38	32		80 %	61 %	6.400	192.00	.3500	548
4388			CSIS	110	TBA	TBA	TBA	WEB	45	9999	43	42	13	93 %	%	8.400	252.00	.3500	720
4389			CSIS	110	TBA	TBA	TBA	WEB	45	9999	45	28	8	62 %	%	5.600	168.00	.3500	480
	CSIS 110 Sections:			10												68.600	2058.00	3.5000	588
4391			CSIS	112	F	900	1150	533	24	30	24	19		79 %	63 %	1.900	57.00	.2000	285
4392			CSIS	112	MW	1230 p	145 p	533	24	30	26	20	5	83 %	66 %	2.000	60.00	.2000	300
4393			CSIS	112	T	530 p	820 p	532	25	40	23	20	2	80 %	50 %	2.000	60.00	.2000	300
	CSIS 112 Sections:			3												5.900	177.00	.6000	295
4395			CSIS	113	S	1200 p	250 p	531	24	32	13	13		54 %	40 %	1.300	39.00	.2000	195
4396			CSIS	113	Th	100 p	350 p	531	24	32		CANC				.000 1	0.00		
4397			CSIS	113	TBA	TBA	TBA	WEB	30	9999	30	19		63 %	%	1.900	57.00	.2000	285
	CSIS 113 Sections:			2												3.200	96.00	.4000	240
4398			CSIS	114	S	900	150 p	533	24	30	24	20		83 %	66 %	3.333	100.00	.2830	353
	CSIS 114 Sections:			1												3.333	100.00	.2830	353
4402			CSIS	119	TTh	800	915	530	24	24	23	21	1	87 %	87 %	2.100	63.00	.2000	315
4404			CSIS	119	MW	530 p	645 p	530	24	24	26	25		104 %	104 %	2.500	75.00	.2000	375
4405			CSIS	119	Th	530 p	820 p	532	24	40		CANC				.000 1	0.00		
	CSIS 119 Sections:			2												4.600	138.00	.4000	345
4408			CSIS	132	T	1130	150 p	531	24	32		CANC				.000 1	0.00		
	CSIS 132 Sections:																		

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4410			CSIS	134	TTh	900	1120	531	24	32	21	22		91 %	68 %	3.666	110.00	.2830	388
4411			CSIS	134	TBA	TBA	TBA	WEB	50	9999	50	33		66 %	%	5.500	165.00	.2830	583
		CSIS 134 Sections:		2												9.166	275.00	.5660	485
4413			CSIS	135	TTh	400 p	650 p	531	24	32	18	14		58 %	43 %	2.333	70.00	.2830	247
		CSIS 135 Sections:		1												2.333	70.00	.2830	247
4414			CSIS	136	TTh	430 p	650 p	530	24	24	19	20		83 %	83 %	3.333	100.00	.2830	353
		CSIS 136 Sections:		1												3.333	100.00	.2830	353
4415			CSIS	137	S	900	150 p	530	24	24	23	22		91 %	91 %	3.666	110.00	.2830	388
		CSIS 137 Sections:		1												3.666	110.00	.2830	388
4416			CSIS	139	MW	700 p	815 p	532	40	40		CANC				.000 1	0.00		
		CSIS 139 Sections:																	
4417			CSIS	140	TTh	700 p	950 p	533	28	30		CANC				.000 1	0.00		
		CSIS 140 Sections:																	
4418			CSIS	141	W	600 p	950 p	533	28	30	13	14		50 %	46 %	1.866	56.00	.2170	258
		CSIS 141 Sections:		1												1.866	56.00	.2170	258
4419			CSIS	142	TTh	500 p	650 p	533	28	30	25	25		89 %	83 %	1.523	50.00	.1330	375
4421			CSIS	142	TBA	TBA	TBA	WEB	28	9999	27	20		71 %	%	1.219	40.00	.1330	300
		CSIS 142 Sections:		2												2.742	90.00	.2660	338
4422			CSIS	143	TTh	500 p	700 p	533	28	30	16	21		75 %	70 %	1.280	42.00	.1330	315
4424			CSIS	143	TBA	TBA	TBA	WEB	28	9999	13	17	3	60 %	%	1.036	34.00	.1330	255
		CSIS 143 Sections:		2												2.316	76.00	.2660	285
4425			CSIS	144	M	600 p	950 p	533	28	30	8	9		32 %	30 %	.548	18.00	.1330	135
		CSIS 144 Sections:		1												.548	18.00	.1330	135
4426			CSIS	145	M	600 p	1020 p	533	28	30	12	9		32 %	30 %	.548	18.00	.1330	135
		CSIS 145 Sections:		1												.548	18.00	.1330	135
4427			CSIS	151A	Th	700 p	950 p	531	24	32	24	22		91 %	68 %	2.200	66.00	.2000	330
		CSIS 151A Sections:		1												2.200	66.00	.2000	330
4428			CSIS	151D	M	900	1150	530	24	24	16	18		75 %	75 %	1.800	54.00	.2000	270
4429			CSIS	151D	F	1200 p	250 p	530	24	24		CANC				.000 1	0.00		
4430			CSIS	151D	T	1230 p	320 p	530	24	24	23	24		100 %	100 %	2.400	72.00	.2000	360
4431			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	34	31		62 %	%	3.100	93.00	.2000	465

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	CSIS 151D Sections:				3											7.300	219.00	.6000	365
4434			CSIS	160	F	900	1150	530	24	24	23	24	6	100 %	100 %	2.400	72.00	.2000	360
	CSIS 160 Sections:				1											2.400	72.00	.2000	360
4435			CSIS	165	MW	400 p	650 p	531	24	32	14	11		45 %	34 %	2.200	66.00	.3500	188
	CSIS 165 Sections:				1											2.200	66.00	.3500	188
4437		4437	CSIS	172	TBA	TBA	TBA	WEB	50	9999	13	23	1	46 %	%	1.401	46.00	.1330	345
3786		4437	BOT	172				WEB	50	9999	10	20		40 %	%	.609	20.00		
								Cluster total			**23**	**43**		86 %	%		66.00		496
	CSIS 172 Sections:				1											2.011	66.00	.1330	496
4438			CSIS	173B	TBA	TBA	TBA	WEB	50	9999	23	22		44 %	%	1.340	44.00	.1330	330
	CSIS 173B Sections:				1											1.340	44.00	.1330	330
4443			CSIS	174B	TBA	TBA	TBA	WEB	50	9999		CANC				.000 1	0.00		
	CSIS 174B Sections:																		
4447			CSIS	175B	TBA	TBA	TBA	WEB	50	9999	19	31		62 %	%	.944	31.00	.1330	233
	CSIS 175B Sections:				1											.944	31.00	.1330	233
4462		4462	CSIS	190	MW	700 p	950 p	530	24	24	11	14	6	58 %	58 %	2.800	84.00	.3500	240
6200		4462	MM	190				530	24	24	13	10	4	41 %	41 %	2.000	60.00		
								Cluster total			**24**	**24**		100 %	100 %		144.00		411
	CSIS 190 Sections:				1											4.800	144.00	.3500	411
4463			CSIS	195	T	700 p	950 p	530	24	24	26	23	4	95 %	95 %	2.300	69.00	.1670	413
	CSIS 195 Sections:				1											2.300	69.00	.1670	413
4465			CSIS	198	TBA	TBA	TBA	TBA			32	252	17			.000 2	0.00		
	CSIS 198 Sections:																		
4466			CSIS	213	MW	700 p	950 p	531	24	32		CANC				.000 1	0.00		
	CSIS 213 Sections:																		
4467			CSIS	217	MW	515 p	725 p	534				4				.000 8	20.00	.2830	70
	CSIS 217 Sections:				1												20.00	.2830	70
4468			CSIS	218	MW	745 p	955 p	534				3				.000 8	15.00	.2830	53
	CSIS 218 Sections:				1												15.00	.2830	53
4469			CSIS	230	TTh	600 p	820 p	534				1				.000 8	5.00	.2830	17

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		CSIS 230 Sections:		1													5.00	.2830	17
4472			CSIS	251D	Th	700 p	950 p	530	24	24	21	18		75 %	75 %	1.800	54.00	.2000	270
		CSIS 251D Sections:		1												1.800	54.00	.2000	270
4474			CSIS	276	T	700 p	950 p	531	24	32	22	23		95 %	71 %	2.300	69.00	.2000	345
		CSIS 276 Sections:		1												2.300	69.00	.2000	345
4475			CSIS	281	TBA	TBA	TBA	TBA	10		6	6		60 %		.400	60.00	.1090	550
		CSIS 281 Sections:		1												.400	60.00	.1090	550
4476			CSIS	293	TTh	930	1220 p	530	24	24	24	21		87 %	87 %	4.200	126.00	.3500	360
4477			CSIS	293	MW	200 p	450 p	530	24	24	26	24	3	100 %	100 %	4.800	144.00	.3500	411
		CSIS 293 Sections:		2												9.000	270.00	.7000	385
4480			CSIS	296	MW	100 p	350 p	531	24	32	22	19		79 %	59 %	3.800	114.00	.3500	325
		CSIS 296 Sections:		1												3.800	114.00	.3500	325
4482			CSIS	299	T	200 p	350 p	531	24	32		CANC				.000 1	0.00		
4481	4481		CSIS	299	T	830	1220 p	533	28	30	16	9	7	32 %	30 %	.548	18.00	.1330	135
3097	4481		AOJ	299				533	28	30	12	11	3	39 %	36 %	.670	22.00		
								Cluster total			**28**	**20**		71 %	66 %		40.00		300
		CSIS 299 Sections:		1												1.219	40.00	.1330	300

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4203	0257		CSIS	105	F	900	1050	538	40	46	28	19		47 %	41 %	3.166	95.00	.2830	335
4204	0259		CSIS	105	MW	1230 p	150 p	532	31	40	23	18		58 %	45 %	3.000	90.00	.2830	318
	CSIS 105 Sections:			2												6.166	185.00	.5660	326
4205	0263		CSIS	110	TTh	800	915	535B	40	50	39	38	7	95 %	76 %	7.600	228.00	.3500	651
4206			CSIS	110	MW	900	1150	532	40	40	38	33	4	82 %	82 %	6.600	198.00	.3500	565
4209	0265		CSIS	110	TTh	930	1045	535B	40	50	37	38	2	95 %	76 %	7.600	228.00	.3500	651
4212	0269		CSIS	110	TTh	1230 p	145 p	542	40	53	38	31		77 %	58 %	6.200	186.00	.3500	531
4214	0270		CSIS	110	MW	200 p	320 p	532	40	40	39	34	5	85 %	85 %	6.800	204.00	.3500	582
4216	0271		CSIS	110	MW	200 p	320 p	532	40	40		CANC				.000 1	0.00		
4219	0274		CSIS	110	TTh	400 p	520 p	532	40	40	39	37		92 %	92 %	7.400	222.00	.3500	634
4221			CSIS	110	MW	700 p	950 p	532	40	40	32	23		57 %	57 %	4.600	138.00	.3500	394
4223	0278		CSIS	110	TTh	700 p	815 p	582	40	50	23	22		55 %	44 %	4.400	132.00	.3500	377
4224			CSIS	110	TBA	TBA	TBA	WEB	45	9999	50	35	39	77 %	%	6.400	210.00	.3500	600
4225			CSIS	110	TBA	TBA	TBA	WEB	45	9999	46	38	18	84 %	%	6.948	228.00	.3500	651
	CSIS 110 Sections:			10												64.548	1974.00	3.5000	564
4227			CSIS	112	F	900	1150	533	24	30	17	15		62 %	50 %	1.500	45.00	.2000	225
4229			CSIS	112	MW	1130	1250 p	533	24	30	24	18		75 %	60 %	1.800	54.00	.2000	270
	CSIS 112 Sections:			2												3.300	99.00	.4000	247
4232			CSIS	113	Th	930	1220 p	531	24	32		CANC				.000 1	0.00		
4233			CSIS	113	TBA	TBA	TBA	WEB	30	9999	24	18	3	60 %	%	1.800	54.00	.2000	270
	CSIS 113 Sections:			1												1.800	54.00	.2000	270
4236			CSIS	114	S	900	150 p	533	28	30	21	17		60 %	56 %	2.833	85.00	.2830	300
	CSIS 114 Sections:			1												2.833	85.00	.2830	300
4239			CSIS	119	TTh	800	915	531	24	32	24	25		104 %	78 %	2.500	75.00	.2000	375
4241			CSIS	119	W	400 p	650 p	531	24	32	16	13		54 %	40 %	1.300	39.00	.2000	195
4243			CSIS	119	TTh	530 p	645 p	532	40	40		CANC				.000 1	0.00		
	CSIS 119 Sections:			2												3.800	114.00	.4000	285
4271			CSIS	132	M	900	1120	534	24		21	16		66 %		1.333	40.00	.1420	281
	CSIS 132 Sections:			1												1.333	40.00	.1420	281
4273			CSIS	134	W	900	1150	531	24	32	23	23		95 %	71 %	3.833	115.00	.2830	406
4275			CSIS	134	TBA	TBA	TBA	WEB	50	9999	51	38		76 %	%	6.333	190.00	.2830	671
	CSIS 134 Sections:			2												10.166	305.00	.5660	538

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4277			CSIS	135	MW	400 p	620 p	530	24	24	18	20		83 %	83 %	3.333	100.00	.2830	353
	CSIS 135 Sections:			1												3.333	100.00	.2830	353
4279			CSIS	136	TTh	430 p	645 p	531	24	32	17	15		62 %	46 %	2.500	75.00	.2830	265
	CSIS 136 Sections:			1												2.500	75.00	.2830	265
4280			CSIS	137	S	900	150 p	530	24	24	16	19		79 %	79 %	3.166	95.00	.2830	335
	CSIS 137 Sections:			1												3.166	95.00	.2830	335
4281			CSIS	138	TTh	330 p	550 p	530	24	24	16	14		58 %	58 %	2.333	70.00	.2830	247
	CSIS 138 Sections:			1												2.333	70.00	.2830	247
4283			CSIS	140	TTh	700 p	950 p	533	24	30	16	15		62 %	50 %	3.000	90.00	.3500	257
	CSIS 140 Sections:			1												3.000	90.00	.3500	257
4287			CSIS	142	TTh	500 p	650 p	533	24	30	17	17		70 %	56 %	1.036	34.00	.1330	255
4291			CSIS	142	TBA	TBA	TBA	WEB	28	9999	26	20		71 %	%	1.219	40.00	.1330	300
	CSIS 142 Sections:			2												2.255	74.00	.2660	278
4293			CSIS	143	TTh	500 p	650 p	533	24	30	13	13		54 %	43 %	.792	26.00	.1330	195
4297			CSIS	143	TBA	TBA	TBA	WEB	28	9999	14	12		42 %	%	.731	24.00	.1330	180
	CSIS 143 Sections:			2												1.523	50.00	.2660	187
4299			CSIS	144	M	600 p	1020 p	533	24	30		CANC				.000 1	0.00		
	CSIS 144 Sections:																		
4301			CSIS	145	M	600 p	950 p	533	24	30		CANC				.000 1	0.00		
	CSIS 145 Sections:																		
4303			CSIS	151A	T	700 p	950 p	531	24	32	21	16	1	66 %	50 %	1.600	48.00	.2000	240
	CSIS 151A Sections:			1												1.600	48.00	.2000	240
4304			CSIS	151D	M	900	1150	530	24	24	24	18		75 %	75 %	1.800	54.00	.2000	270
4305			CSIS	151D	F	1200 p	250 p	531	24	32	24	18		75 %	56 %	1.800	54.00	.2000	270
4309			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	48	39		78 %	%	3.900	117.00	.2000	585
	CSIS 151D Sections:			3												7.500	225.00	.6000	375
4312			CSIS	160	F	900	1150	531	24	32	22	24	5	100 %	75 %	2.400	72.00	.2000	360
	CSIS 160 Sections:			1												2.400	72.00	.2000	360
4316	4316	CSIS	172		TBA	TBA	TBA	WEB	50	9999	11	9		18 %	%	.548	18.00	.1330	135
3768	4316	BOT	172					WEB	50	9999	17	15		30 %	%	.914	30.00		

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									Cluster total		**28**	**24**		48 %	%		48.00		360
	CSIS 172 Sections:				1											1.462	48.00	.1330	360
4318			CSIS	173B	TBA	TBA	TBA	WEB	50	9999	21	48	1	96 %	%	2.925	96.00	.1330	721
	CSIS 173B Sections:				1											2.925	96.00	.1330	721
4319	4319	CSIS	174B	Th		600 p	950 p	530	24	24	13	11		45 %	45 %	.670	22.00	.1330	165
3649	4319	BUS	174B					530	24	24		CANC				.000 1	0.00		
									Cluster total		**13**	**11**		45 %	45 %		22.00		165
	CSIS 174B Sections:				1											.670	22.00	.1330	165
4330	4330	CSIS	190	MW		700 p	950 p	530	24	24	9	8		33 %	33 %	1.600	48.00	.3500	137
6400	4330	MM	190					530	24	24	10	5		20 %	20 %	1.000	30.00		
									Cluster total		**19**	**13**		54 %	54 %		78.00		222
	CSIS 190 Sections:				1											2.600	78.00	.3500	222
4332			CSIS	195	T	700 p	950 p	530	24	24	17	16		66 %	66 %	1.600	48.00	.1670	287
	CSIS 195 Sections:				1											1.600	48.00	.1670	287
4336			CSIS	198	TBA	TBA	TBA	TBA			77	261	16			.000 2	0.00		
	CSIS 198 Sections:																		
4338			CSIS	217	TTh	745 p	1005 p	534				1				.000 8	5.00	.2830	17
	CSIS 217 Sections:				1												5.00	.2830	17
4339			CSIS	218	TTh	515 p	935 p	534				CANC				.000 8	0.00		
	CSIS 218 Sections:																		
4340			CSIS	219	TTh	515 p	735 p	534				CANC				.000 8	0.00		
4341			CSIS	219	TTh	515 p	735 p	534				1				.000 8	5.00	.2830	17
	CSIS 219 Sections:				1												5.00	.2830	17
4342			CSIS	220	TBA	TBA	TBA	WEB	40	9999	16	14		35 %	%	1.400	42.00	.2000	210
	CSIS 220 Sections:				1											1.400	42.00	.2000	210
4344			CSIS	230	MW	600 p	830 p	534				1				.000 8	5.00	.2830	17
	CSIS 230 Sections:				1												5.00	.2830	17
4348			CSIS	251A	Th	700 p	950 p	531	24	32		CANC				.000 1	0.00		
	CSIS 251A Sections:																		
4350			CSIS	274B	Th	600 p	950 p	530	24	24	9	10		41 %	41 %	.609	20.00	.1330	150

BUSINESS AND PROFESSIONAL STUDIES
2005 Spring

Grossmont

Clusters appear under the division and subject of the head class.

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
	CSIS 274B Sections:			1												.609	20.00	.1330	150
4355			CSIS	280	W	500 p	650 p	551A	20	52	18	15		75 %	28 %	1.000	30.00	.1330	225
	CSIS 280 Sections:			1												1.000	30.00	.1330	225
4357			CSIS	281	TBA	TBA	TBA	TBA	20		9	15		75 %		1.000	150.00	.1744	860
	CSIS 281 Sections:			1												1.000	150.00	.1744	860
4363			CSIS	293	T	930	1150	531	24	32	24	19		79 %	59 %	3.800	114.00	.3500	325
4365			CSIS	293	MW	100 p	350 p	531	24	32	20	15		62 %	46 %	3.000	90.00	.3500	257
	CSIS 293 Sections:			2												6.800	204.00	.7000	291
4368			CSIS	296	M	500 p	650 p	531	24	32	24	24	9	100 %	75 %	4.800	144.00	.3500	411
	CSIS 296 Sections:			1												4.800	144.00	.3500	411
4370			CSIS	297	MW	700 p	950 p	531	24	32	13	10		41 %	31 %	2.000	60.00	.3500	171
	CSIS 297 Sections:			1												2.000	60.00	.3500	171
4375			CSIS	299	MW	330 p	520 p	532	24	40		CANC				.000 1	0.00		
4376			CSIS	299	M	230 p	435 p	534	24			CANC				.000 1	0.00		
4377			CSIS	299	T	130 p	450 p	533	28	30		CANC				.000 1	0.00		
4378			CSIS	299	MW	330 p	520 p	532	40	40		CANC				.000 1	0.00		
4372	4372	CSIS	299	W	500 p	850 p	533	28	30	6	4		14 %	13 %	.243	8.00	.1330	60	
3094	4372	AOJ	299				533	28	30	15	12		42 %	40 %	.731	24.00			
								Cluster total			**21**	**16**		57 %	53 %		32.00		240
4373	4373	CSIS	299	W	500 p	850 p	533	28	30	4	10		35 %	33 %	.609	20.00	.1330	150	
3095	4373	AOJ	299				533	28	30	11	6		21 %	20 %	.365	12.00			
								Cluster total			**15**	**16**		57 %	53 %		32.00		240
	CSIS 299 Sections:			2												1.950	64.00	.2660	240

BUSINESS AND PROFESSIONAL STUDIES

Grossmont

2005 Fall

Clusters appear under the division and subject of the head class.

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4360	0252		CSIS	105	F	900	1150	532	40	40	30	25		62 %	62 %	4.166	125.00	.2830	441
4361	0253		CSIS	105	MW	1230 p	150 p	532	37	40	21	17		45 %	42 %	2.833	85.00	.2830	300
		CSIS 105 Sections:		2												7.000	210.00	.5660	371
4368	0260		CSIS	110	TTh	800	915	535B	40	50	39	40	13	100 %	80 %	8.000	240.00	.3500	685
4374	0264		CSIS	110	MW	930	1050	532	40	40	44	36	2	90 %	90 %	7.200	216.00	.3500	617
4375	0265		CSIS	110	TTh	930	1045	535B	40	50	38	37	3	92 %	74 %	7.400	222.00	.3500	634
4378	0268		CSIS	110	MW	1230 p	145 p	CTC2	40		41	39		97 %		7.800	234.00	.3500	668
4382	0270		CSIS	110	TTh	1230 p	145 p	535B	40	50	38	36	1	90 %	72 %	7.200	216.00	.3500	617
4383	0271		CSIS	110	MW	400 p	520 p	532	40	40	19	16		40 %	40 %	3.200	96.00	.3500	274
4386			CSIS	110	MW	700 p	950 p	532	40	40	25	25		62 %	62 %	5.000	150.00	.3500	428
4387	0275		CSIS	110	TTh	700 p	815 p	551A	40	52	33	30		75 %	57 %	6.000	180.00	.3500	514
4388			CSIS	110	TBA	TBA	TBA	WEB	45	9999	43	34	20	75 %	%	3.108	102.00	.3500	291
4389			CSIS	110	TBA	TBA	TBA	WEB	45	9999	47	42	33	93 %	%	3.840	126.00	.3500	360
		CSIS 110 Sections:		10												58.748	1782.00	3.5000	509
4391			CSIS	112	F	900	1150	533	24	30	21	17		70 %	56 %	1.700	51.00	.2000	255
4392			CSIS	112	MW	1230 p	145 p	533	24	30	24	21	2	87 %	70 %	2.100	63.00	.2000	315
		CSIS 112 Sections:		2												3.800	114.00	.4000	285
4395			CSIS	113	W	700 p	950 p	531	24	32	14	13		54 %	40 %	1.300	39.00	.2000	195
4397			CSIS	113	TBA	TBA	TBA	WEB	30	9999	22	16		53 %	%	1.600	48.00	.2000	240
		CSIS 113 Sections:		2												2.900	87.00	.4000	217
4398			CSIS	114	S	900	150 p	533	24	30	14	13		54 %	43 %	2.166	65.00	.2830	229
		CSIS 114 Sections:		1												2.166	65.00	.2830	229
4399			CSIS	115A	M	700 p	850 p	531	24	32	23	20		83 %	62 %	4.000	120.00	.3500	342
		CSIS 115A Sections:		1												4.000	120.00	.3500	342
4400			CSIS	116A	Th	1230 p	320 p	533	24	30		CANC				.000 1	0.00		
		CSIS 116A Sections:																	
4402			CSIS	119	TTh	800	915	531	24	32	22	21	2	87 %	65 %	2.100	63.00	.2000	315
4404			CSIS	119	TTh	530 p	645 p	531	24	32	24	18		75 %	56 %	1.800	54.00	.2000	270
		CSIS 119 Sections:		2												3.900	117.00	.4000	292
4410			CSIS	134	T	900	1150	530	24	24		CANC				.000 1	0.00		
4411			CSIS	134	TBA	TBA	TBA	WEB	50	9999	43	43		86 %	%	7.166	215.00	.2830	759

BUSINESS AND PROFESSIONAL STUDIES
2005 Fall

Grossmont

Clusters appear under the division and subject of the head class.

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
		CSIS 134 Sections:		1												7.166	215.00	.2830	759
4413			CSIS	135	MW	400 p	620 p	530	24	24	22	18		75 %	75 %	3.000	90.00	.2830	318
		CSIS 135 Sections:		1												3.000	90.00	.2830	318
4414			CSIS	136	TTh	430 p	650 p	530	24	24		CANC				.000 1	0.00		
		CSIS 136 Sections:																	
4415			CSIS	137	S	900	150 p	530	24	24	14	16		66 %	66 %	2.666	80.00	.2830	282
		CSIS 137 Sections:		1												2.666	80.00	.2830	282
4418			CSIS	141	TTh	700 p	850 p	533	28	30	13	10		35 %	33 %	1.333	40.00	.2170	184
		CSIS 141 Sections:		1												1.333	40.00	.2170	184
4419			CSIS	142	TTh	500 p	650 p	533	28	30	19	20		71 %	66 %	1.219	40.00	.1330	300
4421			CSIS	142	TBA	TBA	TBA	WEB	28	9999	25	19		67 %	%	1.158	38.00	.1330	285
		CSIS 142 Sections:		2												2.377	78.00	.2660	293
4422			CSIS	143	TTh	500 p	700 p	533	28	30	8	14		50 %	46 %	.853	28.00	.1330	210
4423			CSIS	143	TBA	TBA	TBA	WEB	28	9999	21	21	4	75 %	%	1.280	42.00	.1300	323
		CSIS 143 Sections:		2												2.133	70.00	.2630	266
4424			CSIS	144	MW	500 p	650 p	533	28	30		CANC				.000 1	0.00		
		CSIS 144 Sections:																	
4425			CSIS	145	MW	455 p	655 p	533	28	30		CANC				.000 1	0.00		
		CSIS 145 Sections:																	
4426			CSIS	146	MW	930	1150	533	28	30		CANC				.000 1	0.00		
		CSIS 146 Sections:																	
4427			CSIS	151A	Th	700 p	950 p	530	24	24	23	19		79 %	79 %	1.900	57.00	.2000	285
		CSIS 151A Sections:		1												1.900	57.00	.2000	285
4428			CSIS	151D	M	900	1150	530	24	24	18	17		70 %	70 %	1.700	51.00	.2000	255
4430			CSIS	151D	T	1230 p	320 p	530	24	24	21	20		83 %	83 %	2.000	60.00	.2000	300
4431			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	40	38		76 %	%	3.800	114.00	.2000	570
		CSIS 151D Sections:		3												7.500	225.00	.6000	375
4434			CSIS	160	F	900	1150	530	24	24	24	24	3	100 %	100 %	2.400	72.00	.2000	360
		CSIS 160 Sections:		1												2.400	72.00	.2000	360
4435			CSIS	165	M	500 p	650 p	531	24	32	23	21		87 %	65 %	4.200	126.00	.3500	360

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2005 Fall

Grossmont

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
		CSIS 165 Sections:		1												4.200	126.00	.3500	360
4437	4437	CSIS	172	TBA	TBA	TBA		WEB	50	9999	6	7		14 %	%	.426	14.00	.1330	105
3786	4437	BOT	172					WEB	50	9999	16	14		28 %	%	.426	14.00		
							Cluster total				**22**	**21**		42 %	%		28.00		210
		CSIS 172 Sections:		1												.853	28.00	.1330	210
4438		CSIS	173B	TBA	TBA	TBA		WEB	50	9999		CANC				.000 1	0.00		
		CSIS 173B Sections:																	
4443		CSIS	174B	TBA	TBA	TBA		WEB	50	9999	19	44		88 %	%	2.681	88.00	.1330	661
		CSIS 174B Sections:		1												2.681	88.00	.1330	661
4447		CSIS	175B	TBA	TBA	TBA		WEB	50	9999	15	46		92 %	%	2.803	92.00	.1330	691
		CSIS 175B Sections:		1												2.803	92.00	.1330	691
4462	4462	CSIS	190	MW	700 p	950 p		530	24	24	11	10		41 %	41 %	2.000	60.00	.3500	171
6200	4462	MM	190					530	24	24	8	7		29 %	29 %	1.400	42.00		
							Cluster total				**19**	**17**		70 %	70 %		102.00		291
		CSIS 190 Sections:		1												3.400	102.00	.3500	291
4463		CSIS	195	M	100 p	350 p		530	24	24	15	14		58 %	58 %	1.400	42.00	.1670	251
		CSIS 195 Sections:		1												1.400	42.00	.1670	251
4465		CSIS	198	TBA	TBA	TBA		TBA				CANC				.000 2	0.00		
		CSIS 198 Sections:		1															
4467		CSIS	217	TTh	515 p	725 p		534			1	10				.000 8	50.00	.2830	176
		CSIS 217 Sections:		1													50.00	.2830	176
4468		CSIS	218	TTh	745 p	955 p		534			1	8				.000 8	40.00	.2830	141
		CSIS 218 Sections:		1													40.00	.2830	141
4469		CSIS	230	MW	600 p	820 p		534				2				.000 8	10.00	.2830	35
		CSIS 230 Sections:		1													10.00	.2830	35
4472		CSIS	251D	T	700 p	950 p		530	24	24	16	16		66 %	66 %	1.600	48.00	.2000	240
		CSIS 251D Sections:		1												1.600	48.00	.2000	240
4474		CSIS	276	T	700 p	950 p		531	24	32	11	14		58 %	43 %	1.400	42.00	.2000	210
		CSIS 276 Sections:		1												1.400	42.00	.2000	210
4475		CSIS	281	TBA	TBA	TBA		TBA	10		4	4		40 %		.266	40.00	.0218	1834

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2005 Fall

Grossmont

Clusters appear under the division and subject of the head class.

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
	CSIS 281 Sections:				1											.266	40.00	.0218	1834
4476			CSIS	293	TTh	930	1220 p	531	24	32	14	14		58 %	43 %	2.800	84.00	.3500	240
4477			CSIS	293	W	100 p	420 p	531	24	32	22	20		83 %	62 %	4.000	120.00	.3500	342
	CSIS 293 Sections:				2											6.800	204.00	.7000	291
4480			CSIS	296	M	300 p	450 p	531	24	32	24	19		79 %	59 %	3.800	114.00	.3500	325
	CSIS 296 Sections:				1											3.800	114.00	.3500	325
4482			CSIS	299	TTh	930	1130	533	28	30	8	13		46 %	43 %	.792	26.00	.1330	195
4484			CSIS	299	TTh	930	1120	533	28	30		CANC				.000 1	0.00		
4481	4481		CSIS	299	W	700 p	950 p	533	28	30	13	5		17 %	16 %	.500	15.00	.2000	75
3097	4481		AOJ	299				533	28	30	14	15		53 %	50 %	1.500	45.00		
								Cluster total			**27**	**20**		71 %	66 %		60.00		300
	CSIS 299 Sections:				2											2.792	86.00	.3330	258

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2006 Fall

Grossmont

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4360	0252		CSIS	105	F	900	1150	532	40	40	31	22		55 %	55 %	3.666	110.00	.2830	388
4361	0253		CSIS	105	MW	1230 p	150 p	532	40	40	23	24		60 %	60 %	4.000	120.00	.2830	424
		CSIS 105 Sections:		2												7.666	230.00	.5660	406
4368	0260		CSIS	110	TTh	800	915	535B	40	50	39	37	3	92 %	74 %	7.400	222.00	.3500	634
4374			CSIS	110	MW	930	1220 p	532	40	40	41	38	1	95 %	95 %	7.600	228.00	.3500	651
4375	0265		CSIS	110	TTh	930	1045	535B	40	50	40	35	2	87 %	70 %	7.000	210.00	.3500	600
4378			CSIS	110	MW	1230 p	320 p	534	28		27	23	4	82 %		4.600	138.00	.3500	394
4382			CSIS	110	TTh	1230 p	320 p	532	40	40	38	41	6	102 %	102 %	8.200	246.00	.3500	702
4383	0271		CSIS	110	MW	400 p	520 p	532	40	40	41	32		80 %	80 %	6.400	192.00	.3500	548
4385	0275		CSIS	110	TTh	700 p	815 p	551A	40	52	20	17		42 %	32 %	3.400	102.00	.3500	291
4386			CSIS	110	M	700 p	1000 p	532	40	40	39	36	11	90 %	90 %	5.348	175.50	.3500	501
4387			CSIS	110	TBA	TBA	TBA	WEB	45	9999	45	34	6	75 %	%	6.800	204.00	.3500	582
4388			CSIS	110	TBA	TBA	TBA	WEB	45	9999	43	23	9	51 %	%	2.102	69.00	.3500	197
4389			CSIS	110	TBA	TBA	TBA	WEB	45	9999	46	45		100 %	%	4.114	135.00	.3500	385
		CSIS 110 Sections:		11												62.965	1921.50	3.8500	499
4391			CSIS	112	TTh	930	1045	533	24	30	22	23	2	95 %	76 %	2.300	69.00	.2000	345
4392			CSIS	112	M	1230 p	320 p	533	24	30	24	22	3	91 %	73 %	2.200	66.00	.2000	330
		CSIS 112 Sections:		2												4.500	135.00	.4000	337
4397			CSIS	113	TBA	TBA	TBA	WEB	30	9999	23	15		50 %	%	1.500	45.00	.2000	225
		CSIS 113 Sections:		1												1.500	45.00	.2000	225
4398			CSIS	114	S	900	150 p	533	24	30	15	14		58 %	46 %	2.333	70.00	.2830	247
		CSIS 114 Sections:		1												2.333	70.00	.2830	247
4399			CSIS	115A	W	700 p	930 p	531	24	32	19	18		75 %	56 %	3.600	108.00	.3500	308
		CSIS 115A Sections:		1												3.600	108.00	.3500	308
4400			CSIS	115B	Th	700 p	850 p	531	24	32		CANC				.000 1	0.00		
		CSIS 115B Sections:																	
4402			CSIS	119	TTh	800	915	531	24	32	24	25		104 %	78 %	2.500	75.00	.2000	375
4404			CSIS	119	TBA	TBA	TBA	WEB	30	9999	29	22		73 %	%	2.200	66.00	.2000	330
		CSIS 119 Sections:		2												4.700	141.00	.4000	352
4409			CSIS	134	W	900	1150	530	24	24	22	23		95 %	95 %	3.833	115.00	.2830	406
4411			CSIS	134	TBA	TBA	TBA	WEB	30	9999	29	25	1	83 %	%	4.166	125.00	.2830	441

BUSINESS AND PROFESSIONAL STUDIES
2006 Fall

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Clusters appear under the division and subject of the head class.

Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
	CSIS 134 Sections:				2											8.000	240.00	.5660	424
4413			CSIS	135	MW	400 p	620 p	530	24	24	8	12		50 %	50 %	2.000	60.00	.2830	212
	CSIS 135 Sections:				1											2.000	60.00	.2830	212
4414			CSIS	136	T	430 p	650 p	530	24	24	10	11		45 %	45 %	1.833	55.00	.2830	194
	CSIS 136 Sections:				1											1.833	55.00	.2830	194
4415			CSIS	137	S	900	150 p	530	24	24	14	20		83 %	83 %	3.333	100.00	.2830	353
	CSIS 137 Sections:				1											3.333	100.00	.2830	353
4418			CSIS	141	TTh	700 p	850 p	533	28	30	9	9		32 %	30 %	1.200	36.00	.2170	165
	CSIS 141 Sections:				1											1.200	36.00	.2170	165
4421			CSIS	142	TBA	TBA	TBA	WEB	30	9999	24	16		53 %	%	.975	32.00	.1330	240
	CSIS 142 Sections:				1											.975	32.00	.1330	240
4422			CSIS	143	T	530 p	650 p	533	28	30		CANC				.000	1 0.00		
4423			CSIS	143	TBA	TBA	TBA	WEB	30	9999	14	19		63 %	%	1.158	38.00	.1330	285
	CSIS 143 Sections:				1											1.158	38.00	.1330	285
4424			CSIS	144	TBA	TBA	TBA	WEB	30	9999		CANC				.000	1 0.00		
	CSIS 144 Sections:																		
4425			CSIS	145	TBA	TBA	TBA	WEB	30	9999	11	12		40 %	%	.731	24.00	.1330	180
	CSIS 145 Sections:				1											.731	24.00	.1330	180
4426			CSIS	146	Th	500 p	650 p	533	28	30	10	10		35 %	33 %	1.666	50.00	.2830	176
	CSIS 146 Sections:				1											1.666	50.00	.2830	176
4427			CSIS	151A	T	700 p	950 p	530	24	24	20	20		83 %	83 %	2.000	60.00	.2000	300
	CSIS 151A Sections:				1											2.000	60.00	.2000	300
4428			CSIS	151D	M	900	1150	530	24	24	16	21		87 %	87 %	2.100	63.00	.2000	315
4430			CSIS	151D	T	1230 p	320 p	530	24	24	18	15		62 %	62 %	1.500	45.00	.2000	225
4431			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	22	20		40 %	%	2.000	60.00	.2000	300
	CSIS 151D Sections:				3											5.600	168.00	.6000	280
4434			CSIS	160	F	900	1150	530	24	24	24	24	4	100 %	100 %	2.400	72.00	.2000	360
	CSIS 160 Sections:				1											2.400	72.00	.2000	360
4435			CSIS	165	M	500 p	650 p	531	24	32	24	20	1	83 %	62 %	4.000	120.00	.3500	342
	CSIS 165 Sections:				1											4.000	120.00	.3500	342

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4437	4437		CSIS	172	TBA	TBA	TBA	WEB	50	9999	2	2		4 %	%	.121	4.00	.1330	30
3786	4437		BOT	172				WEB	50	9999	12	10		20 %	%	.304	10.00		
								Cluster total			**14**	**12**		24 %	%		14.00		105
	CSIS 172 Sections:			1												.426	14.00	.1330	105
4439			CSIS	173B	TBA	TBA	TBA	WEB	50	9999		CANC				.000 1	0.00		
	CSIS 173B Sections:																		
4443			CSIS	174B	TBA	TBA	TBA	WEB	50	9999	5	10		20 %	%	.609	20.00	.1330	150
	CSIS 174B Sections:			1												.609	20.00	.1330	150
4447			CSIS	175B	TBA	TBA	TBA	WEB	50	9999	10	12		24 %	%	.731	24.00	.1330	180
	CSIS 175B Sections:			1												.731	24.00	.1330	180
4460			CSIS	180	M	700 p	920 p	531	24	32		CANC				.000 1	0.00		
	CSIS 180 Sections:																		
4462	4462		CSIS	190	MW	700 p	950 p	530	24	24	4	7		29 %	29 %	1.400	42.00	.3500	120
6200	4462		MM	190				530	24	24	5	4		16 %	16 %	.800	24.00		
								Cluster total			**9**	**11**		45 %	45 %		66.00		188
	CSIS 190 Sections:			1												2.200	66.00	.3500	188
4463			CSIS	195A	MW	100 p	255 p	530	24	24		CANC				.000 1	0.00		
	CSIS 195A Sections:																		
4467			CSIS	217	TTh	745 p	955 p	534				2				.000 8	10.00	.2830	35
	CSIS 217 Sections:			1													10.00	.2830	35
4468			CSIS	218	TTh	515 p	725 p	534				0				.000 8	0.00	.2830	
	CSIS 218 Sections:			1														.2830	
4469			CSIS	220	T	600 p	800 p	531	24	32		CANC				.000 1	0.00		
	CSIS 220 Sections:																		
4472			CSIS	251D	Th	700 p	950 p	530	24	24	8	9		37 %	37 %	.900	27.00	.2000	135
	CSIS 251D Sections:			1												.900	27.00	.2000	135
4474			CSIS	276	M	700 p	920 p	531	24	32	12	17		70 %	53 %	1.554	51.00	.2000	255
	CSIS 276 Sections:			1												1.554	51.00	.2000	255
4475			CSIS	281	TBA	TBA	TBA	TBA	10		3	3		30 %		.200	30.00	.1090	275
	CSIS 281 Sections:			1												.200	30.00	.1090	275

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4476			CSIS	293	TTh	930	1220 p	531	24	32	22	19		79 %	59 %	3.800	114.00	.3500	325
4477			CSIS	293	TBA	TBA	TBA	WEB	24	9999	22	18	2	75 %	%	3.600	108.00	.3500	308
	CSIS 293 Sections:			2												7.400	222.00	.7000	317
4480			CSIS	296	TBA	TBA	TBA	WEB	25	9999	24	16	1	64 %	%	3.200	96.00	.3500	274
	CSIS 296 Sections:			1												3.200	96.00	.3500	274
4483			CSIS	299	M	600 p	850 p	533	28	30		CANC				.000 1	0.00		
4484			CSIS	299	T	900	1150	530	24	24		CANC				.000 1	0.00		
4485			CSIS	299	Th	200 p	350 p	533	28	30		CANC				.000 1	0.00		
4487			CSIS	299	MW	600 p	820 p	534				0				.000 8	0.00	.2830	
4481	4481		CSIS	299	W	700 p	950 p	533	28	30	9	8		28 %	26 %	.800	24.00	.2000	120
3097	4481	AOJ		299				533	28	30	12	11		39 %	36 %	1.100	33.00		
								Cluster total			**21**	**19**		67 %	63 %		57.00		285
4486	4486		CSIS	299	T	200 p	450 p	533	28	30	1	3		10 %	10 %	.137	4.50	.1000	45
3098	4486	AOJ		299				533	28	30	2	4		14 %	13 %	.182	6.00		
								Cluster total			**3**	**7**		25 %	23 %		10.50		105
	CSIS 299 Sections:			3												2.220	67.50	.5830	115

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Section	Tied Section	Cluster Head	Subj	Nbr	Days	Start	End	Room	Section Max	Room Max	Begin Enroll	Census Enroll	PWL Enroll	Census Enroll % Sect Max	Census Enroll % Room Max	Estimated FTES	WSCH	Efficiency FTEF	Efficiency WSCH / FTEF
4203	0257		CSIS	105	F	900	1050	538	40	46	16	19		47 %	41 %	3.166	95.00	.2830	335
4204	0259		CSIS	105	MW	1230 p	150 p	532	31	40	26	28		90 %	70 %	4.666	140.00	.2830	494
	CSIS 105 Sections:			2												7.833	235.00	.5660	415
4205	0263		CSIS	110	TTh	800	915	535B	40	50	37	38	7	95 %	76 %	7.600	228.00	.3500	651
4206			CSIS	110	MW	900	1150	532	40	40	37	30	1	75 %	75 %	6.000	180.00	.3500	514
4209	0265		CSIS	110	TTh	930	1045	535B	40	50	37	38	5	95 %	76 %	7.600	228.00	.3500	651
4212	0269		CSIS	110	TTh	1230 p	145 p	542	40	53	40	38	5	95 %	71 %	7.600	228.00	.3500	651
4214	0270		CSIS	110	MW	200 p	320 p	532	40	40	39	37	7	92 %	92 %	7.400	222.00	.3500	634
4219	0274		CSIS	110	TTh	400 p	520 p	532	40	40	39	34		85 %	85 %	6.800	204.00	.3500	582
4221			CSIS	110	MW	700 p	950 p	532	40	40	34	28		70 %	70 %	5.600	168.00	.3500	480
4223			CSIS	110	TBA	TBA	TBA	WEB	45	9999	49	37	9	82 %	%	7.400	222.00	.3500	634
4224			CSIS	110	TBA	TBA	TBA	WEB	45	9999	37	22	17	48 %	%	4.022	132.00	.3500	377
4225			CSIS	110	TBA	TBA	TBA	WEB	45	9999	45	44		97 %	%	8.045	264.00	.3500	754
	CSIS 110 Sections:			10												68.068	2076.00	3.5000	593
4227			CSIS	112	F	900	1150	533	24	30	24	21		87 %	70 %	2.100	63.00	.2000	315
4229			CSIS	112	MW	1130	1250 p	533	24	30	21	19	2	79 %	63 %	1.900	57.00	.2000	285
	CSIS 112 Sections:			2												4.000	120.00	.4000	300
4233			CSIS	113	TBA	TBA	TBA	WEB	30	9999	28	21	1	70 %	%	2.100	63.00	.2000	315
	CSIS 113 Sections:			1												2.100	63.00	.2000	315
4236			CSIS	114	S	900	150 p	533	28	30	10	10		35 %	33 %	1.666	50.00	.2830	176
	CSIS 114 Sections:			1												1.666	50.00	.2830	176
4237			CSIS	115C	TBA	TBA	TBA	WEB	45	9999	19	12		26 %	%	2.400	72.00	.3500	205
	CSIS 115C Sections:			1												2.400	72.00	.3500	205
4239			CSIS	119	TTh	800	915	531	24	32	23	24	2	100 %	75 %	2.400	72.00	.2000	360
4241			CSIS	119	W	400 p	650 p	531	24	32	21	18		75 %	56 %	1.800	54.00	.2000	270
	CSIS 119 Sections:			2												4.200	126.00	.4000	315
4271			CSIS	132	M	900	1120	534	24		16	15		62 %		1.250	37.50	.1420	264
	CSIS 132 Sections:			1												1.250	37.50	.1420	264
4273			CSIS	134	MW	900	1120	531	24	32		CANC				.000 1	0.00		
4275			CSIS	134	TBA	TBA	TBA	WEB	50	9999	39	30		60 %	%	5.000	150.00	.2830	530
	CSIS 134 Sections:			1												5.000	150.00	.2830	530

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4277			CSIS	135	MW	400 p	620 p	530	24	24	12	11		45 %	45 %	1.833	55.00	.2830	194
		CSIS 135 Sections:		1												1.833	55.00	.2830	194
4279			CSIS	136	TTh	430 p	645 p	531	24	32		CANC				.000 1	0.00		
		CSIS 136 Sections:																	
4280			CSIS	137	S	900	150 p	530	24	24	12	13		54 %	54 %	2.166	65.00	.2830	229
		CSIS 137 Sections:		1												2.166	65.00	.2830	229
4281			CSIS	138	TTh	200 p	420 p	530	24	24	14	12		50 %	50 %	2.000	60.00	.2830	212
		CSIS 138 Sections:		1												2.000	60.00	.2830	212
4283			CSIS	140	TTh	700 p	950 p	533	24	30	14	13		54 %	43 %	2.600	78.00	.3500	222
		CSIS 140 Sections:		1												2.600	78.00	.3500	222
4287			CSIS	142	TBA	TBA	TBA	WEB	50	9999	42	29		58 %	%	1.767	58.00	.1330	436
4291			CSIS	142	TTh	500 p	650 p	533	28	30	2	5		17 %	16 %	.304	10.00	.1330	75
		CSIS 142 Sections:		2												2.072	68.00	.2660	255
4293			CSIS	143	TBA	TBA	TBA	WEB	50	9999	23	26		52 %	%	1.584	52.00	.1330	390
4297			CSIS	143	TBA	TBA	TBA	WEB	50	9999		CANC				.000 1	0.00		
		CSIS 143 Sections:		1												1.584	52.00	.1330	390
4299			CSIS	144	TBA	TBA	TBA	WEB	50	9999	19	19		38 %	%	1.158	38.00	.1330	285
		CSIS 144 Sections:		1												1.158	38.00	.1330	285
4301			CSIS	145	TBA	TBA	TBA	WEB	50	9999	14	22		44 %	%	1.341	44.00	.1330	330
		CSIS 145 Sections:		1												1.341	44.00	.1330	330
4303			CSIS	151A	T	700 p	950 p	531	24	32	23	24		100 %	75 %	2.400	72.00	.2000	360
		CSIS 151A Sections:		1												2.400	72.00	.2000	360
4304			CSIS	151D	M	900	1150	530	24	24	20	15		62 %	62 %	1.500	45.00	.2000	225
4305			CSIS	151D	F	1200 p	250 p	531	24	32	15	14		58 %	43 %	1.400	42.00	.2000	210
4309			CSIS	151D	TBA	TBA	TBA	WEB	50	9999	40	42		84 %	%	4.200	126.00	.2000	630
		CSIS 151D Sections:		3												7.100	213.00	.6000	355
4312			CSIS	160	F	900	1150	530	24	24	22	26	7	108 %	108 %	2.600	78.00	.2000	390
		CSIS 160 Sections:		1												2.600	78.00	.2000	390
4316	4316	CSIS	CSIS	172	TBA	TBA	TBA	WEB	50	9999	11	7		14 %	%	.426	14.00	.1330	105
3768	4316	BOT	BOT	172				WEB	50	9999	25	22		44 %	%	1.341	44.00		

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								Cluster total			**36**	**29**		58 %	%		58.00		436
		CSIS 172 Sections:			1											1.767	58.00	.1330	436
4318			CSIS	173B	TBA	TBA	TBA	WEB	50	9999	30	39		78 %	%	2.377	78.00	.1330	586
		CSIS 173B Sections:			1											2.377	78.00	.1330	586
4319	4319		CSIS	174B	Th	700 p	920 p	530	24	24		CANC				.000 1	0.00		
3648	4319		BUS	174B				530	24	24		CANC				.000 1	0.00		
								Cluster total						%	%				
		CSIS 174B Sections:																	
4330	4330		CSIS	190	MW	700 p	950 p	530	24	24	6	8		33 %	33 %	1.600	48.00	.3500	137
6400	4330		MM	190				530	24	24	8	4		16 %	16 %	.800	24.00		
								Cluster total			**14**	**12**		50 %	50 %		72.00		205
		CSIS 190 Sections:			1											2.400	72.00	.3500	205
4332			CSIS	195	T	700 p	950 p	530	24	24	10	10		41 %	41 %	1.000	30.00	.1780	168
		CSIS 195 Sections:			1											1.000	30.00	.1780	168
4338			CSIS	217	TTh	515 p	735 p	534			1	2				.000 8	10.00	.2830	35
		CSIS 217 Sections:			1												10.00	.2830	35
4341			CSIS	219	TTh	745 p	1005 p	534			1	4				.000 8	20.00	.2830	70
		CSIS 219 Sections:			1												20.00	.2830	70
4342			CSIS	220	TTh	200 p	315 p	533	29	30		CANC				.000 1	0.00		
		CSIS 220 Sections:																	
4344			CSIS	230	MW	600 p	830 p	534				0				.000 8	0.00	.2830	
		CSIS 230 Sections:			1													.2830	
4350			CSIS	274B	Th	700 p	920 p	530	24	24		CANC				.000 1	0.00		
		CSIS 274B Sections:																	
4355			CSIS	280	W	700 p	850 p	535B	20	50	13	8		40 %	16 %	.533	16.00	.1330	120
		CSIS 280 Sections:			1											.533	16.00	.1330	120
4357			CSIS	281	TBA	TBA	TBA	TBA	20		9	6		30 %		.400	60.00	.2180	275
		CSIS 281 Sections:			1											.400	60.00	.2180	275
4363			CSIS	293	TTh	930	1220 p	531	24	32	23	24		100 %	75 %	4.800	144.00	.3500	411
4365			CSIS	293	Th	630 p	820 p	532	24	40	23	22	5	91 %	55 %	4.400	132.00	.3500	377

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	CSIS 293 Sections:				2											9.200	276.00	.7000	394
4368			CSIS	296	M	500 p	650 p	531	24	32	22	21	5	87 %	65 %	4.200	126.00	.3500	360
	CSIS 296 Sections:				1											4.200	126.00	.3500	360
4370			CSIS	297	MW	700 p	950 p	531	24	32	10	11		45 %	34 %	2.200	66.00	.3500	188
	CSIS 297 Sections:				1											2.200	66.00	.3500	188
4372		4372	CSIS	299	W	600 p	850 p	533	28	30	5	5		17 %	16 %	.500	15.00	.2000	75
3094		4372	AOJ	299				533	28	30	4	4		14 %	13 %	.400	12.00		
								Cluster total			**9**	**9**		32 %	30 %		27.00		135
	CSIS 299 Sections:				1											.900	27.00	.2000	135

APPENDIX 13

Fiscal Year FTES Analysis by Program Report

GCCCD
06/07 Grossmont College Program Review
Program Data Elements

Computer Science Info Systems (0701.00)

Course #

CSIS 105	CSIS 143	CSIS 190
CSIS 110	CSIS 144	CSIS 195
CSIS 112	CSIS 145	CSIS 196
CSIS 113	CSIS 151A	CSIS 199
CSIS 114	CSIS 151D	CSIS 220
CSIS 115	CSIS 155	CSIS 250
CSIS 115A	CSIS 160	CSIS 251A
CSIS 115C	CSIS 165	CSIS 251D
CSIS 119	CSIS 172	CSIS 270
CSIS 132	CSIS 173B	CSIS 274B
CSIS 134	CSIS 174B	CSIS 275B
CSIS 135	CSIS 175A	CSIS 276
CSIS 136	CSIS 175B	CSIS 280
CSIS 137	CSIS 177A	CSIS 293
CSIS 138	CSIS 177C	CSIS 294
CSIS 140	CSIS 185A	CSIS 296
CSIS 141	CSIS 186A	CSIS 297
CSIS 142	CSIS 186B	CSIS 299

	01/02	02/03	03/04	04/05	05/0
FTES					
Summer	1,132	1,052	1,201	902	697
Fall	7,536	7,175	6,523	4,984	4,354
Spring	7,653	6,471	5,263	4,611	4,49
Total WSCH	16,320	14,697	12,987	10,497	9,54
Total FTES	544.01	489.91	432.90	349.89	318.08
Top 070100 CSIS - Unrestricted	$997,123	$1,048,571	$841,056	$773,573	$1,147,63
Costs per FTES	$1,832.91	$2,140.33	$1,942.84	$2,210.90	$3,607.99
070100 CSIS - Restricted	$485,886	$382,305	$368,238	$214,255	$36,601

GCCCD
06/07 Grossmont College Program Review
Program Data Elements

Multimedia (0699.00)

	01/02	02/03	03/04	04/05	05/06
Course #					
MM 192					
MM 299					
FTES					
Summer	0	0	0	0	0
Fall	51	0	0	0	0
Spring	54	102	72	48	0
Total WSCH	105	102	72	48	0
Total FTES	3.50	3.40	2.40	1.60	0.00
Top 069900 Multimedia - Unrestricted	$9,113	$1,479	$1,886	$5,195	$340
Costs per FTES	$2,603.71	$435.00	$785.83	$3,246.88	N/A
069900 Multimedia - Restricted	$0	$0	$0	$0	$0

APPENDIX 14

Fiscal Data: Outcomes Profile

APPENDIX 14

14. Fiscal Data: Outcomes Profile

1. Semester/Year	Fall 2001	Spring 2002	Fall 2002	Spring 2003	Fall 2003	Spring 2004	Fall 2004	Spring 2005	Fall 2005	Spring 2006
2 Enrollment	1907	2002	1823	1769	1693	1332	1188	1080	1064	1056
3. Earned WSCH/FTEF	428	410	392	381	419	392	414	384	377	395
4. Total FTES	544.01		489.91		432.9		349.89		318.08	
5. Cost/FTES	$1,832.91		$2,140.33		$1,942.84		$2,210.90		$3,607.99	
6. Total Cost/Fiscal Year	$997,121.37		$1,048,569.07		$841,055.44		$773,571.80		$1,147,629.46	
7. Total Revenue	$1,904,035.00		$1,714,685.00		$1,515,150.00		$1,224,615.00		$1,113,280.00	
8. Other Revenue	$485,886.00		$382,305.00		$368,238.00		$214,225.00		$36,601.00	

APPENDIX 14

14. Fiscal Data: Outcomes Profile

1. Semester/Year	Fall 20	Spring 20	Fall 20	Spring 20	Fall 20	Spring 20	Fall 20	Spring 20	Fall 20	Spring 20
2. Enrollment										
3. Earned WSCH/FTEF										
4. Total FTES										
5. Cost/FTES										
6. Total Cost/Fiscal Year										
7. Total Revenue										
8. Other Revenue										

COST – Cost will vary from one department/program to another for many reasons, e.g., department size. Further variation can be caused by (1) the specific step and class standing of the individual faculty members in a department/program, (2) the lack of costs associated with a chair or coordinator (i.e., another department is carrying this charge), and (3) the costs charged to the department/program for fulfilling a college or district function (e.g., miscellaneous reassigned time).

EARNED WSCH/FTEF – These numbers are taken from the Earned WSCH/FTE column in Appendix 12, Subject WSCH Analysis Report. They reflect a department/program's revenue per faculty costs. ("Earned" WSCH is actual student enrollment as compared to "Max" WSCH which is determined purely by classroom size.)

COST/FTES – These figures were taken from Appendix 13, Fiscal Year FTES Analysis by Program/TOPS Report. They will most often inversely reflect the WSCH PER FTEF ratio (i.e., a department/program with a low COST PER FTES will have a high WSCH PER FTEF). If this is not the case, then the figures indicate that an above average percentage of the direct COST of the department/program is attributed to non-faculty costs.

TOTAL REVENUE – General fund money that the department/program earns from the state for each Full Time Equivalent Student (FTES). For example, in FY01-02, that amount was $3,500. Other revenue is non-general fund money such as fees, grants, donations, ROP, non-resident student tuition.

Computer Science Information Systems Department Program Review

Questions and Responses

Dear **Computer Science Information Systems** department:
The Program Review Committee has read your self-study and has generated a list of questions and comments. Please share these with your department and prepare a written response. Please include the question with each response. We will need an electronic written response for distribution to committee members one week prior to meeting with the Committee on **September 5th at 2:00 pm**. The meeting will be held in the **College Conference Room.** Any members of your faculty and staff are welcome and encouraged to attend and answer questions.

Pg	Q	C/R	
3	1.1		You say you have sufficient facilities here, but on page 5 you say you need more lab facilities. Which is it? Please explain. The page 5 reference is addressing a need for facilities that would arise should a general education computer literacy course be added. At the time that this document was developed, the Web Development program (while being developed by CSIS faculty) was not approved by Curriculum. As such (and at that time) facilities were sufficient. However, with the approval of the program we do need the additional facilities as identified on page 5. .
2	1.1		You say the multimedia program is "dead." Later you note it as an achievement. Please explain. "Multimedia program" refers to the idea of a cooperative effort between CSIS and MM to offer multimedia courses. There appears to be little or no student interest in the MM approach to Multimedia. Hence, the term "dead" is used. We are unable to fill the capstone course MM 192 which is offered in the spring semester. Later, under achievements, we refer specifically to the CSIS efforts to develop stand-alone course and program offerings in Multimedia. While it has become clear that the current MM approach is not working, CSIS continues to believe that Multimedia is a viable and important technology to be offered to our students. Current course offerings (CSIS-190) are a good example. Department members are currently doing research in future directions of Multimedia and how current and/or new offerings can be integrated into a comprehensive CSIS Multimedia offering.
2			What have you done to implement your strategic plan? The department now receives a larger training budget though the use of VTEA funds. Each full time faculty member creates an annual training plan that is funded by this source.

			We are continually looking for ways to market our programs but with no marketing funds we have to rely and the campus infrastructure for help with this activity.
3 and appendix	1.1		The report by Waiwitlikhit/ Vivapatanakul has lots of great information. What will you do with it? The intent of the report was to act as initial input into a Marketing Plan. The CSIS Department does not have a marketing budget at this time, so implementation of concrete ideas awaits funding.
3	1.2		Table is confusing. Sometimes we can't tell if the goal is completed or not and whether it is an obstacle or an action. Example: under "provide technology that reflects industry standards," is that an obstacle, an action or a met goal? Did these all happen this year from your most recent EMP? It seems it's been around longer. Please explain in narrative form or create a new table design. Due to the ever-changing technology that forms the basis of our program and course offerings, many of our goals are "standing" goals. In that sense, there is no "final" met or not met. They are ongoing. To quote: "Note that as in previous program review, goals and/or their associated activities are always ongoing. With the changing face of IT, a goal is never met but is instead always in a state of "being" met. New and/or modified curriculum is always being developed, new methods of instruction (hybrid, online) are being applied to existing offerings, faculty is continually undergoing education through conferences, seminars, or other course offerings. p. 5. "Provide technology ..." is such a goal. It is not an obstacle, but is clearly labeled as a "High Level Goal" . Due to the availability of "roll over" funds, this goal has been met in the past. Given continuing funding, it should be met in the future. If District funding is not available, there will be a real need to apply for Grant Industry Money. If, as necessary, that money is not forthcoming, lack of funds will become an obstacle to meeting this goal.
6	1.3		Please provide more detail to #2? Earlier you implied all is not rosy with the multimedia. What are your best ideas for creating more cooperation with your "competitors?" For various reasons, (evidenced by our students) the MM program has not met with success. Our CSIS courses have done well. (Hence, the apparent contradiction noted earlier of an effort being "dead" and CSIS courses continuing to do

			well.) In order to create "more cooperation", we have always sought to identify the strengths and existing offerings both of our department and of other departments on campus. We have always felt the best "cooperation" between departments could be met by CSIS offering a contribution that emphasized our strengths (knowledge of the technology and software, experience in developing and presenting offerings based on that technology and software) while the other department(s) offered contributions that emphasized their strengths (content creation, subject matter). Continue discussions, investigation, and research to determine existing or new program commonalities between disciplines as well as existing or new courses where discipline knowledge/expertise is needed to enhance or create a robust course with appropriate cross-discipline content. For example, computer security in the medical profession. We continue to emphasize working with Departments that share collaborative interests: BOT (Flex Ed courses), Business (Internet Marketing course), AOJ (Computer Forensics course), and most recently Library Science (GE course offering).
6	1.3,3		What was the outcome of your research? Is there a course outline? Statewide, there appears to be no pattern of approval. Although there are a number of institutions who have developed computer literacy courses there is not real direction as to what works best. We are working with the library science department to develop a cross listed GE course which we feel would best fit all students no matter what career/academic goals they are pursuing. Such a course appears to be becoming a reality. Working with the Library Science department, CSIS is reviewing and making comments on a course outline developed jointly by the chairs/coordinators of the departments. It is still "a work in progress", so there is nothing to attach at this moment. However, both departments intend to work very hard to make this course a reality.
7	1.3, 6		178, 184, 284 etc are not in the catalog. We assume they were deleted. What do you mean by "updating" them? We have deleted these courses as the content no longer reflects the current technology.
7	1.4		Are you getting recommendations on emerging technologies, careers and the job markets? Did you have a role in creating the SD4C advisory consortium? We have discussions with SD4C members quite frequently

			throughout the academic year, including the formal, semi-annual gathering of SD4C members. "Principal recommendations of the committee have typically dealt with the desirability, advisability, and/or problems associated with the introduction of different software and hardware packages", i.e. technologies. Attendees at SD4C meetings have always included company representatives that provide information in the areas of current jobs and careers. "As a result, Grossmont and other community colleges, in cooperation with SDSU created the SD4C advisory consortium." "Janet Gelb and Jim Hotz joined the initial members from Mesa College, City College and SDSU to discuss issues that might affect the student's ability to transfer to the 4 year universities." In addition, R. Norman (current full-time faculty) is a past president and founder of the consortium.
9	2.1		What courses are you changing? What courses are you creating? Why? We constantly have to modify our existing course outlines to reflect the change in the IT industry. The department created an entirely new Web Development program to reflect the current job market. We are currently developing both a software engineering and Database Administrator areas of emphasis. These new areas will offer many of our existing course with the addition of 1 or 2 new courses currently in development.
9	2.2		How are you going to measure your SLO's? How will they be used for program improvement? The department has not developed department/program SLO's but plan to work on those 2007/08
10	2.3		Peer reviews only happen once every three years. Can you be more specific about one-on-one and group discussions? We are looking for evidence of specific procedures v.s.informal practices. Twice a year there is a department meeting where adjunct and full time faculty come together to discuss and share ideas on curriculum development, classroom management, and student learning. All full time faculty act as mentors to the adjuncts in their discipline. The practice of peer evaluation happens within the rules laid down by the United Faculty.
10	2.4		What are you doing to educate students about the rigor of online courses? Please address the retention and grading variances. Orientation sessions are held to inform students of the rigor of online courses and the need for effective time management skills to be successful in them. Online students have access to the faculty just as on ground students do via office hours, email, voice mail, instant

			messaging, and discussion boards.
10/11	2.4/2.5		Can you please explain appendix 5 that indicates that CSIS 198 has 100% withdrawal? CSIS 198, Supervised tutoring was cancelled and no longer is being offered as we could no longer conduct this class with a line of site instructor and a tutor(state chancellor's office reporting requirements). The department decided that we would revert back to offering frequent open labs which would be monitored by a CSIS tutor who has enough skills to assist the students.
10/11	2.4/2.5		Are there any plans for what specific action to reduce grade variability for CSIS 110? The department has developed SLO's for this course and the requirement is for the entire faculty teaching this course to follow those guidelines. There is little variance in the content of this course as it is the equivalent course to the IDS 180 at SDSU.
12	2.6		Please expand on bullets and explain. • Individual homework and term papers – these assessments focus on real world, albeit scaled down, situations and environments which helps the student place the SLO's into context • Group projects – these near-real world exercises combine the rigor of a practical and often challenging/problematic situation needing a solution along with the benefits and challenges of working as part of a team to solve the problem. • Research assignments using the resources in the LRC – students are encourage to make use of the library tech mall resources • Internet research The internet has become a wonderful resources for current information and most of our textbooks now include web links, how to learn activities and learn it online. • Student-to-student and student-to-instructor email exchanges – all CSIS students are technological savvy and make use of email far more often than the average student. The department has also encouraged all faculty to use a course management system even if they are not teaching online or hybrid courses. All CSIS faculty have GC email. • Internships in industry – these opportunities allow students to directly engage in weekly business activities in an enterprise – government, private or public business sector, or not for profit –

			and work with individuals within these organizations giving them first hand experiences and best practices for addressing issues/challenges at hand.
12	2.7		What are the environmental, societal, political or technological issues that caused course and curriculum changes? Enrollment decline, evolving & ongoing advances in computer hardware, software and internet technologies.
12	2.7		Did you want to mention something about the rational for including a new course to meet GE requirements? More and more students need formalized training in computer and internet security best practices as well as a foundation to understand how technologies are effectively used as tools to assist organizations to achieve their goals. Working with the Library Science department, CSIS is reviewing and making comments on a course outline developed jointly by the chairs/coordinators of the departments. It is still "a work in progress" and will be submitted to curriculum this year.
12	2.8		Please describe what you mean by "crosswalk." How can the CSIS 140 be the equivalent CIS 201 when it does not satisfy the prerequisite for CSIS 202? Grossmont College and Cuyamaca College have few formal alignment agreements between the two departments. The coordinator of the CIS and the CSIS departments decided that the best way to help students who often go from one college to the other, would be to develop a crosswalk of similar courses. This crosswalk document indicates what courses either college will accept as equivalent to their own. This would result in a student to easily transfer from one institution to the other. We also agreed that we would both not offer the same courses in the same semester that are traditionally hard to fill resulting in the ability to fill more course at both colleges. The crosswalk can be found in the college catalog at both institutions.
12	2.8		Does CSIS have courses that do not exist at Cuyamaca? If so, why? Faculty expertise, low student demand, all contribute to diversification of some courses. Due to the current situation of low enrollments in the CIS and CSIS departments we did not want to duplicate traditionally low enrollment classes thus allowing us to offer a wider variety of courses that would potentially fill. Both coordinators work closing together at the time of schedule development.
13	2.9		Is it a department policy to offer a course several times in a classroom environment before going on-line? Why? It may not be policy but is a preferred practice to help work out the content, flow of same, and assessments leading to an acceptable gpa course average before going online. Also feedback from students during the course is major contributor to ultimate course that goes online.

13	2.10		Have you conducted any recent community outreach? Do internships still provide a means for community outreach? Community outreach is ongoing. Each (adjunct) faculty member has his/her preferred method(s) of doing this. As a result, our outreach is quite diverse and broad. A few examples: SD4C, attend/present at professional meetings, present at/attend professional/academic conferences, attend service organization meetings such as Rotary, consulting, networking with peers & professional colleagues around the globe.
14	2.11		Please be specific about what activities faculty have used to engage students in the learning process. Please use examples for each of your four goals that you either have done or plan on doing. As the department continues to develop course SLO's the 4 goals mentions will be infused in those outcomes.
14	2.11		If "traditional" teaching methods are inadequate, please specify what you are doing or plan on doing to address this. Use of computer directly in the classroom; case studies; team work/projects; active learning through various classroom activities beyond lecture; email/instant messaging; video recordings; recording of lectures for review
15	2.13		How are support services deficient? What do you need? What are projected support needs in the near future? The tutoring center and the tech mall do not have tutors that are proficient in the skills needed to support some of our advanced classes. Also due to the department's policy of always offering the latest and most current software applications the tech mall computers can no longer support this software on their current equipment. The CSIS department purchased 12 new computers for use in the tech mall for CSIS students. This small number is certainly not sufficient for the number of students in the department.
15	2.14		Please contact your liaison, Patty Morrison, for help in answering this question. Library services are sufficient as CSIs student traditionally use the Internet for research purposes as books , by the time they are publishes have old information. This is a very fast paced and fast moving environment where the printed material is old before it gets of the presses.
16	2.16		Student survey number 14 is incomplete. Please fill in. Looking at the student survey, are there any trends or concerns that you have? Example: over 50% of students would attend on Saturdays. Does this cause your department to examine offering Saturday courses? Sundays? 70% of students prefer traditional classroom courses. Does this cause you to re-examine offering more on-line and hybrid courses? Can you explain why so many males in CSIS courses and if this trend is changing? We have noticed that enrollment in Saturday and evening

			classes has dropped. This is a phenomenon that has been difficult for the department to interpret as in the past we had a large number of Saturday classes that were always in high demand..
16	2.17		Which new courses are you developing articulation agreements for? We are currently looking at developing a database program and plan to articulate these courses. We have recently obtained articulation agreements with CSU and UC for all our programming courses
16	2.18		Can you give more detail? What is your working relationship with the local four year institutions? Is there a need to articulate more courses? Would this help your enrollment? Janice Johnson may be helpful in answering this question. The local 4 year institutions are currently members of the SD4C so we meet with them a minimum of twice a year. Janice Johnson has also been supportive is assisting with new articulation agreements with the 4 year institutions.
20	3.1, 3.2		What ever happened to your computer literacy GE course? We are working with the library science department to develop a cross listed GE course which we feel would best fit all students no matter what career/academic goals they are pursuing. Would this help with student success? Is this still a need? Do CSIS 100, 105 and/or 132 meet this need? Are you still looking at infusion skills? These courses do not fulfill the need of a basic computer literacy course as the content is vastly different. It is for this reason that a new course is in development. Absolutely – it would help students throughout their academic careers and beyond in this digital age. From Fall 2001-Fall 2005 success has dropped 8% from a high of 64.4 to a low of 55.8 with a continuing downward trend. Is this because of online and hybrid? Enrollment and success are both declining. Tell us about the chart of Course Retention by Ethnicity. What are you counting? Units, bodies, FTES? Any idea why the 30-49 year olds are dropping We are counting currently enrolled students(Data obtained from data on demand and those provided but the Institutional Research and planning Department)
21	3.2		On your web site, you only have afternoon tutoring. Do you have a need for extended or different hours? Are you collecting FTES for supervised tutoring? The web site is out of date and will be updated in Fall 2007 We have 17-20 hours of open labs which are spread over many different times in the day so as to give the majority of students the ability to find a time the suits them best. This schedule is posted outside the CSIS classrooms at the

			beginning of each semester. We would always like to add more tutoring hours, but we are constrained by four factors: the available budget, availability of qualified tutors, available labs when classes are not scheduled, and the software installed in the labs (We try to put the tutoring in labs that have a full range of software). Thus the hours vary from semester to semester depending on these factors. Are you collecting FTES for supervised tutoring? No
21	3.4		Your DVD is not on the web. Do you plan to put it up soon? Is there an issue of captioning? The CSIS 190 and 192 classes are currently working on the completion of this project. This project is ongoing, but we hope to complete it within the year. Is there an issue of captioning? Any video must have a text component or close captioning. This will be done.
21	3.4		Will you continue with College Day? We will continue with College Day if invited. Many of the high schools are no longer offering computer classes therefore few students attend who are looking for a pathway to a IT career.
22	3.5		What are you going to do about the lack of prerequisite skills? CSIS believes that a required Computer Literacy course would help. Other strategies CSIS is considering include hiring tutors with experience in areas that we recognize as having this problem and using creative scheduling and alternative delivery methods that would allow these students to take the recommended preparations in as short a time frame as possible.
22	3.6		The LAN program is designed so that it is difficult or impossible to get through in two years. Can you address this? This a problem in the whole CSIS area. At the four year universities, for example, a CS bachelors degree cannot be completed in four years because of the number of prerequisites and they are generally taking at least six years. Creative scheduling could allow students who are willing to take a large load per semester to get through in two years. However, many of the LAN program students are working adults and are not able to take a large load. In fact for those students, taking more than two years is desirable.
22	3.6		In addition to labor market, are there other factors such as competition from the small tech schools (ITT tech. Coleman, etc)? Anecdotal evidence suggests that there was competition from the small tech schools. We don't see the small tech schools as competitors because they offer no articulation, few are accredited and many are now closing due to lack of funding and smaller number of students. It would be rare for a person to take one or two courses from these schools simply due to the cost. Students do prefer the education they receive at Grossmont, over the very fast pace at these schools, and once they take classes in CSIS they are very

			reluctant to go elsewhere.
24	4.1		What courses were developed during your sabbaticals? What are the new programs? Clifton Quinn Within one year from the completion of the sabbatical of Clifton Quinn, the Web Development Program was developed that consisted of modifying existing courses and created a number of new ones. Mike Qualls: At the time of Mike's sabbatical the CSIs department was evaluating becoming an Oracle training site. Mike completed the certification process but as there was a downturn in enrollment we felt that it would be inappropriate to introduce high end advanced courses at that time. We did an informal evaluation of the need for training with members of our BAC and found that hiring in this field required at least a 4 year degree. Janet Gelb Many Networking classes are now moved to the online delivery format A number of security classes are in development but due to the lack of student who currently have the skills to complete that program the program is currently put on hold. Jim Hotz: Introduction of the .NET classes, including C#.NET and others Al l programming classes are now offered in an online format as well as on-campus or hybrid.
27	4.4		What involvement do you have in the local community? Are you still placing students in local IT departments? The internship program has positively impacted our students as a result of their involvement with the community through our direct work experience in local businesses. We have employees of many local businesses take our classes for the immediate impact they make on Networking, Programming, Web Design and Development, Office Automation, and a whole host of computer-related jobs. We believe that we are a significant contributor to the local community and we absolutely look at the needs of the local community when designing many of our classed. In the Web Development and Networking areas, it is not

			unusual for a student to start taking one of our classes and during mid-semester wind up with a part-time or full-time job. Many Web Development students create functional web sites for local community members and organizations as they create their "Final Project" websites.
28	4.7		Please go to Tina Pitt's office and get a copy of your equivalencies and attach. Is the "sub group" you mention under our senate or the statewide? Please update us on the status of your efforts. We currently continue to offer our adjuncts equivalencies on a course by course basis as the department uses the expertise of these instructors to enhance the content of our courses. People who work in the industry are unlike to qualify for program equivalencies.
29	4.9		What marketing strategies are you using? What other strategies are you pursuing to help your enrollment? This is an area in which we need to have improvement. There are a variety of mechanisms we are utilizing for marketing, yet we could benefit by utilizing additional strategies. We are currently using: • Advertisements in the Class Schedules • The existence of Hybrid and Online delivery methodologies • Printed flyers distributed across the campus • Word-of-mouth We are considering pursuing, depending on funding and time allocation: • Newspaper advertising • High school advertising • Reaching out to local counselors, including high school, career, Navy, etc.... • Possibly a commercial • Job Fair on campus booth • Many more... New brochure, personal appearances which have limited visibility compared to advertising on radio, tv, internet, and billboards specifically targeted to CSIS offerings and not the college/district as a whole.
30	4.9		When we read appendix 8 we see a decrease in enrollment in Spring of 06. Are we reading this right?

			When we read appendix 8 we see a decrease in enrollment in Spring of 06. Are we reading this right? Yes. The Computer Science field in general, across the entire United States has had a decrease in enrollment. This trend is seen at most universities and colleges in the US. This had been a new development for the Computer-related faculty when the trend started around 2002 but has been a very important motivating part of our new course development. We are attempting to address this by increasing the effectiveness of our marketing efforts and look deeply into which classes are needed both today and in the near-term and long-term future. This is a large challenge for us.
32	5.2		What message are you wanting to convey in the first paragraph? Are you calling for some action? Can you propose a better utilization of your five labs? Our labs are being efficiently utilized and are at full utilization from 7am to 10pm most days. We continue to open our labs to departments who need computer labs that do not have the funding or number of course offerings to maintain a full time lab. English, Foreign languages, AOJ, ROP, Business and the Welcome back program all make use of the labs for various classes.
33	5.4		There seems to be a contradiction between 5.4 and 5.2. In 5.2 you say you have two labs that are underutilized. In 5.4 you say you don't have enough labs? Please explain. I think we are trying to say that those 2 labs are being used by other departments and even if we had them back, the technology that is in all of the labs is inadequate to keep up with an 18 to 24 month cycle of technological change. So, it is not so much the number of rooms but what is in the rooms that is at issue.
34	5.5		How are other colleges responding to declining computer science enrollments, high program costs, including rapidly changing equipment needs? What are the implications with Cuyamaca? Other colleges/universities are having some challenges with enrollment and have reduced class offerings accordingly. Many colleges/universities have annual line-item budgets that allow, to a high degree, for addressing the cost of technological advances. Cuyamaca is possibly faced with the same set of circumstances that we are, given they are in the same district. We try not to offer the same traditionally under enrolled classes in the same semester. Thus increasing our chances of offering a larger number of course offerings that are like to fill. This process is being considered by other community colleges so that our

			students have a greater opportunity to complete their degrees in a timely manner.
34	5.6		What is your timeline for a needs assessment? How do you plan to gather this information? This is a challenge for a community college with no budget to engage in such activity as well as having to have a *minimum enrollment of 12 students to run a course.* All universities in the region including SDSU, UCSD, USD, National, and CSU, San Marcos offer off-site courses and each has a well-established, highly lubricated staffing "machine" that "primes" the marketing pump to contact organizations and discuss with their HR staff and/or IT/IS staff the need for program(s) and/or course(s).
35	5.7		You've summarized the information. Please interpret. What implications does this have for your program? **5.7 Comment on the results of the Student Survey, Appendix 6, focusing on class times and facilities.** Question 6a is "The classrooms for this program are clean and in good repair." The survey results indicate that over 95% of the 303 respondents strongly agreed or agreed with this statement. Interpretation: Our labs are well supported by the college staff including the lab manager, lab assistants, custodians, campus and district IT support staff, and the CSIS (adjunct) faculty. Question 6b is "The classroom equipment is maintained and up-to-date." The survey results indicate that about 95% of the 303 respondents strongly agreed or agreed with this statement. Interpretation: Our lab equipment are well supported by the college staff including the lab manager, lab assistants, campus and district IT support staff, and the CSIS (adjunct) faculty. The survey does not take into account how well/poorly our equipment would/could support new/emerging technologies that have not been offered to the students who completed the survey. Our internal assessment as a (adjunct) faculty would rate it woefully inadequate to support emerging technologies. Question 6c is "The computer technology used in the classroom is up-to-date." The survey results indicate that over 94% of the 303 respondents strongly agreed or agreed with this statement. Interpretation: Students believe the technology is up to date given the content of the current courses. The survey does not take into account how well/poorly our equipment would/could support new/emerging technologies that have not been offered to the students who completed

			the survey. Our internal assessment as a (adjunct) faculty would rate it woefully inadequate to support emerging technologies. Question 7 is "How satisfied are you with the availability of courses in this department?" The survey results indicate that about 92% of the 303 respondents are very satisfied, satisfied, or neutral with respect to course availability. Interpretation: CSIS continuing process/program/course improvement is working! Question 8a is "What would be your preferred start time(s) for courses to be offered (Weekdays)." The survey results indicate that about 57% prefer 9am to 3pm start times, 26% prefer 4pm or later start times, and 19% prefer early mornings (7am). Interpretation: Quite a diverse set of results from a diverse population of students. Our current scheduling appears to meet these preferred start times with the exception of 7am start times – our earliest is 8am. Question 8b is "What would be your preferred start time(s) for courses to be offered (Saturdays)." The survey results indicate that about 45% would not attend courses on Saturday; 25% indicated 9am to 3pm start times, and 14% prefer early mornings (7am). Interpretation: We lose close to 50% of the population of students if we offer a Saturday class. For a scheduled Saturday course it appears that the majority (who would attend a Saturday class) would prefer 9am to 3pm classes. Implication is that Saturday courses currently are not a viable option due to limited enrollment except in specialized situations. Question 8c is "What would be your preferred start time(s) for courses to be offered (Sundays)." The survey results indicate that about 62% would not attend courses on Sunday; 14% indicated 9am to 3pm start times, and 9% prefer early mornings (7am). Interpretation: We lose close to 62% of the population of students if we offer a Sunday class. For a scheduled Sunday course it appears that the majority (who would attend a Sunday class) would prefer 9am to 3pm classes. Implication is that Sunday courses currently are not a viable option due to limited enrollment except in very specialized situations.

36	6.1		Can you provide enrollment and program cost data from other colleges in the SDICCA area? Are they going through the same decline to the same degree? All colleges in the local area are having the same decline in enrollment. Please refer to the study done by SDSU students.
38	7.1		Fiscal Stability: You report your budget as a strength, yet elsewhere report your budget as a weakness relative to periodic rollover of equipment and software. Please explain. In the past our labs have had a 3 year rollover schedule. This has been extended as of last year to 4 years due to the large need for computers across the campus and the cost of the high end computers needed to teach our classes..
39	8 (2)		Data in Lab Rollover schedule doesn't seem to be right. Do you have an updated rollover schedule? 530, 531, 532 and 533 will be rolled over in summer 2008 and 534 will be rolled over when ROP funds become available.
39	8 (4)		Tell us about your ideas for cross discipline courses? Why might this be important and what do you propose? We have developed a number of cross discipline courses with BOT,BUS, AOJ and MM where faculty form both departments team teach the course. It allows students to learn how the integration of skills from both disciplines enhance the knowledge provided. .
39	8-(6)		Please provide support for your request for an additional network administrator. What is not being addressed with current resources? Our labs have become more complex with the new software and operating systems being installed. We also currently support and ROP lab and currently support and manage 162 computer systems and 3 servers.
39	8-(7)		What do you have in mind for articulation agreements with local high schools? Which schools? What classes? Do you have a timeline? The number of computer courses taught at the local high schools has dropped due to funding. We will continue to maintain our current articulation agreements. When the high schools add additional courses we will develop new articulation agreement. Janet Gelb currently attends all Tech Prep meetings and will continue to create articulation agreements as needed..

Program Review Committee
Summary Evaluation

Grossmont College

Computer Science Information Systems

PROGRAM REVIEW COMMITTEE
SUMMARY EVALUATION
Fall 2007

SCHOOL YEAR	FALL SEMESTER		SPRING SEMESTER		COST/FTES	COMMITTEE RECOMMENDATION
	WSCH/FTEF	% of MAX WSCH	WSCH/FTEF	% of MAX WSCH		
01/02	428	80%	410	80%	$1,833	MAINTAIN
02/03	392	81%	381	79%	$2,140	
03/04	419	86%	392	75%	$1,943	
04/05	414	79%	384	72%	$2,211	
05/06	377	73%	395	70%	$3,608	

The CSIS Department is commended for the following:

1. Having a department vision and mission statement.
2. Creating an industry advisory consortium with other local community colleges, SDSU, UCSD, CSUSM, and private universities.
3. Developing 21 online or hybrid courses.
4. Providing access for working students and those with disabilities by offering online and hybrid courses, tutoring, and modification to work stations as needed.
5. Continuing leadership on the Instructional Computing and Distance Education Committees as well as developing and implementing the distance education plan.
6. Modifying and adding courses as well as maintaining faculty expertise in staying abreast of technological advances.
7. Actively involving adjunct faculty in departmental decisions.

The Program Review Committee offers the following recommendations:

1. Continue to provide curriculum that is up-to-date and prepares students for industry demand occupations.
2. Upgrade computer classrooms and lab facilities with new state-of-the-art equipment that meets industry standards.
3. Investigate funding sources to support faculty training and acquisition of state-of-the-art equipment for faculty to understand and use new technology.
4. Continue collaborating with other departments on campus in the development of cross-discipline courses.
5. Enlist the support of the college administration and Community Relations Department to improve and implement department marketing strategies.
6. Create network administrator position to expand and improve upon technical support for the CSIS department.
7. Collaboratively write student-learning outcomes and collectively agree upon their assessment methods to be written in course syllabi. Use student-learning outcome data for continued course and program improvement.
8. Using the Course History Information Report, continue to submit curriculum modification proposals for those courses that have not been reviewed by the Curriculum Committee in more than four years or curriculum deletion forms for those courses that have not been offered in the last three years.

		Scott C. Dean
College President	Department Chair	Academic Program Review Chair