

El Camino College

ARCHITECTURE
Program Review
Fall 2011

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I. ARCHITECTURE OVERVIEW

A. Description of Program

The Architecture Program at El Camino College, which is located in the Division of Industry and Technology, is considered primarily a vocational program. We place many of our graduates in numerous offices throughout the Los Angeles area; we also transfer several dozen students each year to various university architecture programs all over the United States. Most of the students in our program take various courses to learn the basic skills necessary to obtain a job working in an architects' office. Our program offers both an Associate in Science Degree and a Certificate of Competence in the field of Architecture. The Architecture Department is currently proposing to the College Curriculum Committee four new Certificates in; Drafting, Computer Aided Design, Design Theory and Interior Design. We have a need for these certificates because most of our students are here for the specific reason of getting a new job, typically in a certain area, so they are not interested in getting a degree. The Drafting certificate is for people who want to master the hand drawing portion of our program. The Computer Aided Design certificate would be for the student who wants to get a job in an architects' office as a computer operator/draftsman. The Design Theory certificate is aimed at the transfer student, who wants to get the coursework that will transfer and help them be successful at the university level. The Interior Design Certificate is for those students who wish to transfer into a university Interior Design Program.

Historically, Architectural Drafting was one of the original classes offered when El Camino opened its doors to the people of the South Bay for business in 1946. At that time and until the late 1960's, it was a series of courses in the Drafting Department. The Architecture Department originated in the early 1970's when the Drafting Department split into three separate programs, Mechanical Drafting, Technical Illustration and Architectural Drafting. Numerous design oriented courses were added in the 1980's to add substantial critical thinking projects in the curriculum and to evolve it into a more functional transfer program. In the 1990's the personal computer changed the way architects communicate, so numerous computer-aided-design classes were added in this decade, to stay current with the graphic trends in the field. Also, at the same time the department decided to change the course outlines on numerous lecture/lab courses to reflect an "open" lab time, where the student documents the required lab time on a timesheet, instead of a specific assigned lab time, primarily because two major reasons; 1. So that a student may enroll in numerous classes attend the required lecture but document the required lab time for each class around their work/school schedule. Our department refers to the "Lab" as the "Design Studio" and is opened from 7:30am to 9:00pm every weekday and 9:00am to 3pm on Saturdays. During this Open Lab time there is always an instructor in the Lab to answer any questions a student may have about any assignment an architecture student may have

for a class they are currently taking. At that time many students could not take many of our classes because of the time commitment of the lecture and lab time together did not fit into their academic class schedule and we also had a problem with unemployed students were also coming back to school to expedite the process of getting re-trained in another vocation. The 21st Century brought some new innovations to the Architecture Program; First, an inter-disciplinary/department class was introduced, the Design-Build Studio. This class is team taught by Construction and Architecture faculty with students from each of those respective departments co-mingling to learn more about the other's discipline. This innovative class starts out in the architecture design studio, where each student is given the same building problem to solve for a design competition. Several winners are chosen and the class is divided up into teams of six to go out into the construction yard and build the winning solutions. Various times throughout the construction process of the class, the students have to come back to the architecture design studio to graphically figure out problems with the construction details of the buildings.

Since the last program review our department has been incorporating Green and Environmentally Sustainable lecture content into all of our classes and our faculty have been developing three new courses for the Environmental Technology Program that have to do with environmental theory and sustainability issues including the history of the environmental movement. Also being developed are classes dealing with energy systems and how energy is transferred and applied as well as materials and construction methodologies. Our faculty are also currently writing a new course outline for an architectural sustainable class that analyzes the new Green Building code and rating systems like LEED (Leadership in Energy and Environmental Design) and how it pertains to architectural building design.

As far as additional opportunities which a student has available to them in our program, we have several options for a student to enhance their educational experience:

A Study Abroad program was introduced specifically to Architecture students in 2002, where architecture students travel to European countries to study historically significant buildings and learn how other cultures have built and contributed to our design and building process today. This program has happened at least once every two years since then, so each graduating class over the last ten years has had the opportunity to study architecture in another country. The last trip was this past summer, (2011) to Italy. Currently the college has temporarily suspended all Study Abroad Programs because of the budget crisis the State of California is dealing with.

The Architecture Program also has an active club that travels to numerous architectural landmarks around Southern California as well as visiting many university architecture programs. They have also participated in several community service programs like "Habitat for Humanity" to try and be a positive force in the local community. They will have several submissions later

this year, in an annual housing design competition at Cal Poly San Luis Obispo, which they have won three times. The Architecture Club went to Arizona this past Fall to visit the University of Arizona's Architecture School and Arizona State University's Architecture Program as well.

An annual "Lecture Series" was initiated in 2005 to bring various architects to speak at various venues at El Camino specifically to educate students and the community about how their buildings try and positively change the environment we live in. We try and have at least one of these Lecture Series every year at one of the theatre venues here on campus.

Our program strives to meet the diverse needs of our students. We have young students right out of high school that want to transfer to University programs, some students are older and want to get enough skills to make them employable, some of our students are older professionals just trying to learn new trends in our field that have to do with new technology like Green and Sustainable systems or learn a new version of a computer aided design software. We, the faculty of the architecture program here at El Camino, feel our program meets the need of various kinds of students and is what the level of architectural education should be for the community college student. We want to teach numerous new classes that we are currently generating course outlines for but unfortunately the current economic climate of our state's budget will not allow our program to grow. To be able to offer these new classes we would have to give up teaching many of our existing classes. We are constantly trying to think outside the box to give our students the traditional formal education they need as well as incorporate new conceptual ideas and technologies into their classes.

B. Degrees / Certificates Offered

We currently have one degree, (A.S.in Architecture,) and a Certificate of Competence in Architecture. Both Degree and Certificate require the student to complete a minimum of 34 units in Architecture Courses; over half of the units need to be taken here at El Camino.

We have proposed four new certificates at the current time and also proposing another Degreed Program with several certificates offered, as well. I will talk about these new proposed Certificates and Degree later in the Curriculum area of the Program Review. These new Certificates are 12-15 units in the specified areas and will be stackable, so if a student wants to get specialized training in certain areas they will be able to have certificates that show their area of specialty.

C. Status of Previous Recommendations

Our program has changed since our last Program Review in several areas that were addressed in our final recommendations.

First, since the Computer Aided Drafting Department has consolidated its classes to a specific area in our building, an adjacent lab to our department's lab has been used for our "overflow" space that we were asking for in our last program review. There are computers as well as drafting tables in this lab, the computers are 10 years old and do not have current software in them, but are used for Microsoft office and internet uses. The 26 drafting tables in this room do come in handy when many students show up for the open lab at the same time.

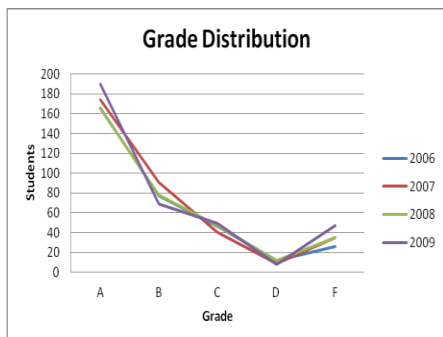
Second, we were asking for a full time tool room attendant to assist our faculty and help with storage and instrument check-out. We received a 20 hr/week tool room attendant starting this semester and even though it was not a full-time position, as we had asked for, our new T.A. has already been a great help in our department. We still need a Full Time Tool Room assistant because we have discovered after a semester of having the part-timer, it still is not enough.

Third, since the last Program Review we received new fast computers with large monitors, we also have added a 42" wide plotter/scanner copier which facilitates with many projects we give to the students.

Fourth, our supply budget was raised by a small amount to purchase materials. Even though we need much more than we are currently allotted to buy materials for the Architecture 180 Design Build Course, a small amount is better than nothing.

II. ANALYSIS OF DATA

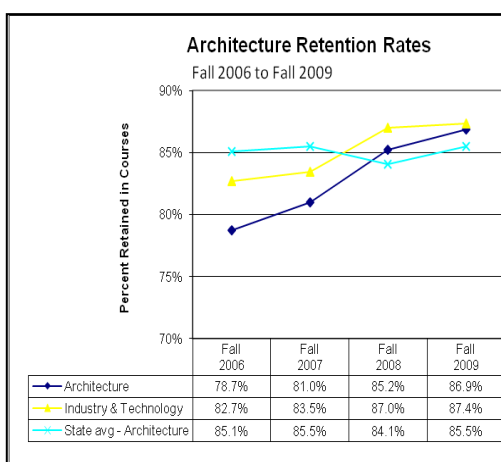
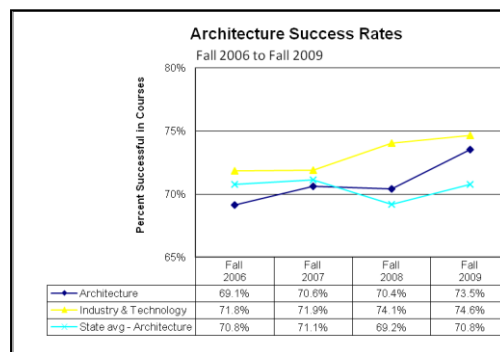
1. Course Grade Distributions; Success and Retention Rates



The grade distribution graph to the left is indicative of a seasoned faculty. Grade distributions are virtually the same year after year. Lessons in this program are established and the faculty are adept at getting the most productivity from their students. Students in the architectural program usually already have their career goals formed and are personally driven to achieve their aspirations. Students in this program are passionate about

wanting to learn as much as they can about the discipline prior to leaving. The artistic subjective nature of the projects completed in most architecture programs makes students more competitive and driven. They seem to invest more time in these subjective classes than in academic oriented objective classes such as math and science. These aspects collectively result in higher grades attained than in other programs.

Architecture success rates are shown as steadily rising from 2006 to 2009. Architecture at El Camino has increased generally faster than the State average Architecture programs. Generally Architectural programs are geared toward preparing students for transferring to a university level program. Consequently



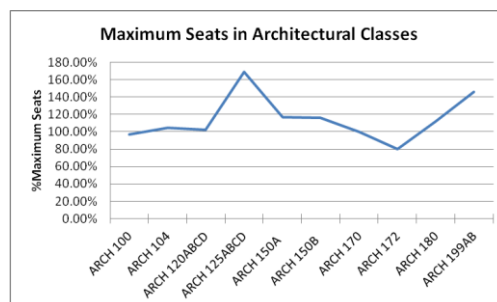
the program is more rigorous than other

Industry and Technology programs.

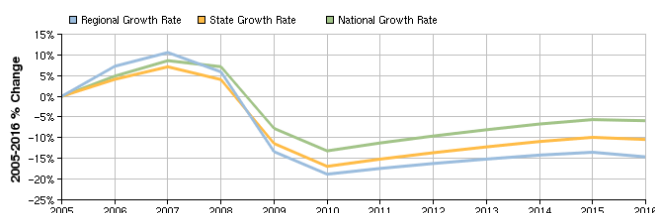
Architecture retention rates are markedly increasing and considered strong. The graph to the left indicates not only a general increase, but at the current rate is set to overtake both the division and state average.

2. Enrollment Statistics with Sections and Seat Counts

We have numerous classes that are over enrolled as far as the number of seats vs. students. This phenomena is primarily due to the section cuts to our program and the need for these classes by the students for getting employment in the industry. The extra students all bring their own laptops and work on other tables in the lab. As the graph to the right demonstrates, classes similar to Architecture 125 would not be as high as 169% if the administration would add sections to address our growing program.

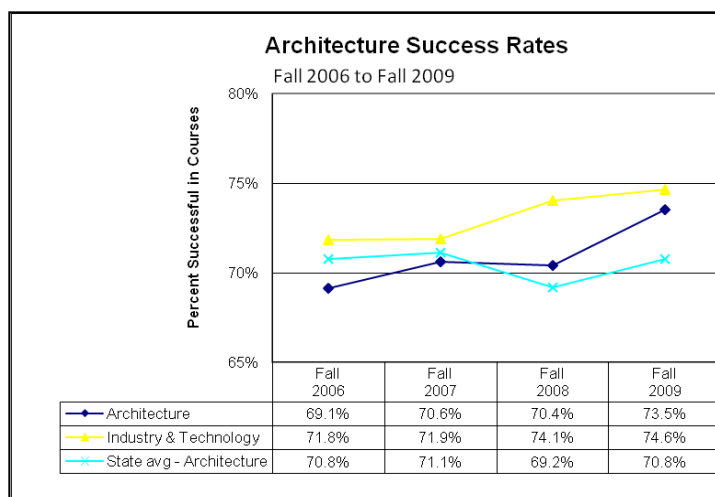


The economy has effected the growth of our industry negatively for four years during the



period 2007-10. Our Industry is projected to rise slowly over the next 5 years from 2010 through 2016. The Green and Sustainable Industry will generate new jobs for architects to design buildings with alternative means of energy sources.

Our success rate here at El Camino is difficult to quantify because many students leave after a semester or two to obtain jobs in the industry. Our department views this one to two

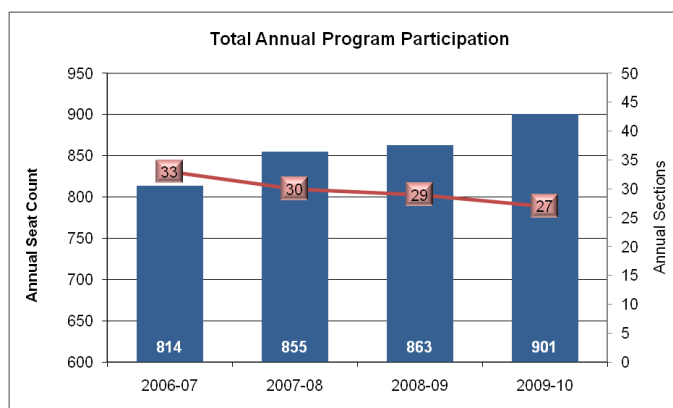


semester attendance as a success because the student accomplished what they intended to do. Students intended to learn enough information to obtain a job, i.e, we believe our goal is to prepare students for employment. The majority of students, once they find employment, do not feel it necessary to report their reasons for not completing the program. But those that have communicated, tell us the reason is that they found employment. It would be

nice if we had a way of tracking each student when they left the program to see where they went, and what they did. Our department is in the process of developing a web site that will have an alumni link to it so it can be documented. Many students also transfer to universities after taking several classes to create a portfolio. We hope the Design Certificate will document these success stories.

See appendix A & B for specific data.

3. Sessions offered on campus



We have cut back on the sections offered each year because of budgetary constraints. Many of these constraints are dictated by the State and its educational funding dictates. These constraints could be circumvented by expanding the services to the community. For example architectural drawings and services could be offered by contract to community businesses for a fee.

4. Scheduling of courses

The Architecture Department schedules both day and evening courses for the students. 75 percent are daytime and 25 percent are offered in the evening. We assume these students can't attend school full time because of their work schedule. Since a large part of our students are working full time jobs, we try and make all of our courses either offered at night or on a Saturday over a four year period so these students may earn a certificate or degree while working full time.

The department also tries to move classes around to be offered on different times, (morning vs. afternoon,) and different days, (Mon/Wed vs. Tu/Thurs,) to provide all possible options for students during their time they spend at El Camino.

5. Additional data

With regard to demographic data we average approximate 300 students per year majoring in Architecture. Approximately 30 percent are female. We have a predominate (40 percent) Latino ethnicity. Caucasians and Asians each number about 20 percent. 10 percent are African-American.

With regard to age, the Architectural student majority (50 percent) are 18 to 23 years of age. 2 percent being under 18 and 48 percent over 23 years of age. This predominance supports the opinion that most architectural students are preparing for longer term first carriers as opposed to enhancing careers.

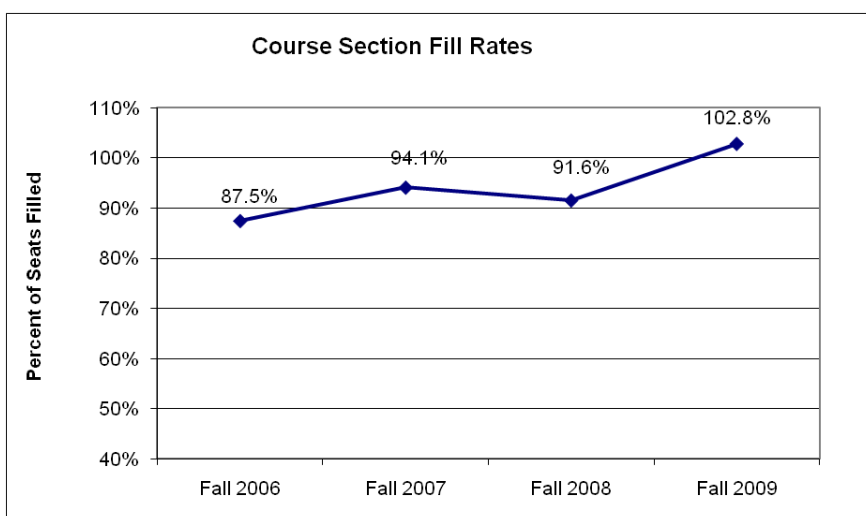
Full time faculty teach approximately 35 percent of the classes offered in the Architectural department. The remaining 65 percent of the classes are taught by part-time faculty. At this time, these numbers seem to parallel the college at large. However the college has been under financial constraints and it has not filled full-time faculty positions and as a result

part-time faculty have increased as a percentage. The optimum staffing would include a higher percentage of full-time faculty given its need to complete ancillary reports and administrative functions such as this report.

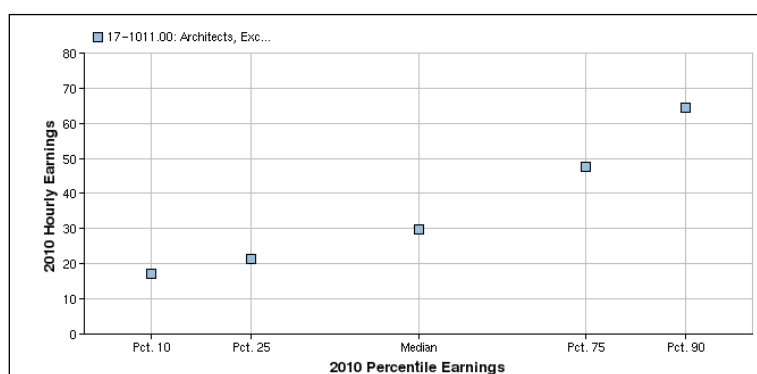
About 15 percent of student attending the program have a previous college degree. 79 percent are high school graduates.

The educational goals of the Architectural student are as follows: 40 percent intend to transfer to university level architectural programs. 20 percent are undecided. 20 percent are enhancing skills to gain employment. 9 percent are attending for personal enrichment. 8 percent are learning new technologies, techniques, and skills.

The graph to the right indicates that our percentage of seats filled have steadily risen over the past four years. Because of the industry downturn and the lack of openings at the university level due to admitting out-of-state and foreign students. This trend causes students who cannot get a job or gain admittance to a university Architecture program to compete for attendance at the community college level. This competition drives up the fill rate.



The median hourly wage for Architects is approximately \$30 per hour with the lowest and highest 10 percentile at \$17 and \$65, respectively¹.



O*NET Code	Title	Pct. 10	Pct. 25	Median	Pct. 75	Pct. 90
17-1011.00	Architects, Except Landscape and Naval	\$17.21	\$21.30	\$29.82	\$47.63	\$64.31

¹ Source: EMSI Complete Employment - 4th Quarter 2010

III. CURRICULUM

Course, Content, and Articulation

A. Courses not reviewed in the last 5 years

All courses in our department have been reviewed in the last 5 years

B. Explain any course additions to current course offerings

We made the Design Studio Course (Architecture 199) into an abcd course so a student may take it up to four times for a student to create an advanced portfolio to have the ability to transfer into a third year of a university school of architecture program. The student also needs to hone their skills in this area with a variety of projects.

We would like to note here that we are experiencing a roadblock of sorts. Numerous courses would have been added in the past couple of years if the college would allow us to offer the new courses and not take away sections of existing courses our students need to graduate.

C. Explain any course deletions from current course offerings

No courses have been deleted since the last program review. Everything we are teaching is currently being used in our industry.

D. Have all courses that are required for your program's degrees and certificates been offered during the last two years?

Yes, we rotate them so all courses are offered every academic year. They are also rotated by starting time as well.

E. Discuss any concerns regarding department/program's courses and their articulation

We currently have articulation agreements with the California Polytechnic State Schools at San Luis Obispo and Pomona and U.C. Berkley. There are currently no Architecture Programs at CSU's. We are in the process of articulating our Design Studio with the Private Colleges for advanced student placement into their programs.

F. Discuss the degrees, certificates and licensure exams. If few students receive degrees or certificates or if few students pass the licensure exam, should the programs criteria or courses be re-examined?

We are creating four new certificates in our program, as of this writing, and that should boost the number of certificates handed out in our department to 20- 30 yearly. We average 5-6 students receive a degree each year, some years more, some years less. The reason for that, I believe, is that most of our students come to El Camino to take specific architecture classes for various reasons. Some want to get a job in an architect's office as soon as they possibly can get work. Once they learn the basic CAD software, they are employable and we lose many students to that scenario. Some students want to be Interior Designers, Realtors, Developers, Civil or Structural Engineers, etc. These students just want specific classes for their major. Almost all of our students either transfer or go out into the workforce in some related industry. I consider our program, which is growing in student population, (currently third largest department in the Industry and Technology Division,) to be a tremendously successful program, in spite of the fact that we don't produce that many students who receive certificates or degrees. Student success in our program is measured by things like how many jobs students get or acquiring the skills to be able to transfer to a University program, I wish El Camino had a means of documenting this data, but it seems like it is left up to the department to do that data collection, which we are working on with this new website alumni link idea.

This institution is a COMMUNITY COLLEGE, our department feels our purpose is to serve the communities' needs, whatever they may happen to be. I feel our program does this, and is why we are so popular and getting even more popular each year that goes by. An example of this is our Architecture Club. This new academic year we have currently signed up over 200 members. We have a Design Studio lab that is filled with many of our students from 7:30 am to 10 pm daily and from 9am-3pm on Saturdays, as well. This is a program that is alive and on fire and doing many things to educate students in areas they need information in to succeed in industry. In our Program's mission statement, we say that "We are many things to many people," and that is how, I believe, we succeed at filling most of our classes to over 100% of the fill rate.

To pass the Architecture License Exam the student needs 8 years of education at an accredited institution and internship under a Licensed Architect, so the time they spend at El Camino is only a small fraction of what is required to pass the License Exam. Our program is not oriented to be a series of courses aimed at preparing a candidate for taking the License Exam. The amount of information that is required for a candidate to know could never be possibly taught in a two year program.

The faculty, who teach in our program, do not feel that we need to change, or re-structure any course or program degree requirement that currently exists. We feel we are having success the way our program is structured right now, and to quote an old saying, "If it isn't broke, don't

try and fix it.” All of our faculty are constantly adding current industry trends and other new technologies to our existing courses to make it a better learning experience for our students, while they are here at El Camino.

I was a student here at one time and received a Certificate of Competence and an A.S. Degree in Architecture. I, along with every other teacher in our department, always stress the importance of getting a degree or certificate in a program of study, and encourage each student to go as far as they can in their educational journey.

IV. STUDENT LEARNING OUTCOMES (SLOs)

A. Program Student Learning Outcome

Upon completion of a course of study in Architecture, a student will be able to design a building and draw the construction documents and specifications necessary for contractors to build it. The Student, upon completion of the program will also have the necessary skills to be competitive in the architectural workplace.

SLOs for each course in the curriculum

Arch 100

Given lecture information, worksheet examples and in-class discussion, students will be able to demonstrate how architecture shapes the urban and social environment on global and local scales.

Given lecture information, worksheet examples and in-class discussion, students will be able to demonstrate knowledge of the education necessary, internship and licensing procedures to become a professional architect.

Arch 104

Given lecture information, syllabus and in-class discussion, students will be able to demonstrate the knowledge of important buildings and theories that came from the various historical periods, (ie. Gothic, Renaissance, etc.)

Arch 120abcd

Given lecture information, worksheet examples, in-class discussion, and hands-on experience, students will be able to know the commands necessary to produce a set of construction drawings for a small house, using AutoCAD Architectural computer software.

Arch 121

Given lecture information, handouts and in-class discussion, students will be able to demonstrate the knowledge of a parametric based computer Aided Design software enough to be able to model a building and be able to analyze it structurally and environmentally as well as create Construction Documents of the building.

Arch 125

Given lecture information, handouts and in-class discussion, students will be able to demonstrate the knowledge of parametric based computer Aided Design software enough to be able to animate a “fly-around” and “walk-through” animated sequence of the proposed building

design. BIM (Building Information Modeling) analyzing components of the software will be taught to reinforce the various structural, material and environmental conscious aspects of the design

Arch 150a

Given lecture explanation and graphic examples of architectural drawing line values and line types, students will correctly apply that graphic technique to their project drawings.

Arch 150b

Given lecture explanation and graphic examples of architectural drawing line values and line types, students will correctly apply that graphic technique to their project drawings.

Arch 158

Given lecture information, handouts and in-class discussion, students will be able to demonstrate the knowledge of the function of structural components in residential buildings. Students will be able to calculate the size of beams, columns and lateral bracing systems of light framed wood structures.

Arch 170

Given lecture information, handouts and in-class discussion, students will be able to demonstrate the ability to delineate the entourage necessary to illustrate an architectural presentation drawing. The student will be knowledgeable in the use of various graphic tools that architects use in their office to delineate presentation drawings.

Arch 171

Given lecture information, handouts and in-class discussion, students will be able to demonstrate the ability to draw and delineate numerous three dimensional drawings like isometrics, Axonometrics, Obliques, One, Two and Three Point Perspectives.

Arch 172

Given lecture information, handouts and in-class discussion, students will be able to demonstrate the ability to draw and delineate architectural presentation drawings using various color mediums. The student will demonstrate knowledge of color theory and color schemes, (monochromatic, complimentary, etc.) that architectural illustrators use in various circumstances.

Arch 180abcd

Upon completing the course work, students will demonstrate the ability to design a simple house and then successfully collaborate within a team to build the structure in the Lab.

Arch 199abcd

Given lecture information, handouts and in-class discussion, students will be able to demonstrate the ability to understand basic architectural theory and apply it to the solution of design projects given throughout the semester

B. Courses with assessments

Year	Semester	Course-Level SLOs Assessed	Program-Level SLOs Assessed
Year 1 of 4-Year SLO Cycle (3 years before Program Review)	Spring Year 2012	ARCHITECTURE 100 ARCHITECTURE 120abcd	First program level assessment due
	Fall Year 2012	ARCHITECTURE 150A ARCHITECTURE 170	
Year 2 of 4-Year SLO Cycle (2 years before Program Review)	Spring Year 2013	ARCHITECTURE 121abcd ARCHITECTURE 172	
	Fall Year 2013	ARCHITECTURE 150ab ARCHITECTURE 171	
Year 3 of 4-Year SLO Cycle (1 year before Program Review)	Spring Year 2014	ARCHITECTURE 180abcd	
	Fall Year 2014	ARCHITECTURE 125abcd ARCHITECTURE 158	
Year 4 of 4-Year SLO Cycle (Year of Program Review)	Spring Year 2015	ARCHITECTURE 104	
	Fall Year 2015	ARCHITECTURE 199abcd	

C. Changes resulting from assessments

Since no assessments have been made yet we can not make any changes from the assessed results.

D. Program certificate and degree SLOs and manner of assessment

In progress.

V. Facilities, Equipment, and Technology

A. Facilities, equipment and technology used by the program/department and adequacy and currency of facilities, equipment and technology

Our Lecture and Lab square footage has grown since the last program review. We have acquired the use of an adjacent lab that used to be inhabited by the CAD Department, but the computers are outdated in the lab so they no longer have use for the room which also has 26 drafting tables, which our department so direly needs. Although the extra space comes in real handy when there are many people in the lab, the computers will not run the software we are currently teaching so they are basically internet and Microsoft office machines. We have a very small storage room, which will be the office for our new part time tool room attendant. We could definitely use a larger space for this area of our department. Also, all of our reproduction equipment is currently located in our lab where all the students can have access to them. These are very expensive machines and can easily jam and malfunction if not used correctly. In a perfect world we would have all these machines located in a room with the tool room attendant who could run the machines. This requires a much larger space than we currently have. Currently all of our equipment is in good condition and has been updated since the last program review, but as software technology changes we will eventually need new computers.

B. Immediate needs of facilities, equipment and technology

Currently we have 24 computers in our “open lab” where as many as 50 students may come to work on a project any one time that the lab is open. (8am-9pm M-Thur, 9am-3pm Fri-Sat) We could use another 24 computers as more software comes on line for the various courses we teach. If we had that many more computers we would also have the ability to offer two sections of CAD courses at the same time.

We need to put several software products on our computers; Photoshop, Illustrator, 3D Studio Max, and Netop to teach the process a project goes thru in an office.

We need a model making laser CNC machine to cut materials for student models.

There is also a need for a means by which we can charge students for reproductions they make on the machines in our lab. Several Architectural schools use a department credit card that is scanned for any reproducible expenditures.

C. Long-range needs

We will need more lecture rooms and labs as our program grows, we will also need more money in our Equipment and Supply budget as we are investing in green and sustainable apparatus/construction materials.

Units	Material	Cost
24	New Computers	\$75,000
	New Software	\$25,000

VI. STAFFING

A. Current staffing

We currently have two full time teachers and four part time teachers. We now have a part time, (20hrs/wk,) Tool Room Attendant. We also usually have an advanced student worker to help out in the lab w/ student drawing and computer questions. (12 hrs/wk)

B. Future needs

We will need another full time teacher when we will be allowed to offer more sections of our classes someday. Our field is expanding into many new directions with the Green and Sustainable Building Code now being enforced. We expect more professionals to come take our classes to learn about this new code and technologies associated with it. There will also be a growing number of younger students wanting to get an education in this area.

If the architecture department could be allowed to grow, the way we would like to, (by adding classes to address all these new emerging Green Job areas as well as expanding our program to contain Landscape and Urban Planning courses,) it would evolve the architecture department into a program of “Environmental Design.” (Much like we see at the Cal Poly Architecture Programs, which we would model our program after.) By doing this we would substantially increase the number of certificates and degrees in our program. At that point we could see the need of another full time teacher, bringing the number to 4 for full time staff.

We will eventually need a full time (40hr/wk) tool room attendant. Currently we have a tool room attendant that works 20 hours, we split him with another department. We do not get to choose the hours, we need him here when we don’t have him, we need a full time attendant because we have an open lab and there are always students in our lab in need of help and one teacher can’t possibly help as much as needed.

C. Specific Recommendations

We recommend that our Department hire another full time teacher so there is more continuity with classes taught. Our adjunct faculty varies so if we had another full time faculty it would make the classes have better continuity. Because our Lab is filled constantly with students due to the “Open Lab” nature of students coming in at all times we need that tool room attendant to be a full time department member.

VII. DIRECTION & VISION

A. Internal and external changes or trends impacting program in next 5 years

We are currently seeing a big change in our program heading towards the Green and Sustainable subject areas and incorporating information regarding these new technologies in all of our course outlines when we update them later this year. Along with that, we will add new courses in this area to our curriculum and start work this academic year on a new, on-going project in our construction yard. This project will be a temporary Green/Sustainable structure and a series of Outside spaces that have Green implications. This project will be constantly evolving each semester as this new technology changes. This structure will serve many functions; as a visual aid to teach all El Camino students, (not just construction and architecture students.) It will also serve as a new venue for several lecture classrooms. There will be an interior and exterior lecture area that will have all the amenities needed for the lecture of any academic class to take place. The vast majority of the time this new structure will serve as a library of materials and information and interactive learning lab for students to learn more about emerging alternative technologies.

B. Direction of program in 5 years

We see the program growing and offering more courses and doing more research in alternative energy sources for buildings to function properly and have a self sustaining environment control system. Eventually, every student will eventually have a laptop computer, so to have all of our software on a wireless network would be a necessity.

Our program is also looking to expand in other disciplines that are parallel to our profession. We are looking at writing new course outlines for: Landscape Architecture, Site/Urban Planning, LEED, and Interior Design

C. Goals & objectives of program related to the college mission and strategic initiatives

We have the goal in our department to stay progressive in our discipline by first, always offering instruction in the latest release of whatever software we are teaching in the various courses we offer. We are trying to stay current with new technology by attending seminars/conventions regarding the changes in Building Codes and apparatus that we now design into buildings. As far as Strategic Initiatives go, the department feels that the new Green Sustainable Industry is a new goal to strive for in developing new course material.

VIII. PRIORITIZED RECOMMENDATIONS

A. Prioritized recommendations and needs of your program/department

Here are the needs ranked from most desired to least needed at this point in time:

Priority	Description	Approx Cost
1.	More computers in our lab	\$50K
2.	Small copy machine	\$1K
3.	CNC Laser cutting machine	\$50K
4.	Increase Supply/Equipment Budget	\$ 5K/YR
5.	More lecture rooms and labs	\$50K
6.	Full time instructor	\$100K

B. Conclusions

The El Camino College Architecture Program strives to give its students all of the tools necessary to possess the graphic ability to design and draw manually, or by computer, Architectural Design and Construction Documents. The student will have the ability to be a skilled professional when they graduate and leave the program to pursue a career, on a higher level, in architecture. The way the architecture department faculty have designed the curriculum, there are many flexible options how a student or returning professional may schedule their busy lifestyle around the classes we offer them. We strive to create an educational atmosphere where a student may obtain the necessary academic skills to be able to function, on many levels, in an Architects' office.

Many more of our students transfer on to university architecture programs now, more than ever before, in our departments long 60 year history. In the beginning we were created to be a vocational program to provide architects with the draftsmen they needed to create the construction documentation for buildings. Now our program has evolved into a dynamic combination of vocational and design oriented courses to better prepare the growing number of students that are transferring to architecture schools all over the world, upon their graduation from El Camino.

The education of an architecture student is a very diverse one, and now requires a student to spend a minimum of 5 years in college to obtain a Bachelors Degree in the field. There are also many other allied majors that our students are pursuing, in which we would like to add coursework to our program's curriculum to facilitate their transfer into these programs, which are in many architecture schools at the university level: Architectural Engineering, Landscape Architecture, Green & Sustainable Technologies, Urban and Regional Planning, and Interior Design.

Data from questionnaires given to the students in our program indicate that most of our students go out and work in Industry when they leave El Camino. If this is true, then we want to provide an environment that is conducive to a school of architecture, at the university level. The faculty want the student to experience the important parts, in addition to coursework, (Lectures, field trips, study abroad, community service projects, club,) necessary in the educational process one needs to go through, to one day become a professional in the architectural array of professions that await the students in the real world when they leave El Camino.

We would like to think of our program as one that creates “Career Paths” towards certain student destinations; Licensure in a specific area relating to architecture, Transferring to an accredited 5 year university program, or a vehicle towards acquiring the needed information and skills necessary to obtain a job. Through the coursework we offer and the extra-curricular activities our program provides, I feel that, over the duration of the time they spend at school, the El Camino College Architecture Student will be exposed to all the information needed to provide them with a foundational education in the fine art of Architecture and its related fields.

APPENDIX A

I. Demographic and Enrollment Characteristics

Architecture

Fall 2006 to Fall 2009

Characteristic	Category	Fall 2006		Fall 2007		Fall 2008		Fall 2009		Fall 2009 ECC		2000 Census ECC District	
		n	%	n	%	n	%	n	%	n	%	n	%
All Enrolled	Total	309	100.0%	291	100.0%	295	100.0%	319	100.0%	27,271	100.0%	520,376	100.0%
Gender	Female	92	29.8%	78	26.8%	100	33.9%	98	30.7%	14,312	52.5%	264,871	50.9%
	Male	217	70.2%	213	73.2%	195	66.1%	221	69.3%	12,953	47.5%	255,505	49.1%
	Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	6	0.0%	0	0.0%
Ethnicity	African-American	26	8.4%	25	8.6%	34	11.5%	33	10.3%	4,577	16.8%	88,701	17.0%
	Amer. Ind. or Alaskan	1	0.3%	0	0.0%	0	0.0%	0	0.0%	100	0.4%	1,219	0.2%
	Asian	49	15.9%	49	16.8%	65	22.0%	62	19.4%	4,539	16.6%	58,779	11.3%
	Latino	128	41.4%	126	43.3%	122	41.4%	126	39.5%	9,466	34.7%	157,138	30.2%
	Pacific Islander	3	1.0%	3	1.0%	2	0.7%	3	0.9%	257	0.9%	2,061	0.4%
	White	68	22.0%	60	20.6%	55	18.6%	56	17.6%	5,236	19.2%	197,570	38.0%
	Unknown or Decline	34	11.0%	28	9.6%	17	5.8%	37	11.6%	3,096	11.4%	0	0.0%

Characteristic	Category	Fall 2006		Fall 2007		Fall 2008		Fall 2009		ECC		ECC District	
		n	%	n	%	n	%	n	%	n	%	n	%
Age/Age Group	Under 17	4	1.3%	4	1.4%	2	0.7%	1	0.3%	572	2.1%	139,140	26.7%
	17	4	1.3%	6	2.1%	8	2.7%	5	1.6%	758	2.8%		
	18	37	12.0%	32	11.0%	32	10.8%	44	13.8%	3,326	12.2%	11,840	2.3%
	19	35	11.3%	34	11.7%	26	8.8%	42	13.2%	3,678	13.5%		
	20	34	11.0%	32	11.0%	33	11.2%	35	11.0%	2,977	10.9%	5,996	1.2%
	21	38	12.3%	29	10.0%	24	8.1%	21	6.6%	2,305	8.5%	5,720	1.1%
	22	18	5.8%	26	8.9%	24	8.1%	25	7.8%	1,677	6.1%	20,233	3.9%
	23	21	6.8%	16	5.5%	26	8.8%	26	8.2%	1,347	4.9%		
	24	13	4.2%	20	6.9%	12	4.1%	13	4.1%	1,121	4.1%		
	25-29	31	10.0%	31	10.7%	43	14.6%	36	11.3%	3,398	12.5%	43,779	8.4%
	30-39	36	11.7%	32	11.0%	26	8.8%	28	8.8%	2,896	10.6%	97,447	18.7%
	40-49	25	8.1%	11	3.8%	21	7.1%	21	6.6%	1,770	6.5%	80,126	15.4%
	50-64	9	2.9%	17	5.8%	15	5.1%	21	6.6%	1,195	4.4%	69,852	13.4%
	65+	4	1.3%	1	0.3%	3	1.0%	1	0.3%	251	0.9%	46,878	9.0%
Class Load	Full-time	104	33.7%	113	38.8%	109	36.9%	136	42.6%	8,560	31.4%		
	Part-time	205	66.3%	178	61.2%	185	62.7%	182	57.1%	18,675	68.5%		
	Not enrolled or N/A	0	0.0%	0	0.0%	1	0.3%	1	0.3%	36	0.1%		
Time of Classes*	Daytime	226	73.1%	221	75.9%	215	72.9%	228	71.5%	19,337	70.9%		
	Evening	83	26.9%	70	24.1%	80	27.1%	91	28.5%	5,084	18.6%		
	Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2,850	10.5%		
Academic Level	College degree	49	15.9%	38	13.1%	53	18.0%	53	16.6%	3,680	13.5%		
	HS Graduate	226	73.1%	223	76.6%	227	76.9%	253	79.3%	21,533	79.0%		
	Not a HS Grad	7	2.3%	8	2.7%	5	1.7%	5	1.6%	582	2.1%		
	K-12 Special Admit	6	1.9%	6	2.1%	5	1.7%	0	0.0%	916	3.4%		
	Unknown	21	6.8%	16	5.5%	5	1.7%	8	2.5%	560	2.1%		

Characteristic	Category	Fall 2006		Fall 2007		Fall 2008		Fall 2009		ECC		ECC District	
		n	%	n	%	n	%						
Educational Goal	Intend to Transfer	121	39.2%	102	35.1%	124	42.0%	112	35.1%	8,408	30.8%		
	Degree/Certif. Only	9	2.9%	11	3.8%	11	3.7%	7	2.2%	1,115	4.1%		
	Retrain/recertif.	30	9.7%	20	6.9%	20	6.8%	16	5.0%	1,719	6.3%		
	Basic Skills/GED	7	2.3%	8	2.7%	8	2.7%	12	3.8%	1,262	4.6%		
	Enrichment	24	7.8%	18	6.2%	18	6.1%	30	9.4%	985	3.6%		
	Undecided	74	23.9%	77	26.5%	77	26.1%	63	19.7%	6,136	22.5%		
	Unknown	44	14.2%	55	18.9%	55	18.6%	79	24.8%	7,646	28.0%		
Additional characteristics available upon request.													

II. Course Grade Distribution and Success/Retention Rates (Fall 2006 to Fall 2009)**Architecture****Fall 2006**

Course	A	B	C	CR	D	F	I	NC	DR	W	Total Grades	Success Rate	Retention Rate
ARCH-100	16	0	2	0	0	5	0	0	0	12	35	51.4%	65.7%
	45.7%	0.0%	5.7%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	34.3%			
ARCH-104	16	10	10	0	3	9	0	0	0	15	63	57.1%	76.2%
	25.4%	15.9%	15.9%	0.0%	4.8%	14.3%	0.0%	0.0%	0.0%	23.8%			
ARCH-120ABCD	24	10	3	0	1	1	2	0	0	7	48	77.1%	85.4%
	50.0%	20.8%	6.3%	0.0%	2.1%	2.1%	4.2%	0.0%	0.0%	14.6%			
ARCH-121ABCD	26	0	0	0	0	2	0	0	0	1	29	89.7%	96.6%
	89.7%	0.0%	0.0%	0.0%	0.0%	6.9%	0.0%	0.0%	0.0%	3.4%			
ARCH-150A	26	22	20	0	0	2	0	0	0	34	104	65.4%	67.3%
	25.0%	21.2%	19.2%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	32.7%			
ARCH-150B	5	5	4	0	7	0	0	0	0	4	25	56.0%	84.0%
	20.0%	20.0%	16.0%	0.0%	28.0%	0.0%	0.0%	0.0%	0.0%	16.0%			
ARCH-158	5	11	0	0	0	4	0	0	0	4	24	66.7%	83.3%
	20.8%	45.8%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	0.0%	16.7%			
ARCH-170	13	8	2	0	0	2	0	0	0	4	29	79.3%	86.2%
	44.8%	27.6%	6.9%	0.0%	0.0%	6.9%	0.0%	0.0%	0.0%	13.8%			
ARCH-171	24	8	3	0	0	1	0	0	0	5	41	85.4%	87.8%
	58.5%	19.5%	7.3%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	12.2%			
ARCH-199AB	9	3	2	0	1	0	0	0	0	1	16	87.5%	93.8%
	56.3%	18.8%	12.5%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	6.3%			
ARCH-96ABCD	2	0	0	0	0	0	0	0	0	2	4	50.0%	50.0%
	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%			
Course Totals	166	77	46	0	12	26	2	0	0	89	418	69.1%	78.7%
	39.7%	18.4%	11.0%	0.0%	2.9%	6.2%	0.5%	0.0%	0.0%	21.3%			
Division Total/Avg	1,392	1,060	609	576	159	328	25	37	0	876	5,062	71.8%	82.7%
	27.5%	20.9%	12.0%	11.4%	3.1%	6.5%	0.5%	0.7%	0.0%	17.3%			
College Total/Avg	15,458	11,582	8,382	4,421	2,809	4,891	345	1,318	0	14,220	63,426	62.8%	77.6%
	24.4%	18.3%	13.2%	7.0%	4.4%	7.7%	0.5%	2.1%	0.0%	22.4%			

Fall 2007

Course	A	B	C	CR	D	F	I	NC	DR	W	Total Grades	Success Rate	Retention Rate
ARCH-100	21	1	3	0	0	6	0	0	1	3	35	71.4%	88.6%
	60.0%	2.9%	8.6%	0.0%	0.0%	17.1%	0.0%	0.0%	2.9%	8.6%			
ARCH-104	15	17	10	0	3	7	0	0	1	9	62	67.7%	83.9%
	24.2%	27.4%	16.1%	0.0%	4.8%	11.3%	0.0%	0.0%	1.6%	14.5%			
ARCH-120ABCD	21	13	2	0	1	3	1	0	0	5	46	78.3%	89.1%
	45.7%	28.3%	4.3%	0.0%	2.2%	6.5%	2.2%	0.0%	0.0%	10.9%			
ARCH-121ABCD	32	0	0	0	1	1	0	0	0	5	39	82.1%	87.2%
	82.1%	0.0%	0.0%	0.0%	2.6%	2.6%	0.0%	0.0%	0.0%	12.8%			
ARCH-150A	34	15	12	0	0	9	0	0	5	33	108	56.5%	64.8%
	31.5%	13.9%	11.1%	0.0%	0.0%	8.3%	0.0%	0.0%	4.6%	30.6%			
ARCH-150B	10	13	5	0	1	1	0	0	1	8	39	71.8%	76.9%
	25.6%	33.3%	12.8%	0.0%	2.6%	2.6%	0.0%	0.0%	2.6%	20.5%			
ARCH-158	10	8	1	0	3	0	0	0	1	3	26	73.1%	84.6%
	38.5%	30.8%	3.8%	0.0%	11.5%	0.0%	0.0%	0.0%	3.8%	11.5%			
ARCH-170	9	9	4	0	0	3	0	0	0	1	26	84.6%	96.2%
	34.6%	34.6%	15.4%	0.0%	0.0%	11.5%	0.0%	0.0%	0.0%	3.8%			
ARCH-171	16	11	2	0	0	4	0	0	1	2	36	80.6%	91.7%
	44.4%	30.6%	5.6%	0.0%	0.0%	11.1%	0.0%	0.0%	2.8%	5.6%			
ARCH-199AB	6	4	1	0	0	1	0	0	0	3	15	73.3%	80.0%
	40.0%	26.7%	6.7%	0.0%	0.0%	6.7%	0.0%	0.0%	0.0%	20.0%			
Course Totals	174	91	40	0	9	35	1	0	10	72	432	70.6%	81.0%
	40.3%	21.1%	9.3%	0.0%	2.1%	8.1%	0.2%	0.0%	2.3%	16.7%			
Division Total/Avg	1,521	1,081	610	551	159	379	32	37	154	711	5,235	71.9%	83.5%
	29.1%	20.6%	11.7%	10.5%	3.0%	7.2%	0.6%	0.7%	2.9%	13.6%			
College Total/Avg	16,244	11,674	8,356	4,788	2,743	5,030	360	1,322	2,566	12,270	65,353	62.8%	77.3%
	24.9%	17.9%	12.8%	7.3%	4.2%	7.7%	0.6%	2.0%	3.9%	18.8%			

Fall 2008

Course	A	B	C	P	D	F	I	NP	DR	W	Total Grades	Success Rate	Retention Rate
ARCH-100	7	7	2	0	0	10	0	0	1	4	31	51.6%	83.9%
	22.6%	22.6%	6.5%	0.0%	0.0%	32.3%	0.0%	0.0%	3.2%	12.9%			
ARCH-104	30	9	5	0	5	12	0	0	3	4	68	64.7%	89.7%
	44.1%	13.2%	7.4%	0.0%	7.4%	17.6%	0.0%	0.0%	4.4%	5.9%			
ARCH-120ABCD	23	10	5	0	0	4	0	0	3	4	49	77.6%	85.7%
	46.9%	20.4%	10.2%	0.0%	0.0%	8.2%	0.0%	0.0%	6.1%	8.2%			
ARCH-121ABCD	25	6	1	0	4	0	0	0	1	2	39	82.1%	92.3%
	64.1%	15.4%	2.6%	0.0%	10.3%	0.0%	0.0%	0.0%	2.6%	5.1%			
ARCH-150A	26	17	13	0	0	2	8	0	5	14	85	65.9%	77.6%
	30.6%	20.0%	15.3%	0.0%	0.0%	2.4%	9.4%	0.0%	5.9%	16.5%			
ARCH-150B	3	8	6	0	0	1	6	0	0	2	26	65.4%	92.3%
	11.5%	30.8%	23.1%	0.0%	0.0%	3.8%	23.1%	0.0%	0.0%	7.7%			
ARCH-158	6	4	6	0	1	0	0	0	0	8	25	64.0%	68.0%
	24.0%	16.0%	24.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	32.0%			
ARCH-170	13	10	2	0	0	3	0	0	0	3	31	80.6%	90.3%
	41.9%	32.3%	6.5%	0.0%	0.0%	9.7%	0.0%	0.0%	0.0%	9.7%			
ARCH-171	20	4	6	0	1	1	0	0	0	4	36	83.3%	88.9%
	55.6%	11.1%	16.7%	0.0%	2.8%	2.8%	0.0%	0.0%	0.0%	11.1%			
ARCH-199AB	12	3	1	0	1	2	0	0	2	1	22	72.7%	86.4%
	54.5%	13.6%	4.5%	0.0%	4.5%	9.1%	0.0%	0.0%	9.1%	4.5%			
Course Totals	165	78	47	0	12	35	14	0	15	46	412	70.4%	85.2%
	40.0%	18.9%	11.4%	0.0%	2.9%	8.5%	3.4%	0.0%	3.6%	11.2%			
Division Total/Avg	1,616	1,306	675	1,252	161	561	43	84	170	680	6,548	74.1%	87.0%
	24.7%	19.9%	10.3%	19.1%	2.5%	8.6%	0.7%	1.3%	2.6%	10.4%			
College Total/Avg	18,319	12,726	9,310	5,700	3,176	6,871	461	1,814	3,085	10,741	72,203	63.8%	80.9%
	25.4%	17.6%	12.9%	7.9%	4.4%	9.5%	0.6%	2.5%	4.3%	14.9%			

Fall 2009

Course	A	B	C	P	D	F	I	NP	DR	W	Total Grades	Success Rate	Retention Rate
ARCH-100	12	7	7	0	0	6	0	0	1	2	35	74.3%	91.4%
	34.3%	20.0%	20.0%	0.0%	0.0%	17.1%	0.0%	0.0%	2.9%	5.7%			
ARCH-104	39	13	12	0	4	10	0	0	1	2	81	79.0%	96.3%
	48.1%	16.0%	14.8%	0.0%	4.9%	12.3%	0.0%	0.0%	1.2%	2.5%			
ARCH-120ABCD	30	3	1	0	0	0	1	0	2	5	42	81.0%	83.3%
	71.4%	7.1%	2.4%	0.0%	0.0%	0.0%	2.4%	0.0%	4.8%	11.9%			
ARCH-121ABCD	29	6	2	0	1	3	0	0	4	1	46	80.4%	89.1%
	63.0%	13.0%	4.3%	0.0%	2.2%	6.5%	0.0%	0.0%	8.7%	2.2%			
ARCH-150A	20	16	17	0	0	18	0	0	1	9	81	65.4%	87.7%
	24.7%	19.8%	21.0%	0.0%	0.0%	22.2%	0.0%	0.0%	1.2%	11.1%			
ARCH-150B	8	7	5	0	1	5	0	0	2	6	34	58.8%	76.5%
	23.5%	20.6%	14.7%	0.0%	2.9%	14.7%	0.0%	0.0%	5.9%	17.6%			
ARCH-158	10	9	3	0	2	0	0	0	3	1	28	78.6%	85.7%
	35.7%	32.1%	10.7%	0.0%	7.1%	0.0%	0.0%	0.0%	10.7%	3.6%			
ARCH-170	13	2	1	0	0	4	0	0	0	7	27	59.3%	74.1%
	48.1%	7.4%	3.7%	0.0%	0.0%	14.8%	0.0%	0.0%	0.0%	25.9%			
ARCH-171	29	6	1	0	0	1	0	0	3	5	45	80.0%	82.2%
	64.4%	13.3%	2.2%	0.0%	0.0%	2.2%	0.0%	0.0%	6.7%	11.1%			
Course Totals	190	69	49	0	8	47	1	0	17	38	419	73.5%	86.9%
	45.3%	16.5%	11.7%	0.0%	1.9%	11.2%	0.2%	0.0%	4.1%	9.1%			
Division Total/Avg	1,761	1,199	634	814	168	508	28	48	148	598	5,906	74.6%	87.4%
	29.8%	20.3%	10.7%	13.8%	2.8%	8.6%	0.5%	0.8%	2.5%	10.1%			
College Total/Avg	18,808	13,245	9,880	5,269	3,201	5,941	388	1,538	3,042	9,914	71,226	66.3%	81.8%
	26.4%	18.6%	13.9%	7.4%	4.5%	8.3%	0.5%	2.2%	4.3%	13.9%			

III. Enrollment statistics; fill rates

		SEATS		% Max	FTEF	WSCH		WSCH/FTEF			
COURSE	SECTS	Max	Actual	Seats	Load						
						Max	Actual	Max	Actual	Adjusted	F.T.E.S.
ARCHITECTURE - SPRING, 2010											
ARCH 100	1	35	34	97.1%	0.06667	42.70	41.48	640.50	622.20	553.07	1.30
ARCH 104	2	70	73	104.3%	0.40000	238.00	248.20	595.00	620.50	551.56	7.75
ARCH 120ABCD	2	48	49	102.1%	0.66667	326.40	333.20	489.60	499.80	444.27	10.41
ARCH 125ABCD	1	26	44	169.2%	0.33333	176.80	299.20	530.40	897.60		9.35
ARCH 150A	2	60	70	116.7%	0.80000	408.00	476.00	510.00	595.00	528.89	14.87
ARCH 150B	1	25	29	116.0%	0.33333	170.00	197.20	510.00	591.60	525.87	6.16
ARCH 170	1	35	35	100.0%	0.33333	238.00	238.00	714.00	714.00	634.67	7.43
ARCH 172	1	35	28	80.0%	0.33333	238.00	190.40	714.00	571.20	507.73	5.95
ARCH 180	1	24	27	112.5%	0.43333	216.00	183.60	498.46	423.69	376.62	5.74
ARCH 199AB	1	24	35	145.8%	0.43333	216.00	315.00	498.46	726.92	646.15	9.84
TOTAL ARCH	13	382	424	111.0%	4.13333	2,269.90	2,522.28	549.17	610.23	542.43	78.79

		SEATS		% Max	FTEF	WSCH		WSCH/FTEF			
COURSE	SECTS	Max	Actual	Seats	Load	Max	Actual	Max	Actual	Adjusted	F.T.E.S.
ARCHITECTURE FALL, 2009											
ARCH 100	1	35	35	100.0%	0.06667	42.70	42.70	640.50	640.50	569.33	1.33
ARCH 104	2	70	78	111.4%	0.40000	238.00	265.20	595.00	663.00	589.33	8.28
ARCH 120ABCD	2	48	41	85.4%	0.66667	326.40	278.80	489.60	418.20	371.73	8.71
ARCH 121ABCD	1	24	43	179.2%	0.66667	163.20	292.40	244.80	438.60	389.87	9.13
ARCH 150A	3	90	108	120.0%	1.00000	612.00	734.40	612.00	734.40	652.80	22.94
ARCH 150B	1	35	34	97.1%	0.33333	238.00	231.20	714.00	693.60	616.53	7.22
ARCH 158	1	35	28	80.0%	0.20000	119.00	95.20	595.00	476.00	423.11	2.97
ARCH 170	1	35	27	77.1%	0.33333	238.00	183.60	714.00	550.80	489.60	5.74
ARCH 171	1	35	45	128.6%	0.33333	238.00	306.00	714.00	918.00	816.00	9.56

		SEATS		% Max	FTEF	WSCH		WSCH/FTEF			
COURSE	SECTS	Max	Actual	Seats	Load	Max	Actual	Max	Actual	Adjusted	F.T.E.S.
ARCHITECTURE – SPRING, 2009											
ARCH 100	1	35	39	111.4%	0.06667	42.70	47.58	640.50	713.70	634.40	1.49
ARCH 104	2	70	65	92.9%	0.40000	238.00	221.00	595.00	552.50	491.11	6.90
ARCH 120ABCD	2	48	55	114.6%	0.66667	326.40	374.00	489.60	561.00	498.67	11.68
ARCH 125ABCD	1	26	35	134.6%	0.33333	176.80	238.00	530.40	714.00	634.67	7.43
ARCH 150A	2	60	68	113.3%	1.00000	408.00	462.40	408.00	462.40	411.02	14.44
ARCH 150B	2	50	45	90.0%	0.33333	340.00	306.00	1,020.00	918.00	816.00	9.56
ARCH 170	1	35	30	85.7%	0.33333	238.00	204.00	714.00	612.00	544.00	6.37
ARCH 172	1	35	39	111.4%	0.33333	238.00	265.20	714.00	795.60	707.20	8.28
ARCH 180	1	24	20	83.3%	0.43333	216.00	136.00	498.46	313.85	278.97	4.25
ARCH 199AB	1	24	18	75.0%	0.43333	216.00	162.00	498.46	373.85	332.31	5.06
TOTAL ARCH	14	407	414	101.7%	4.33333	2,439.90	2,416.18	563.05	557.58	495.63	75.48

		SEATS		% Max	FTEF	WSCH		WSCH/FTEF			
COURSE	SECTS	Max	Actual	Seats	Load	Max	Actual	Max	Actual	Adjusted	F.T.E.S.
ARCHITECTURE – FALL, 2008											
ARCH 100	1	35	32	91.4%	0.06667	42.70	39.04	640.50	585.60	520.53	1.22
ARCH 104	2	70	68	97.1%	0.40000	238.00	231.20	595.00	578.00	513.78	7.22
ARCH 120ABCD	2	48	49	102.1%	0.66667	326.40	333.20	489.60	499.80	444.27	10.41
ARCH 121ABCD	1	24	35	145.8%	0.66667	163.20	238.00	244.80	357.00	317.33	7.43
ARCH 150A	3	90	86	95.6%	1.00000	612.00	584.80	612.00	584.80	519.82	18.27
ARCH 150B	1	35	26	74.3%	0.33333	238.00	176.80	714.00	530.40	471.47	5.52
ARCH 158	1	35	22	62.9%	0.20000	119.00	74.80	595.00	374.00	332.44	2.34
ARCH 170	1	35	31	88.6%	0.33333	238.00	210.80	714.00	632.40	562.13	6.58
ARCH 171	1	35	36	102.9%	0.33333	238.00	244.80	714.00	734.40	652.80	7.65
ARCH 199AB	1	24	22	91.7%	0.43333	216.00	198.00	498.46	456.92	406.15	6.19
TOTAL ARCH	14	431	407	94.4%	4.43333	2,431.30	2,331.44	548.41	525.89	467.46	72.83

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		SEATS		% Max	FTEF	WSCH		WSCH/FTEF			
COURSE	SECTS	Max	Actual	Seats	Load	Max	Actual	Max	Actual	Adjusted	F.T.E.S.
ARCHITECTURE - SPRING, 2008											
ARCH 100	1	35	34	97.1%	0.06667	42.70	41.48	640.50	622.20	553.07	1.30
ARCH 104	2	70	58	82.9%	0.40000	238.00	197.20	595.00	493.00	438.22	6.16
ARCH 120ABCD	2	48	44	91.7%	0.66667	326.40	299.20	489.60	448.80	398.93	9.35
ARCH 125ABCD	1	26	34	130.8%	0.33333	176.80	231.20	530.40	693.60	616.53	7.22
ARCH 150A	3	90	101	112.2%	1.00000	612.00	686.80	612.00	686.80	610.49	21.45
ARCH 150B	2	50	23	46.0%	0.33333	340.00	156.40	1,020.00	469.20	417.07	4.89
ARCH 170	1	35	31	88.6%	0.33333	238.00	210.80	714.00	632.40	562.13	6.58
ARCH 172	1	35	29	82.9%	0.33333	238.00	197.20	714.00	591.60	525.87	6.16
ARCH 180	1	24	28	116.7%	0.43333	216.00	190.40	498.46	439.38	390.56	5.95
ARCH 199AB	1	24	14	58.3%	0.43333	216.00	126.00	498.46	290.77	258.46	3.94
TOTAL ARCH	15	437	396	90.6%	4.33333	2,643.90	2,336.68	610.13	539.23	479.32	72.99

		SEATS		% Max	FTEF	WSCH		WSCH/FTEF			
COURSE	SECTS	Max	Actual	Seats	Load	Max	Actual	Max	Actual	Adjusted	F.T.E.S.
ARCHITECTURE – SPRING, 2007											
ARCH 100	1	35	27	77.1%	0.06667	42.70	32.94	640.50	494.10	439.20	1.03
ARCH 104	2	70	83	118.6%	0.40000	238.00	282.20	595.00	705.50	627.11	8.82
ARCH 120ABCD	2	48	46	95.8%	0.66667	326.40	312.80	489.60	469.20	417.07	9.77
ARCH 125ABCD	1	26	20	76.9%	0.33333	176.80	136.00	530.40	408.00	362.67	4.25
ARCH 150A	3	90	89	98.9%	1.00000	612.00	605.20	612.00	605.20	537.96	18.91
ARCH 150B	2	50	38	76.0%	0.33333	340.00	258.40	1,020.00	775.20	689.07	8.07
ARCH 170	1	35	32	91.4%	0.33333	238.00	217.60	714.00	652.80	580.27	6.80
ARCH 172	1	35	38	108.6%	0.33333	238.00	258.40	714.00	775.20	689.07	8.07
ARCH 180	1	24	26	108.3%	0.43333	216.00	176.80	498.46	408.00	362.67	5.52
ARCH 199AB	1	24	19	79.2%	0.43333	216.00	171.00	498.46	394.62	350.77	5.34
TOTAL ARCH	15	437	418	95.7%	4.33333	2,643.90	2,451.34	610.13	565.69	502.84	76.58

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Maximum Seats:

		SEATS		% Max	FTEF	WSCH		WSCH/FTEF			
COURSE	SECTS	Max	Actual	Seats	Load	Max	Actual	Max	Actual	Adjusted	F.T.E.S.
ARCHITECTURE - SPRING, 2010											
ARCH 100	1	35	34	97.1%	0.06667	42.70	41.48	640.50	622.20	553.07	1.30
ARCH 104	2	70	73	104.3%	0.40000	238.00	248.20	595.00	620.50	551.56	7.75
ARCH 120ABCD	2	48	49	102.1%	0.66667	326.40	333.20	489.60	499.80	444.27	10.41
ARCH 125ABCD	1	26	44	169.2%	0.33333	176.80	299.20	530.40	897.60	797.87	9.35
ARCH 150A	2	60	70	116.7%	0.80000	408.00	476.00	510.00	595.00	528.89	14.87
ARCH 150B	1	25	29	116.0%	0.33333	170.00	197.20	510.00	591.60	525.87	6.16
ARCH 170	1	35	35	100.0%	0.33333	238.00	238.00	714.00	714.00	634.67	7.43
ARCH 172	1	35	28	80.0%	0.33333	238.00	190.40	714.00	571.20	507.73	5.95
ARCH 180	1	24	27	112.5%	0.43333	216.00	183.60	498.46	423.69	376.62	5.74
ARCH 199AB	1	24	35	145.8%	0.43333	216.00	315.00	498.46	726.92	646.15	9.84
TOTAL ARCH	13	382	424	111.0%	4.13333	2,269.90	2,522.28	549.17	610.23	542.43	78.79