

Major Highlights

Program Dashboard

**Degree & Credit Hour
Trends**

Occupational Projections

Program Assessment Plan

Assessment Results

Program Planning Report

Program Marketing Plan

CRC Recommendations

CRC Follow-Up

**CIS Systems Analysis Program
Major Highlights
November 2006**

Overview

The information contained in this binder represents supporting reports and data associated with the CRC's review of the CIS Systems Analysis program. These documents are intended to provide a historical perspective, as well as an idea of current and future issues which may impact the short and long term viability of the program.

Major Highlights

- During 2005-06, one out of the seven Program Dashboard measures fell below its established benchmark (red zone). Specifically, the percent (16.7%) of withdrawals in CIS courses was greater than the 15.0% trouble score. In total, 1,045 withdrawals were granted to CIS students during 2005-06.
- On the other hand, one out of the seven Program Dashboard measures exceeded its established benchmark (green zone). Mainly, the percent of minority students exceeded the target score of 18.8%.
- Overall, CIS sections are 80.6% filled to capacity which is slightly lower than the 83.2% college-wide level. Meanwhile, over the past three years 22% to 34% of offered CIS sections have been cancelled. During 2005-06 a total of 87 CIS sections were canceled down from the prior year when 182 sections were canceled.
- CIS enrollment, in terms of headcount and credit hours, has been declining for the last three consecutive years. In 2000-01 there were 38,772 CIS credit hours, and by 2005-06, the number had decreased to 23,364, a 40% decline.
- The percent of minority students enrolled in CIS courses has remained steady over the last three years. In 2005-06, 30.4% of CIS students were minority, which is higher than the college-wide average of 27.9%.
- The percent of students who successfully complete CIS courses is slightly below the college-wide student success rate. Nearly sixty-four (63.6%) percent of CIS students receive a grade of "C" or higher, compared to 68.2% college-wide.
- Since the program's inception in July 2004, there have been three students who've received an Associates Degree in Systems Analysis. All during academic year 2005-06.
- Occupational opportunities in Southeast Michigan associated with the Systems Analysis field are expected to increase over the next ten years. Forecasts indicate increased demand (new jobs), as well as the need to replace current workers as they retire, move, change careers, etc.
- In total the CIS Systems Analysis program has identified four Learning Outcomes along with nine Benchmarks. Between January 2005 and October 2006, none of the Benchmarks have been assessed.

- All Benchmarks and Assessment Methods need to be revised so they clearly identify what level of proficiency each student is expected to attain and what percent of students are expected to reach this level. Also, some of the Assessment Methods appear to be teaching methods. Furthermore, all Assessment Methods need a timeline e.g. specific dates (month and year) when the Benchmark will be assessed.

Oakland Community College Program Dashboard

The purpose of the program dashboard is to provide a data driven tool designed for the systematic and objective review of all curriculum offerings. Based on a common set of measures which apply to all programs/disciplines the program dashboard facilitates the systematic identification of well performing as well as ailing curriculum so early intervention (triage) efforts can be undertaken.

In a rapidly changing economic and competitive environment it is necessary if not imperative to continually review curriculum offerings annually. Dashboard reports are a useful tool for monitoring program performance. In addition, they allow for an integrated approach for collecting, presenting, and monitoring data to meet long and short-term programmatic decision-making needs. As in an airplane, the dashboard consists of a wide variety of indicator lights to provide the "pilot" information about the overall performance of the highly complex machine.

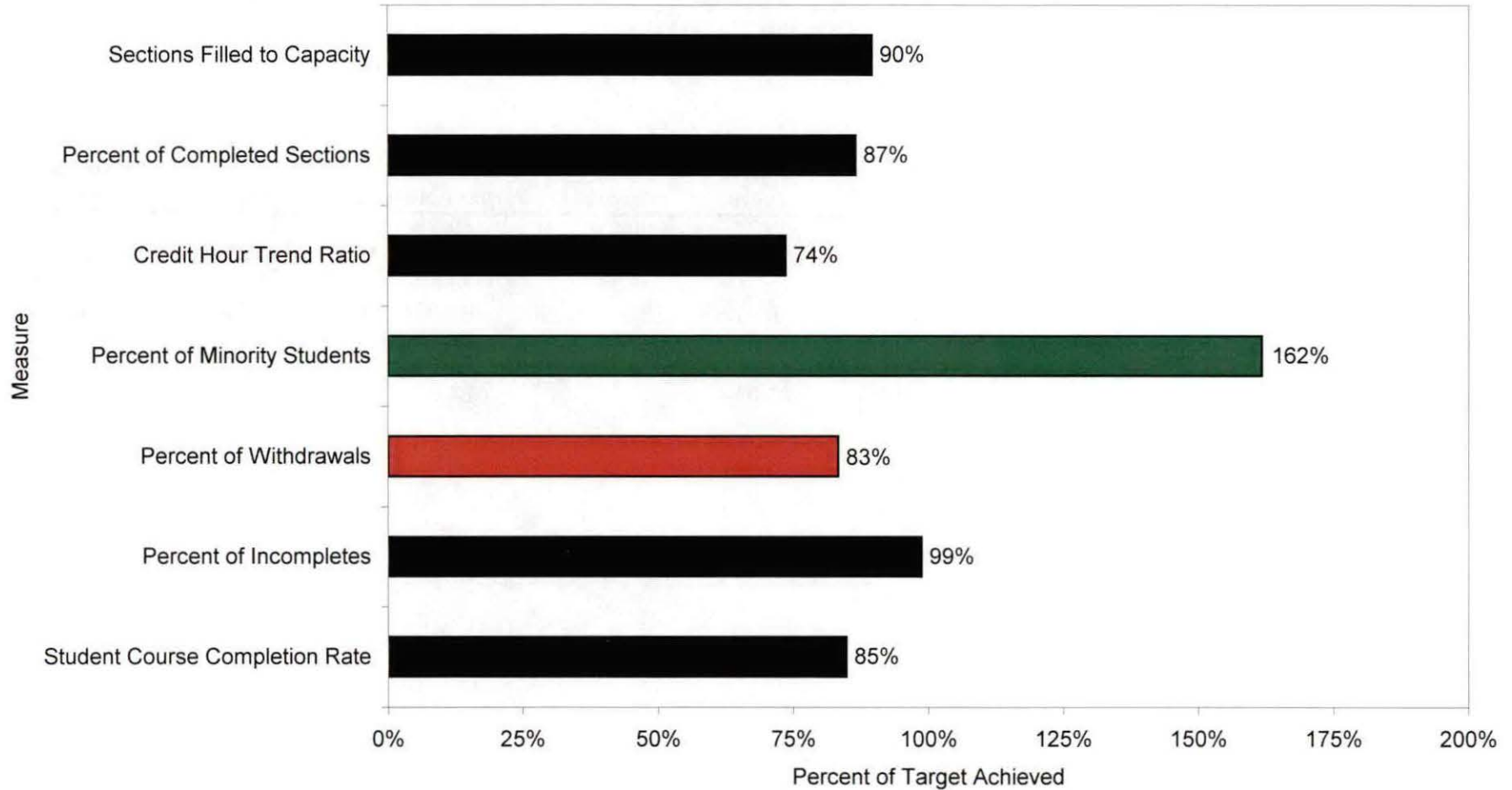
Oakland Community College Program Dashboard Report 2005-06

Computer Information Systems CIS Dashboard Score: 8.98

Measures	Benchmarks			Percent of Target Achieved	Weight	Weighted Score
	Current Score	Trouble Score	Target			
Sections Filled to Capacity	80.6%	75.0%	90.0%	89.6%	18.0%	1.61
Percent of Completed Sections	77.9%	75.0%	90.0%	86.6%	14.2%	1.23
Credit Hour Trend Ratio	0.92	0.71	1.25	73.6%	15.3%	1.13
Percent of Minority Students	30.4%	16.9%	18.8%	161.7%	6.1%	0.99
Percent of Withdrawals	16.7%	15.0%	0.0%	83.3%	12.0%	1.00
Percent of Incompletes	1.3%	3.0%	0.0%	98.7%	7.9%	0.78
Student Course Completion Rate	63.6%	60.0%	75.0%	84.8%	26.5%	2.25

Oakland Community College Percent of Target Achieved 2005-06

Computer Information Systems CIS



Program Dashboard Detail Report

Prefix CIS
Title Computer Information Systems

	Program			College Wide
	2005-06	2004-05	2003-04	2005-06
Sections Filled to Capacity	80.6%	79.8%	84.0%	83.2%
Percent of Completed Sections	77.9%	65.8%	77.7%	86.6%
Headcount Trend Ratio	0.93	0.86	0.89	1.02
Credit Hour Trend Ratio	0.92	0.85	0.89	1.02
Percent of Minority Students	30.4%	30.8%	30.0%	27.9%
Percent of Withdrawals	16.7%	16.4%	16.0%	17.8%
Percent of Incompletes	1.3%	1.5%	0.9%	1.6%
Student Course Completion Rate	63.6%	64.7%	59.3%	68.2%
Dashboard Score	8.98	8.71	8.82	

Sections Filled to Capacity

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Total Students	6,410	5,937	7,369
Total Capacity	7,950	7,444	8,768
Sections Filled To Capacity	80.6%	79.8%	84.0%

Definition:

The percent of all available seats which are filled on the terms official census date. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

Total number of sections (credit courses only) that are filled to their designated capacity e.g. allocated seats divided by the total number of available seats in all sections throughout the academic year (July 1 through June 30). In other words, how many sections are filled to their capacity on the sections 1/10 day out of all sections? Include sections that are more than filled / overflowing in calculation.

One-Tenth Day data shows the capacity filled numbers at approximately 3 weeks after the Fall and Winter terms begin; and 1 week after the Summer I and II terms begin. This data will not provide additional enrollment data if the sections begin after the one-tenth day.

While a section may only have a few students enrolled in it the college is able to designate some sections as 'full' so that they are not cancelled (per OCCFA Master Agreement). Therefore some disciplines may show low fill capacity rates, and the college never cancelled the sections or condense the students into fewer sections offering the same course.

Percent of Completed Sections

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Active Sections	306	350	327
Cancelled Sections	87	182	94
Total Sections	393	532	421
Percent of Completed Sections	77.9%	65.8%	77.7%

Definition:

Of all offered sections, the percent of sections that are completed (not cancelled). Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session, after grades are posted.

Methodology:

Annually, the total number of offered credit sections that are completed. Formula = number of completed credit sections divided by the total number of offered credit sections. In other words, the percent of these sections that are not cancelled.

Headcount Trend Ratio

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Headcount Year 1	7,942	9,535	10,430
Headcount Year 2	7,369	7,942	9,535
Headcount Year 3	6,072	7,369	7,942
Headcount Year 4	6,441	6,072	7,369
Headcount Period 1	7,128	8,282	9,302
Headcount Period 2	6,627	7,128	8,282
Headcount Ratio	0.93	0.86	0.89

Definition:

Trend in student headcount based on a three year rolling average. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term. (Note: this measure is not used in the calculation of the Program Dashboard score since it parallels trends depicted in Credit Hours.)

Methodology:

In order to establish a meaningful enrollment statistic which applies to large as well as small disciplines/programs a "ratio" was calculated based on a three year rolling average of student headcount.

The formula used to calculate this measure involves three simple steps:

- a. $\text{Year 1} + \text{Year 2} + \text{Year 3} / 3 = \text{Period 1}$
- b. $\text{Year 2} + \text{Year 3} + \text{Year 4} / 3 = \text{Period 2}$
- c. $\text{Period 2} / \text{Period 1} = \text{Ratio}$

If the ratio is greater than "1" this means there has been an enrollment increase. On the other hand, if the ratio is less than "1" this translates into an enrollment decline. The larger the number the larger the enrollment increase. Likewise, the lower the number the greater the enrollment decline.

Credit Hour Trend Ratio

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Credit Hour Year 1	29,784	35,840	38,772
Credit Hour Year 2	27,165	29,784	35,840
Credit Hour Year 3	22,000	27,165	29,784
Credit Hour Year 4	23,364	22,000	27,165
Credit Hour Period 1	26,316	30,930	34,799
Credit Hour Period 2	24,176	26,316	30,930
Credit Hour Ratio	0.92	0.85	0.89

Definition:

Trend in student credit hours based on a three year rolling average. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

In order to establish a meaningful enrollment statistic which applies to large as well as small disciplines/programs a "ratio" was calculated based on a three year rolling average of student credit hours.

The formula used to calculate this measure involves three simple steps:

- a. $\text{Year 1} + \text{Year 2} + \text{Year 3} / 3 = \text{Period 1}$
- b. $\text{Year 2} + \text{Year 3} + \text{Year 4} / 3 = \text{Period 2}$
- c. $\text{Period 2} / \text{Period 1} = \text{Ratio}$

If the ratio is greater than "1" this means there has been an enrollment increase. On the other hand, if the ratio is less than "1" this translates into an enrollment decline. The larger the number the larger the enrollment increase. Likewise, the lower the number the greater the enrollment decline.

Percent of Minority Students

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Minority Students	1,463	1,437	1,658
Total Students	4,811	4,670	5,533
Percent of Minority Students	30.4%	30.8%	30.0%

Definition:

The percent of students who are minority. Minority status is self-reported by the student and includes: African American, Asian, Hispanic, Native American Indian and Other. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: One-tenth-day of each term.

Methodology:

Percentages are based on those students enrolled on the terms official census date (one tenth day) and excludes missing data.

Percent of Withdrawals

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Total Withdrawals	1,045	947	1,112
Total Grades	6,253	5,789	6,931
Percent of Withdrawals	16.7%	16.4%	16.0%

Definition:

The percent of students who withdraw from their course after the term begins. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Percent of withdrawals is derived by dividing the total number of student initiated withdrawals by the total number of grades and marks awarded throughout the academic year. The Withdrawal-Passing (WP), and Withdrawal-Failing (WF) are considered Withdrawals (W). Meanwhile, calculations exclude: Audit (AU), Not Attended (N), and Not Reported (NR).

Percent of Incompletes

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Total Incompletes	79	89	64
Total Grades	6,253	5,789	6,931
Percent of Incompletes	1.3%	1.5%	0.9%

Definition:

The percent of students who receive an incomplete in their course. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Percent of incompletes is derived by dividing the total number of incompletes by the total number of grades and marks awarded throughout the academic year. The Continuous Progress (CP) grade is considered an Incomplete (I). Meanwhile, calculations exclude: Audit (AU), Not Attended (N), and Not Reported (NR).

Student Course Completion Rate

Prefix CIS

Prefix Title Computer Information Systems

	2005-06	2004-05	2003-04
Successful Grades	3,979	3,746	4,108
Total Student Grades	6,253	5,789	6,931
Student Course Completion Rate	63.6%	64.7%	59.3%

Definition:

The percent of students who successfully complete a course with a grade of "C" or higher. Time Frame: Academic Year (Summer II, Fall, Winter, Summer I). Data Source: End of session files, after grades are posted.

Methodology:

Student success rates are based on end of session data after all grades have been posted. Data includes grades from the entire academic year (Summer II, Fall, Winter, and Summer I). The following grades/marks are excluded from the calculation: Audit (AU), Not Attended (N) and Not Reported (NR).

Institutional Research Report

**CIS/Systems Analysis
Degree and Credit Hour Trends Reports
for
Curriculum Review Committee**



**OAKLAND
COMMUNITY
COLLEGE**

TABLE OF CONTENTS

CIS/Systems Analysis Degree Trends Report

CIS.SYA Degree Trends Summary

CIS.SYA Ten-Year Trend

CIS.SYA Rate of Change

CIS.SYA Three-Year Moving Mean

College-Wide Ten-Year Trend

Computer Information Systems Credit Hour Trends Report

CIS Credit Hour Trends Summary

CIS Ten-Year Trend

CIS Three-Year Moving Mean

CIS Rate of Change

College-Wide Ten-Year Trend



OAKLAND
COMMUNITY
COLLEGE

Degree Trends Report
CIS System Analysis Option
CIS.SYA
2005-06

Prepared by:
Oakland Community College
Office of Institutional Research
November 14, 2006

**Oakland Community College
Degree Trends Report
CIS System Analysis Option (CIS.SYA)
1996-97 through 2005-06**

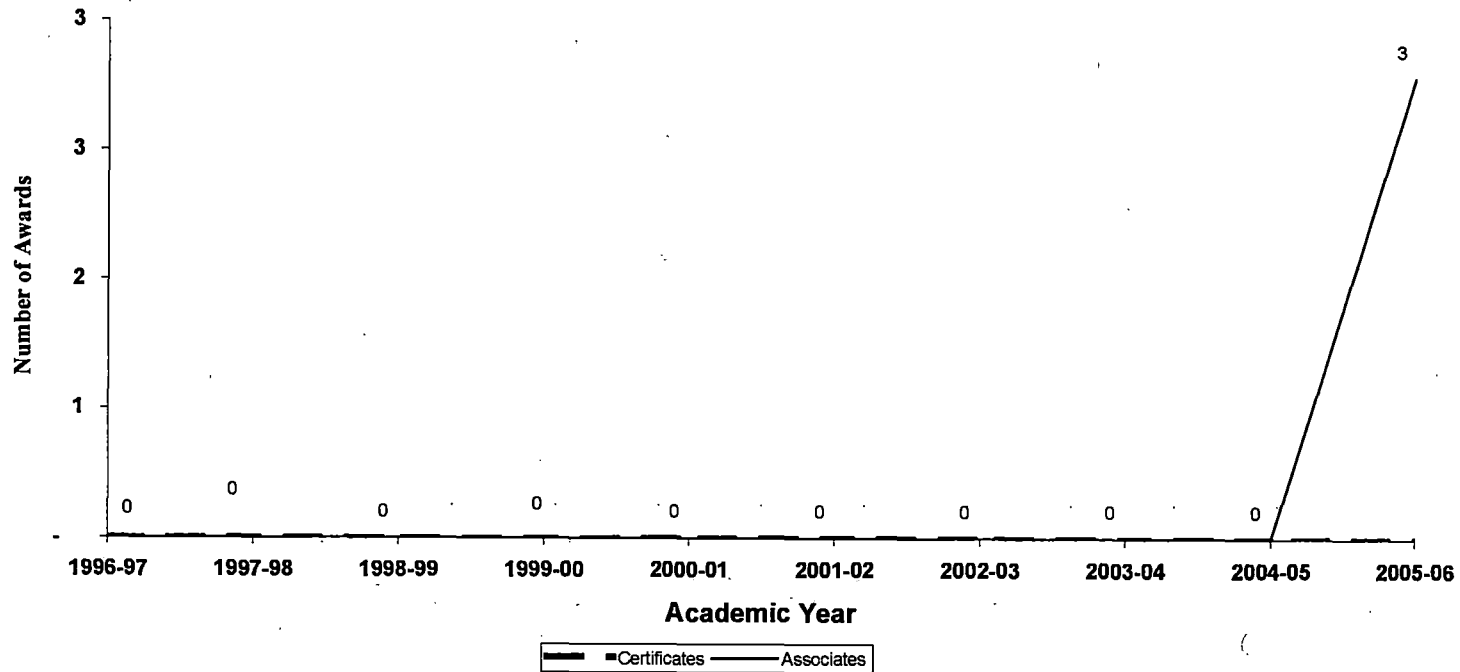
The Degree Trends Report is developed by the Office of Institutional Research based on data compiled from official college records which are submitted to the State of Michigan for the IPEDS (Integrated Post-Secondary Education System) Annual Degrees Conferred Report. The Degree Trends Report examines trends of OCC degrees, based on specific programs. The standard format offers information about certificates and associate degrees awarded. In the event that a given program offers only a certificate or an associate degree, information describing the other type of award will not be shown.

Trends over a specified period of time are illustrated by the following graphs for CIS System Analysis Option (CIS.SYA)

- Ten-year trend showing the annual awards conferred in CIS System Analysis Option
- Rate of change in annual awards conferred in CIS System Analysis Option
- The three-year Moving Mean for annual awards conferred in CIS System Analysis Option
- Ten-year trend in awards conferred collegewide.

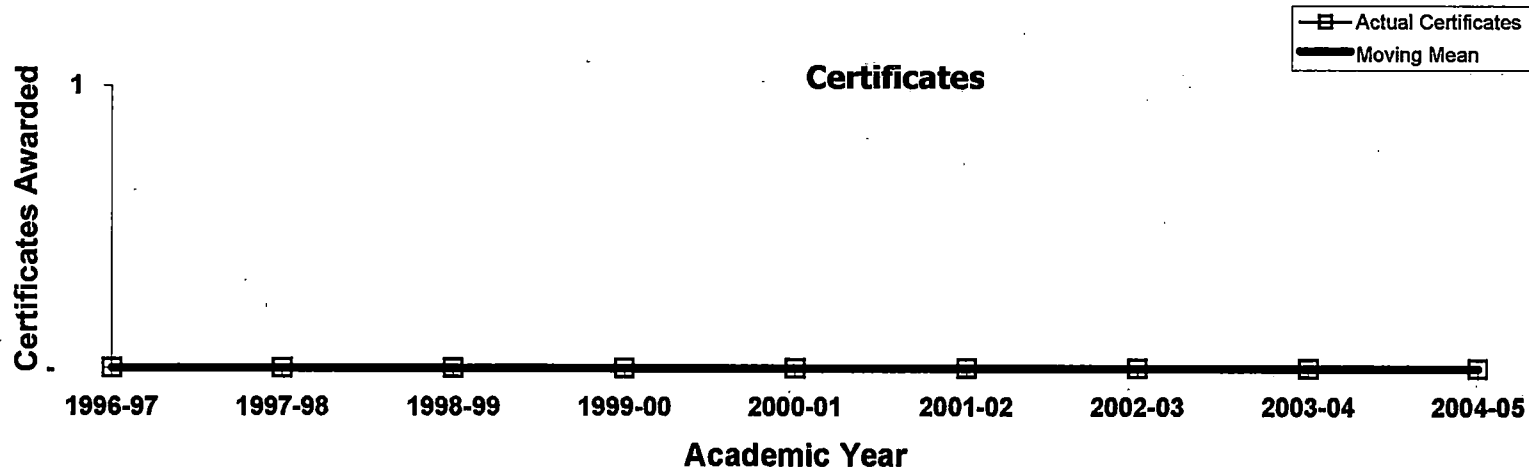
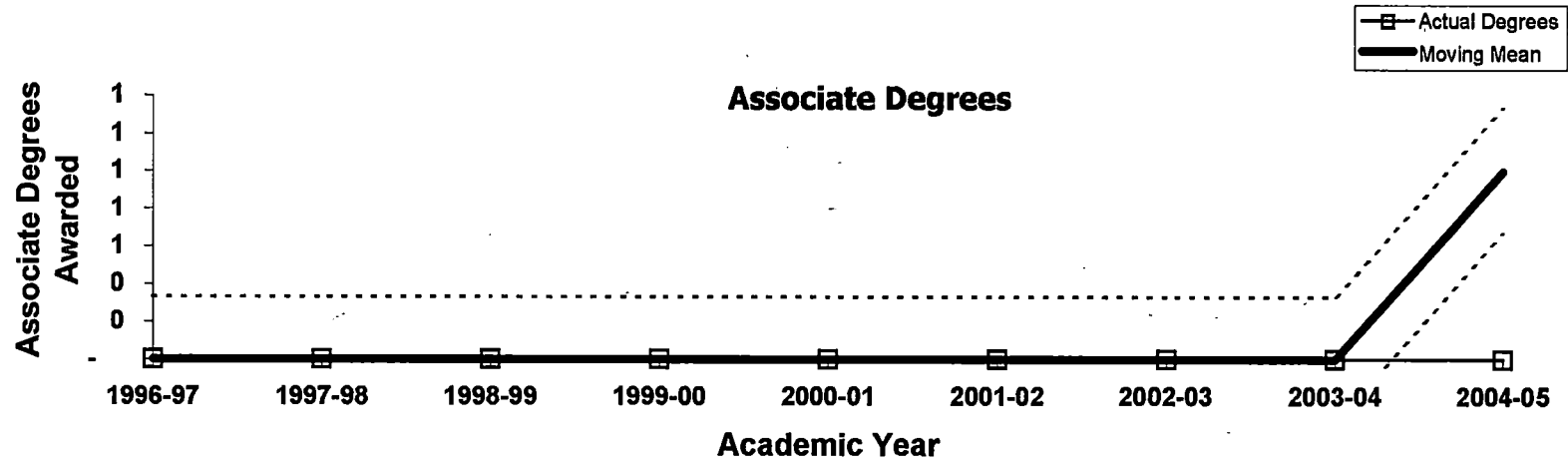
Questions regarding this report can be forwarded to the Office of Institutional Research at (248) 341-2123.

**Oakland Community College
Associate Degrees and Certificates Awarded
CIS System Analysis Option
1996-97 through 2005-06**



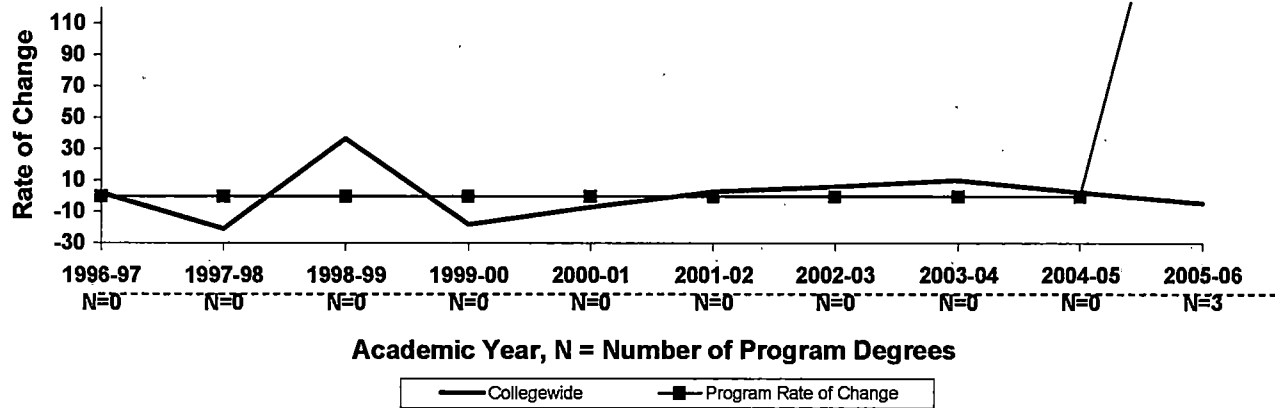
Academic Yr.	Certificates	Associates
1996-97	0	0
1997-98	0	0
1998-99	0	0
1999-00	0	0
2000-01	0	0
2001-02	0	0
2002-03	0	0
2003-04	0	0
2004-05	0	0
2005-06	0	3

**Oakland Community College
 Three Year Moving Mean in Annual Awards
 CIS System Analysis Option
 1996-97 through 2004-05**

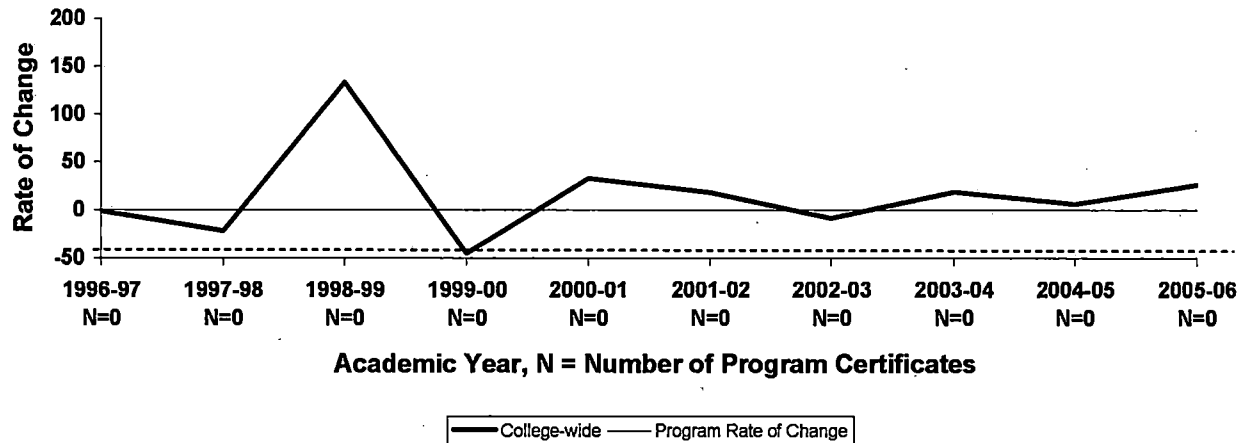


**Oakland Community College
Rate of Change in Annual Awards
College-Wide
1996-97 through 2005-06**

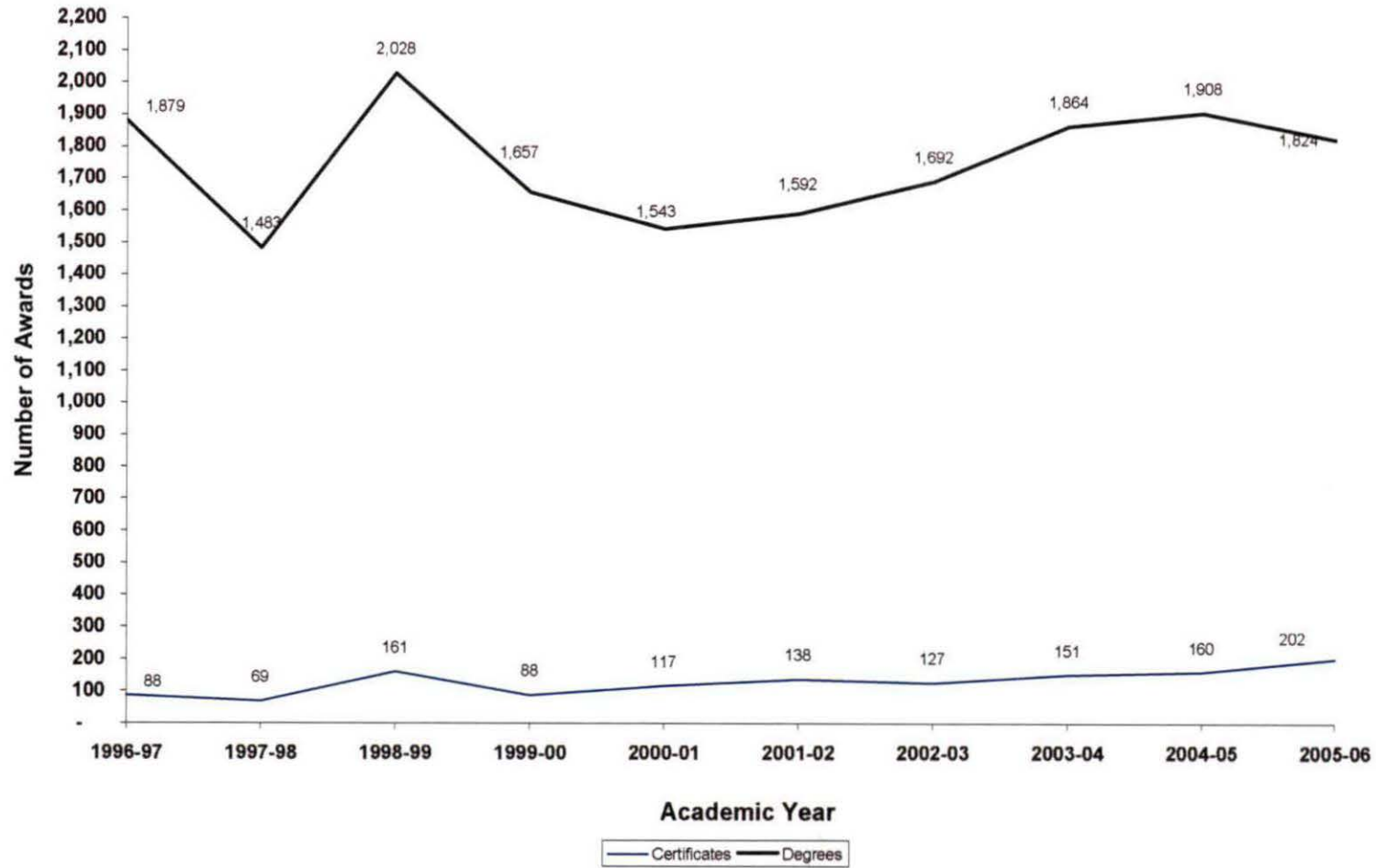
Associate Degrees



Certificates



**Oakland Community College
Associate Degrees and Certificates Awarded
College-Wide
1996-97 through 2005-06**





OAKLAND
COMMUNITY
COLLEGE

**Credit Hour Trends Report
Computer Info Systems
CIS
2005-06**

**Prepared by:
Oakland Community College
Office of Institutional Research
November 14, 2006**

**Oakland Community College
Credit Hour Trends Report
Computer Info Systems
1995-96 through 2005-06**

Each year the Office of Institutional Research prepares the Credit Hour Trends Report, based on data submitted to the State of Michigan in the annual ACS-6 (Activities Classification Structure) process. This report is based on each course section's official count date (1/10th Day). The Credit Hour Trends Report examines annual (July 1 - June 30) enrollment trends of OCC disciplines, based on course prefix codes.

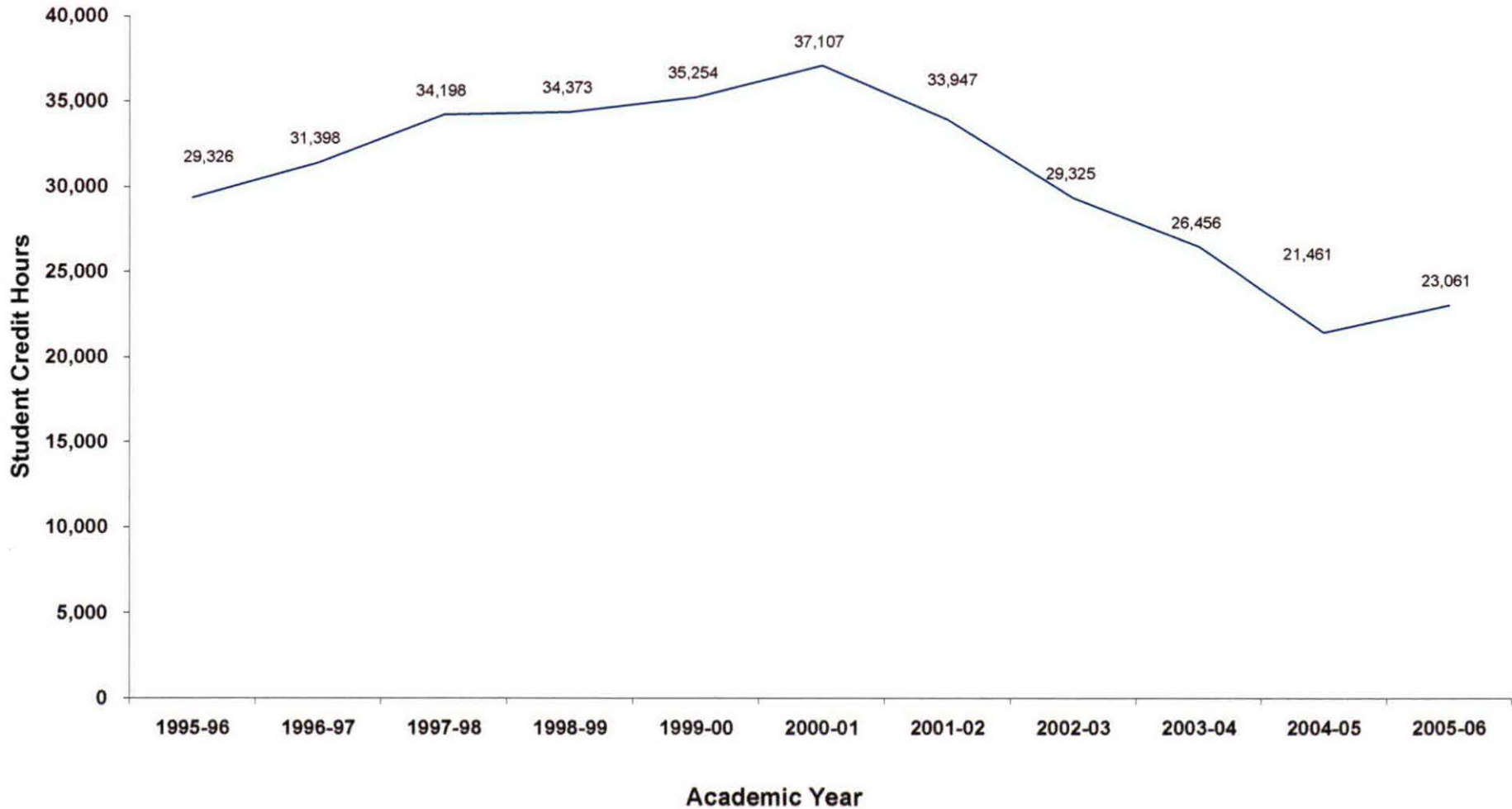
Trends over a specified period of time are illustrated by the following graphs for Computer Info Systems.

- Graph depicting ten-year trend in student credit hours generated by Computer Info Systems
- Graphs depicting three-year moving mean and rate of change in student credit hours for Computer Info Systems.
- Ten-year trend in annual credit hours generated Collegewide.

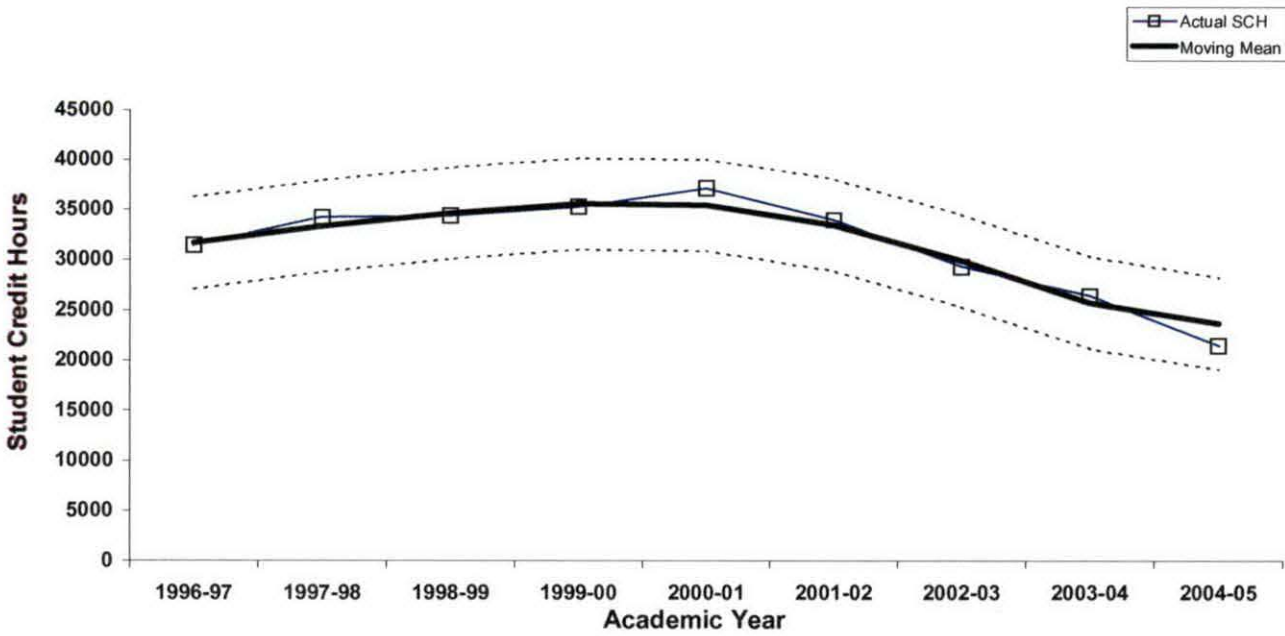
Questions regarding this report can be forwarded to the Office of Institutional Research at (248) 341-2123.

**Oakland Community College
Ten-Year Trend in Student Credit Hours
Computer Info Systems
1995-96 through 2005-06**

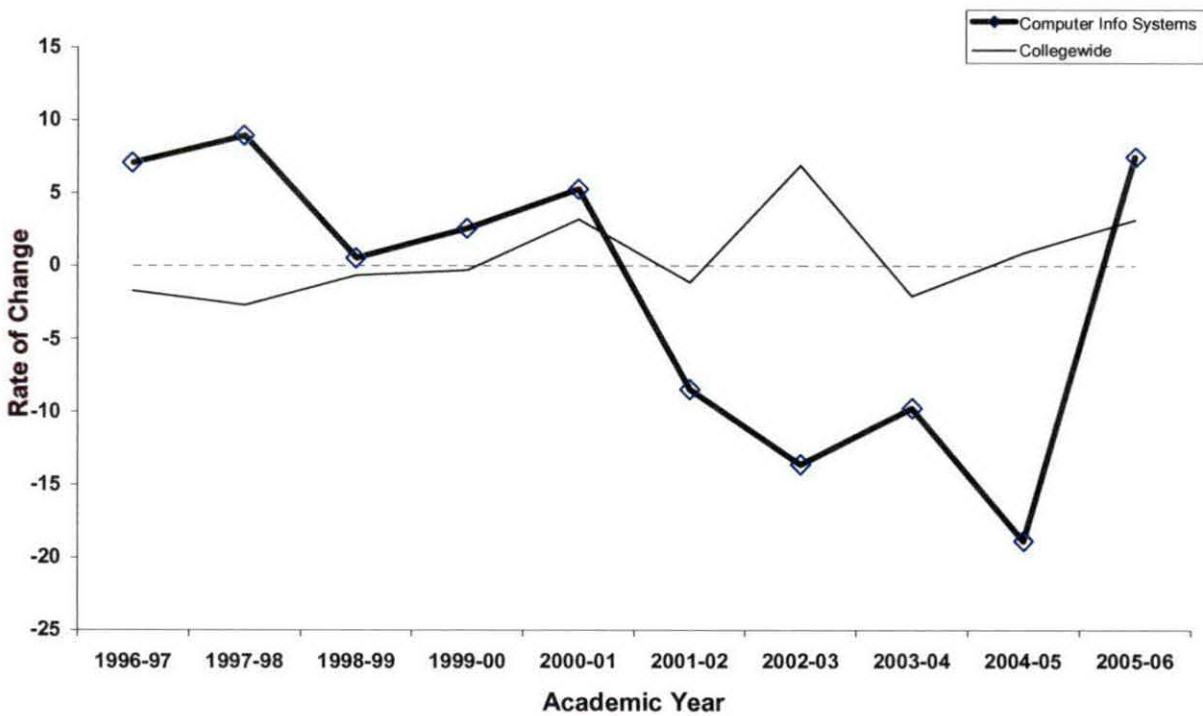
	1995-96 SCH	1996-97 SCH	1997-98 SCH	1998-99 SCH	1999-00 SCH	2000-01 SCH	2001-02 SCH	2002-03 SCH	2003-04 SCH	2004-05 SCH	2005-06 SCH	5-Year % Change	10-Year % Change
Computer Info Systems	29,326	31,398	34,198	34,373	35,254	37,107	33,947	29,325	26,456	21,461	23,061	-37.9	-21.4
College Wide Totals	451,159	443,471	431,521	440,448	438,997	453,054	447,928	478,827	468,777	472,892	487,597	7.6	8.1



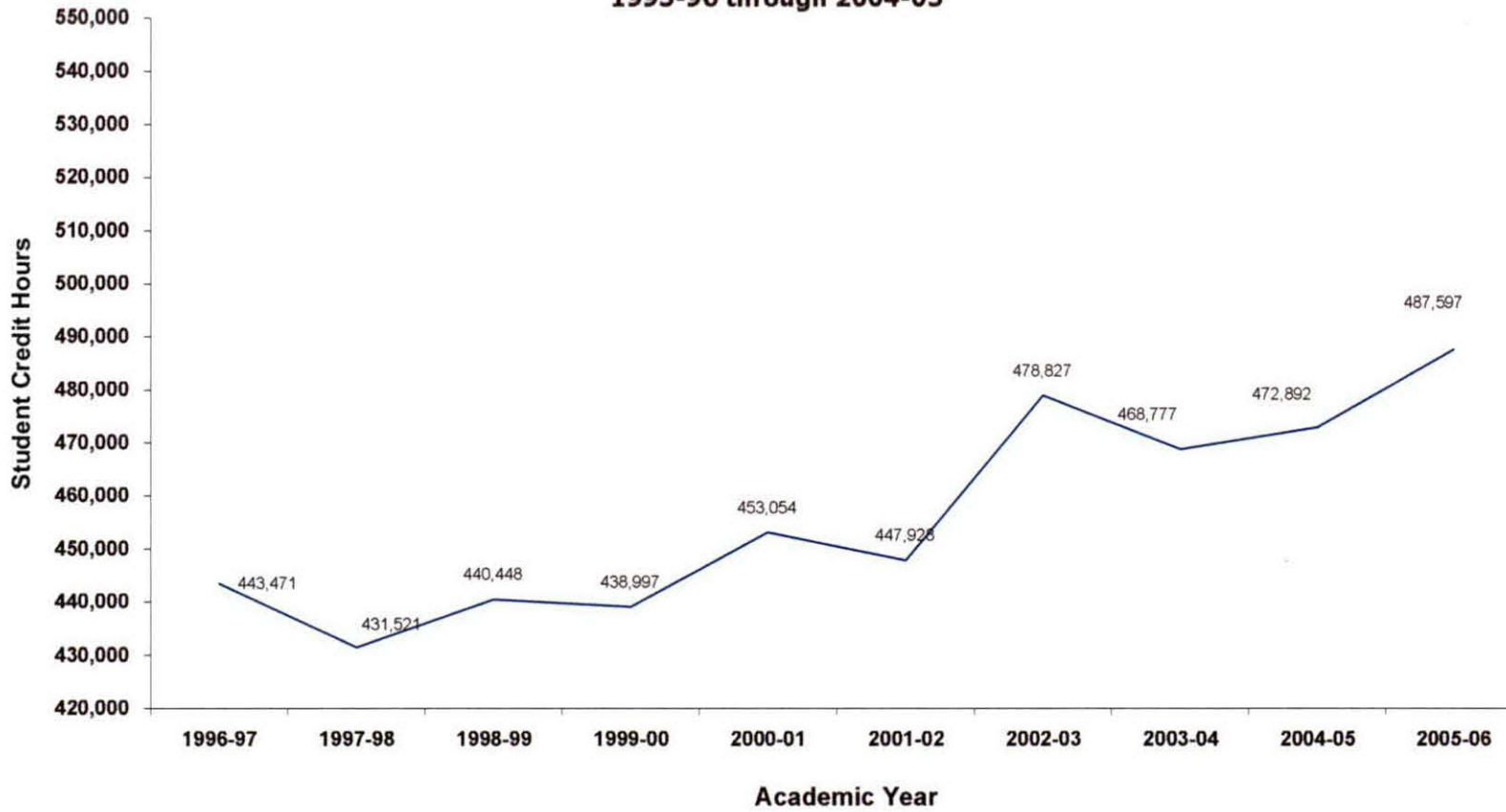
Oakland Community College
 Three-Year Moving Mean
 Computer Info Systems
 1996-97 through 2004-05



Rate of Change in Student Credit Hours 1996-97 through 2005-06



**Oakland Community College
Ten-Year Trend in Student Credit Hours
College-Wide
1995-96 through 2004-05**



1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
443,471	431,521	440,448	438,997	453,054	447,928	478,827	468,777	472,892	487,597

Occupational Projections (2005 – 2015)

The following projections are for those occupations most closely associated with this program. However, the extent to which specific OCC programs lead to jobs reflected within a given Standard Occupational Code (SOC) is dependent upon the way in which the U.S. Department of Labor groups specific occupations.

Occupational projections are presented at the "Detailed Standard Occupational Code" (N = 749) level according to the U.S. Department of Labor.

Projections are subject to change based on emerging economic, political and social forces.

These projections reflect the four county region of Oakland, Macomb, Livingston and Wayne counties.

Projections are based on data from 24 major data sources, including the U.S. Department of Commerce, Bureau of Labor Statistics (BLS), Internal Revenue Service (IRS), and Census data. To forecast occupational demand at the county level, BLS data are regionalized and adjusted for emerging technological changes, the age of workers by occupation, and other factors affecting occupational demand.

This information was obtained from CCbenefits Inc. Community College Strategic Planner (CCSP).

Data presented in the following tables include:

- Base Year: Current number of jobs in 2005.
- Five Year: Number of projected jobs in 2010.
- Ten Year: Number of projected jobs in 2015.
- New Jobs: Projected number of new jobs between 2005 and 2015.
- Replacement Jobs: Projected number of replacement jobs between 2005 and 2015.
- % New Jobs: Percent of projected new jobs in 2015 using 2005 as the base year.
- % Replacement Jobs: Percent of projected replacement jobs in 2015 using 2005 as the base year.
- % New and Replacement Jobs: Percent of projected new and replacement jobs in 2015 using 2005 as the base year.
- Earnings: Average annual earnings within the SOC code in 2005.

Note: Percent change figures must be interpreted carefully since they are based on actual number of jobs. In some cases the actual number of jobs may be quite low, thereby giving a misleading picture if only the percentage was considered.

CIS Systems Analyst Related Occupations (2005 through 2015)

SOC Detail Group

SOC Code	Name	Base Year	Five Year	Ten Year	New Jobs	Rplmnt Jobs	% New Jobs	% Rplm Jobs	% New & Rplmnt	Earnings
15-1051	Computer Systems Analysts	10,102	11,238	12,121	2,019	1,124	20.0%	11.0%	31.0%	\$70,949
Totals:		10,102	11,238	12,121	2,019	1,124				

SOC Code 15-1051
Name Computer Systems Analysts

Definition: Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. May analyze or recommend commercially available software. Exclude persons working primarily as "Engineers" (17-2011 through 17-2199), "Mathematicians" (15-2021), or "Scientists" (19-1011 through 19-3099). May supervise computer programmers.

Examples: Health Systems Computer Analyst, Data Processing Systems Project Planner, Information Systems Consultant

Program Assessment Plan

CIS Systems Analysis Option

Statement of Purpose

To prepare students for careers in industry and business, update students' education for an existing career, or to prepare students for transfer to baccalaureate programs. The specific goal of the program is to graduate competent system analysts who have a fundamental knowledge of existing technologies and how to integrate them into information systems.

Catalog Description

The Computer Information Systems (CIS) Associate Degree program is designed to provide a solid foundation in the fundamental skills that are generally required to analyze system requirements and design solutions or, to support and manage the application of technology resources. These basic skills are routinely required by many different industries and higher-level educational programs. Four degree options of Systems Analysis, Computer Support, Homeland Security , or Software Engineering are available. Each option begins with core courses of information system fundamentals, database systems, networking, web systems, and software development. Additional courses are chosen in one area of specialization to complete the option requirements. Current computer tools and an emphasis on practical application provide a relevant learning environment.

Program Assessment Plan

CIS Systems Analysis Option

Learning Outcomes

Students will have the ability to solve problems analytically, systematically and insightfully.

Benchmark	Assessment Method	Timeline
1. All students will be given a business case to solve using information technology and prepare written documentation that supports the solution.	The instructor will evaluate the problem solution which must be 80% correct.	
2. All students will present the solution to the rest of the class verbally and using appropriate visual aids.	Students will average 80% in evaluation by classmates on the clarity and correctness of the solution to the problem.	
3.		
4.		
5.		

Program Assessment Plan

CIS Systems Analysis Option

Learning Outcomes

The students will be able to integrate theory, practical skills, knowledge of industry standards and newly acquired knowledge of current trends in information technology into the analysis and design of information systems in a given situation.

Benchmark	Assessment Method	Timeline
1. The components within each course project will be completed by 85% of the students at a level not less than 85% for each project component.	Project components will be compared to industry standards and guidelines, that is, Institute of Electrical and Electronics Engineers (IEEE) standards and guidelines.	
2.		
3.		
4.		
5.		

Program Assessment Plan

CIS Systems Analysis Option

Learning Outcomes

Students will have the ability to think critically and creatively.

Benchmark	Assessment Method	Timeline
1. The students will use industry accepted standards to develop models and documentation that support a hypothetical or practical business case.	Through in class interaction with each group, the instructor will provoke logical thought patterns aimed at critical analysis of the problem at hand. 85% of the students will demonstrate critical thinking by incorporating instructor provoked critical thought patterns into their design.	
2. The students will use industry accepted standards to develop models and documentation that support a hypothetical or practical business case.	The students will present the project to the class. Students will average 80% in evaluation by classmates on the creativity of the solution and the presenter's ability to critically interpret the business case.	
3.		
4.		
5.		

Program Assessment Plan

CIS Systems Analysis Option

Learning Outcomes

The students will demonstrate the ability to apply techniques aimed at solving real world problems using state of the art technology.

Benchmark	Assessment Method	Timeline
1. Ninety percent of the students will be able to produce a complete requirement specification for computer applicability for a small business and it must be 90% compatible with the industry standards.	Students will work in groups throughout the semester to produce a complete requirement specification using UML for a given hypothetical business. Each group will have a leader and workers and simulates the methodology used in business. At the end of the semester, each group will present its plan orally and in written format. The total of all presentations will be the complete specification document.	
2. Ninety percent of the students will successfully create plans and implement IT projects that are within budget, on time, and deliver useful results that are based on industry standard design tools (UML) and product evaluation criteria.	Students will work in groups throughout the semester to produce a plan and implement an IT project given a specific hypothetical budget and time constraints.	
3. Ninety percent of the students will successfully create plans and implement IT projects that are within budget, on time, and deliver useful results that are based on industry standard design tools (UML) and product evaluation criteria.	At the end of the semester, each group will present its plan orally and in written format.	
4. Ninety percent of the students will successfully create plans and implement IT projects that are within budget, on time, and deliver useful results that are based on industry standard design tools (UML) and product evaluation criteria.	The total of all presentations will be the complete business case and the supporting project management plan.	

CIS Systems Analysis Assessment Plan Observations

Observations

- Plan has four learning outcomes; two are technical in nature and specific to the degree and two are focused on general education.
- Each learning outcome has one benchmark

Concern

- All the benchmarks need to be written as the one for the learning outcome focused on... "integrate theory, practical skills, knowledge of industry standards..." is written, i.e. each benchmark needs to state how many students will reach the benchmark, at what level of competency, and following what rubric/criterion. Be sure the percentages are no lower than the percentages set for the certificate and certificate of achievement students and that they are consistent across the plans.
- Each benchmark has one or more assessment method

Concern

- The language in the assessment methods needs to be cleaned up. Be sure the assessment method is an assessment and not a teaching strategy or a benchmark. Also, the assessment should be tied to the criterion used in the classroom and should be explained to the students before and during their execution of the project/assignment that is being assessed. For example, the assessment method for the benchmark that goes with the learning outcome ... "integrate theory, practical skills, knowledge of industry standards..." uses IEEE standards and guidelines which is ok provided time is spent in class explaining these to the students and they know that the projects they are working on will be assessed by these standards... basically, the benchmark needs to state that the IEEE standards are the standards used in the class.

Concern

- The assessment methods tied to the benchmark for the learning outcome... "ability to apply techniques aimed at solving real world problems using state of the art technology." really aren't all methods. They read like an outline for the project the students will be doing. A suggestion for an assessment for this benchmark might be some thing like..." The students will be assessed by the instructor using the project rubric on their oral presentations and written components for the projects they develop through out the course."

Action

- Plan needs to have a timeline established.

Concern

- The benchmarks need to be written to include the number of students that will reach the standard, what the standard is (what is the expected level of competency) and the criterion/rubric used.

- The second benchmark for the “to solve problems”...is not a benchmark. It is a teaching method.
- The assessment methods need to be written as assessment methods. As they are, most of them are either teaching methods or a partial benchmark. Make sure the assessment method assesses the students not the instructor and is specific to the benchmark.

For example: the learning outcome “to solve problems...”

Benchmark: All students will be given a business case to solve using information technology and prepare written documentation that supports the solution.

Assessment Method: The instructor will evaluate the problem solution which must be 80% correct

Suggested rewrite:

Benchmark: 100% of the students will be given a business case to solve and produce a written document showing the support for the solution using information technology at $\geq 80\%$ following the project rubric/criterion.

Assessment Method: The instructor will evaluate the students written solutions using the project rubric

Concern

- Has the CIS discipline designed a rubric for the two general education attributes they have attached to this plan? Are all the faculty looking for the same things when determining that the students have developed the ability to think critically or solve problems analytically? You might find having rubrics for the General Education attributes you have embedded in your plans will make doing the assessment tons easier! Think about starting on designing your rubrics – General Education or project specific – as soon as you all can get together.



OAKLAND
COMMUNITY
COLLEGE

Curriculum Review Committee

CIS Review:

April 13, 2007

Software Engineering: Primary review
Systems Engineering follows same format
Multi Media needs revision

Recommendations:

- Catalogue course description review suggests minor course revisions for CIS 1050, CIS 1400, and CIS 2859. These changes to course descriptions are to go through the College Curriculum Committee next year.
- CIS needs to coordinate efforts across the college.
- CIS outcomes should be consistent across the college.
- Continue to work with the CIS SOAC facilitator to update CIS Assessment Plan and report current findings.
- Syllabi review for CIS 1050, 2555, and 2757 reflects a need to add the ADA statement. CRC recommends all faculty consider using a syllabi template on the RO H drive.
- Enrolment trends in 2001 decreased due to off shore scare, but it appears CIS projections are good except for Programmer.
- Since students are more interested in courses than certificates, CIS might review degree needs (only 4 graduated in 3 years). Since students cannot be a Systems Analyst without a bachelor's degree, it might serve students better to consider a Liberal Arts degree with a concentration in CIS Systems Analysis, etc. for transferability.
- Survey of faculty recommended the program to be more competitive. CIS discipline might review how OCC compares to other institutions.
- New website development needs continue in order to inform students and community of it offerings.
- Question? Should CIS 1050 or another course be a General Education requirement? Recommendation to be made to the GE committee.
- Consider interdisciplinary offerings of CIS courses and software. (Interior Design, Graphic Design as examples)

- Consider the integration of technical skills and more liberal arts for transfer students.
- Consider CIS Orientation so students and faculty are more aware of the CIS program.
- Multi Media degree needs revision (low enrollment). Recommend keeping internship course used by Photography.
- CIS courses transfer most as electives except for an agreement with Walsh and Lawrence. Need to increase articulation agreements to be more marketable. Consider 3+1. Ferris on site at AH.
- Consider a Gaming degree, certificate or CA.
- Consider courses in GPS.
- A strong need for internal marketing and student orientation surfaced. Work with the Office of Assessment & Effectiveness to go through the program planning model and design a student orientation.
- Continue to work with the college and OAE to see if continual upgrade of hardware and software can be considered separate from IT to stay current in the industry.