



Computer Information Systems (CBIS)

Six-Year Program Review
2015 – 2016

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Allan Hancock College Program Review

Comprehensive Self-Study

Program review is intended to be a reflective process that builds on the extensive information gathered for the Annual Updates and lays out the program's major directions for the future. (Place your responses in the expandable text boxes below each question.)

I. Program Mission

Describe the need that is met by the program or the purpose of the program. For CTEA programs only, show that "the program does not represent an unnecessary duplication of other vocational or occupational training programs in the area."

The Computer Business Information Systems (CBIS) program is committed to provide students develop the business and technical skills to help support a company's information systems' needs. There are multiple program options that allow a student to specialize in applications, Web development, and software support.

This program strongly supports the Allan Hancock's institutional Information and Technology Literacy Institutional Learning Outcome (ILO):

- Information Literacy
 - In the business environment, professionals need to be able to *define what information is needed to solve a real-life issue and locate, access, evaluate and manage the information.*
 - As stated in our MIS Essentials book, "Future business professionals, need to be able to assess, evaluate and apply emerging information technology to business." Throughout our classes, we hope to emphasize and teach these important skills to our students.
 - In our courses, we strongly emphasize ethics and professional responsibilities in regards to managing and using information.
- Technology Literacy
 - *Proficient in a technology and the ability to choose the appropriate tool.*
 - *Our students,*
 - *learn technical skills that help them analyze and solve problems both independently and in teams using a variety of problem solving approaches and selecting the appropriate software tool.*
 - *learn to analyze/design/develop/deploy/maintain and manage business applications.*

The program does not represent an unnecessary duplication of other vocational or occupational training programs in the area.

II. Program Description and Purpose

The Computer and Business Information Systems (CBIS) program is a comprehensive degree where you will learn business concepts along with needed technical skills to help support a company's information systems' needs.

Other CBIS program options allow you to specialize in:

- Applications
- Web development
- Software support

III. Status Summary – Plan of Action-Post Validation from 2009/2010

During the academic year, 2009 , 2010 the Computer Business Information Systems (CBIS) Program completed its program review. The self-study and validation teams developed a final plan of action post-validation based on the information in the self-study and the recommendations of the validation team. That plan of action has been updated and goals added as necessary each year through the annual update.

(if any plan was made and action not taken, please state the rationale for not pursuing that particular item. If action was delayed or postponed, provide an explanation and a new target date.)

Plan of Action	Action Taken, Results and Status
Develop and modify courses/programs to better assist students to accomplish learning outcomes.	<p>Courses in the computer lab have been modified to lecture instead of lab.</p> <p>All courses have been mapped to corresponding Institutional Learning Outcomes (ILOs)</p> <p>Student Learning outcomes have been reviewed and improved for CBIS courses we are currently teaching. Mapping aligns with new ILOA split: 4A Information Literacy and 4B Technology Competence/Literacy.</p> <p>Student outcomes have been revised for greater clarity for all courses offered.</p>
Continue to develop strategies and timelines for assessment of learning outcomes. Modify program and course learning outcomes where needed after evaluating and analyzing data.	<p>Evaluated other means of assessing learning outcomes beyond class portfolios or other traditionally used activities</p> <p>Improving use of MyITLab and other course management systems to better assess student learning outcomes</p> <p>Student learning outcomes being assessed for every class at the end of the semester and at different points in time of the semester through specific learning outcomes oriented activities. More nuanced rubrics are being used in courses and updated to meet evaluation of criteria.</p>

Plan of Action	Action Taken, Results and Status
<p>Continue work with Public Affairs & Publications to promote new and/or revised courses and programs.</p>	<p>We requested a meeting with Public Affairs and Publications to ask how they can help promote programs and upcoming course offerings.</p> <p>Carmen Montanez-Rodriguez has been working with Public Affairs to promote courses internally with ideas on advertisements presented to students through MyHancock.</p> <p>Further inquiries have been made on updating of the CBIS webpage in the Hancock website as it contains inaccurate information. Since thirty-five percent of the students responding to the survey indicated they found the course on the schedule, faculty are reviewing and updating information in the schedule, and a website has been created to address student questions within the online class search.</p> <p>Faculty are also sharing new promotional information with the Counseling department such as flyers with course offerings on one semester certificates and instructor course site.</p> <p>Other promotional efforts not related to Public Affairs were: participation in the ICT Pathways Initiative which lead to updated information on CBIS/CBOT course offerings and course mapping advertised through the ICT Pathways website and brochures.</p> <p>Courses also listed on the ICT Collaborative Initiative website with information on onsite/online offerings at a Statewide level.</p> <p>This item needs to continue being worked on Spring 2017</p>
<p>Continue work with Public Affairs & Publications to inform local businesses of degree and certificate programs.</p>	<p>We requested a meeting with Public Affairs and Publications to ask how they can help promote programs and upcoming course offerings. We were informed that promotion could be done through different strategies provided that the department had funds available. Request for further information was</p>

Plan of Action	Action Taken, Results and Status
	<p>forwarded to department chair and dean with a need to follow up by CBIS faculty.</p> <p><i>Action postponed</i> – to be worked on Spring 2017</p>
<p>Continue work with local high schools to promote CBIS programs.</p>	<p>Both full-time instructors have been invited and participated in the local high schools' Advisory Committee meetings and have provided feedback to Santa Maria, Nipomo, Righetti, Pioneer Valley, Lompoc, and Cabrillo High Schools. Also, we invite CTE high school instructors to attend our Advisory Group meetings.</p> <p>CBIS Faculty members have also participated in the updating of course offerings and changes in curriculum to high schools through Articulation and Articulation meetings.</p> <p>Brochures were created for CBIS, as part of a Business Department strategy, targeting different High Schools on course articulation and certificates that students could obtain. The project was halted after the brochures were distributed to the high schools for feedback due to lack of funding and support in the area of articulation.</p>
<p>Add and/or replace Advisory Group members</p>	<p>Carmen Montanez-Rodriguez has been attending local events related to business and technology in Santa Barbara County to increase networking opportunities. Two new recruitments resulted from these efforts.</p> <p>With change in technology occurring rapidly and different businesses emerging, we believe that this process should be ongoing.</p> <p>Feedback was asked from Dean on potential strategies to enlist new members. Carmen Montanez-Rodriguez has also reached out to Information Systems faculty at Calpoly. Follow up is needed.</p> <p>This item needs to continue being worked on Spring 2017</p>
<p>Update the distance learning courses utilizing the Quality Matters Model</p>	<p>Quality matters was phased out as a campus strategy, but the principles covered in the</p>

Plan of Action	Action Taken, Results and Status
	<p>training on campus have been applied to online course offerings.</p> <p>Carmen Montanez-Rodriguez is currently training with @One on compliance with the Online Educational Initiative's (OEI) Online Education Standards Initiative.</p> <p>Carmen Montanez-Rodriguez completed a Certificate on Education Technology from Peralta Community College in fall 2011 and a Master's Degree in Educational Technology in June 2014.</p> <p>Margaret Warrick and Carmen Montanez-Rodriguez have attended online, AHC training, and seminars to update their knowledge and computer skills.-</p>
<p>Develop courses/programs needed to keep curriculum current with changes in technology</p>	<p>Courses have been updated to reflect the changes in the required skills based on current job descriptions, Labor Department Statistics, Chancellor's Office Vocational Statistics and Information and Communication Technology (ICT) Statewide Taskforce Statistics.</p> <p>Updated curriculum to include aspects of mobile applications development CBIS 112, and CBIS 327</p> <p>Changes as needed – Continue to submit changes to curriculum to AP&P</p>
<p>Promoted the Cooperative Work Experience program and Entrepreneur course(s)</p>	<p>Worked with other department peers to develop materials for the Entrepreneurship program – website and database</p> <p>Developed and submitted AP&P paperwork to get Entrepreneurship course approved.</p>
<p>Utilized feedback from the CBIS Advisory Group and community businesses to improve curriculum.</p>	<p>Worked with Jody Derry to update CBOT certificate to meet recommendations from Advisory group to offer CBIS 141 (3 units) instead of CBIS 371 (1 unit) in the CBOT certificate.</p> <p>Jody will now be one of the instructors in the CBIS course scheduling for teaching this course.</p>

Plan of Action	Action Taken, Results and Status
	Made modifications to the CBIS 343 Applied Project Management 1 course to be offered online, as Advisory group emphasized importance of project management as a skill needed by employees
Continue to make labs available for students and modify the main CBIS classrooms (room K-11B and K-10) to improve the learning environment	<p>We have made recommendation the room K10 be reorganized and that K11B have a solid wall built. These improvements in facilities have been made.</p> <p>Generated report and created presentation to show need for new hardware for computer classrooms and labs at both the Santa Maria and Lompoc campuses. The Computer Resource Center Lab (room K-11) and rooms K-10 and K-11B were updated with new computers for fall 2013. The Lompoc Valley Computer Lab (room 2-122) and room 2-121 were updated with new computers for fall 2015.</p>
Recommend software and hardware updates to continue to meet course and student needs	Generated report and created presentation to show need for new hardware for computer classrooms and labs at both the Santa Maria and Lompoc campuses. TAC funds were used to upgrade computers. The Computer Resource Center Lab (room K-11) and rooms K-10 and K-11B were updated with new computers for fall 2013. The Lompoc Valley Computer Lab (room 2-122) and room 2-121 were updated with new computers for fall 2015.
Develop rationale for hiring part and full-time faculty and participate in faculty prioritization process	With the reduction in course offerings due to the budget crisis, we do not see a need to hire additional faculty.

IV. Analysis of Resource Use and Program Implementation

Describe the program's current allocation and use of human, physical, technology, and fiscal resources. Are resources sufficient and appropriate to meet program needs? Can program resources be reallocated to better meet student needs?

With the oldest building on campus, the challenges on resources have been on-going. The current facilities are not suitable for the support of technologies taught and equipment installed. There have been no major updates to the building in 30 years. The acoustics for the classrooms are poor. Over the last 10 years we have had damage caused by leaks in the roof. Outside appearance of the building is faded, old and dirty.

CTEA and VTEA grants have funded some of the resources needed over the last many years. These funds are not guaranteed and are restricted to a few years. Our time is running out. For instance, this is the last year VTEA funds will cover our lab student workers' pay.

For the last year and half the computer lab has been without any full-time or part-time support person. This situation has limited student access to the lab and their ability to complete required work. Full-time faculty took on some of the responsibilities in this area in order to keep the lab open, but it can't continue this way. Additionally, the funds allocated for the lab personnel were removed from the CRC budget.

The current funding situation does not meet the program's needs.

Type of Resource	Specific Resource Narrative	Approximate Cost	Status (Accomplished, In Progress, or Pending)
Facilities	As a minimum: <ul style="list-style-type: none"> • Paint outside of Building K. • Paint doors, new tile in student women's & men's restroom in Building K. • Install air conditioning in Building K classrooms and Computer Resources Center to minimize student and faculty discomfort. Classrooms and lab lack proper ventilation and air conditioning. Between students and computers, the classrooms and lab can become very hot and affect the students' learning environment. • Update student water fountains in Building K (water basin looks dirty and stained). • Carpet needs to be replaced in the CRC. • Fix the leaks in the roof so they do not continue to reoccur. 	Estimate provided by Facilities Department	Ongoing /Pending
Technology	Technology in the classroom is up to date at the present moment. Ongoing budget needed for update of equipment as technology changes to respond to community and business needs.	Varying, estimate of \$20,000 annually for hardware and software plus labor costs.	Ongoing

Type of Resource	Specific Resource Narrative	Approximate Cost	Status (Accomplished, In Progress, or Pending)
	<ul style="list-style-type: none"> Continue to maintain and update computers in the CRC and classroom. Computer lab and classrooms (K-11B and K-10) were updated two years ago to improve the learning environment. This resource needs continued updates and/or replacements to stay current with the course learning objectives and technology changed demands. <p>Current technology used includes: student and instructor computers, classroom digital projectors, printers, scanners and other instructional equipment.</p>		
Staffing (Faculty and Faculty Support)	<p>Faculty: Currently, we have two full-time instructors and two part-time instructors. As Technology changes, it is important to keep the full-time faculty positions to maintain the program due to the importance of managing and securing information in our constantly changing environment.</p> <p>Faculty support CRC Lab Coordinator: Computer Resources Center lab has lost all full-time staff position thus limiting support in the lab area. There has been no replacement for the CRC lab coordinator since the former's retirement. Funding for this position was removed from the CRC budget and moved to the General Fund to another non-related area.</p> <p>Administrative Secretary: This position is currently a 10-month employee. The Business Department needs to have this position constantly filled. This position was not filled in for a year and a half which adversely affect the Business Department and their students. We request that this position be made 11-month so that employee may be available during the summer for students and faculty.</p> <p>Student workers (3)</p>	<p>Current salaries depending on experience and degrees.</p> <p>Current salary for position depending on applicant's experience and education.</p> <p>Current salary for position depending on applicant's experience and education.</p> <p>\$20,000</p>	Ongoing

Type of Resource	Specific Resource Narrative	Approximate Cost	Status (Accomplished, In Progress, or Pending)
Equipment (Non-Technology)	Chairs and tables for lab and classrooms need periodic replacement. Funds are needed. Currently the chairs need replacement and we would recommend doing this over a two-year period.	Current approved rate for replacing equipment	30 chairs/year for next three years
Fiscal	The current allocation of resources has been supplemented with CTEA funds which can't be relied on as a continual source of financial support. Current fiscal allocation allows for only update of software and office supplies.		
Other Resources			

V. Trend Analyses/Outlook

Using the information already gathered in the AUs (e.g., enrollment and achievement data; student learning outcomes assessment and analysis; input by advisory boards; existing articulation agreements; labor market trends) summarize the major trends, challenges, and opportunities that have emerged in the program since the last program review

Knowledge of Information Systems is one of the most important areas in maintaining a successful business. Managing information in conjunction with technology and social media is constantly changing. Almost every career field requires knowledge of technology. "Future business professionals need to be able to assess, evaluate, and apply emerging information technology to business." (MIS Essentials, Kroenke, 2015)

As evident by our student survey data, many of our students take only one of our classes to understand how Management Information Systems works with businesses. Others take one or more CBIS classes to learn about system software and/or application software to better manage their information and lastly some students take the courses with the intent of improving/updating technology skills for the work place.

Few students actually complete the two-year CBIS degree, either because they are interested in other areas of business or because they are just taking a specific class to improve their knowledge.

After our last 6-year Program Review when state funds were reduced, all our self-paced classes were cut. These classes allowed students to start and complete classes throughout a semester. These cuts are shown in reduction of classes currently being offered.

Online vs on-site success rates must be improved. This is a program and institutional challenge. Changes to courses are being made to improve success rates for both online classes and on-site courses. Current faculty has been training on the use of the OER rubric as well as an introduction to Canvas. Faculty will also volunteer for the summer pilot

implementation of Canvas. Some of the existing courses have been modified to meet compliance guidelines of the OER rubric.

In the last year, we have become involved with the California Community Colleges Business Information Worker Pathway to Success. "Business Information Worker coursework is current, providing knowledge and skills demanded in today's workplace." (www.ict-dm.net/biw) Current curriculum is being reviewed for grouping into certificate offerings within the ICT Pathways.

To best serve our students and community, we constantly need to modify and develop new courses to handle the changes in technology in business. The problem is we need a method to inform prospective students about these changes. Currently, we do not have the funds to advertise our courses/programs.

Advisory Committee

The CBIS/CBOT Advisory committee meet once a year. Our committee members have stressed what basic knowledge and computer skills are needed for all students. The committee members have informed us that all employees should have skills in word processing and spreadsheets. Also, our advisory team has stressed the importance of students mastering the ability to "follow instructions." This student learning objective is emphasized in every CBIS class.

The joint CBIS/CBOT Advisory committee emphasized the importance of incorporating soft-skills together with technical skills in the curriculum for new hires. Faculty shared with committee how soft skills are being integrated into existing curriculum and asked for feedback on particular content of interest.

Project management skills were considered important for the completion of tasks in the job place. Project management should be introduced to students from the perspective of the process, not only the specific software approach. With this suggestion, the project management course (CBIS 343) offering was modified to be more accessible to students by being offered online.

Skills in Microsoft Excel are highly sought and there was the suggestion to replace the one unit CBIS Excel course that was part of the CBOT certificate with the three unit CBIS 141.

The advisory committee also suggested keeping the Computer Business Information Systems website updated with information on the current software being offered and listing the courses that addressed different software. This helps employers determine the appropriate classes to direct their employees to when suggesting updating computer skills.

Labor Market Data and Analysis

It is important to note that with continuing changes in technology with software and hardware, there is regular re-enrollment of students in the classes in order to update their computer skills for personal use, meet a new job requirement, or acquire the skills needed in order to re-enter the workforce.

Employers demand an increased level of computer literacy from their workforce, and through the Computer Information Systems Program, it is possible for students to acquire the skills that they need to be successful while beating the Digital Divide. This applies to jobs in other

areas besides Computer Information Systems where computer technology has become part of the standard tools used for everyday activities.

Labor Market Data applies to new job openings and was taken from the California Employee Development Department at www.labormarketinfo.edd.ca.gov. The data indicates that by the year 2022 there will be a total of 2,585 jobs annually in Santa Barbara and the San Luis Obispo Counties and an estimated employment of 67,510 in the Computer Business Information Systems and related fields. Tables 1 & 2 below show a more detailed description of the types of jobs and the number of job openings per educational title.

Table 1

Employment Development Department - Labor Market Information Santa Barbara County 2012 - 2022		
Occupation	Estimated Employment	Total Annual Openings
Computer and Information Systems Managers	460	17
Computer Systems Analysts	400	18
Software Developers, Applications	860	33
Computer User Support Specialists	510	20
Computer Occupations, All Other	160	5
Medical Records and Health Information Technicians	210	11
Office and Administrative Support Occupations	31,270	1,119
Information and Record Clerks	5,760	279
Customer Service Representatives	1,880	111
Hotel, Motel, and Resort Desk Clerks	650	43
Executive Secretaries and Administrative Assistants	1,620	31
	43,780	1,687

Table 2

Employment Development Department - Labor Market Information San Luis Obispo County 2012 - 2022		
Occupation	Estimated Employment	Total Annual Openings
Computer and Information Systems Managers	130	7
Computer Systems Analysts	230	13
Software Developers, Applications	310	13
Computer User Support Specialists	440	15
Computer Occupations, All Other	70	3
Medical Records and Health Information Technicians	170	8
Office and Administrative Support Occupations	17,140	608
Information and Record Clerks	3,960	171
Hotel, Motel, and Resort Desk Clerks	640	49

Executive Secretaries and Administrative Assistants	640	11
	23,730	898

By the year 2024 the fastest growing occupations will be in the Computer Business Information fields for the state of California will be Office and Administrative Support Occupation with 2,508,800. Recall that other fields also require computer applications skills that might not be considered Information Systems per se, and that includes them as part of the population that will return to California Community Colleges for re-training.

Table 3

Employment Development Department - Labor Market Information California 2014 - 2024		
Occupation	Estimated Employment	Total Annual Openings
Computer and Information Systems Managers	50,100	2,120
Computer Systems Analysts	75,500	3,640
Software Developers, Applications	121,200	6,880
Computer Occupations, All Other	25,000	820
Medical Records and Health Information Technicians	18,900	790
Office and Administrative Support Occupations	2,508,800	74,220
Information and Record Clerks	528,800	19,160
Customer Service Representatives	201,500	7,970
Hotel, Motel, and Resort Desk Clerks	24,200	1,480
Executive Secretaries and Administrative Assistants	93,400	1,160
	3,647,400	118,240

Trends in Growth for Information Systems as part of Information and Communications Technologies (ICT)

Information and Communications Technologies (ICT) is an umbrella term, widely used outside the U.S. and in the United Nations, to encompass all rapidly emerging, evolving and converging computer, software, networking, telecommunications, Internet, programming and information systems technologies. ICT jobs, employ 1 in 20 private sector workers in California today, pay twice the median wage, expect strong job growth and for which employers report difficulty finding appropriately skilled workers.

The National Association of Colleges and Employers (NACE) Job Outlook 2016 survey revealed that after listing soft-skills as part of attributes that employers want to see in new college graduates' resumes technical skills and technology skills are listed. The focus of the Computer Information Systems Program goes beyond the software to also develop the skills listed below, and mentioned in the survey.

The relevance of these skills has also been reaffirmed by feedback from local businesses with whom we work on updating our curriculum and getting students job ready.

Figure 1: Attributes employers seek on a candidate's resume

ATTRIBUTE	% OF RESPONDENTS
Leadership	80.1%
Ability to work in a team	78.9%
Communication skills (written)	70.2%
Problem-solving skills	70.2%
Communication skills (verbal)	68.9%
Strong work ethic	68.9%
Initiative	65.8%
Analytical/quantitative skills	62.7%
Technical skills	59.6%
Interpersonal skills (relates well to others)	58.4%
Computer skills	55.3%

Source: *Job Outlook 2016*, National Association of Colleges and Employers
<http://www.naceweb.org/career-development/trends-and-predictions/job-outlook-2016-attributes-employers-want-to-see-on-new-college-graduates-resumes/>

As applicable, please address the breadth, depth, currency, and cohesiveness of the curriculum in relation to evolving employer needs and/or transfer requirements, as well as other important pedagogical or technology-related developments.

The program offers a wide variety of specialization, degrees, and certificates. The program has a transfer degree.

Individual courses are based on job related skills that are sought after by employees and that employers place as part of their job requirements on current job openings: spreadsheet applications (CBIS 141), database applications (CBIS 142), project management (CBIS 343), introduction to programming (CBIS 112), networking administration (CBIS 108) and Internet business applications (CBIS 321)

CBIS 101 Computer Concepts and Applications has the most sections offered. This course is a requirement in other degrees such as Business and Accounting. Even though classes are offered during the day, evening, and online, student enrollment numbers are best for CBIS courses offered online. This is also a C-ID course.

Instructors are modifying onsite classes to the flipped class model in some sections, in order to determine how it would improve student preparedness and retention on onsite course. Students also have internship opportunities through the Community Work Education Program (CWE).

VI. Long-Term Program Goals and Action Plans

Describe the long-term plans for changing or developing new courses and programs, other actions being taken to enhance student success, and the need for professional development activities and other resources to implement program goals. Be sure to show how these plans are related to assessment results. (Plan should cover five-year period and include target dates and resources needed.)

AHC Master Plan Goals	Long Term Plans	Timeline
Student Success	Creation of common rubrics for full-time and part-time faculty that can support in the broader assessment of all CSLOs.	Fall 2017
Professional Development	Continue attending industry and ICT promoted activities on the use of technology in the classroom as well as offer professional development on campus to keep staff updated on the changes in technology.	Summer 2017
Integrated Planning	There is a demand for students to obtain computer skills in a short-time frame that can be fulfilled by the scheduling of course already existing.	Spring 2017. Review of courses during Summer 2017 for restructuring.
Community Outreach	Work together with Campus' Public Relations office to develop advertising strategies to reach out to the community in terms of course offerings. Regularly schedule meetings with Advisory Committee to obtain feedback on changes in industry needs and student skills. Continue to Participate as an Advisory Group member at local high schools. Continue recruiting new members to the CBIS Advisory Group	Summer - Fall 2017
New Revenue Development	Potential participation in ICT related grants to supplement campus budget in the acquisition and maintenance of hardware and software, once the opportunities are identified.	On or before 2020

Student Data Analysis

I. Student Data Summary

Data analysis is a critical component of program review. The three categories below should be used as guidelines in developing a summary of the student data. See Exhibit *** for a copy of the student survey and the detailed results thereof.

A total of 86 students responded to the 2015 CBIS Survey.

There were seven CBIS 101 Computer Concepts and Applications classes offered this semester which includes both classroom and distance learning. The CBIS 101 class is a required class for other majors. We believe the majority of responses came from these classes. The remainder responses were from students in CBIS 141 Microsoft Excel - Comprehensive, CBIS 142 Microsoft Access - Comprehensive, CBIS 327 Building Business Web Sites, and CBIS 371 Intro to Excel, and CBIS 321 Internet Business Applications. The students in the CBIS 337 Presentation Design-PowerPoint course completed the survey for the Computer Business Office Technology (CBOT) program which is cross-listed with CBIS 337.

Both the classroom and distance learning students were requested to take the survey by clicking on a link from a Blackboard announcement. We are not able to distinguish what mode of instruction or which class the students are completing.

Note: Some of our students are taking more than one CBIS class this semester. These students were asked to complete only one survey.

Students were asked what influenced them to enroll in the course, 65.9% of the students indicated they are taking the course to obtain job skills to enter the workforce, to improve their job skills or to further their career. Counselors recommended 18.8% of our students to take their course. Fourteen percent (14.1%) of the students indicated they are taking their course for another reason such as it's a requirement or an elective course in their degree or for personal growth. Note: the students were allowed to select all responses that pertained to their situation.

State at least three positive factors about the discipline/program identified by the students. Include the number (or percentage) of students responding and any implications for planning.

1. Ninety-five percent (95.2%) of the students believe their CBIS course(s) contribute towards their intellectual growth and ninety-five percent (95.1%) of those responding are satisfied with the way our program meets their educational goals.
2. In regards to the content of courses offered in the CBIS program ninety-two percent (92.7%) were satisfied whereas ten percent (11.6%) had no opinion.
3. Fifty-four percent (54.7%) of the students indicated their attitude about the CBIS Program has improved with thirty-four percent (34.9%) staying the same as when they started their class(es).

State at least three negative factors about the discipline/program identified by students. Include the number for percentage(s) of students responding and any implications for planning.

1. We believe the thirty-three percent (33.7%) of the students who had no opinion on the advice about the program from counselors decided on their own to take the course or because of a recommendation from an instructor or an acquaintance.

Eighty-nine percent (89.5%) of the students who answered this question were moderately to highly satisfied with the advice about the program from counselors. Of the eighty-nine percent, thirty-one percent (31.6%) were only moderately satisfied and ten percent (10.6%) were not satisfied.

We plan to continue to attend a counselors' meeting once a year to discuss our program and help the counselors understand which course meets or matches with the students' abilities, incoming knowledge, and/or their career goals.

2. One area that may appear to be a problem is the availability of appropriate resources in the libraries. We believe this result is misleading because our students are fortunate to have use of the Computer Resource Center (CRC) and Lompoc Valley Center Lab. In the CRC and LVC labs, we have one or more copies of our books for students to use while in the lab. This helps students that cannot afford to purchase books at the beginning of the semester or have some time to work on course assignments but do not have their book with them.
3. Thirty-four percent (34.1%) of those surveyed are unsure if they will be taking additional CBIS classes and sixteen percent will not be taking any more CBIS classes. In actuality, this makes sense because many of our students just take one class to update their technical skills and other have already declared or decided on another major that requires one or more CBIS classes, i.e. Business, Accounting, and Medical Assisting.

We may persuade those who are undecided about taking additional CBIS classes by educating them about our class offerings and what the benefits are for them. We plan to spend time at the end of each semester offering recommendations on what the next CBIS class they should take. We are currently reviewing our scheduling of classes to offer the opportunity for students to be able to complete some of our smaller certificates quicker.

State any other information (use responsive numbers) that you obtained from student data (e.g. focus groups, questionnaires, or SGIDs) that may be of special interest to the self-study team. What planning implications will result from this information?

At the end of the survey, we asked the students to provide any comments/feedback on their course or the CBIS program. We didn't feel there was a repetitive comment that would direct us to make a major change to a class or to the program. One comment is that students that have Mac computers would like to use them to complete their application work in CBIS 101. With the new release of Office 2016, for both the PC and Mac, we hope that the students will be able to choose which platform to use to complete their course work. Also, spring 2016 we will be offering CBIS 381 Introduction to Mac OS and CBIS 382 Office Apps for the Mac for the first time online. We believe these courses will help our current students and people in the community become more proficient managing their Mac computer(s) and to learn how to use

the Office applications on a Mac. Further support from Campus services on promoting our courses to the wider community might prove helpful to provide opportunities for increased enrollments.

One of the students mentioned about Building K and our classrooms. The building is old and has many problems. Two major problems are we have no air conditioning in the classrooms and the acoustics are poor. With all the students and computers, during August, September, and October, there were many uncomfortable hot days in the classroom. This makes it more difficult to concentrate on the material being covered in class.

The CBIS courses are not easy for our students. Over the years, instructors have issued recommendations on time management and completion of tasks to students. There is also a need for further education, outside of what the instructors do, for students campus-wide to get a better understanding of rigor for 100-level courses in contrast to 300-level classes. We remind our students at the beginning of each semester of the hours they are expected to spend each week completing the course work. There were mixed comments but a few comments talked about there being too much work or that they cannot complete work on a website because it has problems. I don't believe the comment about the website being down for repairs is correct. The SAM, MyITLab and MyITLab website are very reliable.

We plan to continue to teach our students the latest versions of the software. Many times our classrooms and labs are the only places on campus that have the latest hardware and software. There are always a few comments from the students on the high cost of the course materials. As long as technology continues to change so quickly, the price of the course materials, especially books, will be high. The publishers only have a short time to recoup their expenses before new technology is released making the previous materials obsolete. Instructors at the CBIS program continue to work with book publishers on bundling of the books to diminish costs, as well as inclusion of e-texts as part of bundles. Instructors also continue making use of Community College software vendors that provide software at reduced prices, as well as the use of the MSDN program with free software downloads.

Overall, we believe the comments are positive. We are always reviewing and adjusting our course materials to make it easier for the students to understand what is required of them. Over the years, instructors have offered courses in different modalities, in an attempt to improve access to courses and increase retention: online, onsite, hybrid courses. Course materials are modified to respond to the needs of different platforms. Courses are also reviewed and updated in Curricunet, as state requirements on the discipline change and as new job descriptions in the market require students to obtain different skills.

Program and Course Student Learning Outcomes Assessment Plan

I. Program SLOs/Assessment

Learning Outcomes: The graduate of the AS program in *Computer Business Information Systems* will:

- Understand the fundamentals of business, and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business Information System's needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

How are they measured?

1. Classroom evaluation of class content and technology skills through group activities, individual projects, individual quizzes, midterms and final exams.

What is the assessment data indication about strengths and weakness of program?
Changes planned according to data?

II. Program Outcomes

The graduate of the AS program in Computer Business Information Systems will:

- PSLO 1 - understand the fundamentals of business, and how they relate to information systems needs of a business.
- PSLO 2 - use effective written and oral communication to support business information systems' needs.
- PSLO 3 - develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- PSLO 4 - analyze/design/develop/deploy/maintain and manage business applications.

This program strongly supports the Allan Hancock's institutional Information and Technology Literacy Institutional Learning Outcomes (ILO)

III. Course/Program Alignment

Course Outcomes	Program Outcomes				ILOs			
	1	2	3	4	1	2	4	7
CBIS 101	X	X		X	X	X	X	X
CBIS 108	X		X	X		X	X	
CBIS 112	X	X		X	X	X	X	
CBIS 141	X	X		X	X		X	
CBIS 142	X	X		X	X		X	
CBIS 301	X	X	X		X	X	X	
CBIS 321	X	X	X	X	X	X	X	
CBIS 327		X	X		X	X	X	
CBIS 343	X	X		X	X		X	

Course Outcomes	Program Outcomes				ILOs			
CBIS 371	X	X			X		X	
CBIS 372	X	X			X		X	
CBIS 373	X	X	X		X		X	
CBIS 381	X	X	X		X		X	
CBIS 382	X	X	X		X		X	

IV. Assessment Methodology

Course	CSLO 1 (tool)	CSLO 2 (tool)	CSLO 3(tool)	CSLO 4(tool)
CBIS 101	Assignments/ chapter exams*	Assignments	Assignments/ chapter exams	Assignments
CBIS 108	Assignment	Assignments/ chapter exams	Assignments/ chapter exams	Assignments/ chapter exams
CBIS 112	Assignments/ chapter exams	Assignments/ chapter exams	Assignments	
CBIS 141	Assignments/ chapter exams	Assignments/ chapter exams	Assignments	
CBIS 142	Assignments/ chapter exams	Assignments/ chapter exams	Assignments	
CBIS 301	Quizzes	Assignments	Assignments/ chapter exams	Assignments/ chapter exams
CBIS 321	Assignments/ chapter exams	Assignments	Assignments/ chapter exams	Assignments
CBIS 327	Assignments	Assignments	Assignments	
CBIS 343	Assignments/ chapter exams	Assignments/ chapter exams	Assignments	
CBIS 371	Assignments/ chapter exams	Assignments/ chapter exams	Assignments	
CBIS 372	Assignments/ chapter exams	Assignments/ chapter exams	Assignments	
CBIS 373	Assignments/ chapter exams	Assignments/ chapter exams	Assignments	
CBIS 381	Chapter exams	Assignments/ chapter exams	Assignments	Assignments/ chapter exams
CBIS 382	Assignments/ chapter exams	Assignments/ chapter exams	Assignments/ chapter exams	Assignments/ chapter exams

*Assignments could be individual projects or group projects assigned for a chapter or based on a particular set of skills that must be practiced: create/edit/modify/fix deliverables, for a particular business scenario. Chapter exams cover terminology and understanding of material: onsite or online through LMS

V. Implementation of Assessment

Assessment Cycle

Each of the courses will be assessed on a semester basis as they are offered. Part-time instructors contribute to the process of keeping assessment cycle going by evaluating learning outcomes for the courses that they teach with communication to full-time instructors.

VI. Dissemination of Information

Results will be shared in a special department meeting once a year during the analysis of data for the yearly program review. This will occur near the end of the academic year as soon as exam data for the year are available. In addition, written summaries will be shared with the Learning Outcomes and Assessment Committee, the dean, and the Vice President, Academic Affairs. The report is also posted and made accessible via the Program Review Matrix web link in the MyHancock portal.

VII. Program Learning Outcomes Results

All Course Learning outcomes have been matched to Program Learning outcomes. The percentages of students exceeding standards and meeting them based on Program collected data in Elumen from Summer 2015 to Fall 2010 is as follows:

PSLO 1 - understand the fundamentals of business, and how they relate to information systems needs of a business. - 76.72 % of students exceed/meet institutional standards.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	11	52.38%	4	10.05%	3	14.29%	3	14.29%	21	100.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	147	45.37%	103	31.79%	20	6.17%	54	16.67%	324	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	22	78.57%	4	14.29%	2	7.14%	0	0.00%	28	100.00%
Fall 2013	6	54.55%	1	9.09%	3	27.27%	1	9.09%	11	100.00%
Summer 2013	26	86.67%	2	6.67%	2	6.67%	0	0.00%	30	100.00%
Spring 2013	55	83.33%	2	3.03%	9	13.64%	0	0.00%	66	100.00%
Fall 2012	41	28.28%	66	45.52%	9	6.21%	29	20.00%	145	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	108	45.38%	68	28.57%	13	5.40%	49	20.50%	238	100.00%
Fall 2011	16	21.05%	42	55.26%	8	10.53%	10	13.16%	76	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	9	47.37%	2	10.53%	1	5.26%	7	36.84%	19	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	441	46.03%	294	30.69%	70	7.24%	153	15.97%	958	100.00%

PSLO 2 - use effective written and oral communication to support business information systems' needs. 77.32 % of students exceed/meet standards.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	22	52.38%	8	19.05%	6	14.29%	6	14.29%	42	100.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	182	45.16%	98	24.32%	25	6.20%	98	24.32%	403	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	18	78.26%	4	17.39%	1	4.35%	0	0.00%	23	100.00%
Fall 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2013	13	86.67%	1	6.67%	1	6.67%	0	0.00%	15	100.00%
Spring 2013	50	75.76%	1	1.52%	15	22.73%	0	0.00%	66	100.00%
Fall 2012	52	25.62%	108	53.20%	10	4.93%	33	16.26%	203	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	158	59.85%	75	28.41%	26	9.85%	5	1.89%	264	100.00%
Fall 2011	18	16.22%	65	58.56%	16	14.41%	12	10.81%	111	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	7	63.04%	0	0.00%	1	9.09%	3	27.27%	11	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	520	45.69%	360	31.63%	101	8.88%	157	13.80%	1138	100.00%

PSLO 3 - develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software. 72.31 % of students exceed/meet standards.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	26	34.67%	26	34.67%	6	8.00%	17	22.67%	75	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2012	12	15.79%	38	50.00%	0	0.00%	26	34.21%	76	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	26	35.14%	28	37.84%	0	0.00%	20	27.03%	74	100.00%
Fall 2011	29	46.77%	24	38.71%	1	1.61%	8	12.90%	62	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	12	60.00%	1	5.00%	0	0.00%	7	35.00%	20	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	105	34.28%	117	38.11%	7	2.28%	78	25.41%	307	100.00%

PSLO 4 - analyze/design/develop/deploy/maintain and manage business applications. 70.98 % of students exceed/meet standards.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	12	57.14%	0	0.00%	1	4.76%	8	38.10%	21	100.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	96	48.73%	36	18.27%	7	3.55%	58	29.44%	197	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	14	77.78%	4	22.22%	0	0.00%	0	0.00%	18	100.00%
Fall 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2013	19	65.52%	0	0.00%	7	24.14%	3	10.34%	29	100.00%
Fall 2012	32	29.36%	55	50.46%	4	3.67%	18	16.51%	109	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	67	46.85%	36	25.17%	24	16.78%	16	11.19%	143	100.00%
Fall 2011	10	16.39%	34	55.74%	7	11.48%	10	16.39%	61	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	9	36.00%	4	16.00%	1	4.00%	11	44.00%	25	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	239	42.95%	169	28.03%	51	8.46%	124	20.56%	603	100.00%

Based on the PSLOs data presented above, it could be concluded that:

Strengths of the Program	Available data seems to indicate students are meeting program standards
Gaps in the Program	High percentage of n/a amount of data seems to indicate that many students enrolled in the class, remain enrolled, even when not meeting course requirements. Data for PSLO3 not consistently available. Review of assessments methods for this particular PSLO3 with part-time faculty can address any questions/concerns.
Plan(s) to address gaps	Review with Part-time and Full-time faculty on drop procedures and new forms. Department wide reminders sent to instructor together with drop forms. Review of Elumen assessment instruments
Timeline for implementation of the plan	Spring 2016

Enrollment Data and Analysis

I. Enrollment Data

Using Tableau data reports, the following data was extracted for the period of Fall 2010 – Spring 2015 excluding summers for the CBIS Program and for Allan Hancock Community College (AHC)

CBIS Program Enrollment Data

Term	# Of Sections	Enrollment	FTES
Fall 2010	25	428	38.8
Spring 2011	25	451	38.5
Fall 2011	13	361	35.1
Spring 2012	15	398	36.8
Fall 2012	16	370	29.8
Spring 2013	15	383	33.5
Fall 2013	14	344	29.7
Spring 2014	15	358	31.7
Fall 2014	19	358	30.6
Spring 2015	18	330	28.9

AHC Enrollment Data

Term	# Of Sections	Enrollment	FTES
Fall 2010	1,178	32,211	4,239
Spring 2011	1,240	33,109	4,162
Fall 2011	1,023	29,219	3,905
Spring 2012	1,146	30,988	3,879
Fall 2012	1,004	28,559	3,775
Spring 2013	1,087	29,609	3,813
Fall 2013	1,069	28,612	3,852
Spring 2014	1,141	29,369	3,868
Fall 2014	1,141	29,153	3,900
Spring 2015	1,209	28,984	4,048
AVERAGE FOR AHC	1,123.8	29,981.3	3,944.1

II. Retention and Success Data

CBIS Program Retention and Success Data

Term	<i># Of Sections</i>	<i>Enrollment</i>	<i># of Students Retained</i>	<i>% of Students Retained</i>	<i># of Students Successful</i>	<i>% of Students Successful</i>
Fall 2010	25	428	319	75%	211	49%
Spring 2011	25	451	328	73%	226	50%
Fall 2011	13	361	266	74%	173	48%
Spring 2012	15	398	303	76%	233	59%
Fall 2012	16	370	293	79%	213	58%
Spring 2013	15	383	291	76%	222	58%
Fall 2013	14	344	287	83%	210	61%
Spring 2014	15	358	263	73%	180	50%
Fall 2014	19	358	277	77%	207	58%
Spring 2015	18	330	252	76%	181	55%
AVERAGE FOR THE PROGRAM	17.5	378.1	287.9	76%	205.6	55%

AHC Retention and Success Data

Term	<i># Of Sections</i>	<i>Enrollment</i>	<i>% of Students Retained</i>	<i>% of Students Successful</i>
Fall 2010	1,178	32,211	85.14%	67.32%
Spring 2011	1,240	33,109	84.72%	68.82%
Fall 2011	1,023	29,219	86.69%	68.63%
Spring 2012	1,146	30,988	84.65%	69.09%
Fall 2012	1,004	28,559	86.62%	69.63%
Spring 2013	1,087	29,609	86.17%	70.38%
Fall 2013	1,069	28,612	86.97%	70.56%
Spring 2014	1,141	29,369	85.23%	70.22%
Fall 2014	1,141	29,153	86.83%	69.80%
Spring 2015	1,209	28,984	85.44%	71.38%
AVERAGE FOR AHC	1,123.8	29,981.3	85.9%	70%

III. Enrollment, Retention and Success Analysis

The enrollment, retention and success data are provided above from information obtained from Tableau. The CBIS Program has a lower retention and success rate than AHC for the same period of time. There are many factors that can affect retention and success.

Changes in department climate affecting retention and success for students at the CBIS Program are

- Computer lab hours have been reduced, limiting student support for courses offered by Program.
- Weekly requirement of homework to be submitted by each student requires students to reassess use of time for the class.
- Changes in CBIS 101 for transfer status has increased course rigor and amount of course material covered.

- Courses that were self-paced and provided student support by instructor were changed to lecture based, with more student independent work and less one-on-one time.

Plan of Action for Retention and Success

As indicated by the data shown on the previous pages, retention and success averages for the CBIS program are lower than for AHC, which indicates a need to develop strategies that will improve the numbers in the CBIS program to match the institutional standards.

In order to improve retention and success, there are some strategies that could be implemented by a department or discipline that should be applied consistently by faculty, whether part-time or full-time. These strategies should go to par and work with AHC's strategies for student retention and success, as an institution. At the instructor/department level, it is possible to:

- Track of student progress through the beginning weeks of the course for each individual course, using notification messages for missed deadlines as homework such as those provided in Canvas. Important to address:
 - Has a student already missed classes in her/his first two weeks or performed inadequately on a test or quiz?
 - Has she/he reported feeling overwhelmed to her academic advisor?
 - Has she/he failed to engage in your learning management system (LMS) as early or often as you would have expected?

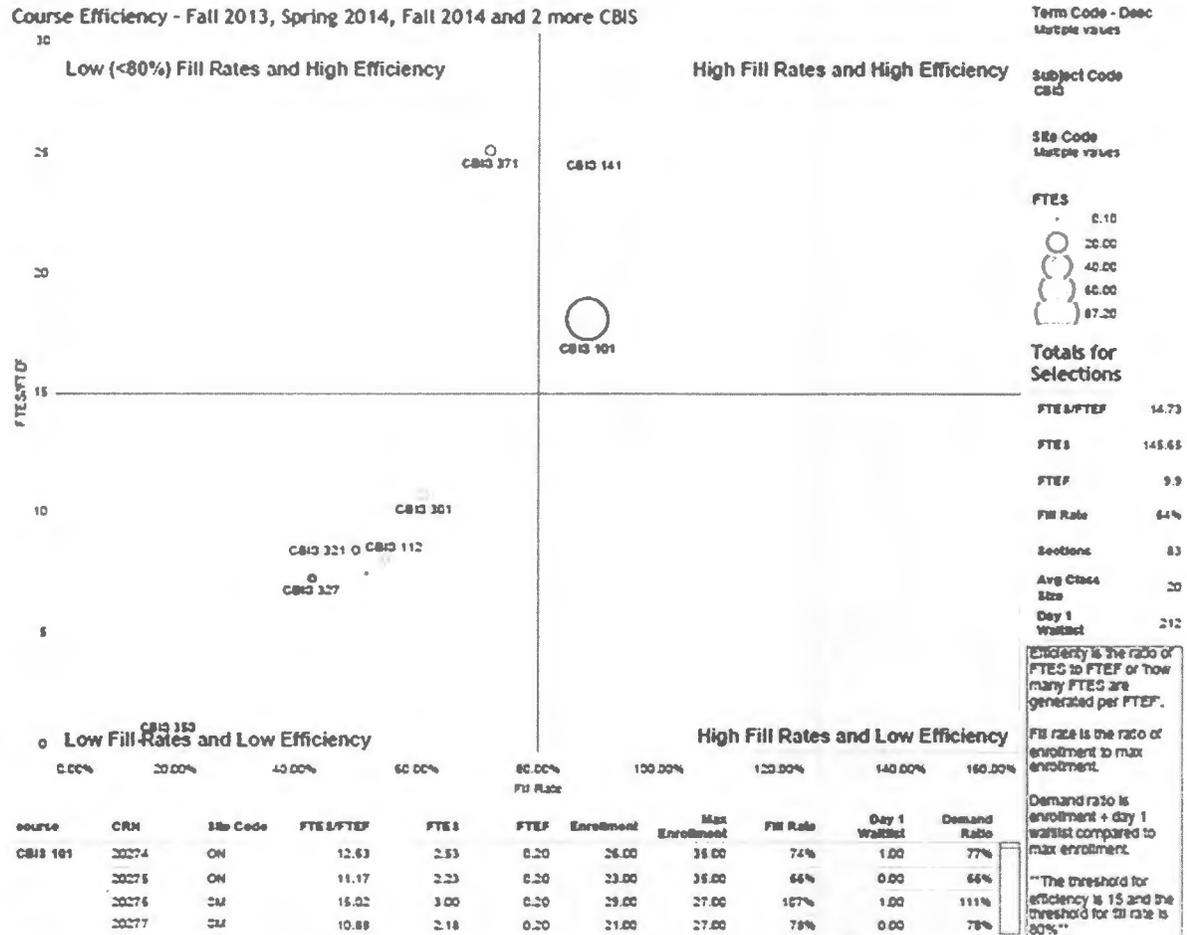
It is important to have a common definition of "at risk"

- Develop activities that require individual student preparation prior to class as well as activities that promote social interaction and student involvement with peers within the classroom (onsite or virtual). This can help students feel prepared and that they have peer support. Scaffolding strategies should be used in activities in order to move towards progress.
- Consciously build instructor interactions with individual students, in order to develop greater rapport.
- Regularly monitor course/section progress with faculty teaching the same courses and providing a means for feedback on activities that have been effective for retention and student success. Setup a formal schedule for reviews if needed.
- Gather feedback from students on what is working, what is not and see for those that are successful, what are the strategies that they are using to be successful.

It is important to note that discipline/department strategies for student retention and success should be supported by institutional strategies for student retention and success. Availability of funds, resources, training for faculty assigned to different disciplines can be affected by limits of funding, resources and training allowed/provided by the Institution. Also, a clear strategy with real world implementation guidelines at the Institutional level sets up the framework that helps shape discipline/department strategies.

IV. Efficiency Report Data

Using Tableau data reports, the following data was extracted for the period of Fall 2013 – Fall 2015 excluding summers for the CBIS Program and for Allan Hancock Community College (AHC)



Based on the course efficiency chart for this time period, CBIS 101 and CBIS 141 have the higher fill and higher efficiency percentages with CBIS 101 having students listed on their waitlist. These courses are offered online and onsite during the Spring, Fall and Summer semesters.

CBIS 101's demand could be related in part to being an option for core courses, as per the Course Catalog, in the areas of:

- Accounting
- Business Administration
- Business Management

This courses are an elective in the areas of:

- Agribusiness
- General Education

CBIS 108, 112, 301, 321, 327 are in the low fill and low efficiency quadrant. These courses have been scheduled online due to past low demand for onsite section.

Upon closer observation of the breakdown on the data table with more detailed information on demand ratio, fill rate and enrollment from Fall 2013 to Spring 2015 (below), it is possible to propose several alternative strategies for increasing efficiency for courses in the CBIS program.

Course Efficiency Data Table

Term Code - Desc Multiple values	Subject Code CBIS	Site Code Multiple values	Course	CRN	Site Code	Lab Sessions	FTE/FTEF	FTE S	FTE F	Enrollment	Max Enrollment	Fill Rate	Day 1 Waitlist	Demand Ratio		
Fall 2013	CBIS	CBIS 101	20293	ON	0	13.11	2.62	0.20	27	35	77%	0	77%			
			20294	ON	0	17.49	3.50	0.20	36	35	103%	3	111%			
			20295	SM	0	13.99	2.80	0.20	27	25	106%	10	148%			
			20296	SM	0	13.47	2.69	0.20	26	25	104%	4	120%			
			20297	LVC	0	16.56	3.31	0.20	31	30	103%	2	110%			
			20298	SM	0	14.43	2.89	0.20	27	25	106%	7	136%			
			20299	ON	0	15.06	3.01	0.20	31	35	89%	5	103%			
			20637	ON	0	14.09	2.82	0.20	29	35	83%	0	83%			
			20301	SM	0	9.12	1.82	0.20	18	27	67%	0	67%			
			20638	ON	0	8.74	1.75	0.20	18	35	51%	0	51%			
			20302	SM	0	0.41	0.00	0.00	4	27	15%	0	15%			
			21114	LVC	0	11.37	0.75	0.07	25	30	83%	0	83%			
			21129	SM	0	12.79	0.95	0.07	30	30	100%	0	100%			
			21130	SM	0	7.25	0.49	0.07	15	30	50%	0	50%			
			Total			13.51	29.73	2.20	344	424	81%	31	88%			
			Spring 2014	CBIS	CBIS 101	40077	ON	0	16.51	3.30	0.20	34	35	97%	5	111%
						40079	ON	0	14.57	2.91	0.20	30	35	86%	5	100%
						40083	SM	0	16.58	3.32	0.20	32	27	119%	8	148%
						40089	LVC	0	13.99	2.78	0.20	25	30	87%	2	93%
						40095	SM	0	16.03	3.21	0.20	30	27	111%	8	141%
40650	SM	0				15.54	3.11	0.20	30	29	107%	5	125%			
40685	ON	0				9.23	1.85	0.20	19	30	63%	0	63%			
40097	ON	0				6.80	1.36	0.20	14	35	43%	0	43%			
40652	ON	0				15.54	3.11	0.20	32	35	91%	6	109%			
40106	SM	0				9.86	1.97	0.20	21	27	78%	0	78%			
40123	ON	0				7.29	1.45	0.20	15	35	43%	0	43%			
40126	ON	0				1.36	0.00	0.00	14	35	40%	0	40%			
40676	ON	0				11.50	0.78	0.07	24	27	89%	0	89%			
40683	SM	0				10.46	0.70	0.07	23	27	85%	0	85%			
41072	LVC	0				7.16	0.48	0.07	14	30	47%	0	47%			
Total						13.20	31.69	2.40	358	443	77%	39	86%			
Fall 2014	CBIS	CBIS 101				21722	ON	0	14.57	2.91	0.20	30	35	86%	5	100%
			21723	ON	0	16.51	3.30	0.20	34	35	97%	3	106%			
Spring 2015	CBIS	CBIS 101	40074	ON	0	11.17	2.23	0.20	23	35	66%	0	66%			
			40076	ON	0	13.60	2.72	0.20	28	35	80%	0	80%			
			40080	SM	0	15.02	3.00	0.20	29	27	107%	3	119%			
			40085	LVC	0	15.49	3.10	0.20	29	30	97%	5	113%			
			40092	SM	0	11.22	2.24	0.20	21	27	78%	0	78%			
			40613	SM	0	13.99	2.80	0.20	27	28	96%	0	96%			
			40804	ON	0	6.80	1.36	0.20	14	30	47%	0	47%			
			40093	ON	0	10.20	2.04	0.20	21	35	60%	0	60%			
			40783	ON	0	16.03	3.21	0.20	33	35	94%	8	117%			
			40102	SM	0	4.70	0.94	0.20	10	27	37%	0	37%			
			40119	ON	0	7.29	1.46	0.20	15	35	43%	0	43%			
			40122	ON	0	1.36	0.00	0.00	14	35	40%	0	40%			
			41847	SM	6	0.46	0.23	0.49	5	40	13%	0	13%			
			41848	SM	1	0.10	0.00	0.00	4	40	10%	0	10%			
			41849	SM	1	0.70	0.00	0.00	15	40	38%	0	38%			
			40758	ON	0	14.50	0.97	0.07	30	27	111%	10	148%			
			40784	SM	0	5.00	0.34	0.07	11	27	41%	0	41%			
Total			10.18	28.80	2.83	329	553	59%	26	64%						

Fall 2015	CBIS	CBIS 101	20274	ON	0	12.63	2.53	0.20	26	35	74%	1	77%	
			20275	ON	0	11.17	2.23	0.20	23	35	66%	0	66%	
			20276	SM	0	15.02	3.00	0.20	29	27	107%	1	111%	
			20277	SM	0	10.88	2.18	0.20	21	27	78%	0	78%	
			20278	LVC	0	9.82	1.92	0.20	18	35	51%	0	51%	
			20279	SM	0	12.82	2.56	0.20	24	27	89%	2	96%	
			21506	ON	0	10.69	2.14	0.20	22	35	63%	0	63%	
			CBIS 141	22031	SM	0	13.11	2.62	0.20	27	35	77%	0	77%
			CBIS 142	21263	ON	0	12.14	2.43	0.20	25	35	71%	0	71%
			CBIS 321	20577	ON	0	6.31	1.26	0.20	13	35	37%	0	37%
			CBIS 337	20283	SM	0		0.21	0.00	2	27	7%	0	7%
			CBIS 350	21354	SM	6	0.46	0.23	0.49	5	40	13%	0	13%
			CBIS 351	21355	SM	1		0.14	0.00	5	40	13%	0	13%
			CBIS 352	21356	SM	1		0.20	0.00	9	40	23%	0	23%
			CBIS 371	20765	LVC	0	4.35	0.29	0.07	9	30	30%	0	30%
				20773	SM	0	5.97	0.40	0.07	14	27	52%	0	52%
			CBIS 373	21037	SM	0	6.37	0.43	0.07	14	27	52%	0	52%
				Total			9.19	24.77	2.70	286	557	51%	4	52%
			Grand Total				9.70	53.56	5.52	615	1,110	55%	30	58%

Efficiency Analysis Suggestions

Looking at overall performance, courses that are above 70% efficiency meet the institutional goal. Courses that are under this institutional goal need to be evaluated for improvement. It is important to consider these strategies within the current bigger picture of campus trends for location, modality, etc.

Some steps for improvement would involve to:

- Revise course offering sequencing to schedule sections more effectively and maximize efficiency while making courses available within reasonable time expected for the completion of the degree.
- Review of variations in target market for spring, fall, and summer to see the demand for vocational vs transfer courses. Courses could be linked in a way that it maximizes opportunity by promoting to the students internally.
- Explore efficiency in terms of scheduling 8 week courses vs 16 week courses and better fit for student success within the timeframe allowed. Explore opportunities for 6 week courses vs 8 week courses scheduling for the summer.
- Review current class size and compare with historical course size for different courses for a better match in numbers and use of resources. This would also apply to the satellite campuses in regards to their particular populations.
- Develop a consistent, across the board strategy for CBIS courses in order to start internal marketing of courses with students in current sections earlier, and provide a clearer pathway to follow.
- Promote courses and sequencing with assistance for Counseling department making promotional information available to counseling early during the time of open enrollment.
- Monitor changes in efficiency on a regular basis to evaluate the strategies being used.
- Revise opportunity for different entry points in for certificates with CBIS 101 as part of its core.
- Review the current arrangement of courses within certificates in regards to current employment trends and demands, which might include addition of courses from other disciplines as part of the core to open more entry points.

- Attempt scheduling of courses with variations of different scheduling: online, onsite, hybrid.
- Attempt delivery of courses with different pedagogical model: traditional vs flipped, etc.

Validation

I. Plan of Action – Pre Validation

Six Year

DEPARTMENT: Business PROGRAM: Computer Information Systems (CBIS)

List below as specifically as possible the actions which the department plans to take as a result of this program review. Be sure to address any problem areas which you have discovered in your analysis of the program. Number each element of your plans separately and for each, please include a target date. Additionally, indicate by the number each institutional goal and objective which is addressed by each action plan. (See Institutional Goals and Objectives)

RECOMMENDATIONS TO IMPROVE STUDENT LEARNING OUTCOMES AND ACHIEVMENT	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Continue to evaluate and refine course SLOs and assessments	SLS1, SLS2	Yearly
Review assessments and develop program recommendations needed	SLS1, SLS2	Semester
Continue to evaluate and refine PSLOs Continue to advocate for resolution of facilities problems which impact student success	SLS1, SLS2 IR2, SLS1,SLS2	Ongoing Ongoing

RECOMMENDATIONS TO ACCOMMODATE CHANGES IN STUDENT CHARACTERISTICS	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Enrollment Changes Maximize course offerings and scheduling options to accommodate student needs.	SLS2, SLS4, SLS6	Fall 2016
Continue developing courses in different modalities to accommodate student needs: hybrid, online, flipped, etc.	SLS2, SLS4, SLS6	Fall 2016
Demographic Changes Continue to recruit and hire qualified faculty	SLS2, SLS6, IR1	Spring 2017

RECOMMENDATIONS TO IMPROVE THE EDUCATIONAL ENVIRONMENT	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Curricular Changes Continue to integrate diverse technologies and teaching methodologies into curriculum.	IR3, SLS2,SLS4, SLS6	Fall 2016
Co-Curricular Changes		

RECOMMENDATIONS TO IMPROVE THE EDUCATIONAL ENVIRONMENT	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Improve scheduling process for satellite facilities	SLS2, E2	Spring 2017
Maintain outreach activities to area high schools	SLS2, SLS3, SLS7	Spring 2016 & Ongoing
Neighboring College and University Plans Reconnect with colleagues of transfer institutions in order to be more in tune with curriculum development and changes in these institutions.	SLS3, SLS4	Spring 2017
Related Community Plans Continue utilizing feedback from the CBIS Advisory Group and community businesses to improve curriculum.	I1	Spring 2017 & Ongoing
Continue to participate as an Advisory Group member at local high schools and to attend Advisory Group meetings	I1	Spring 2017 & Ongoing

RECOMMENDATIONS THAT REQUIRE ADDITIONAL RESOURCES	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Facilities Request repairs to building K as necessary to maintain quality and currency of program	SLS2, IR2, IR4	Spring 2016 & Ongoing
Equipment Replace aging or obsolete equipment as needed to maintain quality and currency of program	SLS2, IR2, IR4	Spring 2016 & Ongoing
Update software as needed with changes in industry	SLS2, IR2	Spring 2016 & Ongoing
Staffing Hire additional part-time faculty as necessary to support course offerings	SLS2, SS6, IR1	Spring 2016 & Ongoing

Strategic Goals listed above were taken from the 2014-2010 Strategic plan

- Goal SLS1: To ensure continuous improvement based on Student Learning Outcomes assessment data.
- Goal SLS2: To support student access, achievement, and success.

- Goal SL3: Help students clarify their aspirations, develop an educational focus they perceive as meaningful and develop a plan that moves them from enrollment to achievement of their goal.
- Goal SLS4: Foster students' motivation and help them develop the skills needed to achieve their goals.
- Goal SLS6: Actively involve students in meaningful and authentic educational experiences and activities inside and outside the classroom.
- GoalSLS7: Create connections between students and the institution and cultivate relationships that underscore how students involve with the college community can contribute to their academic and personal success.
- Goal IR1: To recruit and retain quality employees.
- Goal IR2: To develop district financial resources adequate to support quality programs and services.
- Goal IR3: To enhance and maintain currency in technology usage/application in support of students and faculty, staff efficiency and operational effectiveness.
- Goal IR4: To provide a safe, attractive, and accessible physical environment that enhances the ability to teach, learn, and work.

PROGRAM REVIEW -- VALIDATION TEAM MEMBERS

TO: Nancy Meddings, Dean Lrc/English/Business Ed/D

Date: 11/21/2016

From: Carmen Montanez-Rodriguez, CBIS/CBOT Instructor, Business Department

We recommend the following persons for consideration for the validation team:

DEPARTMENT Business PROGRAM Computer Business Information Systems (CBIS)

Board Policy requires that the validation team be comprised of the dean of the area, one faculty/staff member from a related discipline/program, and two faculty/staff members from unrelated disciplines.

<u>Jody Derry</u> (Name)	<u>Computer Office Technology (CBOT)</u> (Related Discipline/Program)
<u>Fred Patrick</u> (Name)	<u>Political Sciences</u> (Unrelated Discipline/Program)
<u>Clint Freeland</u> (Name)	<u>Counseling</u> (Unrelated Discipline/Program)

At the option of the self-study team, the validation team may also include one or more of the following: a. someone from a four-year institution in the same discipline; someone from another community college in the same discipline; a high school instructor in the same discipline; a member of an advisory committee for the program. Please complete the following as relevant to your program review.

_____	_____
(Name)	(Title)
Affiliation: _____ Telephone Contact Number: _____	
Address _____	
(Mailing)	City/State/Zip email address

_____	_____
(Name)	(Title)
Affiliation: _____ Telephone Contact Number: _____	
Address _____	
(Mailing)	City/State/Zip email address

_____	_____
(Name)	(Title)
Affiliation: _____ Telephone Contact Number: _____	
Address _____	
(Mailing)	City/State/Zip email address

APPROVED: Rick Rantz for Nancy Meddings 3/29/17
 Dean, Lrc/English/Business Ed/D Date

Executive Summary (Validation Team Report)

Strengths

- Good job at keeping current in changes of technology
- Curriculum updated in a timely fashion
- Past goals were met from previous Program Review
- Different modalities addressed for learning
- CTEA funds have provided additional layer of support

Concerns

- Retention and success rates need to be improved to meet College rates
- Few degrees and certificates
- Website for CBIS at Hancock website needs to be updated
- Only one full-time instructor to run the program

Recommendations

- Increase opportunities for students to turn in the homework for the first chapter, if not submitted by the due date, without penalty.
- Revisit opportunities for enrollment through articulation
- Have office hour scheduled after class so that students that need additional support from instructor can stay and work
- Check with part-timers' semester procedures for entering SLO data, dropping students and gathering information on student success, etc.
- Check plan of action and update
- Work on two-year degree plan to setup more consistent class offerings each semester
- Check list of elective units for certificates and degrees

VALIDATION TEAM SIGNATURE PAGE

Fred [unclear]

Jody L. Denny

Rick Rantz

Walt [unclear]

Post-Validation

I. Plan of Action – Post Validation

Six Year

DEPARTMENT: Business PROGRAM: Computer Information Systems (CBIS)

In preparing this document, refer to the Plan of Action developed by the discipline/program during the self-study, and the recommendations of the Validation Team. Identify the actions the discipline/program plans to take during the next six years. Be as specific as possible and indicate target dates. Additionally, indicate by the number each institutional goal and objective which is addressed by each action plan. (See Institutional Goals and Objectives) The completed final plan should be reviewed by the department as a whole.

Please be sure the signature page is attached.

RECOMMENDATIONS TO IMPROVE STUDENT LEARNING OUTCOMES AND ACHIEVMENT	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Continue to evaluate and refine course SLOs and assessments	SLS1, SLS2	Fall 2016/ ongoing
Review assessments and develop program recommendations needed	SLS1, SLS2	Semester
Continue to evaluate and refine PSLOs Continue to advocate for resolution of facilities problems which impact student success	SLS1, SLS2 IR2, SLS1,SLS2	Ongoing Ongoing

RECOMMENDATIONS TO ACCOMMODATE CHANGES IN STUDENT CHARACTERISTICS	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Enrollment Changes Maximize course offerings and scheduling options to accommodate student needs	SLS2, SLS4, SLS6	Fall 2016
Evaluate enrollment trends from current data to respond more effectively to different population needs	SLS2, SLS4, SLS6	Spring 2017 and ongoing
Continue developing courses in different modalities to accommodate student needs: hybrid, online, flipped, etc.	SLS2, SLS4, SLS6	Fall 2016
Work with Public Affairs & Publications to inform local businesses of degree and certificate and programs	G1, E1	Summer 2017
Work with Public Affairs & Publications to promote new and/or revised courses and programs	G1	Summer 2017
	G2	Ongoing

RECOMMENDATIONS TO ACCOMMODATE CHANGES IN STUDENT CHARACTERISTICS	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Update the CBIS website and brochures to reflect changes in courses and degrees with a more representative sample of the demographics of the program.		
Demographic Changes Continue to recruit and hire qualified faculty Add and/or replace Advisory Group members	SLS2, SLS6, IR1	Spring 2017 ongoing

RECOMMENDATIONS TO IMPROVE THE EDUCATIONAL ENVIRONMENT	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Curricular Changes Continue to integrate diverse technologies and teaching methodologies into curriculum.	IR3, SLS2,SLS4, SLS6	Fall 2016
Co-Curricular Changes Improve scheduling process for satellite facilities Maintain outreach activities to area high schools Review certificates and job market to include courses from other departments that might help students build a more robust skill-set for the workplace	SLS2, E2 SLS2, SLS3, SLS7 SLS2,G1	Fall 2016 Spring 2016 & Ongoing
Neighboring College and University Plans Reconnect with colleagues of transfer institutions in order to be more in tune with curriculum development and changes in these institutions.	SLS3, SLS4	Summer 2017
Related Community Plans Continue utilizing feedback from the CBIS Advisory Group and community businesses to improve curriculum. Continue to participate as an Advisory Group member at local high schools and to attend Advisory Group meetings	I1 I1	Spring 2017 & Ongoing Spring 2017 & Ongoing

RECOMMENDATIONS THAT REQUIRE ADDITIONAL RESOURCES	Theme/Objective/ Strategy Number AHC from Strategic Plan	TARGET DATE
Facilities	SLS2, IR2, IR4	

Request repairs to building K as necessary to maintain quality and currency of program		Spring 2016 & Ongoing
Equipment Replace aging or obsolete equipment as needed to maintain quality and currency of program	SLS2,IR2, IR4	Spring 2016 & Ongoing
Update software as needed with changes in industry	SLS2, IR2	Spring 2016 & Ongoing
Staffing Hire additional part-time faculty as necessary to support course offerings	SLS2, SS6,IR1	Spring 2016 & Ongoing

Strategic Goals listed above were taken from the 2014-2010 Strategic plan

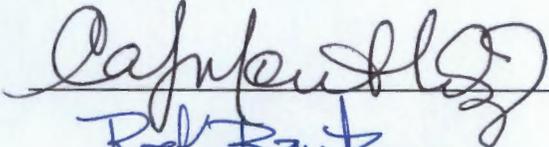
- Goal SLS1: To ensure continuous improvement based on Student Learning Outcomes assessment data.
- Goal SLS2: To support student access, achievement, and success.
- Goal SL3: Help students clarify their aspirations, develop an educational focus they perceive as meaningful and develop a plan that moves them from enrollment to achievement of their goal.
- Goal SLS4: Foster students' motivation and help them develop the skills needed to achieve their goals.
- Goal SLS6: Actively involve students in meaningful and authentic educational experiences and activities inside and outside the classroom.
- GoalSLS7: Create connections between students and the institution and cultivate relationships that underscore how students involve with the college community can contribute to their academic and personal success.
- Goal IR1: To recruit and retain quality employees.
- Goal IR2: To develop district financial resources adequate to support quality programs and services.
- Goal IR3: To enhance and maintain currency in technology usage/application in support of students and faculty, staff efficiency and operational effectiveness.
- Goal IR4: To provide a safe, attractive, and accessible physical environment that enhances the ability to teach, learn, and work.
- Goal G1: To sustain a college-wide culture that values qualitative and quantitative data in the decision-making process.
- Goal G2: To sustain a planning framework that values input from all constituencies and the board of trustees.
- Goal E1: Partner with workforce and industry to expand pursuit of community partnerships and search out opportunities to tell our story to advance the mission of the college.
- Goal E2: Ensure that every member of the campus actively participates in fostering student success. AHC will provide opportunities to build mutual respect, collaboration,

innovation, and creativity in an effort to build student success.

PLAN OF ACTION – Post-Validation

Review and Approval

Plan Prepared By


Rick Rank

Date: 4-18-2017

Date: 4/20/17

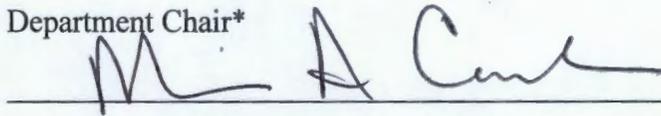
Date: _____

Date: _____

Date: _____

Reviewed:

Department Chair*

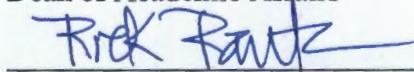


Date: 4-18-2017

*Signature of Department Chair indicates approval by department of Plan of Action.

Reviewed:

Dean of Academic Affairs



Date: 4/20/17

Vice President, Academic Affairs

Date: _____

Appendices

Student Survey

Student Data

Statistics

Articulation Status of Courses

Course Review Verification Sheet

Approved Course Outlines

Degree and Certificate Requirements

Validation Team Member list - Approved

Executive Summary

Advisory Committee

Advisory Committee Meeting Minutes

Labor Market Data

**PROGRAM REVIEW
Student Survey**

Please answer the following questions as they pertain to your experience in this course and all other courses in ****PROGRAM****.

Please indicate how satisfied you are, in general, with the following aspects of your **PROGRAM**

Please fill in the bubbles completely with a pen or pencil.

Like this: ● Not like this: ✓ ✗ /

	No	Highly	Moderately	Not at all		
		<u>Satisfied</u>		<u>Satisfied</u>		<u>Satisfied</u>
	<u>Opinion</u>					
1. Quality of instruction within the program	1	2	3	4	5	0
2. The way textbooks and other materials used in courses within the program help me learn	1	2	3	4	5	0
3. Advice about the program from counselors	1	2	3	4	5	0
4. The way this program meets your educational goals	1	2	3	4	5	0
5. Contribution towards your intellectual growth	1	2	3	4	5	0
6. Clarity of course goals and learning objectives	1	2	3	4	5	0
7. Feedback and assessment of progress towards learning objectives	1	2	3	4	5	0
8. The availability of courses offered in the program	1	2	3	4	5	0
9. The content of courses offered in **PROGRAM**	1	2	3	4	5	0
10. The coordination of courses offered in **PROGRAM** and courses offered in other departments that may be required for your major	1	2	3	4	5	0
11. The physical facilities and space (e.g., classrooms, labs)	1	2	3	4	5	0
12. Instructional equipment (e.g., computers, lab equipment)	1	2	3	4	5	0
13. Presentation of classes via the college's Blackboard course management system	1	2	3	4	5	0
14. Course assistance through tutorial services (e.g. through the Tutorial Center, Math Lab, Writing Center)	1	2	3	4	5	0
15. Availability of appropriate resources in the libraries	1	2	3	4	5	0

OPTIONAL QUESTIONS:

1. Which of the following best describes your reason for taking this and other courses in ****PROGRAM****?

- o Recommended by a counselor o To meet general education requirements

- Recommended by a friend
 - Other
 - Offered at a convenient time
2. Compared to the beginning of the semester, your attitude about ****PROGRAM**** has
- Improved
 - Remained the same
 - Decreased
3. I would recommend taking courses in ****PROGRAM****
- Strongly agree
 - Agree
 - Uncertain
 - Disagree
 - Strongly Disagree
4. I plan on taking additional courses in ****PROGRAM****
- Strongly agree
 - Agree
 - Uncertain
 - Disagree
 - Strongly Disagree
5. Which of the following courses have you taken in ******PROGRAM****?
- A
 - B
 - C
 - D
 - E
6. In which of the following courses are you currently enrolled?
- A
 - B
 - C
 - D
 - E

Background Questions

1. How many units have you completed prior to this semester?
- 0-15
 - 16-30
 - 31-45
 - 46-60
 - 61 or more
2. In how many units are you currently enrolled?
- less than 5
 - 5 to 8.5
 - 9 to 11.5
 - 12 or more
3. What is your final academic goal?
- Certificate
 - AA/AS
 - Bachelors
 - Masters or higher
 - Not certain

Program Review
 Program Review Online Surveys ()
 No. of responses = 87
 For the Period:



Survey Results

Part I. Please indicate how satisfied you are, in general, with the following aspects of the CBIS Program.

Quality of instruction within the program	Not at all satisfied		Highly satisfied	n=84 av.=1.96 md=2 dev.=1.07 ab.=2
The way textbooks and other materials used in courses within the program help me learn	Not at all satisfied		Highly satisfied	n=84 av.=2.04 md=2 dev.=1.12 ab.=2
Advice about the program from counselors	Not at all satisfied		Highly satisfied	n=57 av.=2.35 md=2 dev.=1.06 ab.=29
The way this program meets your educational goals	Not at all satisfied		Highly satisfied	n=82 av.=1.83 md=2 dev.=0.93 ab.=4
Contribution towards your intellectual growth	Not at all satisfied		Highly satisfied	n=84 av.=1.71 md=1 dev.=0.93 ab.=2
Clarity of course goals and learning objectives	Not at all satisfied		Highly satisfied	n=84 av.=1.92 md=2 dev.=1.11 ab.=1
Feedback and assessment of progress towards learning objectives	Not at all satisfied		Highly satisfied	n=84 av.=1.89 md=2 dev.=1.05 ab.=2
The availability of courses offered in the CBIS Program	Not at all satisfied		Highly satisfied	n=76 av.=2.05 md=2 dev.=1.08 ab.=10
The content of courses offered in the CBIS Program	Not at all satisfied		Highly satisfied	n=75 av.=1.81 md=2 dev.=0.93 ab.=10
The coordination of courses offered in the CBIS Program and courses offered in other departments that may be required for your major	Not at all satisfied		Highly satisfied	n=71 av.=1.82 md=2 dev.=0.83 ab.=13

The physical facilities and space (e.g., classrooms, labs)	Not at all satisfied		Highly satisfied	n=68 av.=1.72 md=1 dev.=0.94 ab.=18
Instructional equipment (e.g., computers, lab equipment)	Not at all satisfied		Highly satisfied	n=70 av.=1.61 md=1 dev.=0.89 ab.=16
Presentation of classes via the college's Blackboard course management system	Not at all satisfied		Highly satisfied	n=83 av.=1.87 md=2 dev.=1 ab.=3
Course assistance through tutorial services (e.g through the Tutorial Center, Math Lab, Writing Center)	Not at all satisfied		Highly satisfied	n=55 av.=1.98 md=2 dev.=1.15 ab.=29
Availability of appropriate resources in the libraries	Not at all satisfied		Highly satisfied	n=52 av.=2.21 md=2 dev.=1.23 ab.=33

Part II. Please answer the following questions about the CBIS Program.

Which of the following best describes your reason for taking this and other courses in the CBIS Program?

Recommended by a counselor	<input type="text"/>	18.8%	n=85
Recommended by a friend	<input type="text"/>	1.2%	
To obtain job skills to enter the workforce in Office Technology	<input type="text"/>	22.4%	
To improve my job skills and further my career	<input type="text"/>	43.5%	
Other	<input type="text"/>	14.1%	

Compared to the beginning of the semester, your attitude about the CBIS Program has

Improved	<input type="text"/>	54.7%	n=86
Remained the same	<input type="text"/>	34.9%	
Decreased	<input type="text"/>	10.5%	

I would recommend taking courses in the CBIS Program.

Strongly disagree		Strongly agree	n=86 av.=1.81 md=1 dev.=1.08
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I plan on taking additional courses in the CBIS Program.

Strongly disagree		Strongly agree	n=85 av.=2.47 md=3 dev.=1.19
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Part IV. Background Questions

How many units have you completed prior to this semester?

0 - 15	<input type="text"/>	20%	n=85
16 - 30	<input type="text"/>	24.7%	
31 - 45	<input type="text"/>	11.8%	
46 - 60	<input type="text"/>	20%	
61 or more	<input type="text"/>	23.5%	

In how many units are you currently enrolled?

less than 5	<input type="text"/>	17.4%	n=86
5 - 8.5	<input type="text"/>	17.4%	
9 - 11.5	<input type="text"/>	24.4%	
12 or more	<input type="text"/>	40.7%	

What is your final academic goal?

Certificate	<input type="text"/>	5.8%	n=86
AA/AS	<input type="text"/>	33.7%	
Bachelors	<input type="text"/>	36%	
Masters or higher	<input type="text"/>	14%	
Not certain	<input type="text"/>	10.5%	

Profile

Subunit: IR General Surveys
 Name of the instructor: Program Review
 Name of the course: Program Review Online Surveys
 (Name of the survey)

Values used in the profile line: Mean

Part I. Please indicate how satisfied you are, in general, with the following aspects of the CBIS Program.

Aspect	Not at all satisfied	Highly satisfied	n	av.	md	lev.
Quality of instruction within the program			84	1.96	2.00	1.07
The way textbooks and other materials used in courses within the program help me learn			84	2.04	2.00	1.12
Advice about the program from counselors			57	2.35	2.00	1.06
The way this program meets your educational goals			82	1.83	2.00	0.93
Contribution towards your intellectual growth			84	1.71	1.00	0.93
Clarity of course goals and learning objectives			84	1.92	2.00	1.11
Feedback and assessment of progress towards learning objectives			84	1.89	2.00	1.05
The availability of courses offered in the CBIS Program			76	2.05	2.00	
The content of courses offered in the CBIS Program			75	1.81	2.00	0.93
The coordination of courses offered in the CBIS Program and courses offered in other departments that may be required for your major			71	1.82	2.00	0.83
The physical facilities and space (e.g., classrooms, labs)			68	1.72	1.00	0.94
Instructional equipment (e.g., computers, lab equipment)			70	1.61	1.00	0.89
Presentation of classes via the college's Blackboard course management system			83	1.87	2.00	1.00
Course assistance through tutorial services (e.g through the Tutorial Center, Math Lab, Writing Center)			55	1.98	2.00	1.15
Availability of appropriate resources in the libraries			52	2.21	2.00	1.23

Part II. Please answer the following questions about the CBIS Program.

I would recommend taking courses in the CBIS Program.	Strongly disagree		Strongly agree	n=86	av.=1.81	md=1.00	lev.=1.08
I plan on taking additional courses in the CBIS Program.	Strongly disagree		Strongly agree	n=85	av.=2.47	md=3.00	lev.=1.19

Comments Report

Part II. Please answer the following questions about the CBIS Program.

Please provide any comments/feedback on this course and/or the CBIS program.

- CBIS 101 Online class with M. Montanez needs to be more organized and clear with instructions.
- CBIS 371- This class a really great intro to Exel.
CBIS 141- Being an online class I had thought it was going to be hard, but when I needed helped there was always someone there, where it was the actual teacher or Kira in the lab.
CBIS 142- I am currently taking this class and I have nothing bad to say. I guess sometimes having two portions of homework, blackboard and sam cengage, can feel like a lot.
- Course information and where assignments need to be submitted could be explained better. Also how many pages should be submitted for each assignment would be a great help and could reduce the amount of instructors emails, allowing for more time to grade assignments.
- Feel very lucky to be in this program. Thank-you
- For the most part, I am satisfied with my instructor and the technology we are able to use for the course. The only thing I am truly disappointed with is the website used for our online text book and exercises. A lot of the time they are doing repairs to the website and we are unable to get in and complete our work. In addition, I was disappointed to hear that I had to use Office 2013 in correspondence with this course. I have a Mac computer and there is no version of Office 2013 for Mac operating systems. This created quite a headache for me as I work full time and either have to come to the computer lab or go to a friend's house to complete the homework. I spent quite a bit of money on a Mac computer for a reason and thought it was ridiculous that I haven't been able to use it for the course. I was especially upset because the new version of Office came out and is compatible with Mac, but it does not correspond with Pearson. In order for this course to go more smoothly for future students, there needs to be an update in the software for the course.
- Great class and is very intuitive
- I am disappointed with the classes of this major and how they do not help nor teach the students how the actual work is like. I do not know much other than a few things on Excel and some other programs. This does not help me in my career search.
- I am enjoying my CBIS class, however the workload is pretty heavy, especially for a 3 unit class. There is enough information in this single class to be split into two separate classes.
- I am overwhelmed by the amount of homework required for this class.
- I believe the program needs more support from the college, the hours for the Computer Resources Center, which supports the CBIS, CBOT, and Business students were greatly impacted by the retirement of the previous coordinator. The College's disregard for the need and importance for recreating that position hurts the success of these students and all the students that use the lab.
- I can only speak for Montanez's CBIS 101 online course. She has way too many platforms. Too many submission areas and too many different ways of submitting each file. The class is not very user friendly. Anyone who is not versed in technology would have a hard time completing this course. The class should definitely be restructured.
- I enjoy this course and it has helped me understand more computer applications.
- I enjoy this course because I get to learn about how to better use my computer and the applications such as Word and Excel that will help me in the future. I like the projects that we do with applications.
- I enjoy this course, but sometimes I have hard time to answer the questions from the electronic book.
- I have learned many new skills and shortcuts for excel, I feel that this will help me with the work that I perform. My instructor is very helpful, although I would like the class to be longer.
- I love the pace of the class. There is a right amount of work for the time frames provided.
- I really enjoy this course, I find it to be very informative and interesting.
- I really enjoy working with computers. The CBIS courses I have taken have allowed me to learn meaningful, applicable information to use in my life and career, often by means of online learning. I am truly grateful for this learning opportunity.
- I really like this class CBIS Excel 141. It has help me understand better this program.
- I would recommend anyone who is unfamiliar with Office 365 to give this course a go. I've learned so much in this course, however, I wish there would be a tutor area such as the writing and math centers.
- If it were me, I would word the course description to emphasize this class requires a strong work ethic and organization skills. There a many issues involved in ech olss e[ea, pk

- It is a great course to take! Covers a lot of material and will benefit so much in my future career (2 Counts)
- Not only is this course a part of my Student Education Plan for my degree, but this course, and program are providing me with exceptional skills that I have already been able to put to use in my professional life. Please keep these courses available to me and my current and future classmates as I believe with the way the world is heading, it is an immeasurable skill to acquire in the class room and for in the career field.
- One of the things I like is to be able to take courses online. When I first signed up for the class the instructor decided to change it to a hybrid class. It was one of the only classes that fit in with the rest of my schedule so I had no choice but to re-register for it. I realize that in person instruction could be beneficial to a lot of people but making it mandatory for this type of class feels unnecessary. It also feels like we are not actually being taught anything in the current class.
- Some of the online instructors need to have better ways of communicating an assignment to the student.
- Students were overwhelm about the amount of homework given from Go! and MIS. However, the instructor heard our comments and reduce the homework and did some in class. Because of that change, the class is much enjoyable since we don't feel stress out about a lot of homework.
- The CBIS course (online) has been challenging to say the least. From trying to nabigate Blackboard, MIT Lab, readijg multible chapters, chapter questions, and ethics review. This is an excessive amount of time and effort. I took the onlie class because I'm working full time and it was suggested by my counselor. Had I known that it was actually more of a business clas I would not have taken it. I thought that it was more of a Microsoft 2013 applications class and had no idea what I was getting into. I have to spend between 15 -20 hours every week to complete my assignments. i'm struggling to keep up with my other 2 courses. I don't know if it's a new class or not, but I've been to your campus and it seemed that the online course is more intense. I guess the ultimate goal is for the student to be successful but I suspect that I'm not alonne in my feelings. I know that a online course needs to hv accountability but this is above and beyond. As far as retentionthings move to fast to retain what I learned last week. I'm just hiping to pass with a "C so that I do't hav to repeat the course. In my opinion the course shoud be two courses or broken up into Microsoft for 6-8 weeks and MIT for 6-8 weeks.
- The CBIS program is one that I wish I knew more about but the classes I am taking do not help me learn much about what goes on in the field of work for Computer Business.
- The CBIS program, specifically CBIS 101, has helped immensely. Even when learning new things like Excel, or Access, I was able to immediately turn my knew knowledge into production. I help out the men's basketball team, and the knowledge I gained taking this class has help us become more organized.
- The Office part of this course provides great information and it extremely helpful learning along and physically working along with the book in the Office programs. The second text, MIS, which is online is very difficult to read online and is a very difficult book to get through in general. I understand that learning about the business aspect of computer systems is necessary, but that book is a very slow read and makes it more difficult online. I thinks the ethics part of the class was a neat addition to the class. Outside of the confusing structure of the class and some issues that were resolved by the instructor, I feel like I learned a lot with this class and that it was beneficial to take.
- The computers provided are excellent and perfect for homework. However, the K building where many of the CBIS classes are taught are not satisfactory. The rooms have little to no air conditioning making the rooms very unpleasant to have to occupy with the heat produced from the computers and the many people. It would make the classrooms more comfortable to stay in if there was an upgraded air conditioning system in place.
- The course itself is straight-forward. The book for this course is extremely helpful, so is the instructor. However, in the beginning of the course, the instructions on the assignments/homework were quite confusing. Perhaps, that should be look upon. Once everything is clear, everything will fall into place.
- The instructor is extremely knowledgeable Within the CBIS field of study, Helpful in understanding and analyzing problems or struggles students have. Although the course work is heavy and the 3 units feel more like 5 Mrs. Warwick enables her students by giving her full attention to us as needed and providing relative resources in hopes of all her students passing.
- The reason I say that my attitude about the program has decreased is because of the excessive price of the materials. The school saved me this semester by providing Microsoft Office, making up for the price of the text and access codes for CBIS 101.
- There is a lot of work in many different places with the Tutorial and Review in book and Assignments and Tests in SAM. It is very time consuming and difficult to finish all assignments and exams each week.
- This is a great course and Ms. Montanez is very helpful to understand everything.
- This program has giving me the opportunity to learn new perspectives on computing software like microsoft office.
- This survey is way too broad to answer for both "this course and all other courses in the CBIS Program." For example, the first question of "Quality of instruction within the program" - what if you have one teacher that was awesome and one that should not be teaching at all?
- Very good class to learn exel skills
- You really do learn new skills and have fun doing it all at the same time.

- i liked how they constructed the CBIS program because it really helps you to learn new things.
- it would be nice to know the amount of work and the work time involved in this. with this you need to take less classes to provide the needed study and work time.
- this program has help me a lot to improve my computer skill.

Multi Term Display

Term
Multiple Values

Summer 2012, Fall 2012, Spring 2013 and 6 more CBIS Outcomes

subject_code
CBIS

	Summer 2012	Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014	Summer 2014	Fall 2014	Spring 2015
Sections	5.0	16.0	15.0	3.0	14.0	15.0	3.0	19.0	18.0
Headcount	104.0	322.0	338.0	70.0	310.0	324.0	67.0	305.0	284.0
Enrollment	111.0	370.0	383.0	71.0	344.0	358.0	67.0	358.0	330.0
retained	91.0	293.0	291.0	56.0	287.0	263.0	60.0	277.0	252.0
Retention %	81.98%	79.19%	75.98%	78.87%	83.43%	73.46%	89.55%	77.37%	76.36%
success	73.0	213.0	222.0	48.0	210.0	180.0	40.0	207.0	181.0
Success %	65.77%	57.57%	57.96%	67.61%	61.05%	50.28%	59.70%	57.82%	54.85%
FTES	7.1	29.8	33.5	5.4	29.7	31.7	5.0	30.6	28.9

Credit Status
Multiple Values

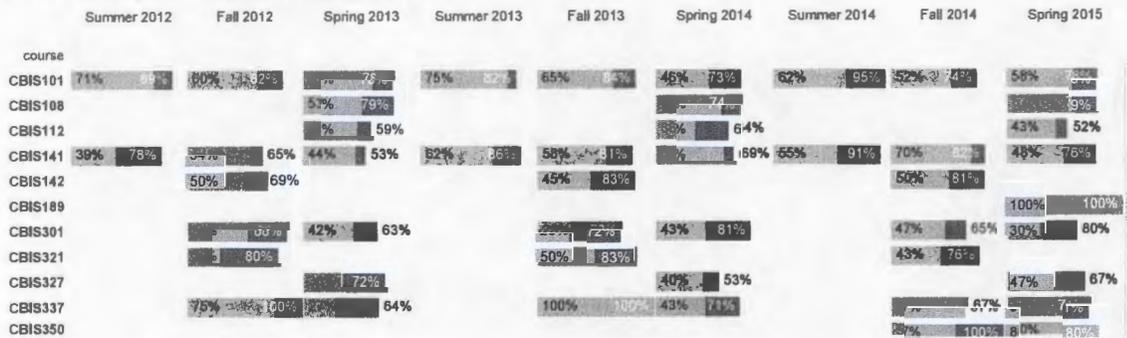
ETHNICITY
All

Gender
All

age_category
All

Summer 2012, Fall 2012, Spring 2013 and 6 more Retention & Success

Click on course name to get retention/success by course demographics



Enrollment: Status
All

Measure Names

Retention %
Success %

Choose 'AHC Data' to see data for the entire college. Choose 'Course Data' and pick a course to see individual course data.

Summer 2012, Fall 2012, Spring 2013 and 6 more Enrollment, FTES, Retention & Success AHC Data

	Summer 2012	Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014	Summer 2014	Fall 2014	Spring 2015
Sections	293	1,004	1,087	285	1,069	1,141	306	1,141	1,209
Headcount	5,551	10,883	11,361	5,421	10,922	11,293	5,185	11,084	11,249
Enrollment	8,784	28,559	29,509	8,455	28,812	29,369	8,168	29,153	28,984
Retention %	89.79%	86.62%	86.17%	89.13%	86.97%	85.23%	89.37%	86.83%	85.44%
Success %	77.33%	69.63%	70.38%	77.46%	70.56%	70.22%	77.69%	69.80%	71.38%
FTES	1,001	3,775	3,813	978	3,852	3,868	944	3,900	4,048

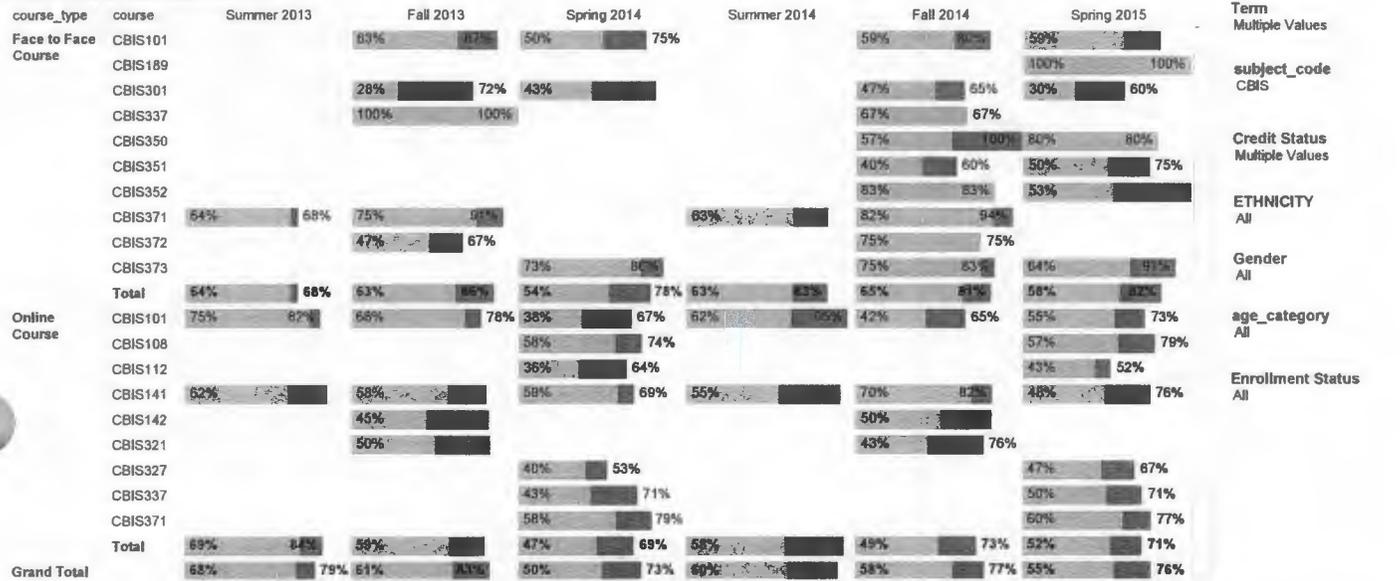
Select a Sheet
AHC Data

course
None

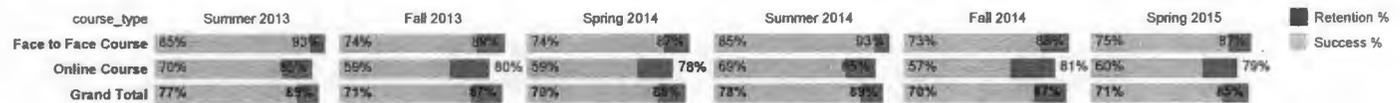
Online vs. Face to Face Comparison Multi Term Display

Data or Graph DL Compare
Graph

Retention & Success for CBIS

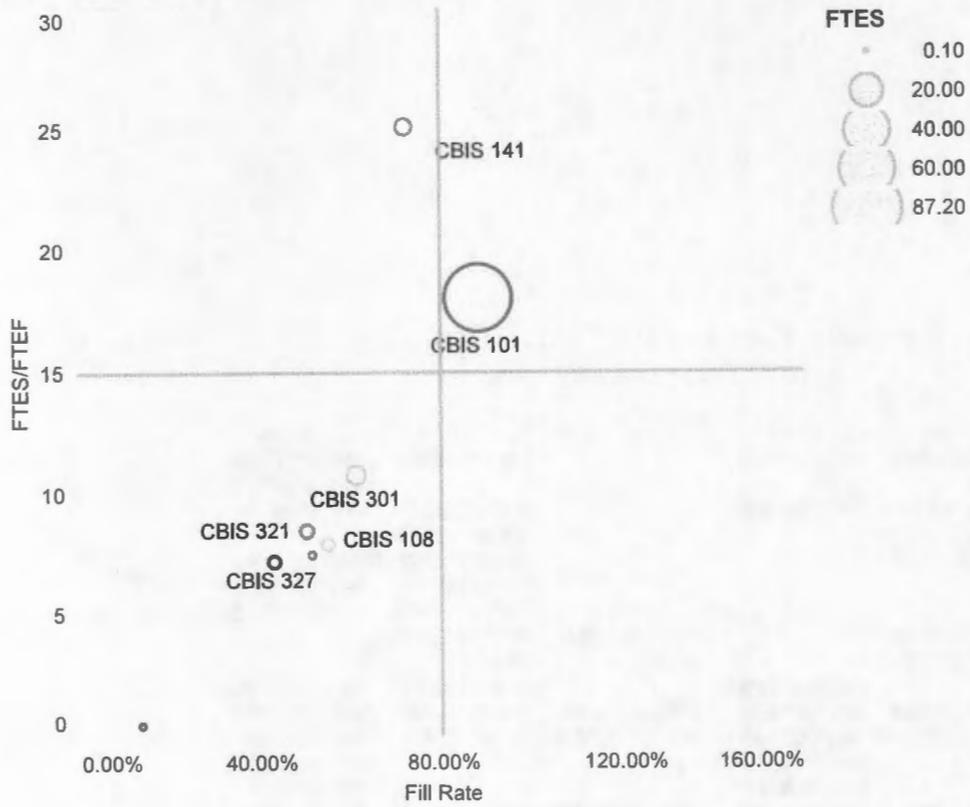


Retention & Success for all AHC



course_type	Summer 2013			Fall 2013			Spring 2014			Summer 2014			Fall 2014			Spring 2015		
	Sectio..	Enroll..	FTES	Sectio..	Enroll..	FTES	Sectio..	Enroll..	FTES	Sectio..	Enroll..	FTES	Sectio..	Enroll..	FTES	Sectio..	Enroll..	FTES
Face to Face Course	180	4,413	570	888	22,687	3,245	941	22,716	3,214	200	4,441	564	943	22,904	3,260	984	22,200	3,364
Online Course	105	4,042	409	181	5,925	608	200	6,853	855	106	3,727	380	198	6,249	640	225	6,784	685
Grand Total	285	8,455	978	1,069	28,612	3,852	1,141	29,369	3,868	306	8,168	944	1,141	29,153	3,900	1,209	28,984	4,048

Course Efficiency - Fall 2013, Spring 2014, Fall 2014 and 2 more CBIS



Scheduling Viz Data - Fall 2013, Spring 2014, Fall 2014 and 2 more CBIS

course	CRN	Site Code	FTEs/FTEF	FTEs	FTEF	Enrollment	Max Enrollment	Fill Rate	Day 1 Waitlist	Demand Ratio
CBIS 101	20274	ON	12.63	2.53	0.20	26.00	35.00	74%	1.00	77%
	20275	ON	11.17	2.23	0.20	23.00	35.00	66%	0.00	66%
	20276	SM	15.02	3.00	0.20	29.00	27.00	107%	1.00	111%
	20277	SM	10.88	2.18	0.20	21.00	27.00	78%	0.00	78%
	20278	LVC	9.62	1.92	0.20	18.00	35.00	51%	0.00	51%
	20279	SM	12.82	2.56	0.20	24.00	27.00	89%	2.00	96%
	20293	ON	13.11	2.62	0.20	27.00	35.00	77%	0.00	77%
	20294	ON	17.49	3.50	0.20	36.00	35.00	103%	4.00	114%
	20295	SM	13.99	2.80	0.20	27.00	25.00	108%	14.00	164%
	20296	SM	13.47	2.69	0.20	26.00	25.00	104%	4.00	120%
	20297	LVC	16.56	3.31	0.20	31.00	30.00	103%	2.00	110%
	20298	SM	14.43	2.89	0.20	27.00	25.00	108%	9.00	144%
	21508	ON	10.69	2.14	0.20	22.00	35.00	63%	9.00	89%
	21722	ON	14.57	2.91	0.20	30.00	35.00	86%	14.00	126%
	21723	ON	16.51	3.30	0.20	34.00	35.00	97%	5.00	111%
	21724	SM	12.95	2.59	0.20	25.00	25.00	100%	6.00	124%
	21725	SM	13.47	2.69	0.20	26.00	25.00	104%	15.00	164%
	21726	LVC	15.49	3.10	0.20	29.00	30.00	97%	14.00	143%
	21727	SM	10.69	2.14	0.20	20.00	25.00	80%	5.00	100%
	23611	ON	6.80	1.36	0.20	14.00	35.00	40%	0.00	40%
	40074	ON	11.17	2.23	0.20	23.00	35.00	66%	0.00	66%
	40076	ON	13.60	2.72	0.20	28.00	35.00	80%	0.00	80%
	40077	ON	16.51	3.30	0.20	34.00	35.00	97%	7.00	117%
	40079	ON	14.57	2.91	0.20	30.00	35.00	86%	6.00	103%
	40080	SM	15.02	3.00	0.20	29.00	27.00	107%	3.00	119%
	40083	SM	16.58	3.32	0.20	32.00	27.00	119%	11.00	159%
	40086	LVC	15.49	3.10	0.20	29.00	30.00	97%	7.00	120%
	40089	LVC	13.89	2.78	0.20	26.00	30.00	87%	3.00	97%
	40092	SM	11.22	2.24	0.20	21.00	27.00	78%	0.00	78%
	40095	SM	16.03	3.21	0.20	30.00	27.00	111%	11.00	152%
40613	SM	13.99	2.80	0.20	27.00	28.00	96%	0.00	96%	
40650	SM	15.54	3.11	0.20	30.00	28.00	107%	8.00	136%	
CBIS 108	40804	ON	6.80	1.36	0.20	14.00	30.00	47%	0.00	47%
	40885	ON	9.23	1.85	0.20	19.00	30.00	63%	0.00	63%
CBIS 112	40093	ON	10.20	2.04	0.20	21.00	35.00	60%	0.00	60%
	40097	ON	6.80	1.36	0.20	14.00	35.00	40%	0.00	40%
CBIS 141	20299	ON	15.06	3.01	0.20	31.00	35.00	89%	8.00	111%
	21728	ON	16.03	3.21	0.20	33.00	35.00	94%	4.00	106%
	22031	SM	13.11	2.62	0.20	27.00	35.00	77%	0.00	77%
	40783	ON	16.03	3.21	0.20	33.00	35.00	94%	13.00	131%
CBIS 142	40852	ON	15.54	3.11	0.20	32.00	35.00	91%	9.00	117%
	20637	ON	14.09	2.82	0.20	29.00	35.00	83%	0.00	83%
	21263	ON	12.14	2.43	0.20	25.00	35.00	71%	0.00	71%
	23296	ON	12.63	2.53	0.20	26.00	35.00	74%	0.00	74%
CBIS 189	42336	SM		0.10	0.00	1.00	1.00	100%	0.00	100%
CBIS 301	20301	SM	9.12	1.82	0.20	18.00	27.00	67%	0.00	67%
	21730	SM	8.61	1.72	0.20	17.00	27.00	63%	0.00	63%
	40102	SM	4.70	0.94	0.20	10.00	27.00	37%	0.00	37%

Scheduling Viz Data - Fall 2013, Spring 2014, Fall 2014 and 2 more CBIS

course	CRN	Site Code	FTES/FTEF	FTES	FTEF	Enrollment	Max Enrollment	Fill Rate	Day 1 Waitlist	Demand Ratio
CBIS 301	40106	SM	9.86	1.97	0.20	21.00	27.00	78%	0.00	78%
CBIS 321	20577	ON	6.31	1.26	0.20	13.00	35.00	37%	0.00	37%
	20638	ON	8.74	1.75	0.20	18.00	35.00	51%	0.00	51%
	22048	ON	10.20	2.04	0.20	21.00	35.00	60%	0.00	60%
CBIS 327	40119	ON	7.29	1.46	0.20	15.00	35.00	43%	0.00	43%
	40123	ON	7.29	1.46	0.20	15.00	35.00	43%	0.00	43%
CBIS 337	20283	SM		0.21	0.00	2.00	27.00	7%	0.00	7%
	20302	SM		0.41	0.00	4.00	27.00	15%	0.00	15%
	21731	SM		0.31	0.00	3.00	27.00	11%	0.00	11%
	40122	ON		1.36	0.00	14.00	35.00	40%	0.00	40%
	40126	ON		1.36	0.00	14.00	35.00	40%	0.00	40%
CBIS 350	21354	SM	0.46	0.23	0.49	5.00	40.00	13%	0.00	13%
	23422	SM	0.57	0.28	0.49	7.00	40.00	18%	0.00	18%
	41847	SM	0.46	0.23	0.49	5.00	40.00	13%	0.00	13%
CBIS 351	21355	SM		0.14	0.00	5.00	40.00	13%	0.00	13%
	23423	SM		0.09	0.00	5.00	40.00	13%	0.00	13%
	41848	SM		0.10	0.00	4.00	40.00	10%	0.00	10%
CBIS 352	21356	SM		0.20	0.00	9.00	40.00	23%	0.00	23%
	23424	SM		0.42	0.00	6.00	40.00	15%	0.00	15%
	41849	SM		0.70	0.00	15.00	40.00	38%	0.00	38%
CBIS 371	20765	LVC	4.35	0.29	0.07	9.00	30.00	30%	0.00	30%
	20773	SM	5.97	0.40	0.07	14.00	27.00	52%	0.00	52%
	21114	LVC	11.37	0.76	0.07	25.00	30.00	83%	0.00	83%
	21129	SM	12.79	0.86	0.07	30.00	30.00	100%	0.00	100%
	22264	LVC	5.46	0.37	0.07	12.00	30.00	40%	0.00	40%
	22274	SM	9.38	0.63	0.07	22.00	30.00	73%	0.00	73%
	40798	ON	14.50	0.97	0.07	30.00	27.00	111%	15.00	167%
40876	ON	11.60	0.78	0.07	24.00	27.00	89%	2.00	96%	
CBIS 372	21130	SM	7.25	0.49	0.07	15.00	30.00	50%	0.00	50%
	22275	SM	7.73	0.52	0.07	16.00	30.00	53%	0.00	53%
CBIS 373	21037	SM	6.37	0.43	0.07	14.00	27.00	52%	0.00	52%
	23015	SM	5.46	0.37	0.07	12.00	27.00	44%	0.00	44%
	40784	SM	5.00	0.34	0.07	11.00	27.00	41%	0.00	41%
	40853	SM	10.46	0.70	0.07	23.00	27.00	85%	0.00	85%
	41072	LVC	7.16	0.48	0.07	14.00	30.00	47%	0.00	47%

Totals for Selections

FTES/FTEF	14.73
FTES	145.65
FTEF	9.9
Fill Rate	64%
Sections	83
Avg Class Size	20
Day 1 Waitlist	212

SLO Performance - ILO/PSLO Overall

Program: Business Information Systems

Date: 09/03/2015

Terms:

PSLO: CBIS PSLO - Understand the fundamentals of business, and how they relate to information systems needs of a business.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	11	52.38%	4	19.05%	3	14.29%	3	14.29%	21	100.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	147	45.37%	103	31.79%	20	6.17%	54	16.67%	324	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	22	78.57%	4	14.29%	2	7.14%	0	0.00%	26	100.00%
Fall 2013	6	54.55%	1	9.09%	3	27.27%	1	9.09%	11	100.00%
Summer 2013	28	86.67%	2	6.67%	2	6.67%	0	0.00%	30	100.00%
Spring 2013	55	83.33%	2	3.03%	9	13.64%	0	0.00%	66	100.00%
Fall 2012	41	28.28%	66	45.52%	9	6.21%	29	20.00%	145	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	108	45.38%	66	28.57%	13	5.46%	49	20.59%	236	100.00%
Fall 2011	16	21.05%	42	55.26%	8	10.53%	10	13.16%	76	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	9	47.37%	2	10.53%	1	5.26%	7	36.84%	19	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	441	46.03%	294	30.69%	70	7.31%	153	15.97%	958	100.00%

PSLO: CBIS PSLO - Use effective written and oral communication to support business information systems needs.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	22	52.38%	8	19.05%	6	14.29%	6	14.29%	42	100.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	182	45.16%	96	24.32%	25	6.20%	96	24.32%	403	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	18	78.26%	4	17.39%	1	4.35%	0	0.00%	23	100.00%
Fall 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2013	13	86.67%	1	6.67%	1	6.67%	0	0.00%	15	100.00%
Spring 2013	50	75.76%	1	1.52%	15	22.73%	0	0.00%	66	100.00%
Fall 2012	52	25.62%	108	53.20%	10	4.93%	33	16.26%	203	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	158	59.85%	75	28.41%	26	9.85%	5	1.89%	264	100.00%
Fall 2011	18	16.22%	65	58.56%	16	14.41%	12	10.81%	111	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	7	63.64%	0	0.00%	1	9.09%	3	27.27%	11	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	520	45.89%	360	31.63%	101	8.88%	157	13.80%	1138	100.00%

PSLO: CBIS PSLO - Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	26	34.67%	28	34.67%	6	8.00%	17	22.67%	75	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2012	12	15.79%	38	50.00%	0	0.00%	26	34.21%	76	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	26	35.14%	26	37.84%	0	0.00%	20	27.03%	74	100.00%
Fall 2011	29	46.77%	24	38.71%	1	1.61%	8	12.90%	62	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	12	60.00%	1	5.00%	0	0.00%	7	35.00%	20	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	105	34.20%	117	38.11%	7	2.28%	78	25.41%	307	100.00%

PSLO: CBIS PSLO - Analyze/design/develop/deploy/maintain and manage business applications.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	12	57.14%	0	0.00%	1	4.76%	8	38.10%	21	100.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	96	48.73%	36	18.27%	7	3.55%	58	29.44%	197	100.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	14	77.78%	4	22.22%	0	0.00%	0	0.00%	18	100.00%
Fall 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2013	19	65.52%	0	0.00%	7	24.14%	3	10.34%	29	100.00%
Fall 2012	32	29.36%	55	50.48%	4	3.67%	18	16.51%	109	100.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	67	46.85%	36	25.17%	24	16.78%	16	11.19%	143	100.00%
Fall 2011	10	16.39%	34	55.74%	7	11.48%	10	16.39%	61	100.00%
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	9	36.00%	4	16.00%	1	4.00%	11	44.00%	25	100.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	259	42.85%	169	28.03%	51	8.46%	124	20.56%	603	100.00%

PSLO: CBIS PSLO - Course doesn't map to degree or certificate.

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
Summer 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2015	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2014	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2013	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2012	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

	Institutional Exceeds Standards		Institutional Meets Standards		Institutional Below Standards		N/A		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Summer 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2011	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2010	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

SUMMARY OF ARTICULATION AGREEMENTS

Allan Hancock College and Lompoc High School

High School Course Title (with B or better)	Equivalent to Allan Hancock College course	<i>Student must take one of the following: (and earn a C or better)</i>
Automotive Technology AND Automotive Undercar Systems (or equivalent ASE Student Certificates if needed)	Automotive Technology 100	AT 133, 303, 313, 314, 323, 324
Exploring Computer Science	CBIS301	Any CBIS course
Jump Start	CBOT360 & CBOT361 & CBIS371	Any CBOT or CBIS course
ROP Web Design & App Development	CBIS321 – Internet Business Applications	Any CBIS course
ROP Office Technology	CBOT100, CBOT360 & CBOT361 & CBIS371	CBOT 132 or 337 or CBIS 337 or CBIS 141
Engineering Design	Engineering Technology 100	ET140
ROP CAD/Manufacturing 1 (or Certified Solidworks Associate Certificate)	MT113 Solidworks 1	MT114

SUMMARY OF ARTICULATION AGREEMENTS

Allan Hancock College and Cabrillo High School

High School Course Title (with B or better)	Equivalent to Allan Hancock College course	<i>Student must take one of the following: (and earn a C or better)</i>
ROP Advanced Tune-Up (1 semester) AND ROP Advanced Brakes & Suspension (1 semester) OR ROP Advanced Automotive (2 semesters)	Automotive Technology 100	AT 133, 303, 313, 314, 323, 324
Keyboarding	Computer Business Office Technology CBOT100 & CBOT360	Any CBOT course
ROP Communication Technology	CBOT360 & CBOT361 & CBIS371 & CBIS372	CBOT 132 or 337 or CBIS 337 or CBIS 141 or 142

SUMMARY OF ARTICULATION AGREEMENTS

Allan Hancock College and Pioneer Valley High School

High School Course Title (with B or better)	Equivalent to Allan Hancock College course	<i>Student must take one of the following: (and earn a C or better)</i>
Computer Applications I	CBOT100, CBOT360 & CBOT361 & CBIS371 & CBOT372	CBOT 132 or 337 or CBIS 337 or CBIS 141 or CBIS 142
Website Design	CBIS 327	Any CBIS Course
ROP Communication Technology	CBOT 312 & 360 & 361	CBOT 132 or 337 or CBIS 337
Agricultural Mechanics-Advanced	WLDT106	WLDT107

SUMMARY OF ARTICULATION AGREEMENTS

Allan Hancock College and Righetti High School

High School Course Title (with B or better)	Equivalent to Allan Hancock College course	<i>Student must take one of the following: (and earn a C or better)</i>
Computer Applications A & B	Computer Business Office Technology CBOT100	Any CBOT course
ROP Communication Technology A & B	CBOT 312 & 360 & 361	Any CBOT course
ROP Advanced Filmmaking	Film 110	FILM 111
Advanced Welding	Welding Technology 106	WLD T 107, 306, 307, 308

SUMMARY OF ARTICULATION AGREEMENTS

Allan Hancock College and Santa Maria High School

High School Course Title (with B or better)	Equivalent to Allan Hancock College course	<i>Student must take one of the following: (and earn a C or better)</i>
Advanced Automotive	Automotive Technology 100	AT 133, 303, 313, 314, 323, 324
ROP Office Technology	CBOT360, CBOT361, CBIS371 & CBIS372	CBOT132, CBOT337, CBIS141, CBIS142
ROP Computer Applications	CBOT100 & CBOT 360-Word Basics	Any CBOT course
Survey of Business	Computer Business Office Technology 100 & CBOT 360	Any CBOT course
ROP Professional Business Communications	CBOT131-Intro to Word Processing	Any CBOT course
Website Design	CBIS327 Building Business Websites	Any CBIS course
CAD Manufacturing 1a AND 1b	Engineering Technology 100	ET 140
CAD Manufacturing 1c AND 1d	MT113 Solidworks 1	MT114
Advanced Agricultural Mechanics	Welding Technology WLDT106	WLD T 107

SUMMARY OF ARTICULATION AGREEMENTS

Allan Hancock College and Santa Ynez Valley Union High School

High School Course Title (with B or better)	Equivalent to Allan Hancock College course	<i>Student must take one of the following: (and earn a C or better)</i>
ROP Advanced Automotive	Automotive Technology 100	AT 133, 303, 313, 314, 323, 324
ROP Computer Software Applications	Computer Business Office Technology 131	
Computer Applications I	Computer Business Office Technology 360	Any CBOT course
ROP Computer Aided Drafting A	Engineering Technology 100	ET140
ROP Computer Aided Drafting B	MT113 Solidworks 1	MT114
ROP Advanced Filmmaking/Video Production	Film 110	FILM 111
Advanced Agricultural Mechanics	Welding Technology WLDT106	WLD T 107

COURSE REVIEW VERIFICATION

Discipline: Business - Computer Information Systems Year: 2015 - 2016

As part of the program evaluation process, the self-study team has reviewed the course outlines supporting the discipline/program curriculum. The review process has resulted in the following recommendations:

1. The following course outlines are satisfactory as written and do not require modification (list all such courses):
CBIS 327, CBIS 334, CBIS 336, CBIS 337, CBIS 343, CBIS 350, CBIS 351, CBIS 352, CBIS 371, CBIS 372, CBIS 373, CBIS 381, CBIS 382
2. The following courses require minor modification to ensure currency. The self-study team anticipates submitting such modifications to the AP&P, FALL 2015 SPRING 20__:

Textbook/Materials Change Only: CBIS 101, CBIS 108, CBIS 112, CBIS 141, CBIS 142, CBIS 301, CBIS 321

3. The following courses require major modification. The self-study team anticipates submitting such modifications to the AP&P committee, FALL 2015 SPRING 20__:

DL Conversion: CBIS 330

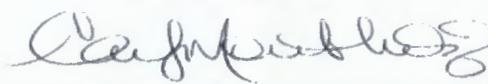
GRADUATION REQUIREMENTS: General Education (GE), Multicultural/Gender Studies (MCGS) and Health & Safety (H&W) Courses.

The following courses were reviewed as meeting an **AHC GE** requirement: CBIS 101 & CBIS 112 - Category 4 - Language and Rationality. The AP&P GE Criteria and Category Definitions (GE Learning Outcomes) forms were submitted to the AP&P for review on: _____
n/a - courses were already part of the AHC GE requirements.

The following courses were reviewed as meeting the **MCGS** requirement. The AP&P MCGS Criteria and Category Definitions (MCGS Learning Outcomes - To Be Developed) forms were submitted to the AP&P for review on: _____ **n/a**

The following courses were reviewed as meeting the **H&W** requirement. The AP&P H&W Studies Criteria (To Be Developed) and Category Definitions (H&W Learning Outcomes - To Be Developed) forms were submitted to the AP&P chair for review on: _____ **n/a**

Course Review Team Members:


 _____ (Carmen J Montanez-Rodriguez) 02/25/16
 Signature Date

Signature Date

Signature Date

Signature AP&P Chair Date

Signature Academic Dean Date

**REVIEW OF PREREQUISITES, COREQUISITES, AND ADVISORIES
Summary**

List all courses in Discipline/Program

Course Prefix No	CURRENT Prerequisite/Coreq/Advisory/ Limitation on Enrollment	LEVEL OF SCRUTINY (Statistics, Content Review, UC/CSU Comparison, Student Survey – list all)	RESULT (i.e., current PCA is established, should be dropped/modified or new PCA is established)	ACTION TO BE TAKEN (None, APP- Major or Minor)
CBIS 101	Advisory (CBOT 100, CBIS 301)	Statistics, Content Review, UC/CSU Comparison, Student Survey	Advisory is appropriate	Minor modification – Textbook change
CBIS 108	Advisory (CBIS 301)	Statistics, Content Review, UC/CSU Comparison, Student Survey	Advisory is appropriate	Minor modification – Textbook change
CBIS 112	Advisory (CBIS 301 or CBIS 101 or CS 102)	Statistics, Content Review, UC/CSU Comparison, Student Survey	Advisory is appropriate	Minor modification – Textbook change
CBIS 141	Advisory (CBIS 101 or CBIS 371 or CS 102)	Statistics, Content Review, UC/CSU Comparison, Student Survey	Advisory is appropriate	Minor modification – Textbook change
CBIS 142	Advisory (CBIS 101 or CBIS 372 or CS 102)	Statistics, Content Review, UC/CSU Comparison, Student Survey	Advisory is appropriate	Minor modification – Textbook change
CBIS 301	Advisory (CBOT 100)	Content Review	No Advisory Needed	Minor modification – Textbook change
CBIS 321	Advisory (CBIS 301)	Content Review	Advisory is appropriate	Minor modification – Textbook change
CBIS 327	Advisory (CBIS 301)	Content Review	Advisory is appropriate	None
CBIS 330	Advisory (CBIS 101)	Content Review	Advisory is appropriate	Major modification: DL Conversion
CBIS 334	Advisory (CBIS 142 or CBIS 330)	Content Review	Advisory is appropriate	None
CBIS 336	Prerequisite (CBIS 327 & CBIS 330) Advisory (CS 102)	Content Review	Prerequisite and Advisory are appropriate	None
CBIS 337/CBOT 337	Advisory (CBIS 373 or Knowledge of Windows)	Content Review	Advisory is appropriate	None
CBIS 343	Advisory (Knowledge of Windows)	Content Review	Advisory is appropriate	None

Course Prefix No	CURRENT Prerequisite/Coreq/Advisory/ Limitation on Enrollment	LEVEL OF SCRUTINY (Statistics, Content Review, UC/CSU Comparison, Student Survey – list all)	RESULT (i.e., current PCA is established, should be dropped/modified or new PCA is established)	ACTION TO BE TAKEN (None, APP- Major or Minor)
CBIS 350	Concurrent (CBIS 141 or 142 or 371 or 372)	In-class student feedback, Content Review	Corequisite is appropriate	None
CBIS 351	Concurrent (CBIS 108, 112, 301 or 373)	In-class student feedback, Content Review	Corequisite is appropriate	None
CBIS 352	Concurrent (CBIS 101)	In-class student feedback, Content Review	Corequisite is appropriate	None
CBIS 371	None	In-class student feedback, Content Review	No Advisory needed	None
CBIS 372	None	In-class student feedback, Content Review	No Advisory needed	None
CBIS 373	None	In-class student feedback, Content Review	No Advisory needed	None

Note: If prerequisite or corequisite is being established for the first time, course must be modified to include entrance skills.

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Date BOT Approved:

Date Reviewed: Fall 2013

PCA Established:

Date DL Conversion Approved: 17-DEC-2002

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 101**CATALOG COURSE TITLE:** Computer Concepts & Applications**BANNER COURSE TITLE:** Computer Concepts & Apps**UNITS:** 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):**CBOT 100
CBIS 301**LIMITATION(S) ON ENROLLMENT:** None**ENTRANCE SKILLS:****ADVISORY SKILLS:****Upon entering this course, the student should be able to:****CBOT 100**

1. operate the computer as a writing instrument.
2. apply the proper reaches for attaining an acceptable level of keyboard speed.
3. demonstrate elementary keyboarding skills using touch techniques.

CBIS 301

1. perform basic computer operations using input/output devices such as a mouse, keyboard, monitor, and printer.
2. distinguish between various computer storage devices.

3. perform basic and advanced file and folder management using Windows Explorer.
4. customize a standard computer using Windows control panel.
5. perform basic communication and search procedures on the Internet.

CATALOG DESCRIPTION:

The focus of this course is to provide the students with computer concepts and management information systems concepts as used with business computing. Additionally, the course covers changes in technology that affect how computers are used in business. The course includes hands-on experience using software applications such as Internet browsers, word processing, spreadsheets, databases, and presentation software.

COURSE CONTENT:

1. Computer Components and Terminology
2. Information Systems Concepts
3. Communication and network concepts, systems, and applications
4. Information systems security, crime, and ethics
5. Types of information systems and their roles in business
6. Word processing application concepts and practical exercises
7. Spreadsheet application concepts and practical exercises
8. Database application concepts and practical exercises
9. Presentation application concepts and practical exercises

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. describe existing and emerging technologies and their impact on organizations and society.
2. demonstrate an understanding of the development and use of information systems in business.
3. discuss the impact of current and emerging technology on society.
4. solve common business problems using the appropriate Information Technology applications and systems.

METHODS OF INSTRUCTION:

Methods of Instruction
Discussion Lecture Methods of Instruction Description: Demonstration, repetition/practice video/computer based collaborative/team participation

OUTSIDE ASSIGNMENTS:

Outside Assignments
Read course text and reference material Complete chapter projects/exercises Portfolio Take quizzes online Presentations, student demonstrations, group activities, self and peer assessment

METHODS OF EVALUATION:

Methods of Evaluation
Quizzes and/or midterm examination(s) Final examination Portfolio Individual group projects observations

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Gaskin (2013). *Go! With Microsoft Office 2013 Introductory with MyITLab* (1/e). ISBN: 9780134279282

- Kroenke. (2015). *MIS Essentials Pearson Etext with MyMISLab* (1st/e). ISBN: 9780133807479

Other Materials:

- AHC student ID
- USB/online drive
- Printer paper

STUDENT LEARNING OUTCOMES:

1. CBIS101 SLO1 - Recall/demonstrate appropriate processes to use in application programs.
2. CBIS101 SLO2 - Use a variety of sources for reference materials (i.e. online help, vendors' websites, online discussion groups, tutorials.)
3. CBIS101 SLO3 - Use template or design/create/modify documents, spreadsheets, database or presentations for business and school needs.
4. CBIS101 SLO4 - Show ability to follow instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet

Instructor Initiated Contact Hours Per Week: 3.00

Contact Types:

- Email Communication (group and/or individual communications)
- Discussion Board via Blackboard
- Telephone Contacts
- Other (please specify)
 - CCCconfer, Instant Messaging

Person Contact Types:

- Orientation Sessions
- Group Meetings
- Testing

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

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Date BOT Approved:

Date Reviewed: Spring 2009

PCA Established:

Date DL Conversion Approved: 17-DEC-2002

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 108**CATALOG COURSE TITLE:** Networking and Administration**BANNER COURSE TITLE:** Networking & Administration**UNITS:** 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):**

CBIS 301

LIMITATION(S) ON ENROLLMENT: None**ENTRANCE SKILLS:****ADVISORY SKILLS:****Upon entering this course, the student should be able to:**
CBIS 301

1. perform basic computer operations using input/output devices such as a mouse, keyboard, monitor, and printer.
2. distinguish between various computer storage devices.
3. perform basic and advanced file and folder management using Windows Explorer.
4. customize a standard computer using Windows control panel.
5. perform basic communication and search procedures on the Internet.

CATALOG DESCRIPTION:

Prepares students to work as network administrators or server managers emphasizing installation and maintenance of a Windows networking environment. Also provides preparation for the Windows certification exam.

COURSE CONTENT:

1. Introduction to Windows as a client operating system
2. Installing Windows using different methods
3. Using the system utilities across the network
4. Managing disks in client/server environment
5. Common file systems and managing permissions
6. User accounts, groups, and profile management
7. Windows security features and network policy
8. Understanding Windows network components and architecture
9. Remote access
10. Using productivity and media tools
11. Performance tuning, establishing baselines, recognizing bottlenecks
12. Application support
13. Disaster recovery and troubleshooting
14. Enterprise computing

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. evaluate their own computer needs in respect to system software and hardware in regards to the Windows operating system.
2. utilize Windows and/or the network operating system to effectively manage their files, users, environment, and hardware.
3. employ Windows software utilities to troubleshoot system problems.
4. design and implement a basic network, including creating and maintaining user groups, accounts, and directory structures and establishing server management policies.
5. manage security, access rights, and permissions.

METHODS OF INSTRUCTION:

Methods of Instruction

Lecture

OUTSIDE ASSIGNMENTS:

Other Assignments

1. Read course text
2. Complete end of chapter exercises
3. Research course topics online
4. Take quizzes online

Sample assignments:

Cases studies: Cases will be found at the end of each chapter. They are very important and are similar to the type of questions on the certification exam. Case studies will be used in online threaded discussions for both individual and group efforts.

Simulation labs: Simulation labs are presented on the instructional CD and simulates a hands-on experience with a computer with Windows. Completing of the SimLabs multiple times will provide an improved learning experience. There are demonstrations followed by self-participation evaluations. Verification of completed work will be forwarded to the instructor.

METHODS OF EVALUATION:

Methods of Evaluation

1. Computer assignments
- Written assignments
- Class participation or threaded discussions
4. Quizzes and exams

Sample essay question:

Describe why different user accounts for a single installation of Windows may each have different privileges. Include three levels of users in your explanation.

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- TestOut (2015). *Windows Client Pro LabSim* (1st/e). ISBN: 9781935080459
- Andrews, J. (2015). *Supporting Windows 8* (4th/e). ISBN: 9781285843063

Other Materials:

- Windows Reference Manuals and Websites.
- Current articles related to system software, hardware and networking.
- AHC student ID
- USB/online drive
- Printing paper

STUDENT LEARNING OUTCOMES:

1. CBIS108 SLO1 - Evaluate computer needs in respect to system software and hardware.
2. CBIS108 SLO2 - Identify how computer network requirements, objects and processes interrelate.
3. CBIS108 SLO3 - Manage access rights and security for users, groups and objects (i.e. files, folders).
4. CBIS108 SLO4 - Design/implement/troubleshoot a basic network, including creating and maintaining user groups, accounts, directory structures, and establishing server management policies.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet

Instructor Initiated Contact Hours Per Week: 3.00

Contact Types:

- Email Communication (group and/or individual communications)
- Discussion Board via Blackboard
- Telephone Contacts
- Other (please specify)
 - CCCconfer, Instant Messaging

In-Person Contact Types:

- Orientation Sessions
- Group Meetings
- Testing

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

<="">

Date BOT Approved:

Date Reviewed: Spring 2009

PCA Established:

Date DL Conversion Approved: 17-DEC-2002

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Science (Masters Required) or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 112

CATALOG COURSE TITLE: Intro to Visual Basic Program

BANNER COURSE TITLE: Intro to Visual Basic Program

UNITS: 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

CBIS 301 or
CBIS 101 or
CS 102

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:
CBIS 301

1. perform basic computer operations using input/output devices such as a mouse, keyboard, monitor, and printer.
2. distinguish between various computer storage devices.
3. perform basic and advanced file and folder management using Windows Explorer.
4. customize a standard computer using Windows control panel.
5. perform basic communication and search procedures on the Internet.

CBIS 101

1. describe existing and emerging technologies and their impact on organizations and society.
2. demonstrate an understanding of the development and use of information systems in business.
3. discuss the impact of current and emerging technology on society.
4. solve common business problems using the appropriate Information Technology applications and systems.

CS 102

1. use the basic terms applicable to computer systems.
2. describe computer networks and communication via the Internet and intranets.
3. recite some history in the development of computers and their uses.
4. describe and compare the components and associated devices of computer systems.
5. discuss the impact of current and emerging technology on society and computer related occupations.
6. find online HTML resources.
7. incorporate hyperlinks and graphics within web pages.
8. implement text fields and radio buttons.
9. decide which application software to use in specific situations.

CATALOG DESCRIPTION:

An introduction to Visual Basic Net programming language for the Windows environment. Learn to create forms, add controls, and develop code for Windows, Mobile, Web, and database application programs.

COURSE CONTENT:

1. Review Windows Concepts and Introduction to Visual Basic
2. Project Structuring and Visual Basic's Programming Tools
3. Representing Data Using Constants and Variables
4. Performing Calculations and Manipulating Data
5. Using the Selection Structure Statements
6. Using Sub Procedures and Programmer-defined Functions
7. Using the Repetition Structure Statements
8. Sequential Access Data Files Versus Random Access
9. Using Data Control for Databases

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. develop a logical methodology in the solution of computer problems.
2. develop techniques of testing and debugging computer programs.
3. analyze the accuracy of programs during designing, writing, testing, running, and breaking.
4. develop minimal documentation.
5. plan and create interactive window applications which include familiar elements like menus, textboxes, and scrollbars.
6. create object-oriented/event-driven programs in which the user's actions in respect to an object causes an event to occur.

METHODS OF INSTRUCTION:

Methods of Instruction
Lecture

OUTSIDE ASSIGNMENTS:

Outside Assignments
Read course text Complete end of chapter exercises 3. Research course topics online 4. Take quizzes online 5. Portfolio

Sample assignments:

CHAPTER 6 – Loop Structure

Create a folder named CBIS_112_CH_6_FIRSTNAME_LASTNAME where you replace FIRSTNAME with your first name and LASTNAME with your last name. Use this folder to copy your Word documents and the four Chapter 6 Visual Basic program folders. (The guided program and 3 case projects.) Once you have completed your assignment, double check to confirm a copy of the documents and the program folders are in the folder listed above. Upload your zipped folder to the Assignment 6 ~ Chapter 6 area of Blackboard.

Read the Chapter 6, pages 383-462
Complete the Guided Program Development, pages 438-461

CASE PROGRAMMING ASSIGNMENTS – Each project consists of a folder with subfolders and files.

Case 6-1 Average Temperature in Paradise, pages 470-471 In addition to the program folder, you should submit an Event Planning Document for the program.

Case 6-3 Football Fever Scoreboard, pages 474-475
In addition to the program folder, you should submit an Event Planning Document for the program.

Case 6-6 Pay Calculator, page 478
In addition to the program folder, you should submit a Use Case Definition and an Event Planning Document for this program.

TAKE CHAPTER 6 QUIZ

- Logon to Blackboard
- Click the "Chapter Quizzes" section button
- Click the VB Net 2008 – Chapter 6 link
- Click "OK" to start the quiz

METHODS OF EVALUATION:

Methods of Evaluation

1. Program design documents
2. Program applications
3. Quizzes and/or midterm examination
4. Final examination
5. Portfolio

Sample exam questions:

Write the statements to declare variables named dblHoursWorked, dblHourlyRate, dblGrossPay, and dblNetPay having a data type of Double. Retrieve hours worked from the textbox named txtHoursWorked and hourly pay from the textbox named txtHourlyRate. Write the statements to multiply the hours worked by the hourly rate to calculate the gross pay. Calculate the net pay by multiplying the gross pay by 0.80. Finally, convert the net pay to a string and store the result in the label named lblOutput.

What is an event handler? In your answer, describe the purpose of the Handles clause and the purpose of the Sub keyword.

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Schneider, David I. (2014). *Intro to Programming Using Visual Basic 2012* (9th/e). ISBN: 9780133450866

Other Materials:

- AHC student ID
- USB or flash drive
- Printing paper
- Zak. Programming with Microsoft Visual Basic, Course Technology
- Schneider. An Introduction to Programming Using Visual Basic, Prentice Hall, current edition.

Mastering Series, Microsoft World Wide Web site at <http://www.microsoft.com/mastering>.
Burrows/Langford. Programming Business Applications with Microsoft Visual Basic, McGraw-Hill, current edition.

STUDENT LEARNING OUTCOMES:

1. CBIS112 SLO1 - Recall significant programming vocabulary and principles.
2. CBIS112 SLO2 - Develop interactive applications for business, personal and/or school needs. This development process includes analyzing the problem; developing and designing the form(s); writing, testing, and debugging the code; and documenting the application for the end user.
3. CBIS112 SLO3 - Show the ability to follow instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet
- Other Method (explain)
 - video conferencing

Instructor Initiated Contact Hours Per Week: 3.00

Contact Types:

- Email Communication (group and/or individual communications)
- Chat room
- Telephone Contacts
- Other (please specify)
 - CCCconfer, Instant Messaging

In-Person Contact Types:

- Orientation Sessions
- Group Meetings
- Testing

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

<="">

Date BOT Approved:

Date Reviewed: Spring 2009

PCA Established:

Date DL Conversion Approved: 17-DEC-2002

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Accounting or Computer Information Systems or Computer Science (Masters Required) or Computer Service Technology or Office Technologies

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 141

CATALOG COURSE TITLE: Microsoft Excel-Comprehensive

BANNER COURSE TITLE: Microsoft Excel-Comprehensive

UNITS: 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

CBIS 101 or
CBIS 371 or
CS 102

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:
CBIS 101

1. describe existing and emerging technologies and their impact on organizations and society.
2. demonstrate an understanding of the development and use of information systems in business.
3. discuss the impact of current and emerging technology on society.
4. solve common business problems using the appropriate Information Technology applications and systems.

CBIS 371

1. evaluate and construct a worksheet using a spreadsheet program.
2. use of spreadsheet commands and functions.
3. print multiple worksheets and graphs.
4. read and evaluate information contained in the spreadsheet program manual.

CS 102

1. use the basic terms applicable to computer systems.
2. describe computer networks and communication via the Internet and intranets.
3. recite some history in the development of computers and their uses.
4. describe and compare the components and associated devices of computer systems.
5. discuss the impact of current and emerging technology on society and computer related occupations.
6. find online HTML resources.
7. incorporate hyperlinks and graphics within web pages.
8. implement text fields and radio buttons.
9. decide which application software to use in specific situations.

CATALOG DESCRIPTION:

Manage and analyze information using spreadsheets for more informed decisions. Some skills covered are applying formatting, creating calculations, using functions, creating Pivot Tables and Pivot Charts, developing macros, sharing data, and writing VBA code.

COURSE CONTENT:

1. Introduction/Review of Spreadsheets and Basic Terms
2. The Basics of the Print, Worksheet, Range, Copy, Move and File Handling
3. Absolute Versus Relative Addressing
4. Formatting Spreadsheets
5. Using Functions
6. Creating and Printing Charts
7. Data Management, Table Management, Data Analysis
8. Automating Workbooks
9. What-If Analysis
10. Collaboration and Workbook Distribution
11. Templates, Styles, Web Usage
12. Macros and VBA

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. set up manual spreadsheets for preliminary computer analysis.
2. define how information should be displayed on a spreadsheet.
3. develop spreadsheets which utilize relative and absolute address references, graphing, advanced function calls, add-in tools, macros and VBA code.
4. verify spreadsheet results in terms of business decision-making processes.

METHODS OF INSTRUCTION:

Methods of Instruction
Lecture

OUTSIDE ASSIGNMENTS:

Other Assignments
<ol style="list-style-type: none"> 1. Read course text 2. Complete end of chapter exercises 3. Research course topics online 4. Take quizzes online 5. Portfolio

METHODS OF EVALUATION:**Methods of Evaluation**

1. Computer assignments
2. Chapter quizzes and/or midterm examination(s)
3. Final examination
4. Portfolio

Sample exam question:

Describe three different situations where you may use Data Extraction with a spreadsheet.

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Parsons (2014). *New Perspectives On M/S Excel 2013 Comprehensive with Sam* (1/e). ISBN: 9781285725406

Other Materials:

- Utilize the application and online help and training available from the software manufacturer.
- AHC student ID
- USB/online drive
- Printing paper

STUDENT LEARNING OUTCOMES:

1. CBIS141 SLO1 - Recall significant principles, functions and uses of a spreadsheet application.
2. CBIS141 SLO2 - Use templates and/or analyze, design, create, and modify spreadsheets for business, personal and/or school needs. This includes designing, developing, and testing all the elements that make up a comprehensive workbook.
3. CBIS141 SLO3 - Show the ability to follow instructions.

DISTANCE LEARNING COURSE STATUS:**Delivery Methods**

- Internet
- Other Method (explain)
 - video conferencing

Instructor Initiated Contact Hours Per Week: 12.00

Contact Types:

- Email Communication (group and/or individual communications)
- Chat room
- Telephone Contacts
- Other (please specify)
 - CCCconfer, Instant Messaging

In-Person Contact Types:

- Orientation Sessions
- Group Meetings
- Testing

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

<="">

Date BOT Approved:

Date Reviewed: Spring 2009

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Science (Masters Required) or Computer Service Technology or Office Technologies

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 142

CATALOG COURSE TITLE: Microsoft Access-Comprehensive

BANNER COURSE TITLE: Microsoft Access-Comprehensive

UNITS: 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

CBIS 101 or
CBIS 372 or
CS 102

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:
CBIS 101

1. describe existing and emerging technologies and their impact on organizations and society.
2. demonstrate an understanding of the development and use of information systems in business.
3. discuss the impact of current and emerging technology on society.
4. solve common business problems using the appropriate Information Technology applications and systems.

CBIS 372

1. evaluate and create a database.
2. analyze and retrieve data in various formats from data stored in a database.
3. write reports using information derived from a database.
4. read and evaluate information contained in the database manual.
5. locate resources related to databases using an on-line search.

CS 102

1. use the basic terms applicable to computer systems.
2. describe computer networks and communication via the Internet and intranets.
3. recite some history in the development of computers and their uses.
4. describe and compare the components and associated devices of computer systems.
5. discuss the impact of current and emerging technology on society and computer related occupations.
6. find online HTML resources.
7. incorporate hyperlinks and graphics within web pages.
8. implement text fields and radio buttons.
9. decide which application software to use in specific situations.

CATALOG DESCRIPTION:

Learn techniques to solve business problems and develop business decision-making processes using a database program. Some skills covered are developing and maintaining tables, relationships, queries, forms, reports, macros, and code modules. Learn Microsoft Access 2007.

COURSE CONTENT:

1. Introduction to Relational Databases
2. Designing/Creating Tables
3. Setting Field Properties
4. Creating Relationships
5. Creating Select Queries
6. Designing/Creating Reports
7. Designing/Creating Forms
8. Data Mining with PivotTables and PivotCharts
9. Data Protection
10. Advanced Queries
11. Protecting Data and Analyzing Database Performance
12. Design/Develop Switchboards
13. Customize Databases using VBA

COURSE OBJECTIVES:**At the end of the course, the student will be able to:**

1. analyze business systems for database processing.
2. develop the database structures to satisfy the system.
3. translate business problem analysis into algorithms.
4. develop the programs needed to satisfy the system specifications.
5. test and debug the system programs.

METHODS OF INSTRUCTION:**Methods of Instruction**

Lecture

OUTSIDE ASSIGNMENTS:**Other Assignments**

1. Read course text
2. Complete end of chapter exercises
3. Research course topics online
4. Take quizzes online

5. Portfolio

Sample assignment:

Advanced query exercise: You work as an associate database manager at Northwind Traders. This is a small international gourmet foods wholesaler. Your responsibilities include maintaining the firm's database and ensuring the dependability of the data. You need to update the database by increasing the price of all of the beverage and dairy products by 10%. You need to make a table of discontinued products. You will need to create a listing of summarized profits by salesperson and category. When you have completed the work, you will compact and repair then make a backup of the database.

METHODS OF EVALUATION:**Methods of Evaluation**

1. computer and written assignments
2. chapter quizzes and/or midterm examination(s)
3. final examination
4. portfolio

Sample written exam questions:

Describes what happens with a parameter query that has the following criteria:

Like "*" & [Type a three letter manufacturing code, example ABC]

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Adamski, J., K. Finnegan, S. Scollard (2014). *New Perspectives on Microsoft® Access 2013, Comprehensive (1/e)*. ISBN: 9781285099200

Other Materials:

- Utilize the application and online help available from the software manufacturer.
- AHC student ID
- USB/online drive
- Printing paper

STUDENT LEARNING OUTCOMES:

1. CBIS142 SLO1 - Recall significant principles, functions and uses of a database application.
2. CBIS142 SLO2 - Use templates and/or analyze, design, create, and modify databases for business, personal and/or school needs. This includes designing, developing, and testing all the elements that make up a database application.
3. CBIS142 SLO3 - Show the ability to follow instructions.

DISTANCE LEARNING COURSE STATUS:**Delivery Methods**

- Internet
- Other Method (explain)
 - video conferencing

Instructor Initiated Contact Hours Per Week: 0.00

Contact Types:

- Email Communication (group and/or individual communications)
- Chat room
- Telephone Contacts
- Other (please specify)
 - CCCconfer, Instant Messaging

In-Person Contact Types:

- Orientation Sessions
- Group Meetings

Testing

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered onlin

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

<="">

Date BOT Approved:

Date Reviewed:

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT:**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 189**CATALOG COURSE TITLE:** Independent Projects**BANNER COURSE TITLE:** Independent Projects**UNITS:** 1 – 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	1.00	16.00-18.00	1.00
Lab:	-	-	-
Total Contact Hours:	1.00 - 0.00	16.00-18.00 to 48.00- 54.00	1.00 – 3.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):** None**LIMITATION(S) ON ENROLLMENT:** None**ENTRANCE SKILLS:****CATALOG DESCRIPTION:**

Courses for students capable of independent work who demonstrate the need or desire for additional study beyond the regular curriculum. Enrollment allows students to pursue activities such as directed field experience, research, or development of skills and competencies under faculty advisement and supervision. Independent projects may be earned in most disciplines. Students wishing to enroll in Independent Projects should contact the appropriate instructor identified in the class schedule. If the project proposed is acceptable to that instructor, a contract will be developed. All contracts for these classes must be completed and submitted to the Records Office no later than the end of the second week of the semester. Students may enroll for any combination (unit value) of Independent Projects 189 and/or 389 for a total of four semesters in a specific discipline. Units are awarded depending upon satisfactory performance and the amount of time committed by the student to the course. Allowable units vary according to discipline, and are based on the following formula: 1 unit - 48 hours per semester 2 units - 96 hours per semester 3 units - 144 hours per semester

COURSE CONTENT:

COURSE OBJECTIVES:

the end of the course, the student will be able to:

METHODS OF INSTRUCTION:

Methods of Instruction

none

METHODS OF EVALUATION:

Methods of Evaluation

None

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- None

Other Materials:

- None

STUDENT LEARNING OUTCOMES:

None Entered

<="">

Date BOT Approved:
 Date Reviewed:
 PCA Established:
 Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT:**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 301**CATALOG COURSE TITLE:** Computer Fundamentals 1**BANNER COURSE TITLE:** Computer Fundamentals 1**UNITS:** 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):**

CBOT 100

LIMITATION(S) ON ENROLLMENT: None**ENTRANCE SKILLS:****ADVISORY SKILLS:**

Upon entering this course, the student should be able to:
CBOT 100

1. operate the computer as a writing instrument.
2. apply the proper reaches for attaining an acceptable level of keyboard speed.
3. demonstrate elementary keyboarding skills using touch techniques.

CATALOG DESCRIPTION:

A basic course for computer novices to learn how to operate a computer and use common software such as the Windows operating system and an Internet browser. Also covers the use of common hardware devices such as a mouse, keyboard and printer. Learn Windows operating system.

COURSE CONTENT:

1. Introduction to Computers
2. Internet Communication and Research
3. Application Software
4. Components of the System Unit
5. Input Devices
6. Output Devices
7. Storage Devices
8. Operating Systems and Utility Programs
9. Communications and Networks
10. Computer Ethics and Privacy
11. Introduction to Windows
12. Windows Applications
13. File Management
14. System Customization
15. System Maintenance

COURSE OBJECTIVES:**At the end of the course, the student will be able to:**

1. perform basic computer operations using input/output devices such as a mouse, keyboard, monitor, and printer.
2. distinguish between various computer storage devices.
3. perform basic and advanced file and folder management using Windows Explorer.
4. customize a standard computer using Windows control panel.
5. perform basic communication and search procedures on the Internet.

METHODS OF INSTRUCTION:**Methods of Instruction**

Lecture

OUTSIDE ASSIGNMENTS:**Other Assignments**

1. Read course text(s)
2. Complete end of chapter exercises
3. Research course topics online
4. Take quizzes online

Sample assignments:

1. Using a web browser, research on potential computer systems that will match the needs of a business user.
2. Design a folder structure to organize files for your schoolwork following the written specifications. Create a parent folder and at least two more levels, with at least two folders in each level under the parent.
3. Using a browser, submit feedback on your group assignment to the Discussion Board in Blackboard.

METHODS OF EVALUATION:**Methods of Evaluation**

1. End of chapter exercises.
2. Research assignments to be accomplished via Internet searching.
3. Group projects and presentations on course subjects.
4. Quizzes and/or midterm examination.
5. Final examination.

Sample test questions:

1. On the Internet, your computer is a(n) _____ that can access data, information, and services on a variety of servers.
2. Components inside the system unit include: _____
3. Any event or action that could cause a loss of or damage to computer hardware, software, data, information, or processing capability is called a _____.

- a. cybercrime
- b. computer crime
- c. computer security risk
- d. payload

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Gaskin (2013). *Go! with Windows 8 Introductory* ISBN: 9780133028911
- Miller (2011). *Introduction to Google Apps (1st/e)*. ISBN: 9781423905448

Other Materials:

- Online and printed articles on information systems, hardware and software reviews, and website knowledge databases.
- USB drive
- AHC student ID card
- Printing paper
- Headphones

STUDENT LEARNING OUTCOMES:

1. CBIS301 SLO1 - Illustrate knowledge by using the appropriate computer and technology terms.
2. CBIS301 SLO2 - Create/modify/search/organize folders and files using the current operating system.
3. CBIS301 SLO3 - Customize a standard computer by modifying the operating system software settings.
4. CBIS301 SLO4 - Create solutions to computer scenario problems by analyzing the information available in the computer system.
5. CBIS301 SLO5 - Show the ability to follow instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet
- Other Method (explain)
 - video conferencing

Instructor Initiated Contact Hours Per Week: 0.00

Contact Types:

- Email Communication (group and/or individual communications)
- Chat room
- Discussion Board via Blackboard
- Telephone Contacts
- Other (please specify)
 - CCCconfer, Instant Messaging

In-Person Contact Types:

- Orientation Sessions
- Group Meetings
- Testing

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

<="">

Date BOT Approved: 18-JAN-2011

Date Reviewed: Fall 2010

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Science (Masters Required) or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 318

CATALOG COURSE TITLE: Programming for the Web

BANNER COURSE TITLE: Programming for the Web

UNITS: 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S):

CBIS 327

COREQUISITE(S): None

ADVISORY(IES):

CS 102

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

PREREQUISITE SKILLS:

Upon entering this course, the student should be able to:
CBIS 327

1. create basic business web sites with accessibility and usability in mind.
2. use and create templates.
3. create links to web sites and e-mail addresses.
4. use background images.
5. create and format tables.
6. use cascading style sheets for website format and structure.
7. create libraries.
8. modify layers using the layer palette.

9. create and modify timelines.
10. check browser compatibility.
11. check for website accessibility.

ADVISORY SKILLS:

Upon entering this course, the student should be able to:

CS 102

1. use the basic terms applicable to computer systems.
 2. describe computer networks and communication via the Internet and intranets.
 3. recite some history in the development of computers and their uses.
 4. describe and compare the components and associated devices of computer systems.
 5. discuss the impact of current and emerging technology on society and computer related occupations.
 6. find online HTML resources.
 7. incorporate hyperlinks and graphics within web pages.
 8. implement text fields and radio buttons.
 9. decide which application software to use in specific situations.
-
1. define terms related to the Internet, website development and software used.
 2. understand how computer hardware, software and communications software interrelate on a computer network.
 3. create/modify/locate/organize folders and files in the computer system and on a web server.
 4. utilize web development software and operating system utilities to solve website problems.

CATALOG DESCRIPTION:

An intro to programming and scripting for the development of Web-based business solutions. Emphasizes program concepts to develop Web pages that include client-side and server-side scripting. Students taking this course should have a basic knowledge of programming.

COURSE CONTENT:

1. Internet Recap
2. Review website management software
3. Client-side versus Server-side scripting
4. Introduction to XHTML
5. Cascading Style Sheets (CSS) and Styles
6. Basics of JavaScript
7. Dynamic Documents
8. Client Side Scripting
9. Server Side Scripting
10. Web 2.0 Features
11. Setting Up with Open Source

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. develop basic interactive/dynamic Web sites using up-to-date software.
2. incorporate Internet and Web technology into existing and new information systems.
3. analyze the accuracy of the programs during design, development and implementation.
4. develop appropriate documentation.
5. identify when client-side and/or server-side scripting should be used.

METHODS OF INSTRUCTION:

Methods of Instruction
Structure

OUTSIDE ASSIGNMENTS:

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1. Read course text
2. Complete end of chapter exercises
3. Research course topics online
4. Take quizzes online

Sample assignments:

Write, test, and debug (if necessary) JavaScript scripts for the following problems. When required to write functions, you must include a script to test the function with at least two different data sets. In all cases, for testing, you must write an XHTML file that references the JavaScript file.

1. Output : The first 20 Fibonacci numbers, which are defined as in the following sequence 1, 1, 2, 3, ... Where each number is the sequence after the second is the sum of the two previous numbers. You must use the document.write to produce the output.

2. Input: Three numbers, using prompt to get each.

Output: The largest of the three input numbers.

Hint: Use the predefined function Math.max

TAKE CHAPTER 4 QUIZ

- Logon to Blackboard
- Click the "Chapter Quizzes" section button
- Click the Chapter 4 link
- Click "OK" to start the quiz

METHODS OF EVALUATION:

Methods of Evaluation

1. Graded assignments- end of chapter exercises and research assignments
2. Quizzes and/or midterm examination
3. Final examination

Sample exam questions:

1. If you know the id of an XHTML element, how can you get the DOM address of that element in JavaScript?
2. What is a callback function in an Ajax application?

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Sebesta, Robert W. (2010). *Programming the World Wide Web 2009* (5th/e). ISBN: 13: 978-0-13-

Other Materials:

- Printing Paper
- USB drive
- Carey. *New Perspectives on Creating Web Pages with HTML, XHTML, and XML*, 3rd Edition. South-Western, Cengage Learning, 2009.
- Deitel, P. J. and H. M. Deitel. *Internet & World Wide Web How to Program*, Fourth Edition. Upper Saddle River, New Jersey: Pearson Education, Inc., 2008.
- Felke-Morris, Terry. *Web Development & Design Foundations with XHTML*, Fourth Edition. Addison-Wesley, 2008.
- Lecky-Thompson, Guy W. *Just Enough Web Programming with XHTML, PHP, and MySQL*, 1st Edition. Course Technology, Cengage Learning, 2008.

STUDENT LEARNING OUTCOMES:

None Entered

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Date BOT Approved:

Date Reviewed: Spring 2009

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 321

CATALOG COURSE TITLE: Internet Business Applications

BANNER COURSE TITLE: Internet Business Applications

UNITS: 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

CBIS 301 or equivalent skills

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:
CBIS 301

1. perform basic computer operations using input/output devices such as a mouse, keyboard, monitor, and printer.
2. distinguish between various computer storage devices.
3. perform basic and advanced file and folder management using Windows Explorer.
4. customize a standard computer using Windows control panel.
5. perform basic communication and search procedures on the Internet.

CATALOG DESCRIPTION:

Development of fundamental competency in Internet business applications. Explores a comprehensive range of skills from the basic uses of Internet browsers, search engines, and e-mail to file transfer protocol, file compression, and bookmark management. Includes the use of editing software to create interactive business Web sites, searching for and registering domain names, and analyzing business web sites.

COURSE CONTENT:

1. Introduction to the Internet
2. Browsing the Web
3. Searching the Web
4. Communication Tools Online
5. Advanced Internet Tools
6. Internet Security
7. Business Website Analysis
8. Creating Webpages with HTML
9. Website Planning
10. Website Design
11. Website Development & Troubleshooting
12. Website Publishing

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. describe basic and advanced Internet tools and resources.
2. use meta-search engines.
3. configure e-mail clients.
4. configure and use mailing lists, newsgroups, and chat sessions.
5. perform the search and registration process for an Internet domain name.
6. perform changes to a website using application software.
7. download and open compressed files.

METHODS OF INSTRUCTION:

Methods of Instruction
Lecture

OUTSIDE ASSIGNMENTS:

Other Assignments
<ol style="list-style-type: none"> 1. Read course text(s) 2. Complete end of chapter exercises 3. Research course topics online 4. Develop website projects 5. Take online quizzes 6. Portfolio <p>Sample assignments:</p> <ol style="list-style-type: none"> 1. Conduct a survey on email usage and preferences. Record the results on word processing software and forward file with findings to instructor using Blackboard. 2. Using Microsoft Internet Explorer, create a hierarchy of bookmark folders for the storage of website development resources and videos. 3. Using a template, create a web search page.

METHODS OF EVALUATION:

Methods of Evaluation
<ol style="list-style-type: none"> 1. Concepts and skills reviews 2. Research assignments Quizzes and/or midterm examination Discussion boards on Internet/web development topics 5. Website development projects 6. Portfolio

Sample exam question:
How do you assess a web page's content credibility?

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Campbell (2015). *Discovering The Internet: Complete (5/e)*. ISBN: 9781285845401
- Bojak (2011). *New Perspectives on Microsoft Expression Web 3.0/4.0 (2/e)*. ISBN: 9780538746748

Other Materials:

- Online and printed articles on history and development of the Internet, digital business, and Hypertext Markup Language (HTML), reviews of browser and e-mail clients, online user manuals, Internet and business magazines, and website knowledge bases
- AHC student ID
- USB/online drive
- Printing paper

STUDENT LEARNING OUTCOMES:

1. CBIS321 SLO1 - Recall principles, functions and uses of the Internet and the World Wide Web.
2. CBIS321 SLO2 - Create/modify/locate/organize folders and files in the computer system and on a web server.
3. CBIS321 SLO3 - Utilize appropriate Internet tools and web software to meet business needs.
4. CBIS321 SLO4 -Learn/utilize web software to develop webpages and solve website problems.
5. CBIS321 SLO5 - Show the ability to follow instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- None

Instructor Initiated Contact Hours Per Week: 0.00

Contact Types:

- None

In-Person Contact Types:

- None

Adjustment to Assignments:

Adjustments to Evaluation Tools:

Strategies to Make Course Accessible to Disabled Students:

Inform Students

Additional Comments:

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Date BOT Approved:

Date Reviewed: Spring 2009

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 327**CATALOG COURSE TITLE:** Building Business Web Sites**BANNER COURSE TITLE:** Building Business Web Sites**UNITS:** 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):**

CBIS 301 or equivalent

LIMITATION(S) ON ENROLLMENT: None**ENTRANCE SKILLS:****ADVISORY SKILLS:****Upon entering this course, the student should be able to:**
CBIS 301

1. perform basic computer operations using input/output devices such as a mouse, keyboard, monitor, and printer.
2. distinguish between various computer storage devices.
3. perform basic and advanced file and folder management using Windows Explorer.
4. customize a standard computer using Windows control panel.
5. perform basic communication and search procedures on the Internet.

CATALOG DESCRIPTION:

Comprehensive course on business website development covering web site design, accessibility, usability and troubleshooting. Presents skills necessary to create professional-looking business web sites using images, tables, tags, cascading style sheets, forms, libraries, behaviors, and timelines. Includes skills on uploading and maintaining pages on an Internet server site. Learn Adobe Dreamweaver.

COURSE CONTENT:

1. Dreamweaver Basics
2. Planning and Designing a Successful Web Site
3. Organizing Page Content and Layout
4. Creating Web Pages
5. Enhancing Documents
6. Connecting Web Pages
7. Working with Images
8. Creating Tables
9. Adding Shared Site Elements
10. Creating Animations
11. Adding Rich Media to a Website
12. Working with Forms and Libraries
13. Working with Rollovers and Behaviors
14. Working with Layers and Layer Behaviors
15. Working with Timelines
16. Testing Sites in Target Browsers

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. create basic business web sites with accessibility and usability in mind.
2. use and create templates.
3. create links to web sites and e-mail addresses.
4. use background images.
5. create and format tables.
6. use cascading style sheets for website format and structure.
7. create libraries.
8. modify layers using the layer palette.
9. create and modify timelines.
10. check browser compatibility.
11. check for website accessibility.

METHODS OF INSTRUCTION:

Methods of Instruction

Lecture

OUTSIDE ASSIGNMENTS:

Other Assignments

1. Read course text(s)
2. Complete end of chapter exercises
3. Research course topics online
4. Online quizzes
5. Final project

Samples of some of the program/project assignments:

1. Analyze a website to determine target audience and design features that enhance website experience. Create a document on such analysis.
2. Design a hierarchical diagram on the categories of information on the website.
3. Create a new homepage layout based on the comparison of two competitor sites and using the best features of both in terms of navigation, usability and content display.
4. Through HTML, troubleshoot problems with behaviors and provide written report on how the issue was resolved.

METHODS OF EVALUATION:

Methods of Evaluation

1. End of chapter exercises
 2. Chapter/tutorial tests
 3. Final project and final project documentation (includes reflection)
- Group activities performed in the classroom

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:**Adopted Text:**

- Cashman (2009). *Adobe Dreamweaver CS3: Comprehensive Concepts and Techniques* ISBN: 142391242x

Other Materials:

- USB flash drive
- Macromedia Dreamweaver software
- Printing paper
- Student ID card
- *Balanced Website Design: Optimizing Aesthetics, Usability and Purpose.* Dave Lawrence, Soheyla Tavakol. ISBN: 1846285186 Springer © 2005
- *Bulletproof Web Design: Improving Flexibility and Protecting Against Worst-Case Scenarios with XHTML and CSS.* Dan Cederholm. ISBN: 0321346939 New Riders Press © 2006
- *Web Style Guide, 3rd edition: Basic Design Principles for Creating Web Sites,* Patrick Lynch. ISBN 0300137370 Yale University Press © 2009

STUDENT LEARNING OUTCOMES:

1. CBIS327 SLO1 - Create/modify/locate/organize folders and files in the computer system and on a web server.
2. CBIS327 SLO2 - Learn/utilize web software and operating system utilities to develop webpages and solve website problems.
3. CBIS327 SLO3 - Show the ability to follow instructions.

STANCE LEARNING COURSE STATUS:**Delivery Methods**

- Internet
- Other Method (explain)
 - video conferencing

Instructor Initiated Contact Hours Per Week: 0.00**Contact Types:**

- Email Communication (group and/or individual communications)
- Chat room
- Discussion Board via Blackboard
- Telephone Contacts
- Other (please specify)
 - CCCconfer, Instant Messaging

In-Person Contact Types:

- Orientation Sessions
- Group Meetings
- Testing
- Other (please specify)
 - Instructor-Student contact

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

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Date BOT Approved: 15-JUN-2010Date Reviewed: Fall 2015PCA Established: 24-SEP-2015Date DL Conversion Approved: 13-OCT-2015

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Science (Masters Required) or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 330

CATALOG COURSE TITLE: Database Management Concepts

BANNER COURSE TITLE: Database Management Concepts

UNITS: 3

	Hours per week (based on 15 weeks)	Total Hours per Term (range based on 15- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

CBIS 101
CBIS 142

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:

CBIS 101

1. describe existing and emerging technologies and their impact on organizations and society.
2. demonstrate an understanding of the development and use of information systems in business.
3. discuss the impact of current and emerging technology on society.
4. solve common business problems using the appropriate Information Technology applications and systems.

CBIS 142

1. analyze business systems for database processing.
2. develop the database structures to satisfy the system.
3. translate business problem analysis into algorithms.
4. develop the programs needed to satisfy the system specifications.
5. test and debug the system programs.

CATALOG DESCRIPTION:

This course provides a comprehensive foundation in practical database design and implementation covering a range of database types in a variety of formats. Data modeling, implementation with SQL (Structured Query Language), database performance, database security, and connectivity with the Web are covered. Students taking this course should be competent in the use of office applications and the operating system.

COURSE CONTENT:

1. Database Concepts
2. Design Concepts
 - A. Relational Database Model
 - B. Entity Relationship Modeling
 - C. Normalization of Tables
3. Design and Implementation
 - A. Introduction to SQL
 - B. Advanced SQL
4. Advanced Database Concepts
 - A. Transaction Management and Concurrency Control
 - B. Performance and Tuning and Query Optimization
 - C. Distributed Database Mgt. Systems and Business Intelligence
5. Database Connectivity and Web Technologies
6. Database Administration and Security

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. define database terminology and concepts.
2. develop and use Entity-Relationship (ER) modeling concepts.
3. identify concurrency and user access requirements.
4. use normalization to design and develop database tables.
5. write SQL statements to build and manipulate a database.

METHODS OF INSTRUCTION:

Methods of Instruction

Discussion
Lecture

OUTSIDE ASSIGNMENTS:

Sample Assignment(s)

Written Question:

Answer a through e below in regards to keys in tables

- a. Define the term "unique key" and give an example.
- b. Define the term "nonunique key" and give an example.
- c. Give an example of a relation with a unique composite key.
- d. Explain the difference between a primary key and a candidate key.
- e. Describe four uses of a primary key.
- f. What is a surrogate key, and under what circumstances would you use one?
- g. How do surrogate keys obtain their values?
- h. Why are the values of surrogate keys normally hidden from users on forms, queries, and reports?
- i. Explain the term "foreign key" and give an example.

SQL Code Question:

Code an SQL statement to create a view named CourseFeeOwedView that shows CourseNumber, Course, CourseDate, CustomerNumber, CustomerLastName, CustomerFirstName, Phone, Fee, AmountPaid, and the calculated column (Fee —AmountPaid) renamed as AmountOwed.

Access:

Create and save the following Access query as viewCourseFeeOwed.

```
SELECT CO.CourseNumber, Course, CourseDate, CU.CustomerNumber, CustomerLastName,
CustomerFirstName, Phone, Fee, AmountPaid, (Fee- AmountPaid) AS AmountOwed FROM (COURSE
AS CO INNER JOIN ENROLLMENT AS E ON CO.CourseNumber = E.CourseNumber) INNER JOIN
CUSTOMER AS CU ON E.CustomerNumber = CU.CustomerNumber;
```

For SQL Server and MySQL:

```
CREATE VIEW CourseFeeOwedView AS SELECT CO.CourseNumber, Course, CourseDate,
CU.CustomerNumber, CustomerLastName, CustomerFirstName, Phone, Fee, AmountPaid, (Fee-
AmountPaid) AS AmountOwed FROM COURSE AS CO JOIN ENROLLMENT AS E ON CO.CourseNumber
= E.CourseNumber JOIN CUSTOMER AS CU ON E.CustomerNumber = CU.CustomerNumber;
```

METHODS OF EVALUATION:

Methods of Evaluation

1. Chapter assignments
2. Case studies
3. Group project(s)
4. Chapter exams
5. Final exam or Comprehensive project

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Coronel, Carlos; Morris, Steven (2015). *Database Systems: Design, Implementation, and Management* (11th/e). ISBN: 9781285196145

Other Materials:

- USB drive
- AHC Student ID card
- Printer paper

STUDENT LEARNING OUTCOMES:

1. Recall significant principles, functions and uses of a database application (assignments and/or exams)
2. Use modeling and design concepts to develop/implement a database system (assignments and/or exams)
3. Show ability to follow instructions (assignments)

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet

Instructor Initiated Contact Hours Per Week: 3.00

Contact Types:

- Email Communication (group and/or individual communications)
- Discussion Board via Blackboard
- Other (please specify)
 - Online office hours.
 - Online orientation.

Person Contact Types:

- Labs
- Other (please specify)

Office hours or meeting by appointment.

Adjustment to Assignments:

There are no changes to the assigned homework for the DL version. Assigned homework will remain the same as F2F sections. Instead the following adjustments will be made: (1) On the DL section, the instructor may organize the groups on the course management system for projects and/or discussion groups or allow students to use other Internet applications/tools, such as cloud applications and storage. (2) Assignments may be submitted through the campus course management system or through emails to the instructor. (3) Evaluations will be communicated through the course management system or email. (4) Group projects will be uploaded to the course management system or emailed to the instructor.

Adjustments to Evaluation Tools:

Online attendance will be monitored via assigned participation activities and by submission of assigned work.

Strategies to Make Course Accessible to Disabled Students:

Met with Nancy Peters, AHC Alternative Media Specialist, on Accessibility Guidelines for course materials. Discussed current tools, materials, and Blackboard features currently using in our courses. Discussed the five content basics and captioning services available to instructors so all class materials may accessible to all students.

Inform Students

Course syllabus/orientation document; announcements from course management system, emails, and/or assignment documents.

Additional Comments:

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Date BOT Approved:

Date Reviewed: Fall 2015

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Science (Masters Required) or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 334

CATALOG COURSE TITLE: Database Security and Auditing

BANNER COURSE TITLE: Database Security and Auditing

UNITS: 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	limits
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

CBIS 330 and
CBIS 142

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:

CBIS 142

1. analyze business systems for database processing.
2. develop the database structures to satisfy the system.
3. translate business problem analysis into algorithms.
4. develop the programs needed to satisfy the system specifications.
5. test and debug the system programs.

CATALOG DESCRIPTION:

A course on security techniques used when developing and maintaining database applications. Design secure applications from the beginning and defend from attacks. Learn database security for business applications. Students should have previous database development experience.

COURSE CONTENT:

1. Security Architecture
2. Operating System Security Fundamentals
3. Administration of Users
4. Profiles, Password Policies, Privileges, and Roles
5. Database Application Security Models
6. Virtual Private Databases
7. Database Auditing Models
8. Application Data Auditing
9. Auditing Database Activities
10. Security and Auditing Project Cases

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. describe the foundations of database security.
2. check database system for security vulnerabilities.
3. implement solutions to vulnerabilities found.
4. test security enhancements for reliability in the event of an attack.

METHODS OF INSTRUCTION:**Methods of Instruction**

Demonstration
Discussion
Lecture

OUTSIDE ASSIGNMENTS:**Other Assignments**

1. Chapter assignments: read chapter, develop solutions to end of chapter exercises
2. Group activities
3. Final project and documentation

Examples of some of the program/project assignments:

1. Analyze a database to determine vulnerability points. Create document on such analysis.
2. Evaluate software vulnerabilities on the current platform supported by the database server. Suggest strategies to reinforce security.
3. Troubleshoot problems with access and provide written report on how the issue was resolved.

METHODS OF EVALUATION:**Methods of Evaluation**

1. Chapter assignments
2. Chapter/tutorial tests
3. Final project and final project documentation including reflection
4. Group activities

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Basta, Alfred, Melissa Zgola (2012). *Database Security* (1st/e). ISBN: 9781435453906

Other Materials:

- USB Flash Drive
- 20 lb. Printer Paper
- Student ID card

STUDENT LEARNING OUTCOMES:

1. Recall significant principles of security features, vulnerabilities and threats for database systems (assignments and/or exams)
2. Demonstrate the process to evaluate the security of a database system, implement solutions to improve security and test enhancements (assignments and/or exams)
3. Show ability to follow instructions (assignments)

DISTANCE LEARNING COURSE STATUS:**Delivery Methods**

- Internet

Instructor Initiated Contact Hours Per Week: 3.00

Contact Types:

- Email Communication (group and/or individual communications)
- Discussion Board via Blackboard
- Other (please specify)
 - Online Office Hours
 - Online Orientation

In-Person Contact Types:

- Other (please specify)
 - Office hours or meetings by appointment

Adjustment to Assignments:

There are no changes to the assigned homework for the DL version. Assigned homework will remain the same as F2F sections. Instead the following adjustments will be made: (1) On the DL section, the instructor may organize the groups on the course management system for projects and/or discussion groups or allow students to use other Internet applications/tools, such as cloud applications and storage. (2) Assignments may be submitted through the campus course management system or through emails to the instructor. (3) Evaluations will be communicated through the course management system and/or email. (4) Group projects will be uploaded to the course management system or emailed to the instructor.

Adjustments to Evaluation Tools:

Online attendance will be monitored via assigned participation activities and by submission of assigned work.

Strategies to Make Course Accessible to Disabled Students:

Met with Hancock's Alternative Media Specialist, on Accessibility Guidelines for course materials. Discussed current tools, materials, and the course management systems features currently using in our courses. Discussed the five content basics and captioning services available to instructors so all class materials may accessible to all students.

Inform Students

Course syllabus/orientation document; announcements from course management system, emails, and/or assignment documents.

Additional Comments:

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Date BOT Approved:

Date Reviewed: Spring 2011

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Science (Masters Required) or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 336

CATALOG COURSE TITLE: Web DB Programming-PHP/ASP

BANNER COURSE TITLE: Web DB Programming-PHP/ASP

UNITS: 3

	Hours per week (based on 15 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S):

CBIS 327 and
CBIS 330

COREQUISITE(S): None

ADVISORY(IES):

CS 102

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

PREREQUISITE SKILLS:

Upon entering this course, the student should be able to:
CBIS 327

1. create basic business web sites with accessibility and usability in mind.
2. use and create templates.
3. create links to web sites and e-mail addresses.
4. use background images.
5. create and format tables.
6. use cascading style sheets for website format and structure.
7. create libraries.

8. modify layers using the layer palette.
9. create and modify timelines.
10. check browser compatibility.
11. check for website accessibility.

CBIS 330

ADVISORY SKILLS:

Upon entering this course, the student should be able to:

CS 102

1. use the basic terms applicable to computer systems.
 2. describe computer networks and communication via the Internet and intranets.
 3. recite some history in the development of computers and their uses.
 4. describe and compare the components and associated devices of computer systems.
 5. discuss the impact of current and emerging technology on society and computer related occupations.
 6. find online HTML resources.
 7. incorporate hyperlinks and graphics within web pages.
 8. implement text fields and radio buttons.
 9. decide which application software to use in specific situations.
-
1. define terms related to the Internet, website development and software used.
 2. create/modify/locate/organize folders and files in the computer system and on a web server.
 3. utilize web development software and operating system utilities to solve website problems.
 4. recall significant principles, functions, and uses of a database application.
 5. use data normalization and modeling concepts to design a database management system for a business.

CATALOG DESCRIPTION:

A course on developing dynamic, database-driven websites and implementing Web-based business solutions. Manage databases on the Web using server-side scripting with PHP (Hypertext Preprocessor) and ASP (Active Server Pages). Students taking this course should understand Web page and database development.

COURSE CONTENT:

1. Server and Client Testing and Setup
2. Introducing Server Side Scripting
3. Working with Variables
4. Using Numbers
5. Manipulating String data
6. Controlling Structures
7. Using Arrays
8. Creating Functions
9. Incorporating HTML Forms with server side processing
10. Creating and Debugging Web Applications
11. Validating User Input
12. Tracking Data Using Cookies and Sessions
13. Storing Data Using Files and Directories
14. Using Server Side Scripting Security

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. describe the correct language syntax to use when writing scripts.
2. develop solutions to user information needs.
- test scripts online for reliability and accurate results.
- implement solutions to errors found in scripting.

METHODS OF INSTRUCTION:

Methods of Instruction

Lecture

OUTSIDE ASSIGNMENTS:

Other Assignments

1. Chapter Assignments: reading, writing and programming in PHP and ASP

Example of a program/project assignment:

Troubleshoot problems with the given program scripts and provide written report on how issues were resolved.

METHODS OF EVALUATION:

Methods of Evaluation

1. Chapter Assignments

2. Chapter/Tutorial Tests

3. Final Examination or Final Comprehensive Project

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- David Powers (2011). *Adobe Dreamweaver CS5 with PHP: Training from the Source* ISBN: 9780321719843

Other Materials:

- USB Flash Drive
- 20 lb. Printer Paper
- Webhost Access
- Student ID card
- PHP for Absolute Beginners. Jason Lengstorf. ISBN 1430224738. APress © 2009
- ASP.NET 4 24-Hour Trainer. Toi B. Wright ISBN 0470596910. Wrox © 2010

STUDENT LEARNING OUTCOMES:

None Entered

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Date BOT Approved:
 Date Reviewed:
 PCA Established:
 Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 337

CATALOG COURSE TITLE: Presentation Design - PowerPoint

BANNER COURSE TITLE: Presentation Design-PowerPoint

UNITS: 3

	Hours per week (based on 16 weeks)	Total hours per Term (range based on 16- 18 weeks)	Units
Lecture:	3.00	48.00-54.00	3.00
Lab:	-	-	-
Total Contact Hours:	3.00	48.00-54.00	3.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

P/NP - Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

CBIS 373 or knowledge of Windows

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:
CBIS 373

1. describe the function and purpose of an operation system program
2. use the select menus, commands, and icons.
3. use file management to maintain files and folders
4. use Windows applications
5. manage and control printing from Windows applications.

CATALOG DESCRIPTION:

An introduction to computer-based business presentations and their development using PowerPoint.

COURSE CONTENT:

1. Introduction to Presentation and Design
2. Selecting different types of presentation media
3. Developing content and considering the environment
4. Computer-based presentations
 - A. Creating and editing presentations
 - B. Creating and animating objects (clip art, charts, etc.)
 - C. Creating objects using the scanner
 - D. Adding sound to the slide show
5. Presenting in groups with class feedback
6. Presenting individually with class feedback

COURSE OBJECTIVES:**At the end of the course, the student will be able to:**

1. identify different types of media for a business presentation such as models, handouts, posters, flip charts, transparencies, 35mm slides, or computer-based shows.
2. present business material in a group and individual presentation using two types of media.
3. create slide presentations using computer-based presentation software.
4. animate slide transitions, bullets, and clip art objects using computer-based presentation software.
5. add sound to a slide show using computer-based presentation software.
6. create and edit graphics using computer-based presentation software.

METHODS OF INSTRUCTION:**Methods of Instruction**

Lecture

OUTSIDE ASSIGNMENTS:**Other Assignments**

1. Research a topic dealing with office technology and create a business presentation using computer-based software. The presentation should include clip art, animation, and handouts. Present this topic in class and receive and discuss feedback from students on your presentation.
2. Complete assigned exercises at the end of each chapter from the assigned computer-based presentation text.

METHODS OF EVALUATION:**Methods of Evaluation**

1. Explain in an essay the three different types of media available for business presentations and the advantages and disadvantages of each.
2. Tests will be given
3. Oral and written presentations will be graded by the instructor and feedback from students will be used.

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Poatsy, M. (2014). *Microsoft PowerPoint 2013 Comprehensive* ISBN: 013340644X

Other Materials:

- Internet sites on presentations such as Microsoft
- Internet sites with clip art such as Microsoft

STUDENT LEARNING OUTCOMES:

1. CBIS337 SLO1 - Describe features used in PowerPoint.
2. CBIS337 SLO2 - Create a PowerPoint Presentation.
3. CBIS337 SLO3 - Show the ability to follow written and oral instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet

Instructor Initiated Contact Hours Per Week: 0.00

Contact Types:

- Email Communication (group and/or individual communications)
- Discussion Board via Blackboard
- Telephone Contacts
- Other (please specify)
 - 2 hours – developing samples, instructions, etc. to aid students

In-Person Contact Types:

- Orientation Sessions
- Group Meetings
- Other (please specify)
 - Instructor-student contact

Adjustment to Assignments:

Students will be required to use PowerPoint to complete most assignments.

Adjustments to Evaluation Tools:

The students will be taking Blackboard quizzes and on-campus exams.

Strategies to Make Course Accessible to Disabled Students:

Review of books and software that will enable access.

Inform Students

Students will be referred to AHC student services.

Additional Comments:

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Date BOT Approved:
 Date Reviewed: Spring 2011
 PCA Established:
 Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 343

CATALOG COURSE TITLE: Applied Project Management 1

BANNER COURSE TITLE: Applied Project Mgt 1

UNITS: 1.5

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	1.50	24.00-27.00	1.50
Lab:	0.50	8.00-9.00	0.17
Total Contact Hours:	2.00	32.00-36.00	1.50 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

P/NP - Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES):

knowledge of current Windows operating system

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

ADVISORY SKILLS:

Upon entering this course, the student should be able to:

CATALOG DESCRIPTION:

An introduction to managing comprehensive projects using a commercial project management software package. Provides skills necessary for planning and creating professional-looking schedules, communicating project information, and using the critical path.

COURSE CONTENT:

1. Introduction to Microsoft Project Basics

2. Working with Tasks
3. Scheduling Tasks
4. Managing Resources
5. Working with Task Views
6. Finalizing the Task Plan
7. Filtering, Grouping, and Sorting

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. compare Gantt chart and network diagram views
2. use project timescale and calendar
3. enter and edit recurring tasks and milestones
4. apply a work breakdown structure
5. crash the critical path by using task durations, relationships, and lag time.

METHODS OF INSTRUCTION:

Methods of Instruction
Lab Lecture

OUTSIDE ASSIGNMENTS:

Outside Assignments
Examples of some of the program/project assignments: <ol style="list-style-type: none"> 1. Update the recurring tasks and milestones for a contractor's residential construction project 2. Using outline features, develop the construction project by creating summary tasks and task dependencies. 3. Format the Gantt Chart and Network Diagram to better communicate the construction baseline to contractors

METHODS OF EVALUATION:

Methods of Evaluation
<ol style="list-style-type: none"> 1. Graded programs of the above assignments 2. Chapter/Tutorial tests and a final examination

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Richie, Gregg (2013). *Microsoft Project 2013* (1st/e). ISBN: 9780470133125

Other Materials:

- Flash or USB Drive
- 20 lb. printer paper

STUDENT LEARNING OUTCOMES:

1. CBIS343 SLO1 - Recall significant principles, functions and uses of a project application.
2. CBIS343 SLO2 - Create a Project Plan; define project calendars; enter, link, organize, track and document task; establish, adjust, and assign resources.
3. CBIS343 SLO3 - Show the ability to follow written and oral instructions.

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Date BOT Approved: 15-APR-2014Date Reviewed: Spring 2014PCA Established: 15-APR-2014

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 350**CATALOG COURSE TITLE:** Information Systems Applications Lab**BANNER COURSE TITLE:** Info Systems Applications Lab**UNITS:** 1

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	-	-	-
Lab:	3.00	48.00-54.00	1.00
Total Contact Hours:	3.00	48.00-54.00	1.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

0

GRADING OPTION:

P/NP - Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):**

CBIS 141 or
CBIS 142 or
CBIS 371 or
CBIS 372

ADVISORY(IES): None**LIMITATION(S) ON ENROLLMENT:** None**ENTRANCE SKILLS:****CATALOG DESCRIPTION:**

Open-entry laboratory class designed to provide students with the opportunity to refine and expand techniques learned in the corequisite course.

COURSE CONTENT:

1. The instructor and the student will develop and agree upon the project to be worked on in the class

based on the individual goals of the student. During the course of the class the following areas of instruction will be emphasized.

- A. Software necessary to complete the project
- B. Techniques necessary to complete the project
- C. Procedures necessary to complete the project

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. analyze and apply the techniques and processes necessary for creating files using office application software.
2. produce finished work that demonstrates a proficient level of skill.

METHODS OF INSTRUCTION:

Methods of Instruction

Methods of Instruction Description:

Information Systems software application assignments related to the individual goals/projects of the student.

OUTSIDE ASSIGNMENTS:

Outside Assignments

none

METHODS OF EVALUATION:

Methods of Evaluation

Participation, application of techniques, research and procedures necessary for the creation of files using the computer application software, and critique of finished project.

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- None

Other Materials:

- None

STUDENT LEARNING OUTCOMES:

1. CBIS350 SLO1 - Refine and expand procedures in information systems applications.

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Date BOT Approved:

Date Reviewed: Spring 2014

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 351**CATALOG COURSE TITLE:** Info Systems Lab**BANNER COURSE TITLE:** Info Systems Lab**UNITS:** 1

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	-	-	-
Lab:	3.00	48.00-54.00	1.00
Total Contact Hours:	3.00	48.00-54.00	1.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

P/NP - Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):**

CBIS 108 or
CBIS 112 or
CBIS 301 or
CBIS 373

ADVISORY(IES): None**LIMITATION(S) ON ENROLLMENT:** None**ENTRANCE SKILLS:****CATALOG DESCRIPTION:**

Open-entry laboratory class designed to provide students with the opportunity to refine and expand techniques learned in the corequisite course.

COURSE CONTENT:

The instructor and the student will develop and agree upon the project to be worked on in the class based on the individual goals of the student. During the course of the class the following areas of instruction will be

emphasized.

1. Software necessary to complete the project
2. Techniques necessary to complete the project
3. Procedures necessary to complete the project

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. analyze and apply the techniques and processes necessary for managing information systems
2. produce finished work that demonstrates a proficient level of skill

METHODS OF INSTRUCTION:

Methods of Instruction
Methods of Instruction Description: Information systems assignments related to the individual goals/projects of the student.

METHODS OF EVALUATION:

Methods of Evaluation
1. Participation 2. Application of techniques, research and procedures necessary for the management of information systems 3. Critique of finished project

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- None

Other Materials:

- None

STUDENT LEARNING OUTCOMES:

1. CBIS351 SLO1- Refine and Expand Procedures in Information Systems.

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Date BOT Approved:
 Date Reviewed: Spring 2014
 PCA Established:
 Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 352

CATALOG COURSE TITLE: Info Systems Office Lab

BANNER COURSE TITLE: Info Systems Office Lab

UNITS: 1

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	-	-	-
Lab:	3.00	48.00-54.00	1.00
Total Contact Hours:	3.00	48.00-54.00	1.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

P/NP - Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S):

CBIS 101

ADVISORY(IES): None

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

CATALOG DESCRIPTION:

Open-entry laboratory class designed to provide students with the opportunity to refine and expand techniques learned in the corequisite course.

COURSE CONTENT:

The instructor and the student will develop and agree upon the project to be worked on in the class based on the individual goals of the student. During the course of the class the following areas of instruction will be emphasized.

1. Software necessary to complete the project

2. Techniques necessary to complete the project
3. Procedures necessary to complete the project

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. analyze and apply the techniques and processes necessary for creating files using the correct office application software
2. produce finished work that demonstrates a proficient level of skill

METHODS OF INSTRUCTION:

Methods of Instruction
Methods of Instruction Description: Information Systems software application assignments related to the individual goals/projects of the student using Microsoft Office.

METHODS OF EVALUATION:

Methods of Evaluation
1. Participation 2. Application of techniques, research and procedures necessary for the creation of files using Microsoft Office software 3. <i>Critique of finished project</i>

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- None

Other Materials:

- None

STUDENT LEARNING OUTCOMES:

1. CBIS352 SLO1 - Refine and Expand Procedures in Information Systems Office applications.

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Date BOT Approved:
 Date Reviewed: Fall 2010
 PCA Established:
 Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 371

CATALOG COURSE TITLE: Intro to Excel

BANNER COURSE TITLE: Intro to Excel

UNITS: 1

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	1.00	16.00-18.00	1.00
Lab:	-	-	-
Total Contact Hours:	1.00	16.00-18.00	1.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

P/NP - Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES): None

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

CATALOG DESCRIPTION:

Provides the students with an introduction to the use of Microsoft Excel. This course covers fundamentals of spreadsheet design; data entry, use of formulas and operators, charting information and printing worksheets and graphs.

COURSE CONTENT:

1. How to Start and Quit the Program
2. Introduction to Worksheets
3. Labels and editing
4. Values, Formulas, and Operators
5. Menus and Files
6. Spreadsheet Commands

- 7. Creating Graphs
- 8. Managing Printing

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

- 1. evaluate and construct a worksheet using a spreadsheet program.
- 2. use of spreadsheet commands and functions.
- 3. print multiple worksheets and graphs.
- 4. read and evaluate information contained in the spreadsheet program manual.

METHODS OF INSTRUCTION:

Methods of Instruction
Methods of Instruction Description: Lecture, instructor demonstration, instructor-led exercises and hands-on training

OUTSIDE ASSIGNMENTS:

Other Assignments
Required chapter assignments Required end of chapter exercises

METHODS OF EVALUATION:

Methods of Evaluation
Graded chapter assignments Graded end of chapter lab assignments Quizzes based on lecture, end of chapter assignments, and chapter work

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Freund, S., M. Jones, J. Starks, (2014). *Microsoft® Excel® 2013* (1st/e). ISBN: 9781285168562

Other Materials:

- USB/online drive
- Computer Paper

STUDENT LEARNING OUTCOMES:

- 1. CBIS371 SLO1 - Create spreadsheets and design templates using correct business format.
- 2. CBIS371 SLO2 - Effectively uses basic spreadsheet commands.
- 3. CBIS371 SLO3 - Show the ability to follow written instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet

Instructor Initiated Contact Hours Per Week: 0.00

Contact Types:

- Email Communication (group and/or individual communications)
- Telephone Contacts

Person Contact Types:

- Orientation Sessions
- Testing

Adjustment to Assignments:

none

Adjustments to Evaluation Tools:

none

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings.

Additional Comments:

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Date BOT Approved:

Date Reviewed: Fall 2010

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 372

CATALOG COURSE TITLE: Intro to Access

BANNER COURSE TITLE: Intro to Access

UNITS: 1

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	1.00	16.00-18.00	1.00
Lab:	-	-	-
Total Contact Hours:	1.00	16.00-18.00	1.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

P/NP - Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES): None

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

CATALOG DESCRIPTION:

Provides the student with an introduction to the use of a database management program such as Microsoft Access 2010.

COURSE CONTENT:

1. Introduction to Database Management
2. Creating a New Database
3. Changing the Structure of a Table
4. Using a Database
5. Adding Data to a Database
6. Commands to Add, Delete, Modify, and Change the Data in a Database
7. Changing the Order of the Data

8. Locating Records in the Database Using Various Search Techniques
9. Arithmetic Operations on the Data
10. Generating Reports from the Database

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. evaluate and create a database.
2. analyze and retrieve data in various formats from data stored in a database.
3. write reports using information derived from a database.
4. read and evaluate information contained in the database manual.
5. locate resources related to databases using an on-line search.

METHODS OF INSTRUCTION:

Methods of Instruction
Lecture Methods of Instruction Description: 1. Review of assigned reading material, followed by instructor-guided demonstrations 2. Instructor-led class discussions 3. Hands-on exercises applying concepts covered

OUTSIDE ASSIGNMENTS:

Other Assignments
Required chapter assignments Required end of chapter exercises

METHODS OF EVALUATION:

Methods of Evaluation
Graded chapter assignments Quizzes based on lecture and chapter work

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Pratt, Philip J., Mary Last (2014). | *Print Microsoft® Access 2013: Introductory (1st/e)*. ISBN: 9781285169033

Other Materials:

- USB drive, 20 lb. Printer Paper

STUDENT LEARNING OUTCOMES:

1. CBIS372 SLO1 - Create database objects and design templates using correct business format.
2. CBIS372 SLO2 - Effectively uses basic database commands.
3. CBIS372 SLO3 - Show the ability to follow instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet
- Other Method (explain)
 - video conferencing

Instructor Initiated Contact Hours Per Week: 0.00

Contact Types:

- Email Communication (group and/or individual communications)
- Chat room

Telephone Contacts

- Other (please specify)
 - CCCconfer, Instant Messaging

Person Contact Types:

- Orientation Sessions
- Group Meetings
- Testing

Adjustment to Assignments:

Assignments are submitted online

Adjustments to Evaluation Tools:

Exams are administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings.

Additional Comments:

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Date BOT Approved:

Date Reviewed: Fall 2010

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 373**CATALOG COURSE TITLE:** Intro to Windows**BANNER COURSE TITLE:** Intro to Windows**UNITS:** 1

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	1.00	16.00-18.00	1.00
Lab:	-	-	-
Total Contact Hours:	1.00	16.00-18.00	1.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

P/NP - Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):** None**LIMITATION(S) ON ENROLLMENT:** None**ENTRANCE SKILLS:****CATALOG DESCRIPTION:**

Provides the students with an introduction to the use of Windows, the most widely used operating system for PC computers. Course covers fundamentals of windows; managing the desktop; managing files and folders; personalizing and customizing your computer; and using Windows applications.

COURSE CONTENT:

- I. Introduction
- II. Controlling Windows
- III. Managing Windows Program

- IV. File and Folder Management
- V. Creating Files Using Windows Applications
- VI. Transferring Data
- VII. Managing Printing
- VIII. Customizing Windows

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. describe the function and purpose of an operation system program
2. use the select menus, commands, and icons.
3. use file management to maintain files and folders
4. use Windows applications
5. manage and control printing from Windows applications.

METHODS OF INSTRUCTION:

Methods of Instruction
Methods of Instruction Description: Lecture, instructor demonstration, instructor-led exercises and hands-on training

OUTSIDE ASSIGNMENTS:

Other Assignments
Required chapter assignments Required end of chapter exercises

METHODS OF EVALUATION:

Methods of Evaluation
Graded chapter assignments Graded end of chapter lab assignments Quizzes based on lecture, end of chapter assignments, and chapter work

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Cashman, S., R. Enger, C. Hoisington (2014). *Microsoft Windows 8: Complete* (1st/e). ISBN: 9781285163123

Other Materials:

- USB/online drive
- Computer paper

STUDENT LEARNING OUTCOMES:

1. CBIS373 SLO1 - Recall principles, functions and uses of operating system.
2. CBIS373 SLO2 - Create/modify/search/organize folders and files using the current operating system (file management).
3. CBIS373 SLO3 - Modify system environment settings to correspond to the user needs.
4. CBIS373 SLO4 - Show the ability to follow written instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet

Instructor Initiated Contact Hours Per Week: 0.00

Contact Types:

- Email Communication (group and/or individual communications)
- Telephone Contacts

In-Person Contact Types:

- Orientation Sessions
- Testing

Adjustment to Assignments:

none

Adjustments to Evaluation Tools:

none

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

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Date BOT Approved:

Date Reviewed: Spring 2012

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 381**CATALOG COURSE TITLE:** Introduction to Mac OS**BANNER COURSE TITLE:** Intro to Mac OS**UNITS:** 1

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	1.00	16.00-18.00	1.00
Lab:	-	-	-
Total Contact Hours:	1.00	16.00-18.00	1.00 - 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

P/NP - Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):** None**LIMITATION(S) ON ENROLLMENT:** None**ENTRANCE SKILLS:****CATALOG DESCRIPTION:**

Provides the students with an introduction to the use of the Mac operating system. Course covers fundamentals of Mac OS; managing the desktop; managing files and folders; personalizing and customizing your computer; and using system applications.

COURSE CONTENT:

1. Introduction
2. Getting Started with Mac
3. Customizing your Mac
4. Using the Dock
5. Organizing and Managing Files and Folders
6. Managing Disks

7. Using Safari
8. Using iWorks
9. Going Further with Your Mac

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. describe the functions and purposes of the operating system.
2. use menus, commands, and icons.
3. customize the dock by setting the program icons' display options.
4. create, delete, modify and organize files and folders.
5. use operating system's applications.
6. manage and control printing.

METHODS OF INSTRUCTION:**Methods of Instruction**

Methods of Instruction Description:

Lecture, instructor demonstration, instructor-led exercises and hands-on training

OUTSIDE ASSIGNMENTS:**Other Assignments**

Required chapter assignments

Required end of chapter exercises

METHODS OF EVALUATION:**Methods of Evaluation**

Graded chapter assignments

Graded end of chapter lab assignments

Quizzes based on lecture, end of chapter assignments, and chapter work

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Shaffer, Kelly (2010). *Getting Started with Macintosh OS X Leopard, Illustrated* (1st/e).

Other Materials:

- Computer Paper
- Headphones
- USB drive

STUDENT LEARNING OUTCOMES:

1. CBIS381 SLO1 - Recall principles, functions and uses of operating system.
2. CBIS381 SLO2 - Create/modify/search/organize folders and files using the current operating system (file management).
3. CBIS381 SLO3 - Modify system environment settings to correspond to the user needs.
4. CBIS381 SLO4 - Show the ability to follow written instructions.

DISTANCE LEARNING COURSE STATUS:**Delivery Methods**

- Internet

Instructor Initiated Contact Hours Per Week: 1.00

Contact Types:

- Email Communication (group and/or individual communications)

Discussion Board via Blackboard

- Other (please specify)
 - Announcements Blackboard

Person Contact Types:

- Orientation Sessions
- Group Meetings
- Labs
- Testing

Adjustment to Assignments:

Assignments could be submitted online

Adjustments to Evaluation Tools:

Exams will be administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings

Additional Comments:

<="">

Date BOT Approved:

Date Reviewed: Spring 2012

PCA Established:

Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT: Computer Information Systems or Computer Service Technology**DEPARTMENT:** Business Education**PREFIX & NUMBER:** CBIS 382**CATALOG COURSE TITLE:** Office Apps for the Mac**BANNER COURSE TITLE:** Office Apps for the Mac**UNITS:** 2

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16- 18 weeks)	Units
Lecture:	2.00	32.00-36.00	2.00
Lab:	-	-	-
Total Contact Hours:	2.00	32.00-36.00	2.00 – 0.00

NUMBER OF TIMES COURSE CAN BE REPEATED:**GRADING OPTION:**

P/NP - Pass/No Pass

PREREQUISITE(S): None**COREQUISITE(S):** None**ADVISORY(IES):**

CBIS 381

LIMITATION(S) ON ENROLLMENT: None**ENTRANCE SKILLS:****ADVISORY SKILLS:****Upon entering this course, the student should be able to:**
CBIS 381

1. describe the functions and purposes of the operating system.
2. use menus, commands, and icons.
3. customize the dock by setting the program icons' display options.
4. create, delete, modify and organize files and folders.
5. use operating system's applications.
6. manage and control printing.

CATALOG DESCRIPTION:

An introduction to Microsoft Office applications using a Mac computer. Word, Excel and PowerPoint

COURSE CONTENT:

1. Introduce the Mac environment
2. Introduce office application software
3. Manage files and set program options
4. Create, save, and print documents, spreadsheets, and presentations
5. Using shared office tools
6. Manage document, spreadsheet, and presentation layout
7. Add and manipulate art objects
8. Work with templates
9. Integrate Office applications

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

1. create and maintain various types of office documents.
2. save, retrieve, and print documents.
3. perform editing tasks such as inserting, deleting, moving, and copying.
4. determine and use the appropriate application to complete a task.
5. use application programs to share data.

METHODS OF INSTRUCTION:

Methods of Instruction

Methods of Instruction Description:

Lecture, instructor demonstration, instructor-led exercises and hands-on training

OUTSIDE ASSIGNMENTS:

Other Assignments

Required chapter assignments
Required end of chapter exercises

METHODS OF EVALUATION:

Methods of Evaluation

Graded chapter assignments
Graded end of chapter lab assignments
Quizzes based on lecture, end of chapter assignments, and chapter work

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- Shaffer, Kelly (2010). *Microsoft Office for Mac 2011 (1st/e)*. ISBN: 978-1-111-824

Other Materials:

- USB drive
- Headphones
- Computer Paper

STUDENT LEARNING OUTCOMES:

1. CBIS382 SLO1 - Illustrate knowledge by knowing and using the correct computer terms.
2. CBIS382 SLO2 - Design/create/modify word processing documents for business and school needs.
3. CBIS382 SLO3 - Design/create/modify spreadsheets for business and school needs.
4. CBIS382 SLO4 - Design/create/modify presentations for business and school needs.
5. CBIS382 SLO5 - Show the ability to follow written instructions.

DISTANCE LEARNING COURSE STATUS:

Delivery Methods

- Internet
- Other Method (explain)
 -

Instructor Initiated Contact Hours Per Week: 2.00

Contact Types:

- Email Communication (group and/or individual communications)
- Discussion Board via Blackboard
- Other (please specify)
 - Announcements Blackboard

In-Person Contact Types:

- Orientation Sessions
- Group Meetings
- Labs
- Testing

Adjustment to Assignments:

none

Adjustments to Evaluation Tools:

exams will be administered online

Strategies to Make Course Accessible to Disabled Students:

met with adaptive tech specialist, course is accessible to students with disabilities

Inform Students

Flyers, schedules, orientations, individual contact, and Blackboard listings.

Additional Comments:

<="">

Date BOT Approved:
 Date Reviewed:
 PCA Established:
 Date DL Conversion Approved:

ALLAN HANCOCK COLLEGE COURSE OUTLINE

DISCIPLINE PLACEMENT:

DEPARTMENT: Business Education

PREFIX & NUMBER: CBIS 399

CATALOG COURSE TITLE: Special Topics Courses

BANNER COURSE TITLE: Special Topics Courses

UNITS: 0.5 - 3

	Hours per week (based on 16 weeks)	Total Hours per Term (range based on 16-18 weeks)	Units
Lecture:	0.50 - 3.00	8.00-9.00 to 48.00-54.00	0.50 - 3.00
Lab:	-	-	-
Total Contact Hours:	0.50 - 3.00	8.00-9.00 to 48.00-54.00	0.50 - 3.00

NUMBER OF TIMES COURSE CAN BE REPEATED:

GRADING OPTION:

GR/P/NP - Letter Grade or Pass/No Pass

PREREQUISITE(S): None

COREQUISITE(S): None

ADVISORY(IES): None

LIMITATION(S) ON ENROLLMENT: None

ENTRANCE SKILLS:

CATALOG DESCRIPTION:

COURSE CONTENT:

COURSE OBJECTIVES:

At the end of the course, the student will be able to:

METHODS OF INSTRUCTION:

Methods of Instruction
none

METHODS OF EVALUATION:

Methods of Evaluation
None

REQUIRED TEXTS AND OTHER INSTRUCTIONAL MATERIALS:

Adopted Text:

- None

Other Materials:

- None

STUDENT LEARNING OUTCOMES:

None Entered

CHEMISTRY (A.A.)

The associate degree program in chemistry prepares students to begin upper-division work leading to a baccalaureate degree in chemistry or chemical engineering. It also provides some of the support courses required for the baccalaureate degree.

The graduate of the AA program in chemistry will:

- Demonstrate mastery of the approach and rationale of the scientific method and be able to apply these principles to solve problems.
- Demonstrate mastery of stoichiometric calculations.
- Demonstrate mastery of laboratory technique.

A major of 40 units is required for the associate in arts degree.

COURSE NUMBER	TITLE	UNITS
Required core courses (40 units):		
CHEM 150	General Chemistry 1	5
CHEM 151	General Chemistry 2	5
MATH 181	Calculus 1	5
MATH 182	Calculus 2	5
MATH 183	Multivariable Calculus	5
PHYS 161	Engineering Physics 1	5
PHYS 162	Engineering Physics 2	5
PHYS 163	Engineering Physics 3	5
Recommended electives:		
CHEM 140	Introduction to Organic Chemistry	4

ASSOCIATE in ARTS in COMMUNICATION STUDIES for TRANSFER (AA-T)

The Associate in Arts in Communication Studies for Transfer provides students with an opportunity to improve their personal, public and professional lives. Students study communication dynamics in interpersonal relationships, groups, and public settings. By studying how, why and with what consequences people communicate, students will become more competent communicators. Students will develop broad-based competencies in oral and written communication as well as critical analysis. The Associate in Arts in Communication Studies for Transfer will prepare students for further studies toward a California State University (CSU) baccalaureate degree in speech and/or communication studies.

The graduate of the AA-T in Communication Studies will:

- Demonstrate knowledge of communication theories.
- Demonstrate competent communication behaviors for a variety of purposes.
- Be able to locate, synthesize, evaluate and utilize research.

Associate Degree for Transfer Requirements

Completion of 60 semester units that are eligible for transfer to the California State University, including the following:

- The completion of the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth (CSU GE). [The following Allan Hancock College graduation requirements will not be required: Health and Wellness, Multicultural Gender Studies and Allan Hancock College General Education.]
- A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0 with all courses in the major being completed with a grade of "C" or better.

Associate in Arts in Communication Studies for Transfer Program Requirements

- GENERAL EDUCATION:** Complete one of the following:
 - CSU General Education Pattern 39 units
 - Intersegmental General Education Transfer Curriculum 37 units
 Total GE Units: 37-39 units
- MAJOR CORE COURSES:** A major of 18 units is required for the associate in arts in communication studies for transfer degree.

COURSE NUMBER	TITLE	UNITS
Required core courses (18 units):		
SPCH 101	Public Speaking	3
SPCH 102	Small Group Communication	3
SPCH 103	Interpersonal Communication	3
SPCH 106	Argumentation and Debate	3
SPCH 108	Oral Interpretation	3
SPCH 110	Intercultural Communication	3
3. DOUBLE COUNTING: Up to 15 units may be double counted for CSU GE and up to 6 units may be double counted for IGETC.		
a) Total CSU GE and AA-T in Speech Communication units:		42
b) Total IGETC and AA-T in Speech Communication units:		49
4. Select additional course(s) to achieve the 60 units required for the associate degree.		

COMPUTER BUSINESS INFORMATION SYSTEMS (A.S. & Certificate of Achievement)

If you enjoy using technology and helping others then a career in information technology may be for you. The Computer and Business Information Systems (CBIS) program is a comprehensive degree where you will learn business concepts along with needed technical skills to help support a company's information systems' needs. Other CBIS program options allow you to specialize in applications, Web development and software support. Discover the possibilities of a career in information technology. This is a Tech Prep program (see "Programs of Study" on page 56 for information about Tech Prep).

The graduate of the AS or certificate program in computer business information systems will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A major of 27 units is required for the associate in science degree and certificate.

COURSE NUMBER	TITLE	UNITS
Required core courses (27 units)		
ACCT 130	Financial Accounting	3
BUS 101	Introduction to Business	3
CBIS 101	Computer Concepts and Applications	3
CBIS 108	Networking and Administration	3
CBIS 112	Introduction to Programming	3
CBIS 141	Microsoft Excel - Comprehensive	3
CBIS 142	Microsoft Access - Comprehensive	3
CBIS 321	Internet Business Applications	3
EL 105	PC Preventive Maintenance and Upgrading	3

Recommended electives:

BUS 102	Marketing	3
BUS 104	Business Organization and Management	3
BUS 106	Small Business Management	3
CBIS 399	Special Topics Courses	0.5-3

COMPUTER BUSINESS INFORMATION SYSTEMS: COMPUTER BUSINESS OFFICE SOFTWARE (Certificate of Accomplishment)

This certificate is the foundation for students to learn the basics of computer system software and general office applications through a series of hands on coursework. The skills developed throughout the different courses will improve students' productivity.

The graduate of the certificate program in computer business office software will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 5 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
CBIS 373	Intro to Windows	1
CBIS 371	Intro to Excel	1
CBIS 372	Intro to Access	1
CBOT 360	Word - Basics	1
CBOT 361	Intro to PowerPoint	1

COMPUTER BUSINESS INFORMATION SYSTEMS: DATABASE ADMINISTRATION (Certificate of Accomplishment)

This certificate provides comprehensive training for students who will develop and maintain databases in our changing business world.

The graduate of the certificate program in database administration will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 17.5 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
CBIS 142	Microsoft Access - Comprehensive	3
CBIS 189	Independent Projects	1
CBIS 327	Building Business Websites	3
CBIS 330	Database Management Concepts	3
CBIS 334	Database Security and Auditing	3
CBIS 336	Web DB Programming-PHP/ASP	3
CBIS 343	Applied Project Management 1	1.5

COMPUTER BUSINESS INFORMATION SYSTEMS: INFORMATION ARCHITECTURE (Certificate of Accomplishment)

This certificate provides comprehensive training for students who will plan, develop and manage business websites.

The graduate of the certificate program in information architecture will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 16.5 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
Required core courses (6.5 units)		
BUS 380	Marketing Strategies	0.5
CBIS 321	Internet Business Applications	3
CBIS 327	Building Business Web Sites	3
Plus a minimum of 10 units selected from the following:		
BUS 111	Internet Marketing	3
BUS 366	Promoting Small Business	0.5
BUS 377	Managing Service Quality	0.5
CBIS 318	Programming for the Web	3
CBIS 343	Applied Project Management 1	1.5
CBIS 372	Intro to Access	1
CS 102	Introduction to Computing with HTML	3
MMAC 114	Dynamic Internet Design	3

COMPUTER BUSINESS INFORMATION SYSTEMS: OFFICE SYSTEMS ANALYSIS (Certificate of Accomplishment)

This certificate specializes in office applications. Students learn to manage projects from the design phase through implementation. The coursework also includes fundamentals of program management and computer programming.

The graduate of the certificate program in office systems analysis will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 13.5 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
CBIS 101	Computer Concepts and Applications	3
CBIS 112	Introduction to Programming	3
CBIS 141	Microsoft Excel - Comprehensive	3
CBIS 142	Microsoft Access - Comprehensive	3
CBIS 343	Applied Project Management 1	1.5

COMPUTER BUSINESS INFORMATION SYSTEMS: OFFICE SOFTWARE SUPPORT (Certificate of Accomplishment)

This certificate covers office applications and Web fundamentals. Students completing this certificate will be able to provide support in the office applications and basic Web maintenance.

The graduate of the certificate program in office software support will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 15 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
CBIS 101	Computer Concepts and Applications	3
or		
CBOT 132	Advanced Word Processing	3
CBIS 141	Microsoft Excel - Comprehensive	3
CBIS 142	Microsoft Access - Comprehensive	3
CBIS 321	Internet Business Applications	3
CBIS/CBOT 337	Presentation Design-PowerPoint	3

COMPUTER BUSINESS INFORMATION SYSTEMS: INFORMATION TECHNOLOGY FUNDAMENTALS (Certificate of Accomplishment)

This certificate provides the basic computer skills that every student needs. The focus will be on understanding and using computer applications such as word processing, spreadsheets, database and presentation.

The graduate of the certificate program in information technology fundamentals will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 9 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
CBIS 101	Computer Concepts and Applications	3
CBIS 301	Computer Fundamentals 1	3
CBIS 321	Internet Business Applications	3

COMPUTER BUSINESS INFORMATION SYSTEMS: MAC FUNDAMENTALS FOR BUSINESS (Certificate of Accomplishment)

The certificate of accomplishment in Mac Fundamentals for Business prepares a student to manage a Mac computer environment and utilize Office software to develop solutions for business and school needs.

The graduate of the certificate program in Mac Computer Fundamentals for Business will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 3 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
CBIS 381	Introduction to Mac OS	1
CBIS 382	Office Apps for the Mac	2

COMPUTER BUSINESS INFORMATION SYSTEMS: SMALL BUSINESS WEBMASTER (Certificate of Accomplishment)

This certificate provides basic training for students who will plan, develop and manage business websites.

The graduate of the certificate program in small business Webmaster will:

- Understand the fundamentals of business and how they relate to information systems needs of a business.
- Use effective written and oral communication to support business information systems needs.
- Develop technical skills to analyze and solve problems both independently and in teams, using a variety of problem-solving approaches and selecting the appropriate software.
- Analyze/design/develop/deploy/maintain and manage business applications.

A total of 10 units is required for the certificate.

COURSE NUMBER	TITLE	UNITS
Required core courses (6 units)		
CBIS 321	Internet Business Applications	3
CBIS 327	Building Business Web Sites	3
Plus a minimum of 4 units selected from the following:		
BUS 111	Internet Marketing	3
BUS 366	Promoting Small Business	0.5
BUS 377	Managing Service Quality	0.5
BUS 380	Marketing Strategies	0.5
CBIS 318	Programming for the Web	3
CBIS 372	Intro to Access	1
CS 102	Introduction to Computing with HTML	3
MMAC 114	Dynamic Internet Design	3

COMPUTER BUSINESS OFFICE TECHNOLOGY: ADMINISTRATIVE ASSISTANT/SECRETARIAL (A.S. & Certificate of Achievement)

Administrative Assistant/Secretarial is designed to prepare students for entrance into positions working with upper level management. Training includes all phases of administrative/secretarial work with emphasis on software applications such as word processing, desktop publishing, presentation graphics and records management. Business communication and administrative operations and procedures are also emphasized.

The graduate of the AS or certificate program in administrative assistant/secretarial will:

- Apply proper administrative operations and procedures for business.

CBIS 101 Computer Concepts and Applications (3)

7/15/16

CATALOG DESCRIPTION

A general education course focusing on computer concepts, terminology, uses, and the computer's effect on society. Introduces typical software applications such as word processing, spreadsheets, databases, presentation software, and Internet browsers.

AHC Special Notes	Articulation Institution	Prefix	Title
	Cal Poly Pomona	CIS 101 OR AG 128 & AG 128L OR CE 110 & CE 100L	Introduction to Micro-Computing (4) Computer Application in Agriculture (3) Computer Application in Agriculture Lab (1) Computers in Civil Engineering (1) Computers in Civil Engineering Lab (1)
	Cal Poly San Luis Obispo	-----	No Equivalent Course
	CSU Bakersfield	MIS 200A	Software Productivity Tools
	CSU Channel Islands	CIS 110 or COMP 101	Computer Information Systems or Computer Literacy
	CSU Chico	BSIS 105	Introduction to Computers in Business (3)
	CSU Dominguez Hills	Not Articulated	Requested 1/2009 [CIS 270, Info Systems & Technology Fundamentals]
	CSU East Bay	CIS 1270 Or CS 1020	PC Fundamentals Or Introductions to Computers
	CSU Fresno	IS 52 & IS 52L or CSCI 5	Computer Concepts and Computer Concepts Lab or Computer & Applications
	CSU Fullerton	CPSC 103	Introduction to Personal Computer Applications
	CSU Long Beach	IS 233	Introduction to Computer System & Applications
	CSU Los Angeles	CIS 100	Business Computer Systems
	CSU Monterey Bay	CST 101	Technology Tools Lecture
	CSU Northridge	COMP 100	Computers: Their Impact and Use
	CSU Sacramento	-----	Articulation request not accepted because the course not a required major preparation course. [CSC 5, Personal Computing]
	CSU San Bernardino	INFO 101	Introduction to Information Technology
	CSU San Marcos	-----	No Equivalent Course
	CSU Stanislaus	Not Articulated	Requested 1/2009 [CIS 2000, Intro to Computer Info Systems]
	Humboldt State	-----	No Equivalent Course
	San Diego State	IDS 180	Principles of Information Systems
	San Francisco State	ISYS 263	Introduction to Information Systems

	San Jose State	BUS 91L	Computer Tools for Business
	Sonoma State	Not Articulated	Requested 1/2009 [CS 101, Intro to Computers and Computing]
	UC Transferable	Yes	
	UC Berkeley	-----	No Equivalent Course
	UC Davis	ENGCS 15 or ENGCS 15AT	Introduction to Computers
	UC Irvine	-----	No Equivalent Course
	UC Los Angeles	-----	No Equivalent Course
	UC Merced	Not Articulated	Requested 1/2009 [CSE 5, Intro to Computer Applications]
	UC Riverside	CS 8	Introduction to Computing
	UC San Diego	Not Articulated	Requested 1/2009 [CSC 3, Fluency in Information Technology]
	UC Santa Barbara	-----	No Equivalent Course
	UC Santa Cruz	Not Articulated	Requested 1/2009 [CMPS 2, Computer Literacy]
	C-ID	BUS 140	Business Information Systems, Computer Information Systems
	CSU GE	N/A	
	IGETC	N/A	

CATALOG DESCRIPTION

Assists students preparing to work as network administrators or server managers emphasizing installation and maintenance of a Windows NT Server on a LAN. Also provides preparation for the Windows NT certification exam.

AHC Special Notes	Articulation Institution	Prefix	Title
	Cal Poly Pomona	-----	No Equivalent Course
	Cal Poly San Luis Obispo	-----	No Equivalent Course
	CSU Bakersfield	-----	No Equivalent Course
	CSU Channel Islands	-----	No Equivalent Course
	CSU Chico	-----	No Equivalent Course
	CSU Dominguez Hills	-----	No Equivalent Course
	CSU East Bay	-----	No Equivalent Course
	CSU Fresno	-----	No Equivalent Course
	CSU Fullerton	-----	No Equivalent Course
	CSU Long Beach	-----	No Equivalent Course
	CSU Los Angeles	-----	No Equivalent Course
	CSU Monterey Bay	-----	No Equivalent Course
	CSU Northridge	-----	No Equivalent Course
	CSU Sacramento	-----	No Equivalent Course
	CSU San Bernardino	-----	No Equivalent Course
	CSU San Marcos	-----	No Equivalent Course
	CSU Stanislaus	-----	Upper Division Equivalent [CIS 4100, System Administration]
	Humboldt State	-----	No Equivalent Course
	San Diego State	-----	No Equivalent Course
	San Francisco State	-----	No Equivalent Course
	San Jose State	-----	No Equivalent Course
	Sonoma State	-----	No Equivalent Course
	UC Transferable	No	
	UC Berkeley		
	UC Davis		
	UC Irvine		
	UC Los Angeles		
	UC Merced		
	UC Riverside		
	UC San Diego		
	UC Santa Barbara		
	UC Santa Cruz		
	C-ID	N/A	
	CSU GE	N/A	

IGETC

NA

CATALOG DESCRIPTION

An introduction to Visual Basic, an object-oriented/event and procedure-driven programming language for the Windows environment. Provides skills necessary for the creation of professional-looking applications, development of macros in Excel, and use of procedures and modules in Access.

AHC Special Notes	Articulation Institution	Prefix	Title
	Cal Poly Pomona	Pending	Requested 1/2009 [CIS 234, Object-Oriented Programming w/ Java]
	Cal Poly San Luis Obispo	-----	No Equivalent Course
+ MMAC 112	CSU Bakersfield	CMPS 211	Internet Programming and Web Design
	CSU Channel Islands	-----	No Equivalent Course
	CSU Chico	CSCI 110	Introduction to Application Programming
	CSU Dominguez Hills	Not Articulated	Requested 1/2009 [Business Programming I]
	CSU East Bay	-----	Upper Division Equivalent [CS 3340, Intro to Object-Oriented Programming & Design]
	CSU Fresno	IS 51	Programming Fundamentals
	CSU Fullerton	-----	No Equivalent Course
	CSU Long Beach	-----	No Equivalent Course
	CSU Los Angeles	CIS 284	Introduction to Application Programming in Visual Basic.Net
	CSU Monterey Bay	-----	No Equivalent Course
	CSU Northridge	Not Articulated	Requested 1/2009 [COMP 105 BAS, Computer Programming in Basic]
	CSU Sacramento	-----	No Equivalent Course
	CSU San Bernardino	CSCI 125 or INFO 282	Programming in BASIC or Business Systems I
	CSU San Marcos	-----	No Equivalent Course
	CSU Stanislaus	Not Articulated	Requested 1/2009 [CIS 2020, Visual Basic Programming]
	Humboldt State	Not Articulated	Requested 1/2009 [CIS 130, Introduction to Programming]
	San Diego State	-----	No Equivalent Course
	San Francisco State	-----	No Equivalent Course
	San Jose State	Not Articulated	Requested 1/2009 [BUS 92, Introduction to Business Programming]
	Sonoma State	-----	No Equivalent Course
	UC Transferable	Yes	
	UC Berkeley	-----	No Equivalent Course
	UC Davis	ENG SC 10	Basic Concepts

	UC Irvine	-----	No Equivalent Course
	UC Los Angeles	-----	No Equivalent Course
	UC Merced	-----	No Equivalent Course
	UC Riverside	-----	No Equivalent Course
	UC San Diego	-----	No Equivalent Course
	UC Santa Barbara	-----	No Equivalent Course
	UC Santa Cruz	-----	No Equivalent Course
	C-ID	N/A	
	CSU GE	N/A	
	IGETC	N/A	

CATALOG DESCRIPTION

Manage and analyze information using spreadsheets for more informed decisions. Some skills covered are applying formatting, creating calculations, using function, creating Pivot Tables and Pivot Chairs, developing macros, sharing data, and writing VBA code.

AHC Special Notes	Articulation Institution	Prefix	Title
	Cal Poly Pomona	-----	No Equivalent Course
	Cal Poly San Luis Obispo	-----	No Equivalent Course
	CSU Bakersfield	-----	No Equivalent Course
	CSU Channel Islands	-----	No Equivalent Course
	CSU Chico	Not Articulated for old CBIS 141	Requested 1/2009 [BSIS 102, Spreadsheets and Graphics]
	CSU Dominguez Hills	-----	No Equivalent Course
	CSU East Bay	-----	No Equivalent Course
	CSU Fresno	-----	No Equivalent Course
	CSU Fullerton	-----	No Equivalent Course
	CSU Long Beach	-----	No Equivalent Course
	CSU Los Angeles	-----	No Equivalent Course
	CSU Monterey Bay	Not Articulated for old CBIS 141	Requested 1/2009 [BUS 299, Asmt: Excell Spreadsheets]
	CSU Northridge	-----	No Equivalent Course
	CSU Sacramento	-----	Articulation request not accepted because the course not a required major preparation course. [CSC 6B, Spreadsheets or MIS 2, Microcomputer Applications - Spreadsheets]
+ CBIS 142	CSU San Bernardino	Not Articulated for old CBIS 141	Requested 1/2009 [CSCI 134, Using Spreadsheets and Database Software]
	CSU San Marcos	-----	No Equivalent Course
	CSU Stanislaus	-----	No Equivalent Course
	Humboldt State	Not Articulated for old CBIS 141	Requested 12/2008 [CI/CS 172, Spreadsheets I]
	San Diego State	-----	No Equivalent Course
	San Francisco State	-----	No Equivalent Course
	San Jose State	-----	No Equivalent Course
	Sonoma State	-----	No Equivalent Course
	UC Transferable	No	
	UC Berkeley		
	UC Davis		
	UC Irvine		
	UC Los Angeles		

	UC Merced		
	UC Riverside		
	UC San Diego		
	UC Santa Barbara		
	UC Santa Cruz		
	C-ID	N/A	
	CSU GE	N/A	
	IGETC	N/A	

CATALOG DESCRIPTION

Learn techniques to solve business problems and developing business decision-making processes using a database program. Some skills covered are developing and maintaining tables, relationships, queries, forms, reports, macros and code modules. Learn Microsoft Access.

AHC Special Notes	Articulation Institution	Prefix	Title
	Cal Poly Pomona	-----	No Equivalent Course
	Cal Poly San Luis Obispo	-----	No Equivalent Course
	CSU Bakersfield	-----	No Equivalent Course
	CSU Channel Islands	-----	No Equivalent Course
	CSU Chico	Not Articulated for old CBIS 142	Requested 1/2009 [BSIS 103, Databases
	CSU Dominguez Hills	-----	No Equivalent Course
	CSU East Bay	-----	No Equivalent Course
	CSU Fresno	-----	No Equivalent Course
	CSU Fullerton	Not Articulated for old CBIS 142	Requested 12/2008 [ISDS 167, Practical Approach to Database Systems]
	CSU Long Beach	-----	No Equivalent Course
	CSU Los Angeles	-----	No Equivalent Course
	CSU Monterey Bay		
	CSU Northridge	-----	No Equivalent Course
	CSU Sacramento	-----	Articulation request not accepted because the course not a required major preparation course. [CSC 6C, Microcomputer Applications - Database]
+CBIS 141	CSU San Bernardino	Not Articulated for old CBIS 142	Requested 1/2009 [CSCI 134 167, Practical Approach to Database Systems]
	CSU San Marcos	-----	No Equivalent Course
	CSU Stanislaus	-----	No Equivalent Course
	Humboldt State	Not Articulated for old CBIS 142	Requested 12/2008 [CIS/CS 173, Micro Databases I]
	San Diego State	-----	No Equivalent Course
	San Francisco State	-----	No Equivalent Course
	San Jose State	-----	No Equivalent Course
	Sonoma State	-----	No Equivalent Course
	UC Transferable	No	
	UC Berkeley		
	UC Davis		
	UC Irvine		
	UC Los Angeles		
	UC Merced		

	UC Riverside		
	UC San Diego		
	UC Santa Barbara		
	UC Santa Cruz		
	C-ID	N/A	
	CSU GE	N/A	
	IGETC	N/A	



CBOT CBIS Advisory Committee Meeting Minutes

Building A401 4:00 pm - Thursday, April 23, 2015

Members Present

Full-time Faculty Members - Jody Derry, Peggy Warrick, Carmen Montanez-Rodriguez

Advisory Committee Community Members – Darlene Chavez (Foodbank of Santa Barbara County), Frances Talmadge (Halsell Builders), Donna Martinez (Cost Analyst, L-3 Communications)

Introductions & Overview

Attendees introduced themselves and the purpose of the meeting was discussed. A brief overview of the CBIS/CBOT Programs and updates to the program were discussed.

Employer Needs

- ✓ All members communicated the importance of knowing Excel. It was stated that Spreadsheet skills are still needed but are lacking in employees. Prospective employees state they know Excel but are not at the appropriate skill level. Excel was discussed at length in regards to topics such as exporting data into Access, and the need for students to know pivot tables and use filters. It was stated to the committee that Office Technology added a three unit Excel course to the Administrative Assistant degree and certificate based on previous Advisory Committee feedback and recommendations (previously the requirement was for only a one unit introductory Excel course).
- ✓ Frances Talmadge said that the construction industry is exploding and expressed her frustration in hiring employees that are either unreliable or lacking in technological skills. The job/career placement center was discussed as a place to post job opportunities and to hire Hancock students who have completed our programs.
- ✓ Donna Martinez shared an experience she had with a class in high school that helped her in her career that showed the relationship in an office with different departments, work flow and interdependency within a company (it was called Office Automation, but was unfortunately one of the first cancelled classes due to budget cuts at the high school). She recommended that this class be offered and have students assume different roles and run a mock company. This idea was discussed by all members and the benefits of having students introduced to different jobs and the teamwork needed to be successful.
- ✓ Group projects were stressed by all members and the importance of working with others on the job. The negatives that students have to go through when working on group projects were brought up as far as some students not pulling their weight in a project, how to grade that scenario and the fact that this happens in companies as well and is a real life issue.
- ✓ Additional skills lacking in the workplace that were discussed were E-mail communication and etiquette, ability to work completely online in a paperless environment and filling out job applications.

Action Steps

- ✓ CBOT and CBIS – Stress the importance of knowing Excel to students and how Excel can be used with other software applications. Consider offering Excel Comprehensive in the classroom again or as a hybrid to ensure all students who need the class will have access to the traditional classroom setting and not just online.
- ✓ CBOT and CBIS – Incorporate more group activities in our classes.
- ✓ CBOT and CBIS – Stress in our courses the importance of being a reliable employee, using business etiquette in e-mails, and filling out a job application completely using the technology available.
- ✓ CBOT and CBIS – Explore the possibility of creating a new class that stressed the interdependence of all departments in a business and their roles. A mock company setting could be used where students can rotate through each role in the company.

Respectfully submitted,

Jody Derry, Peggy Warrick, Carmen Montanez-Rodriguez

Jody Derry, Peggy Warrick, Carmen Montanez - Rodriguez

Faculty, Computer Business Office Technology and Information Systems

CBOT/CBIS Advisory Committee
Updated Fall 2015

Dept	Faculty	Adv Comm Name	First	Last	School/Business	Position	Address	City	State	Zip Code	Phone/Fax	Email
Business		CBOT/ CBIS	Lielle	Arad	California Space Enterprise Center	Director Public Affairs	Box 285	Santa Barbara	CA	93102	310.663-2609	lielle@ftd3.me
Business		CBOT/ CBIS	Dariene	Chavez	Food Bank of Santa Barbara County	Community Leadership Manager	490 West Foster Road	Santa Maria	CA	93455	937-3422 x 109	dchavez@foodbanksbc.org
Business		CBOT/ CBIS	Chris	Chrigwin	Lanspeed	CEO	100 North Hope Avenue, Suite 20	Santa Barbara	CA	93102		
Business	X	CBOT/ CBIS	Jody	Derry	Allan Hancock College	Faculty	800 South College Drive	Santa Maria	CA	93454	922-6966 x 3471	jderry@hancockcollege.edu
Business		CBOT/ CBIS	Karen	Draper	Santa Maria High School	Teacher	901 S. Broadway	Santa Maria	CA	93454	925-2567	kdraper@santamariahighschool.org
Business		CBOT/ CBIS	Alex	Ek	Helical Products Company	Manufacturing/Engi neering Manager	P.O. Box 1069	Santa Maria	CA	93456	928-3851	ack@heli-cal.com
Business		CBOT/ CBIS	Jose	Huiltron	Your People Professionals		2605 South Miller Street, Ste. 107	Santa Maria	CA	93454	922-6966	jh@hub81.com
Business		CBOT/ CBIS	Linda	Lindner	Coast Hills							lindal@coasthills.coop
Business		CBOT/ CBIS	Teri	Maa	City of Santa Maria A.S./Info. Tech. Dept	Information Technology Manager	110 E. Cook Street	Santa Maria	CA	93454	925-0951 x 236	tmaa@ci.santa-maria.ca.us
Business		CBOT/ CBIS	Donna	Martinez	L-3 Communications	Cost Analyst	P.O. Box 5293	Vandenberg AFB	CA	93437	608-1208 x 1017	donna.martinez@exelisinc.com
Business	X	CBOT/ CBIS	Carmen	Montanez- Rodriguez	Allan Hancock College	Faculty	800 South College Drive	Santa Maria	CA	93454	922-6966 x 3794	cmontanez@hancockcollege.edu
Business		CBOT/ CBIS	Mircea	Oprea	DbTemps	Director		Santa Maria	CA			moprea@dbtemps.com
Business		CBOT/CBI S	Cindy	Quaid	Santa Maria High School	Teacher	901 S. Broadway	Santa Maria	CA	93455	925-2567	cquaid@santamariahighschool.org
Business		CBOT/ CBIS	Kelly	Romain	Wiser Property Management and Sales	Administrative Manager	119 East Walnut Avenue	Lompoc	CA	93436	736-1283	kellyromain@hotmail.com
Business		CBOT/ CBIS	Frances	Talmadge	Haisell Builders		3130 Skyway Dr., Ste. 601	Santa Maria	CA	93455	928-8948	frances@haisellbuilders.com
Business		CBOT/ CBIS	Alan	Trainer	California Space Enterprise Center	Green2Gold International Director	2605 South Miller Street, Ste. 107	Santa Barbara	CA	93102	805.735-7261	Alan@green2gold.org
Business	X	CBOT/ CBIS	Lilia	Wambolt	Community Education, Allan Hancock College		800 South College Drive	Santa Maria	CA	93454	922-6966	lwambolt@hancockcollege.edu
Business	X	CBOT/ CBIS	Margaret	Warrick	Allan Hancock College	Faculty	800 South College Drive	Santa Maria	CA	93454	922-6966 x 5259	mwarrick@hancockcollege.edu
Business		CBOT/ CBIS	Bruce	Weaver	Weaver Consulting	Owner/Training Consultant	5485 Lancer Avenue	Santa Maria	CA	93455	938-0085	Bruce@techskillsusa.com

Employment Development Department
 Labor Market Information Division
 Published: December 2014

2012-2022 Fastest Growing Occupations
Santa Maria-Santa Barbara Metropolitan Statistical Area
(Santa Barbara County)

SOC Code*	Occupational Title	Estimated Employment 2012**	Projected Employment 2022	Percent Change 2012-2022	Annual Average Percent Change	2014 First Quarter Wages [1]		Education and Training Levels [3]		
						Median Hourly	Median Annual	Entry Level Education	Work Experience	On-the-Job Training
47-2044	Tile and Marble Setters	260	410	57.7%	5.8%	\$19.41	\$40,376	8	None	LT OJT
31-9094	Medical Transcriptionists	280	440	57.1%	5.7%	\$9.01	\$18,732	5	None	None
47-2141	Painters, Construction and Maintenance	720	1,130	56.9%	5.7%	\$16.94	\$35,225	8	None	MT OJT
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders Market Research Analysts and Marketing Specialists	230	360	56.5%	5.7%	\$18.73	\$38,971	7	None	MT OJT
13-1161	Specialists	760	1,160	52.6%	5.3%	\$32.30	\$67,183	3	None	None
39-9021	Personal Care Aides	2,830	4,250	50.2%	5.0%	\$11.93	\$24,808	8	None	ST OJT
43-4151	Order Clerks	240	350	45.8%	4.6%	\$16.38	\$34,073	7	None	ST OJT
47-2081	Drywall and Ceiling Tile Installers	240	350	45.8%	4.6%	\$20.69	\$43,048	8	None	MT OJT
41-9011	Demonstrators and Product Promoters	210	300	42.9%	4.3%	\$11.92	\$24,803	7	None	ST OJT
47-2051	Cement Masons and Concrete Finishers	200	280	40.0%	4.0%	\$19.88	\$41,358	8	None	MT OJT
39-5012	Hairdressers, Hairstylists, and Cosmetologists	360	500	38.9%	3.9%	\$10.69	\$22,239	5	None	None
15-1134	Web Developers	290	400	37.9%	3.8%	\$21.08	\$43,858	4	None	None
17-2112	Industrial Engineers	250	340	36.0%	3.6%	\$46.43	\$96,568	3	None	None
9092	Medical Assistants	860	1,140	32.6%	3.3%	\$16.77	\$34,885	5	None	None
121	Computer Systems Analysts	400	530	32.5%	3.3%	\$40.08	\$83,365	3	None	None
1051	Cost Estimators	250	330	32.0%	3.2%	\$33.83	\$70,377	3	None	None
15-1133	Software Developers, Systems Software	940	1,240	31.9%	3.2%	\$52.30	\$108,770	3	None	None
43-4051	Customer Service Representatives	1,880	2,480	31.9%	3.2%	\$17.12	\$35,612	7	None	ST OJT
35-2014	Cooks, Restaurant	1,600	2,110	31.9%	3.2%	\$11.86	\$24,677	8	<5 years	MT OJT
45-2091	Agricultural Equipment Operators	480	630	31.3%	3.1%	\$11.14	\$23,173	8	None	ST OJT
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	610	800	31.1%	3.1%	\$17.58	\$36,582	7	None	MT OJT
19-2041	Environmental Scientists and Specialists, Including Health	230	300	30.4%	3.0%	\$36.54	\$76,000	3	None	None
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	4,000	5,210	30.3%	3.0%	\$9.58	\$19,931	8	None	ST OJT
53-7081	Refuse and Recyclable Material Collectors	270	350	29.6%	3.0%	\$19.22	\$39,969	8	None	ST OJT
43-6013	Medical Secretaries	860	1,110	29.1%	2.9%	\$17.45	\$36,291	7	None	MT OJT
25-2012	Kindergarten Teachers, Except Special Education	310	400	29.0%	2.9%	[2]	\$70,749	3	None	I/R
11-3051	Industrial Production Managers	210	270	28.6%	2.9%	\$47.65	\$99,112	3	≥5 years	None
29-1123	Physical Therapists	210	270	28.6%	2.9%	\$41.91	\$87,169	1	None	None
29-2071	Medical Records and Health Information Technicians	210	270	28.6%	2.9%	\$15.30	\$31,818	5	None	None
47-2061	Construction Laborers	1,480	1,900	28.4%	2.8%	\$17.49	\$36,379	8	None	ST OJT
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,060	1,360	28.3%	2.8%	\$16.54	\$34,391	7	<5 years	None
37-2021	Pest Control Workers	250	320	28.0%	2.8%	\$16.18	\$33,656	7	None	MT OJT
25-2022	Middle School Teachers, Except Special and Career/Technical Education	220	280	27.3%	2.7%	[2]	\$48,775	3	None	I/R

**2012-2022 Fastest Growing Occupations
 Santa Maria-Santa Barbara Metropolitan Statistical Area
 (Santa Barbara County)**

SOC Code*	Occupational Title	Estimated Employment 2012**	Projected Employment 2022	Percent Change 2012-2022	Annual Average Percent Change	2014 First Quarter Wages [1]		Education and Training Levels [3]		
						Median Hourly	Median Annual	Entry Level Education	Work Experience	On-the-Job Training
47-2031	Carpenters	1,030	1,310	27.2%	2.7%	\$24.41	\$50,779	7	None	APP
15-1132	Software Developers, Applications	860	1,090	26.7%	2.7%	\$37.89	\$78,813	3	None	None
17-2051	Civil Engineers	420	530	26.2%	2.6%	\$49.31	\$102,568	3	None	None
29-1131	Veterinarians	230	290	26.1%	2.6%	\$56.48	\$117,491	1	None	None
25-2021	Elementary School Teachers, Except Special Education	2,190	2,760	26.0%	2.6%	[2]	\$70,142	3	None	I/R
51-4041	Machinists	310	390	25.8%	2.6%	\$22.75	\$47,326	7	None	LT OJT
17-2141	Mechanical Engineers	320	400	25.0%	2.5%	\$39.83	\$82,849	3	None	None
25-2011	Preschool Teachers, Except Special Education	520	650	25.0%	2.5%	\$17.55	\$36,513	4	None	None
31-9011	Massage Therapists	370	460	24.3%	2.4%	\$9.35	\$19,448	5	None	None
43-3021	Billing and Posting Clerks	500	620	24.0%	2.4%	\$17.61	\$36,625	7	None	ST OJT
11-3021	Computer and Information Systems Managers	460	570	23.9%	2.4%	\$58.30	\$121,248	3	≥5 years	None
15-1151	Computer User Support Specialists	510	630	23.5%	2.4%	\$27.24	\$56,656	6	None	MT OJT
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	510	630	23.5%	2.4%	\$9.94	\$20,674	8	None	ST OJT
51-2022	Electrical and Electronic Equipment Assemblers	770	950	23.4%	2.3%	\$14.34	\$29,843	7	None	ST OJT
43-5061	Production, Planning, and Expediting Clerks	300	370	23.3%	2.3%	\$26.20	\$54,487	7	None	MT OJT
21-1011	Substance Abuse and Behavioral Disorder Counselors	260	320	23.1%	2.3%	\$17.93	\$37,292	7	None	ST OJT
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	400	490	22.5%	2.3%	\$33.94	\$70,593	7	≥5 years	None

* The Standard Occupational Classification (SOC) system is used by government agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

** Data sources: U.S. Bureau of Labor Statistics' Current Employment Statistics (CES) March 2013 benchmark, Quarterly Census of Employment and Wages (QCEW) industry employment, and Occupational Employment Statistics (OES) data. Occupational employment projections include self-employed, unpaid family workers, private household workers, farm, and nonfarm employment. N/A - Information is not available. Occupations with employment below 200 in 2012 are excluded. Excludes "All Other" categories. These are residual codes that do not represent a detailed occupation. The use of occupational employment projections as a time series is not encouraged due to changes in the occupational, industrial, and geographical classification systems; changes in the way data are collected; and changes in the OES survey reference period.

[1] Median hourly and annual wages are the estimated 50th percentile of the distribution of wages; 50 percent of workers in an occupation earn wages below, and 50 percent earn wages above the median wage. The wages are from 2014 first quarter and do not include self-employed or unpaid family workers.

[2] In occupations where workers do not work full-time all year-round, it is not possible to calculate an hourly wage.

[3] The Bureau of Labor Statistics develops and assigns education and training categories to each occupation. For more information on these categories, please see http://www.bls.gov/emp/ep_education_training_system.htm

Entry Level Education
1- Doctoral or professional degree
2- Master's degree

Work Experience Codes	
≥5 years	5 years or more experience in a related occupation or field

On-the-Job Training	
I/R	Internship/Residency

