

Major Highlights

Dashboard

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Credit Hour Trends

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Targets

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Targets

**Biology Curriculum Review
Major Highlights
December 2008**

Overview

The information contained in this binder represents supporting reports and data associated with the CRC's review of the Biology curriculum. These reports are intended to provide a historical perspective, as well as an idea of current strengths and future challenges facing the curriculum which may impact short and long term curriculum development.

Major Highlights

- Although Biology has maintained a relatively consistent composite dashboard score over the last four years, there has been a slight steady decline each year from 9.72 to 9.39 in 2007-08. In the most recent year the composite dashboard score was ranked the 24th highest among all college curriculum.
- Two out of the seven program dashboard measures exceeded established college benchmark targets in 2007-08. Specifically, these measures pertain to sections filled to capacity and the percent of minority students. The percent of Biology sections that are filled to capacity has consistently been high over the last four years and has ranged from 94% to 95%. At approximately 94% in 2007-08, it exceeded the college wide average of 86%
- In addition, the percent of minority students in Biology courses has been quite consistent over the last four years, ranging between 29% and 31%, which falls in line with the college wide average and exceeds the college-wide benchmark.
- Meanwhile the percent of withdrawals fell below the established benchmark in 2007-08. The percent of withdrawals has been steadily increasing over the four year period and at approximately 19% in the most recent year, it has now gone above the college wide average of 18% and also exceeds the college-wide trouble score of 15%.
- Over the last nine years, the annual number of credit hours in Biology has steadily increased and has reached an all time high of 31,368 in 2007-08. As a result, Biology is the third largest credit hour producing curriculum at OCC.

Oakland Community College Program Dashboard

The purpose of the program dashboard is to provide a data driven tool designed for the objective review of all curriculum offerings. Based on a common set of measures which apply to all curriculum the dashboard facilitates the systematic identification of well performing as well as ailing curriculum in order to support short and long range curriculum development.

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 curriculum decision-making needs.

The Program Dashboard is based on seven measures which include:

- Sections Filled to Capacity
- Percent of Canceled Sections
- Credit Hour Trend Ratio
- Percent of Minority Students
- Percent of Withdrawals
- Percent of Incompletes
- Student Course Completion Rate

The following report provides summative information for the most recent academic year as well as detailed trend data on each measure over the past several years.

Program Dashboard Detail Report

Prefix BIO
Title Biology

	Program				College Wide
	2007-08	2006-07	2005-06	2004-05	2007-08
Sections Filled to Capacity	93.7%	94.3%	95.0%	94.9%	85.6%
Percent of Cancelled Sections	4.7%	7.3%	8.7%	3.8%	9.7%
Credit Hour Trend Ratio	1.05	1.04	1.06	1.08	1.02
Percent of Minority Students	30.6%	30.1%	29.6%	29.4%	28.7%
Percent of Withdrawals	19.3%	19.1%	17.3%	15.5%	18.4%
Percent of Incompletes	0.3%	0.4%	0.3%	0.3%	1.5%
Student Course Completion Rate	66.5%	65.3%	67.1%	68.7%	67.4%
Dashboard Score	9.39	9.52	9.61	9.72	

Sections Filled to Capacity

Prefix BIO
Prefix Title Biology

	2007-08	2006-07	2005-06	2004-05
Total Students	8,301	8,130	7,585	7,080
Total Capacity	8,856	8,619	7,988	7,457
Sections Filled To Capacity	93.7%	94.3%	95.0%	94.9%

Definition:

Of all available seats, the percent that are filled based on end of term enrollment data. Calculation includes all four terms within the academic year Summer II, Fall, Winter and Summer I. This measure reflects the extent to which all credit "sections" are filled to their designated capacity e.g. allocated seats divided by the total number of available seats between July 1 and June 30. In particular, this measure provides one indication of the magnitude of student demand.

Percent of Cancelled Sections

Prefix BIO

Prefix Title Biology

	2007-08	2006-07	2005-06	2004-05
Active Sections	327	317	294	331
Cancelled Sections	16	25	28	13
Total Sections	343	342	322	344
Percent of Cancelled Sections	4.7%	7.3%	8.7%	3.8%

Definition:

Of all offered credit sections the percent of sections that are canceled as of the end of the term. Calculation includes all four terms during the academic year Summer II, Fall, Winter and Summer I. The calculation is based on a simple formula which takes the number of canceled credit sections which is then divided by the total number of offered credit sections. This measure is one indicator of scheduling strategies and student demand.

Credit Hour Trend Ratio

Prefix BIO
Prefix Title Biology

	2007-08	2006-07	2005-06	2004-05
Credit Hours Year 1	27,309	27,573	24,269	21,711
Credit Hours Year 2	28,887	27,309	27,573	24,269
Credit Hours Year 3	30,848	28,887	27,309	27,573
Credit Hours Year 4	31,355	30,848	28,887	27,309
Credit Hours Period 1	29,015	27,923	26,384	24,518
Credit Hours Period 2	30,363	29,015	27,923	26,384
Credit Hours Ratio	1.05	1.04	1.06	1.08

Definition:

Trend in credit hour enrollment based on a three year rolling average. Includes total credit hours over the academic year Summer II, Fall, Winter and Summer I. The calculation is based on those students enrolled on the terms official census date (one-tenth day). In order to establish a meaningful enrollment statistic which applies to large as well as small disciplines/programs a "ratio" is calculated based on a three year rolling average of student credit hours. The formula used to calculate this measure involves three simple steps:

- a. Year 1 + Year 2 + Year 3 / 3 = Period 1
- b. Year 2 + Year 3 + Year 4 / 3 = Period 2
- c. (Period 2 – Period 1) / Period 1 = 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 BIO
Prefix Title Biology

	2007-08	2006-07	2005-06	2004-05
Minority Students	2,543	1,889	1,660	1,598
Total Students	8,301	6,282	5,604	5,441
Percent of Minority Students	30.6%	30.1%	29.6%	29.4%

Definition:

The percent of students who are minority in relation to all enrolled students. Minority status is self-reported by the student and includes African American, Asian, Hispanic, Native American Indian and Other. Calculation is based on the full academic year Summer II, Fall, Winter and Summer I. Percentages are computed on those students enrolled as of the end of the term and exclude missing data.

Percent of Withdrawals

Prefix BIO
Prefix Title Biology

	2007-08	2006-07	2005-06	2004-05
Total Withdrawals	1,572	1,530	1,296	1,083
Total Grades	8,128	8,011	7,500	7,001
Percent of Withdrawals	19.3%	19.1%	17.3%	15.5%

Definition:

The percent of students who withdraw from their course after the term begins. Calculation includes the entire academic year Summer II, Fall, Winter and Summer I. Moreover, the calculations are derived from end of session data, after grades are posted. 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), Not Reported (NR), and Missing status. This is one indication of student success.

Percent of Incompletes

Prefix BIO

Prefix Title Biology

	2007-08	2006-07	2005-06	2004-05
Total Incompletes	28	29	22	23
Total Grades	8,128	8,011	7,500	7,001
Percent of Incompletes	0.3%	0.4%	0.3%	0.3%

Definition:

The percent of students who receive an incomplete in their course. Calculation includes the entire academic year Summer II, Fall, Winter and Summer I. Moreover, the calculations are based on end of session files, after grades are posted. 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) Not Reported (NR), and Missing status. This is one indication of student success.

Student Course Completion Rate

Prefix BIO

Prefix Title Biology

	2007-08	2006-07	2005-06	2004-05
Successful Grades	5,407	5,233	5,029	4,813
Total Student Grades	8,128	8,011	7,500	7,001
Student Course Completion Rate	66.5%	65.3%	67.1%	68.7%

Definition:

The percent of students who successfully complete a course with a grade of "C" or higher. Calculation includes grades from the entire academic year Summer II, Fall, Winter and Summer I. Student success rates are based on end of session data after grades have been posted. The following grades/marks are excluded from the calculation: Audit (AU), Not Attended (N), Not Reported (NR), and Missing status. This is one indication of student success.

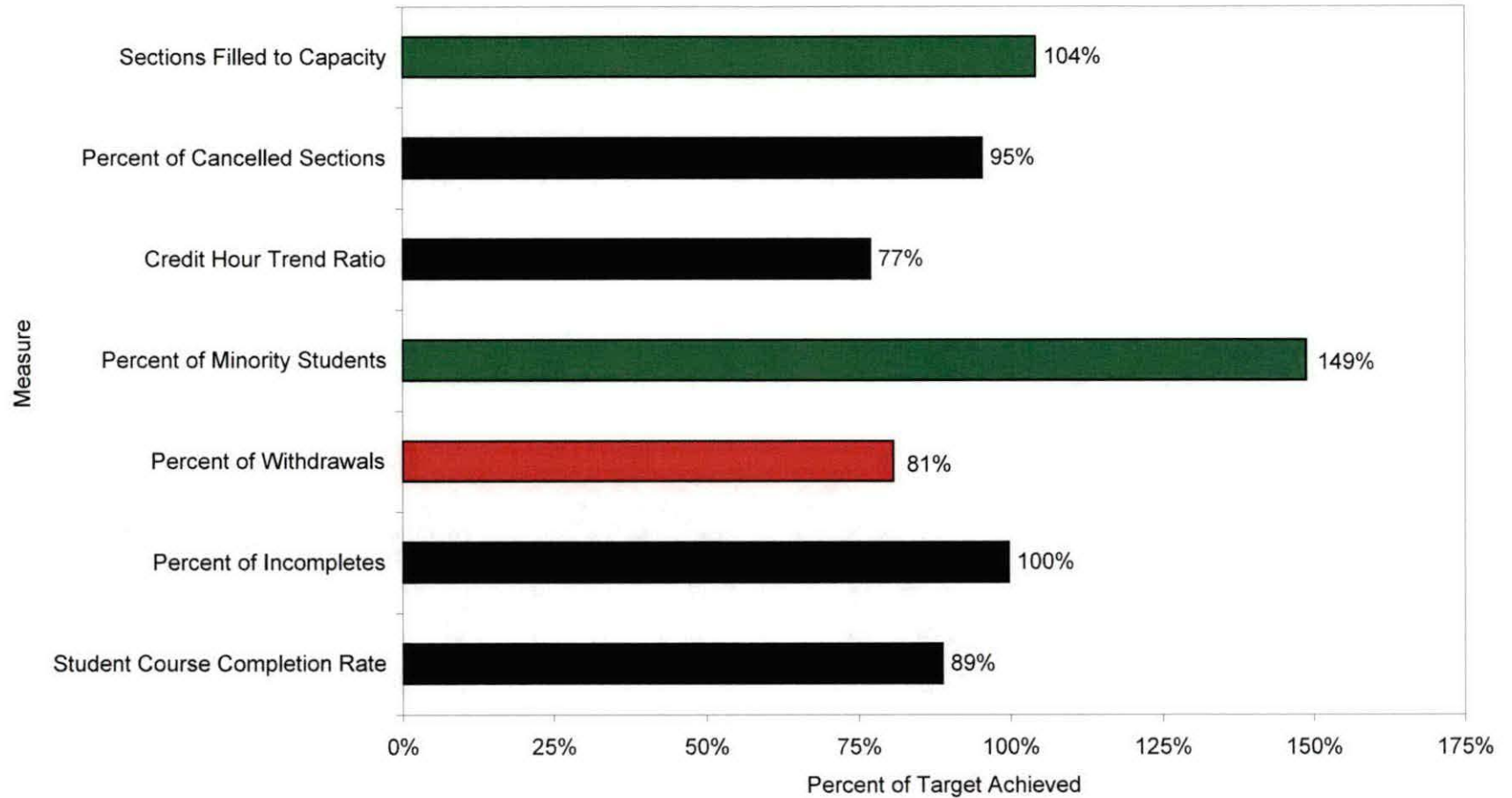
Oakland Community College Program Dashboard Percent of Targets Achieved

The following graph and table depict the extent to which each of the seven dashboard measures met established college-wide benchmarks. Benchmarks (targets and trouble scores) are based on historical data and reflect a range within which each measure is expected to perform.

Measures which exceed the established benchmark are depicted in green, while those that fall short of the benchmark are shown in red. This information is useful in identifying areas of excellence, as well as areas of concern. As a consequence, this report can help to identify specific areas which may require additional attention by program staff.

Oakland Community College Percent of Target Achieved 2007-08

Biology BIO



Source: Office of Assessment and Effectiveness
Updated On: 12/10/2008

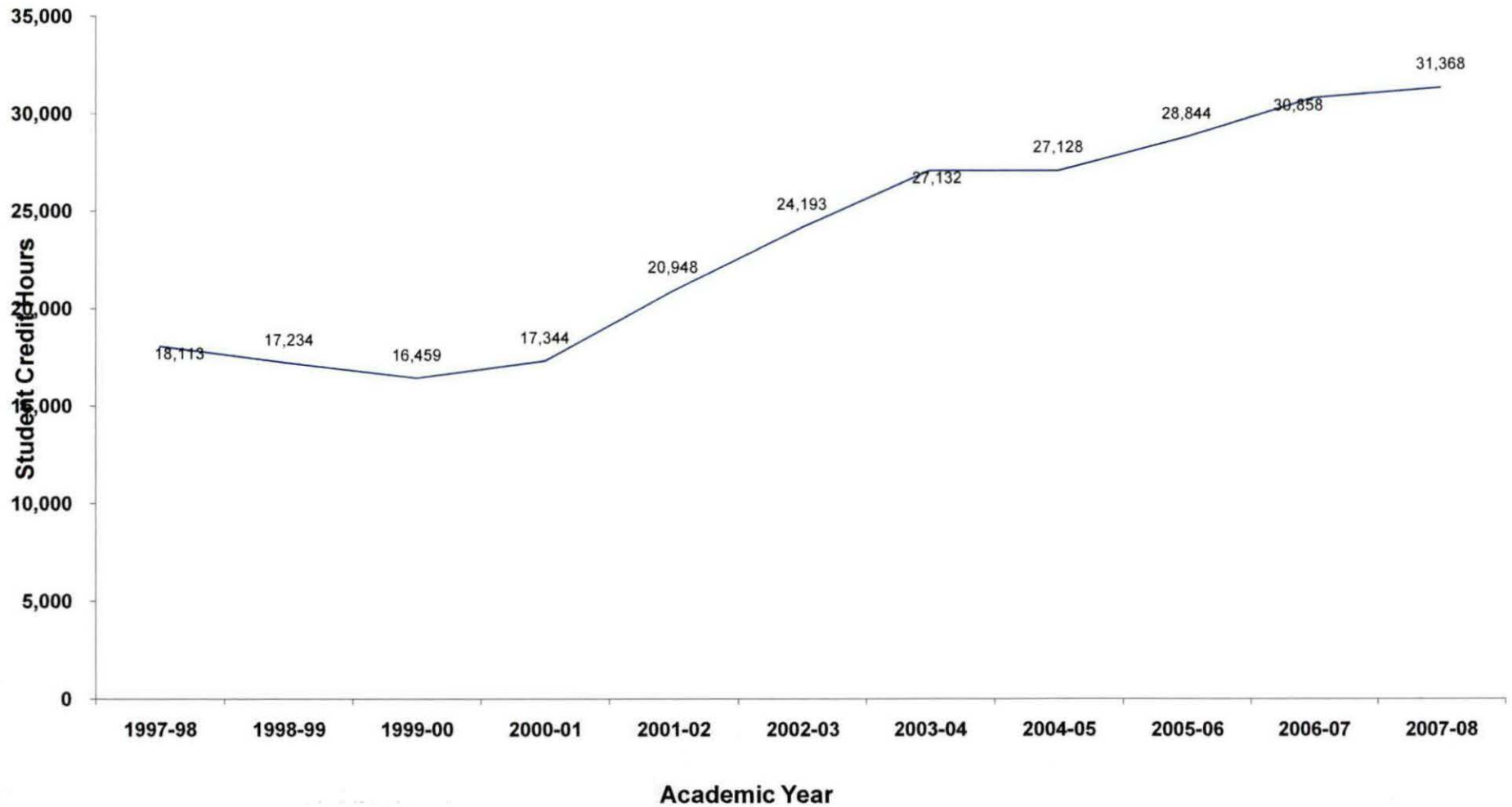
**Oakland Community College
Program Dashboard Report
2007-08**

**Biology BIO
Dashboard Score: 9.39**

Measures	Benchmarks			Percent of Target Achieved	Weight	Weighted Score
	Current Score	Trouble Score	Target Score			
Sections Filled to Capacity	93.7%	75.0%	90.0%	104.1%	18.3%	1.91
Percent of Cancelled Sections	4.7%	25.0%	0.0%	95.3%	14.8%	1.41
Credit Hour Trend Ratio	1.05	0.68	1.36	76.9%	17.6%	1.35
Percent of Minority Students	30.6%	18.5%	20.6%	148.7%	5.9%	0.88
Percent of Withdrawals	19.3%	15.0%	0.0%	80.7%	10.3%	0.83
Percent of Incompletes	0.3%	3.0%	0.0%	99.7%	6.5%	0.65
Student Course Completion Rate	66.5%	60.0%	75.0%	88.7%	26.6%	2.36

**Oakland Community College
Ten-Year Trend in Student Credit Hours
Biology
1997-98 through 2007-08**

	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	2006-07 SCH	2007-08 SCH	5-Year % Change	10-Year % Change
Biology	18,113	17,234	16,459	17,344	20,948	24,193	27,132	27,128	28,844	30,858	31,368	29.7	73.2
College Wide Totals	431,521	440,448	438,997	453,054	447,928	478,827	468,777	472,892	487,597	493,655	506,474	5.8	17.4





**OAKLAND
COMMUNITY
COLLEGE**

Curriculum Review Committee Recommendations

Biology
Vince Lamb
March 20, 2009

Curriculum

- BIO 1320 course catalogue description needs to be updated. Biology discipline will take suggested changes to Curriculum Instructional Committee.
- A pre-assessment for BIO 2630 will be used to address student's potential competence for this course. There is an urgency to have it completed and a process in place as students are now preparing soon for fall 2009 registration.
- Biology discipline will continue the discussion with the Allied Health programs about how the discipline can continue support the needs of these programs.
- Biology discipline will work with the Registrar to clean up the online catalogue which current reflects courses not taught in the past 5 years and have been removed from the 2008-2009 hard copy catalogue.
- The CRC Chair will also communicate to the Registrar, IT, and Webmaster the catalogue issues.
- Biology discipline will address syllabi issues to meet FMA requirements.
- Biology will work on placing outcomes and course objectives on courses.

Resources

- Biology discipline will work with deans to determine how to purchase additional models and a replacement cycle for current models. Possible models online.
- The Biology discipline, with the assistance of the deans, can work to identify areas on each campus for students to study models.