

Program Review Comprehensive Report



Program Review - Instructional: Computer Information Systems & Computer Science

Supplemental Reports and Attachments

2014 - 2017

Comments or Notes: NCB ENTERED

Attachments:

- [2014-17_CIS_C++_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_COMPUTER_AIDED_PROD_TECH_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_COMPUTER_PROGRAMING_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_COMPUTER-NUM_CTRL_PRGM_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_DESKTOP_PUBLISHING_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_GRAPHIC DESIGN_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_JAVA_PROGRAMMING_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_MOBILE_APPLICATIONS_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CIS_SLO_DISCIPLINE.pdf](#)
- [2014-17_CSC_COMPUTER_SCIENCE_PLO_INSTRUCTIONAL.pdf](#)
- [2014-17_CSC_SLO_DISCIPLINE.pdf](#)
- [2014_17_CIS_CSC_CurriculumRPT.pdf](#)
- [2014_17_CIS_CSC_SuccessEfficiencyRetentionRPT.pdf](#)
- [2014-17_INSTRUCTION_CIS_CSC_ResourceRequests.xlsx](#)

Program Trends and Updates

2014 - 2017

Program Update Section

Has your unit shifted departments in the PAST 4 years?: No. CIS/CSC has been part of the Business, Engineering and Information Technology (BEIT) department.

Do you anticipate your unit will shift departments in the NEXT 4 years?: Norco College is shifting disciplines to Schools. It is unclear if we will continue to work within the BEIT department. Most of our programs are within the STEM school. One is part of the Art and Humanities school, Graphic Design. This program is being moved from Computer Information Systems to the discipline of Digital Media. This will require courses be cross-listed for a couple of years so that current students will be able to find them in CIS and the new discipline.

There is not a clear plan yet, but with the restructuring occurring at Norco College to facilitate the new organization around our "Schools" there may be a shift in the organization of our departments. Already there is a change in the responsibilities of our deans of instruction. No longer, will there be a dean of Career and Technical Education. The main motivation for reorganization is improving student achievement; implementation is a major piece of the Completion Initiative.

New certificates programs created by your unit in the PAST 4 years?: Last year we introduced a new program and revitalized the CAT discipline at Norco. It had been discontinued but due to increased demand for secretarial workers, a new program named Business Information Worker was adopted. In addition in March 2017 we discontinued a low-enrollment program under CIS; Mobile Applications Development. A new Full Stack Web Development certificate was added with plans to offer it in a summer ACE format.

New certificate programs anticipated by your unit in the NEXT 4 years?: We are in the process of moving Graphic Design to a new discipline Digital Media. It is a better fit for this design program than in the Computer Information Systems discipline.

CIS is part of several programs that will offer dual enrollment with local high schools. The purpose of the dual enrollment patterns is to increase student interest in several of our programs. This folds into the completion initiative with moving students faster through their program of study to completion of a certificate, degree or transfer.

The current CIS and CSC programs are continually reevaluated to determine whether they correctly prepare our students for the careers in computer we currently teach.

Substantial modifications made to certificates/degrees in the PAST 4 years.: As a discipline we are constantly in the mode of reviewing and evaluating our curriculum. In spring 2017 college faculty along with RCC and Moreno Valley, reviewed and updated all of the courses in the CIS discipline. Seventeen courses no longer offered and one program was discontinued. This was done in an effort to clean up our catalog and to eliminate confusion for students who take our courses. In spring 2018 we will again look at the offerings and with the help of our advisory committee that meets each spring determine if we need to modify any of our programs.

Substantial modifications anticipated to certificates/degrees in the NEXT 4 years.: This will be something that we discuss at our yearly Industry Summit, advisory meeting. Each year, we hold an industry breakfast where we share our programs and goals with local business owners and educators. They, in turn, have been instrumental in providing suggestions on our curriculum and our teaching strategies. In past years, the industry feedback has had significant impact on our offerings. We value our business partners and their expertise.

The move of Graphic Design program means that we will need to cross list the courses in CIS with Digital Media for a while. We will need to create the cross-listed courses in the next year to accommodate existing students and allow for the new students to select the Digital Media course identification.

Activities in other units that impacted your unit in the PAST 4 years.: "Increase campus and program awareness of our CIS/CSC offerings." As a department, we know that we want to attract more student into our programs. We need to promote and inform high school and the local community of the programs we offer and to do more advertising on campus.

The Strong Workforce Program grant is being embedded into many programs across our college. The Strong Workforce grant has several components that will impact our unit. With the addition of two major roles, Dean of Community Partnerships & Workforce Development and a Career Center Director we feel that they can help us strengthen programs throughout the CTE. Both of these positions will move us toward achieving the above mentioned goal.

We are in a constant state of change in the field of computers. Along with changes in our courses, certificates and programs, Norco College is undergoing some substantial changes to the organization. Last year there were major changes to tutoring and how it is delivered to our students. We had embedded tutors in many of our classes. This is not something we have at this time. This has required us to look to other grant funding to provide this valuable service inside our lecture classrooms.

The CS ADT is experiencing rapid growth. Data supplied by Greg Aycock's office indicates the number of students who are majoring in Computer Science has doubled in the 2 year period from Fall 2015 (96 students) though Fall 2017 (190 students). The CS ADT includes 2 calculus based physics classes and 2 calculus classes in the 2 year rotation. It's important to coordinated scheduling CS courses with Physics and Math to ensure students do not have scheduling conflicts in the 2 year published sequence.

Activities in other units that impacted your unit in the NEXT 4 years.: Guided Pathways -- Provides all students with a set of clear course-taking patterns that promotes better enrollment decisions and prepares students for future success. This will integrate support services in ways that make it easier for students to get the help they need during every step of their community college experience.

CIS and GAM are going to move their programs to the STEM building beginning fall 2018. This will provide a cohesive learning environment. Students will be able to find support in and out of the classroom and have the opportunity to collaborate with fellow classmates in a location where students are in courses related to their major.

Previous Program Review Resource Requests

Resource Requests Received: Lynda.com is a tool we use in our courses for students. Faculty also use this to stay abreast of

software changes in the constantly changing field of computers. In 2015 Norco College purchased this for all staff and students.

Dean of Career and Technical position is now fully funded by the college.

Two desktop computers for CIS faculty offices.

Software licenses for Adobe software suite, Camtasia, and and SchoolVue are now provided by our college.

Upgrades to LRC computers funded both by the college general funds and Perkins grant funds.

Lab aides and CAT student support has been funded during the past three years by college general funds and Title V grant funds.

How did the resources received impact student learning?: Lynda.com is a wonderful resource and it has improved students' access to industry standard videos on many programs that we teach. Our instructors have used it as a lab component and some as the course materials for their courses.

The Dean of CTE has a positive impact on student learning at Norco College. Kevin Fleming served as a champion for student success. He lead, inspired and facilitated changes both in the college and within our disciplines that allowed us to offer programs that provide opportunities for our students to be competitive in the field of computers.

Faculty computers in CIS is important so that we can stay ahead of the changes in our industry. Student learning is why we continue to train on current and new software.

Software licenses - To provide our students with the latest software is essential in the fields we prepare our students for. We are thankful that many of the programs we use in our classroom are now district or college funded. We still have some that we do not have automatically updated but the ability to provide the current versions of all of our software programs is critical to our student's success.

We are very thankful for the computer upgrades in our Learning Resource Center. It is very important that we provide both current software and computes that will allow us to use the software and keep pace with the needs of the technology demands.

Student support both in our classrooms and in our learning resource lab is a critical piece for student success. We are thankful that the college and our grant funds have allowed us to use this as a way to improve student achievement.

If you requested resources but did not receive them, how did that impact student learning?: We rarely are awarded college resources. We depend on funding through Lottery Funds, Title V, STEM and Perkins grants to keep our technology up to date.

Program Data Highlights Section

COR Review: Our discipline met in spring of 2017 and we reviewed every course. Some that were Riverside or Moreno Valley, only courses show up in the courses not updated but shouldn't be listed for Norco College.

Program Metric Highlights: According to data provided by Greg Aycock's office, the number of students who declared Computer Science as their major has increased from 96 in Fall 2015 to 169 in Fall 2016 to 190 in Fall 2017. It has doubled in 2 years and we believe the number is still increasing.

Assessment Report Highlights: Here is a place that we are still struggling to improve. Currently we show that 72% have been assessed. We are aware that we are deficient in assessment and will work to bring the number of courses assessed each year to 100%.

One note I want to make is that we still have several courses in the assessment section that are not taught at Norco College. Last spring we began a process to delete old classes and clean up our catalog. Riverside and Moreno Valley colleges still offer the courses. We will follow through with the curriculum committee to delete this removed courses.

Program Goal: Increase articulation with high schools and 4-year colleges

Increase the number of courses articulated with high school and universities in Computer Science and Computer Information Systems.

The purpose of increasing articulation agreements is to create pathways and increase completers.

Goal Status: In Progress

Program Review - Instructional: Computer Information Systems & Computer Science

Goal Year(s): 2018 - 2021

Start Date: 08/27/2018

How do your goals support the Educational Master Plan?: By working with the local high schools we will be able to encourage these students to continue at Norco to complete programs of study that they began during their high school years. This will increase success and retention. It will increase the amount of units they complete and move them closer to attaining the program award.

This Program Goal Supports the selected EMP Goal(s) and Objective(s): Goal 1 Objective 4: , Goal 1 Objective 5: , Goal 1 Objective 6: , Goal 1 Objective 7: , Goal 1 Objective 8: , Goal 1 Objective 9: , Goal 1 Objective 10: , Goal 2 Objective 1: , Goal 2 Objective 2: , Goal 2 Objective 3: , Goal 2 Objective 4: , Goal 2 Objective 5: , Goal 2 Objective 6: , Goal 3 Objective 1: , Goal 3 Objective 2: , Goal 3 Objective 3: , Goal 3 Objective 4: , Goal 3 Objective 5: , Goal 4 Objective 1: , Goal 4 Objective 2: , Goal 4 Objective 3: , Goal 4 Objective 4:

Program Goal: CIS: Increase Student Success and Retention

Student retention in CIS is 77% overall compared to 82% for Norco College. Student success in CIS is 68% overall compared to 70% overall for Norco College. The online success rate for CIS is 63% compared to the online success rate of 64% for Norco College. The goal is to improve retention rates to 82% and success rates to 75%. An additional goal is to improve online success rates to 75%.

We plan to improve these rates by providing additional student support in the Open Lab area of STEM and by recreating the vibrant learning community that evolved when the CIS and Game Labs were functioning as Open Labs. Peer to peer mentoring, additional faculty support in the lab, and the implementation of a new asynchronous online delivery mode are some of the methods we will employ to improve the retention and success rates.

Goal Status: In Progress

Goal Year(s): 2018 - 2021

Start Date: 04/20/2018

How do your goals support the Educational Master Plan?: Improving student success and retention is a goal in the Master Plan. Transfer rates will improve as success and retention improve.

This Program Goal Supports the selected EMP Goal(s) and Objective(s): Goal 1 Objective 4:

Program Goal: Create Graphic Design Discipline

Move the current CIS graphic design program into a digital media discipline, align the curriculum with the Graphic Design ADT, and hire a full-time Graphic Design Faculty member

Goal Status: In Progress

Goal Year(s): 2018 - 2021

Start Date: 04/20/2018

How do your goals support the Educational Master Plan?: Improve transfer rates. Improve student preparation for industry.

This Program Goal Supports the selected EMP Goal(s) and Objective(s): Goal 1 Objective 2: Improve transfer rate by 10% over 5 years.

Program Goal: Hire a full-time tenure track faculty member to support the Graphic Design program

Hire a full-time tenure track faculty member to support the Graphic Design program

Goal Status: In Progress

Goal Year(s): 2018 - 2021

Start Date: 08/27/2018

Completion Date: 06/30/2019

How do your goals support the Educational Master Plan?: A full time faculty member will improve the strength of the program, improve transfer preparedness, and increase transfer rates.