# 2015-16 Program Review

# Mathematics: Basic Skills



**Prepared By GWC Office of Institutional Effectiveness** 

## 2015-16 Program Review

## **Mathematics: Basic Skills**

NOTES AND DEFINITIONS	3
SUMMARY DASHBOARD	4
STUDENT DEMOGRAPHICS	6
UNDUPLICATED HEADCOUNT AND DISTRIBUTION BY ETHNICITY	6
UNDUPLICATED HEADCOUNT AND DISTRIBUTION BY GENDER	7
UNDUPLICATED HEADCOUNT AND DISTRIBUTION BY AGE GROUP	8
UNDUPLICATED HEADCOUNT AND DISTRIBUTION BY ECONOMICALLY DISADVANTAGED STATUS	9
UNDUPLICATED HEADCOUNT AND DISTRIBUTION BY DISABILITY STATUS	10
UNDUPLICATED HEADCOUNT AND DISTRIBUTION BY VETERAN STATUS	11
UNDUPLICATED HEADCOUNT AND DISTRIBUTION BY FOSTER YOUTH STATUS	12
ENROLLMENT AND FILL RATE	13
RETENTION AND SUCCESS	15
OVERALL RETENTION AND SUCCESS BY TERM	15
OVERALL RETENTION AND SUCCESS BY ACADEMIC YEAR	17
RETENTION AND SUCCESS BY SESSION TYPE	18
RETENTION AND SUCCESS BY ETHNICITY	20
RETENTION AND SUCCESS BY GENDER	23
RETENTION AND SUCCESS OF SPECIAL POPULATION GROUPS	25
FULL-TIME AND PART-TIME FACULTY DISTRIBUTION	26

### **Notes and Definitions**

The following data tables and charts have been provided to each department at Golden West College in order to assist them in completing a comprehensive review of each of their programs. Program Review is the primary mechanism by which Golden West College identifies the objectives and resources needed to fulfill our educational mission. It is also an opportunity for each department to document its plans for improving student success and sharing that information with the college community. Each department is asked to review all of its programs (instructional and non-instructional) on the same three-year cycle. It is important for all departments to participate in the Program Review process, since programs that do not complete a review are not eligible to receive additional funding for one-time requests, classified positions, faculty positions, or facilities requests.

- Enrollment refers to the count of students enrolled in courses in the specified discipline each term
  or academic year. If a student enrolls in multiple courses in a discipline, they will be counted more
  than once.
  - Note: In some cases, enrollment counts differ slightly across the tables included in this report.
    These minor discrepancies occur, because different data sets are needed for different parts of
    the report. These unique data sets often contain some small discrepancies. However, the
    larger trends over the multi-year period being reviewed are consistent across the data sets
    used.
- **Unduplicated headcount** refers to the unduplicated count of students enrolled in courses in a given discipline in the specified semester or academic year. It differs from the enrollment count, since students will only be counted once in the unduplicated headcount, even if they enroll in multiple courses in a given discipline.
  - Note: The unduplicated headcounts included in this report are unduplicated for each academic year by discipline. Counts across disciplines or for the entire college are duplicated.
- **Retention** refers to the percentage of students who enrolled in a course in a specified discipline who did not withdraw and received a valid grade.
- Success refers to the percentage of students who enrolled in a course in a specified discipline and received a passing or satisfactory grade (defined as grades of A, B, C, P, IA, IB, IC, or IPP).
  - Note: Retention and success rates are calculated using the duplicated enrollment count of students, since many students enroll in more than one course in a discipline in a given semester.



0.0%

2009-2010

# PROGRAM REVIEW – SUMMARY DASHBOARD 2015-16

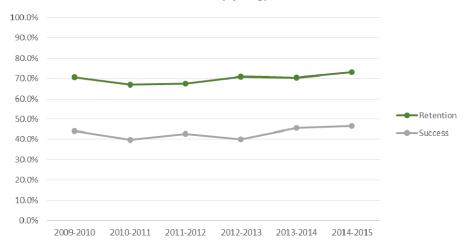
## **Mathematics: Basic Skills**



#### Overall Retention & Success Rates (Spring)

2010-2011

2011-2012



2012-2013

2013-2014

#### Gaps in Success Rates by Student Ethnicity, 2014-2015 Academic Year

	Total Enrolled	% of Total Enrolled	Success Rate	Avg. Success Rate	Success Rate Gap (Compared to Avg.)	Successful Completions Lost
Am. Indian/Alaska						
Native	14	0.5%	28.6%	48.1%	-19.5%	3
Asian	437	15.7%	62.9%	48.1%	14.8%	
Black or African						
American	71	2.5%	35.2%	48.1%	-12.9%	10
Hispanic	1,237	44.4%	41.7%	48.1%	-6.4%	79
Nat. Hawaiian /						
Pac. Islander	16	0.5%	50.0%	48.1%	1.9%	
Two or More	126	4.5%	48.4%	48.1%	0.3%	
Unknown	42	1.5%	38.1%	48.1%	-10.0%	5
White	845	30.3%	51.6%	48.1%	3.5%	
Total	2,788					

Note: For those disciplines that have labs, enrollment data do not include dependent lab sections. In cases where the total enrollment for a particular ethnic group is 10 or less, data have been excluded from the analysis in order to protect individuals' privacy.

Three-Year Trend	Summary
FALL	
	Three-Year Tren
Enrollment	
Total Enrollment	<b>1</b>
Enrollment/Section	↓ ↓
Average Fill Rate	<b>↑</b>
Overall Retention and Success	
Retention	<u>↑</u>
Success	<b>1</b>
Success Rates by Student Ethnicit	у
Am. Indian/Alaska Native	
Asian	<b>↑</b>
Black or African American	<b>4</b>
Hispanic/Latino	↑ ↓ ↑ · · · · · · · · · · · · · · · · ·
Nat. Hawaiian / Pac. Islander	
White	<b>1</b>
Two or More Races	<b>4</b>
Unknown	<b>4</b>
Success Rates by Gender	
Female	<b>1</b>
Male	<u> </u>
SPRING	
	Three-Year Tren
Enrollment	
Total Enrollment	<b>1</b>
Enrollment/Section	<b>V</b>
Average Fill Rate	<u> </u>
Overall Retention and Success	
Retention	<u> </u>
Success	<u> </u>
Success Rates by Student Ethnicit	у
Am. Indian/Alaska Native	
Asian	<u> </u>
Black or African American	↓ ↑  ↑
Hispanic/Latino	<b>↑</b>
Nat. Hawaiian / Pac. Islander	
White	<u> </u>
Two or More Races	<b>^</b>

Awards	Three-Year Trend
Certificates Awarded	
Degrees Awarded	

Unknown

Female

Male

Success Rates by Gender

个

1



# **PROGRAM REVIEW – SUMMARY DASHBOARD** 2015-16

## **Mathematics: Basic Skills**

#### **Enrollment, Sections, and Fill Rate**

FALL					
	Enrollment	Max. Seats	Total Sections	Enrollment/ Section	Avg. Fill Rate
2009-2010	1,419	1,422	13	109.2	99.8%
2010-2011	1,323	1,332	11	120.3	99.3%
2011-2012	1,228	1,224	11	111.6	100.3%
2012-2013	1,228	1,242	10	122.8	98.9%
2013-2014	1,259	1,242	14	89.9	101.4%
2014-2015	1,273	1,242	14	90.9	102.5%

### SPRING

	Enrollment	Max. Seats	Total Sections	Enrollment/ Section	Avg. Fill Rate
2009-2010	1,252	1,350	11	113.8	92.7%
2010-2011	1,419	1,440	12	118.3	98.5%
2011-2012	1,083	1,140	10	108.3	95.0%
2012-2013	1,202	1,260	10	120.2	95.4%
2013-2014	1,243	1,260	14	88.8	98.7%
2014-2015	1,343	1,407	16	83.9	95.5%

#### **SUMMER**

	Enrollment	Max. Seats	Total Sections	Enrollment/ Section	Avg. Fill Rate
2009-2010	184	180	2	92.0	102.2%
2010-2011	166	180	2	83.0	92.2%
2011-2012	196	180	2	98.0	108.9%
2012-2013	0	0	0		
2013-2014	142	174	3	47.3	81.6%
2014-2015	170	176	5	34.0	96.6%

#### **Certificates and Degrees Awarded**

(No certificates or degrees awarded during Program Review cycle)

### **Unduplicated Headcount and Distribution by Student Ethnicity**

	200	9-2010	2010-2011		2011	2012	201	2-2013	201	3-2014	201	4-2015
	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total
Am. Indian/Alaska Native	9	0.4%	12	0.5%	7	0.3%	3	0.1%	7	0.3%	12	0.5%
Asian	476	20.5%	478	19.8%	411	19.4%	425	20.2%	422	18.0%	378	15.5%
Black or African American	36	1.6%	46	1.9%	48	2.3%	32	1.5%	50	2.1%	64	2.6%
Hispanic/Latino	706	30.4%	812	33.7%	774	36.6%	819	38.9%	960	40.9%	1,074	44.1%
Nat. Hawaiian / Pac. Islander	21	0.9%	24	1.0%	19	0.9%	14	0.7%	16	0.7%	14	0.6%
Two or More Races	66	2.8%	97	4.0%	105	5.0%	92	4.4%	101	4.3%	114	4.7%
Unknown	81	3.5%	40	1.7%	38	1.8%	59	2.8%	41	1.7%	36	1.5%
White	926	39.9%	901	37.4%	714	33.7%	660	31.4%	751	32.0%	744	30.5%
Total	2,321	100.0%	2,410	100.0%	2,116	100.0%	2,104	100.0%	2,348	100.0%	2,436	100.0%

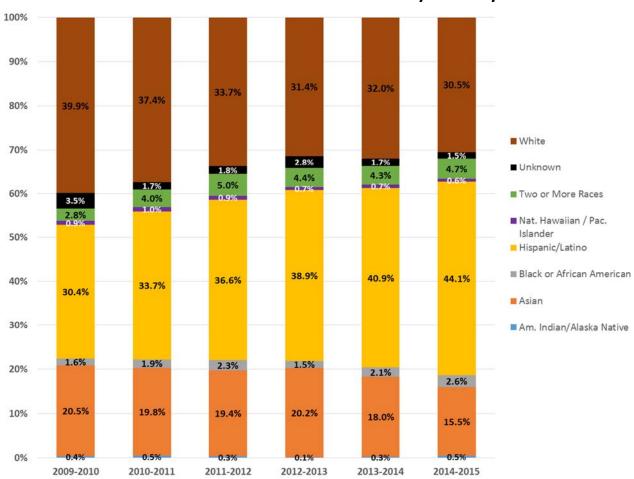
Note: Data are unduplicated for each academic year by discipline. Data across multiple disciplines or for the entire college are duplicated.



# PROGRAM REVIEW – UNDUPLICATED HEADCOUNT BY ETHNICITY 2015-16

## **Mathematics: Basic Skills**

### **Distribution of Student Headcount by Ethnicity**



## **Unduplicated Headcount and Distribution by Student Ethnicity**

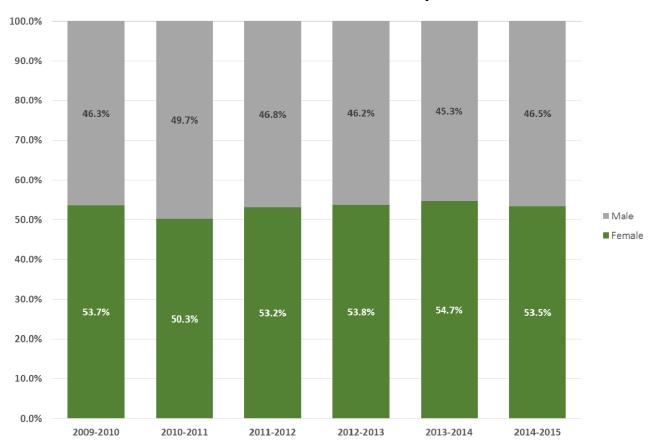
	200	9-2010	2010	2010-2011		l- <b>2012</b>	201	2-2013	201	3-2014	201	4-2015
	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total
Am. Indian/Alaska Native	9	0.4%	12	0.5%	7	0.3%	3	0.1%	7	0.3%	12	0.5%
Asian	476	20.5%	478	19.8%	411	19.4%	425	20.2%	422	18.0%	378	15.5%
Black or African American	36	1.6%	46	1.9%	48	2.3%	32	1.5%	50	2.1%	64	2.6%
Hispanic/Latino	706	30.4%	812	33.7%	774	36.6%	819	38.9%	960	40.9%	1,074	44.1%
Nat. Hawaiian / Pac. Islander	21	0.9%	24	1.0%	19	0.9%	14	0.7%	16	0.7%	14	0.6%
Two or More Races	66	2.8%	97	4.0%	105	5.0%	92	4.4%	101	4.3%	114	4.7%
Unknown	81	3.5%	40	1.7%	38	1.8%	59	2.8%	41	1.7%	36	1.5%
White	926	39.9%	901	37.4%	714	33.7%	660	31.4%	751	32.0%	744	30.5%
Total	2,321	100.0%	2,410	100.0%	2,116	100.0%	2,104	100.0%	2,348	100.0%	2,436	100.0%



# **PROGRAM REVIEW – UNDUPLICATED HEADCOUNT BY GENDER** 2015-16

## **Mathematics: Basic Skills**

### **Distribution of Student Headcount by Gender**



### **Unduplicated Headcount and Distribution by Student Gender**

	2009-2010		201	2010-2011		2011-2012		2012-2013		3-2014	2014-2015	
	N	% of Total	N	% of Total	N	N % of Total		% of Total	N	% of Total	N	% of Total
Female	1,236	53.7%	1,194	50.3%	1,114	53.2%	1,126	53.8%	1,273	54.7%	1,296	53.5%
Male	1,067	46.3%	1,182	49.7%	981	46.8%	965	46.2%	1,053	45.3%	1,127	46.5%
Total	2,303	100.0%	2,376	100.0%	2,095	100.0%	2,091	100.0%	2,326	100.0%	2,423	100.0%

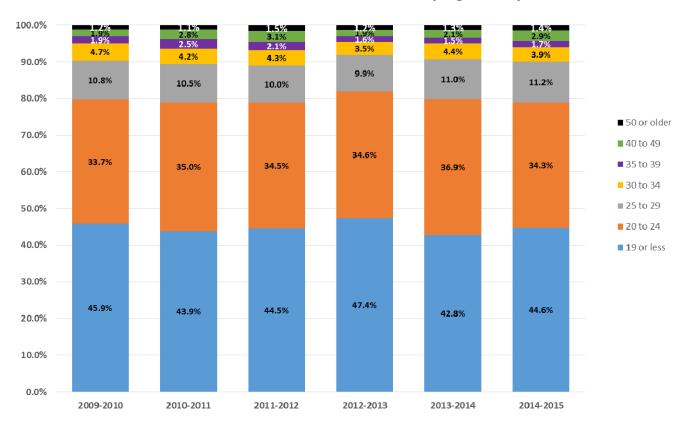
Note: Observations without a gender indicated were excluded from the analysis.



# PROGRAM REVIEW – UNDUPLICATED HEADCOUNT BY AGE GROUP 2015-16

## **Mathematics: Basic Skills**

### **Distribution of Student Headcount by Age Group**



### **Unduplicated Headcount and Distribution by Student Age Group**

	2009-2010		2010-2011		201	2011-2012		2012-2013		2013-2014		2014-2015	
	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total	
19 or less	1,065	45.9%	1,058	43.9%	941	44.5%	997	47.4%	1,005	42.8%	1,087	44.6%	
20 to 24	783	33.7%	844	35.0%	729	34.5%	728	34.6%	867	36.9%	835	34.3%	
25 to 29	250	10.8%	252	10.5%	212	10.0%	208	9.9%	258	11.0%	273	11.2%	
30 to 34	109	4.7%	102	4.2%	91	4.3%	74	3.5%	103	4.4%	95	3.9%	
35 to 39	44	1.9%	61	2.5%	45	2.1%	33	1.6%	35	1.5%	41	1.7%	
40 to 49	43	1.9%	67	2.8%	66	3.1%	39	1.9%	50	2.1%	70	2.9%	
50 or older	27	1.2%	26	1.1%	32	1.5%	25	1.2%	30	1.3%	35	1.4%	
Total	2,321	100.0%	2,410	100.0%	2,116	100.0%	2,104	100.0%	2,348	100.0%	2,436	100.0%	

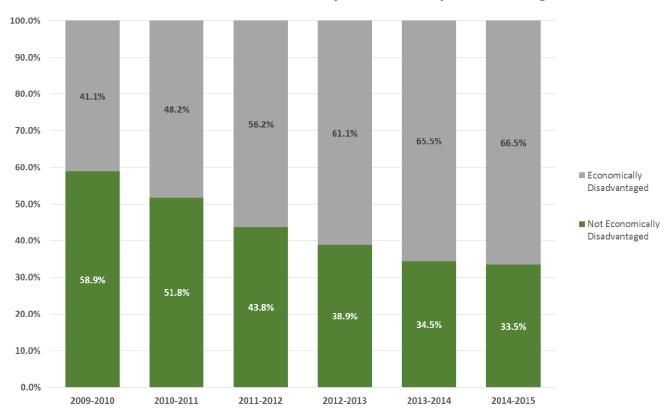


# PROGRAM REVIEW – UNDUPLICATED HEADCOUNT BY ECONOMICALLY DISADVANTAGED STATUS

2015-16

## **Mathematics: Basic Skills**

### **Distribution of Student Headcount by Economically Disadvantaged Status**



## **Unduplicated Headcount and Distribution by Economically Disadvantaged Status**

	2009-2010		2010-2011		201	2011-2012		2012-2013		2013-2014		4-2015
	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total	N	% of Total
Not Economically												
Disadvantaged	1,366	58.9%	1,249	51.8%	926	43.8%	818	38.9%	809	34.5%	815	33.5%
Economically												
Disadvantaged	955	41.1%	1,161	48.2%	1,190	56.2%	1,286	61.1%	1,539	65.5%	1,621	66.5%
Total	2,321	100.0%	2,410	100.0%	2,116	100.0%	2,104	100.0%	2,348	100.0%	2,436	100.0%

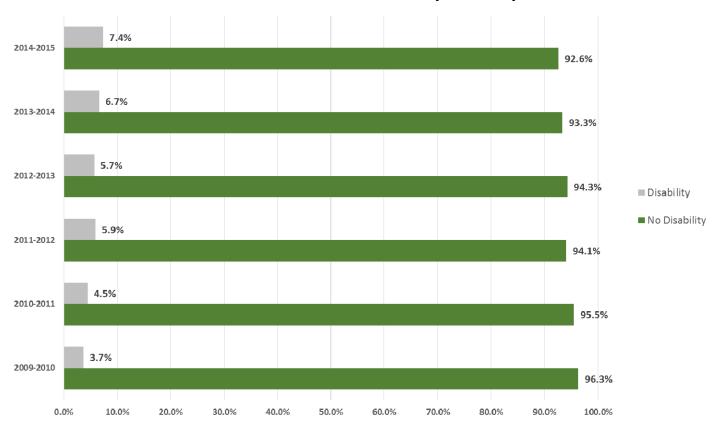


# PROGRAM REVIEW – UNDUPLICATED HEADCOUNT BY DISABILITY STATUS

2015-16

## **Mathematics: Basic Skills**

## **Distribution of Student Headcount by Disability Status**



### **Unduplicated Headcount and Distribution by Student Disability Status**

	200	9-2010	201	0-2011	2011	-2012	2012	2-2013	201	3-2014	201	4-2015
	N	% of Total										
No Disability	2,144	96.3%	2,033	95.5%	1,694	94.1%	1,773	94.3%	1,860	93.3%	2,188	92.6%
Disability	82	3.7%	96	4.5%	107	5.9%	107	5.7%	133	6.7%	175	7.4%
Total	2,226	100.0%	2,129	100.0%	1,801	100.0%	1,880	100.0%	1,993	100.0%	2,363	100.0%

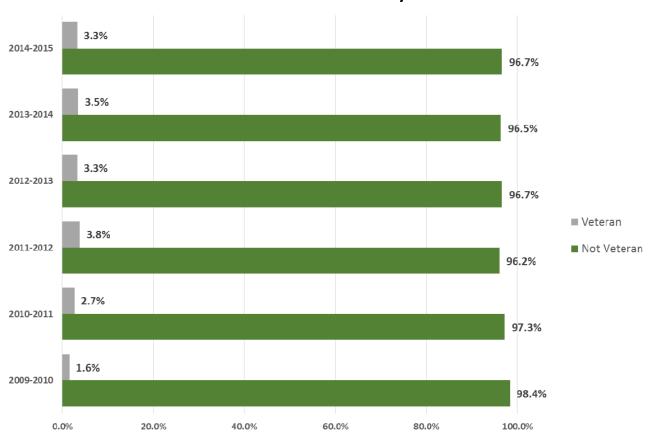


# PROGRAM REVIEW – UNDUPLICATED HEADCOUNT BY VETERAN STATUS

2015-16

## **Mathematics: Basic Skills**

## **Distribution of Student Headcount by Veteran Status**



### **Unduplicated Headcount and Distribution by Veteran Status**

	2009	9-2010	201	0-2011	201	1-2012	2012	2-2013	2013	3-2014	2014	-2015
	N	% of Total										
Not Veteran	2,191	98.4%	2,072	97.3%	1,732	96.2%	1,818	96.7%	1,923	96.5%	2,285	96.7%
Veteran	35	1.6%	57	2.7%	69	3.8%	62	3.3%	70	3.5%	78	3.3%
Total	2,226	100.0%	2,129	100.0%	1,801	100.0%	1,880	100.0%	1,993	100.0%	2,363	100.0%

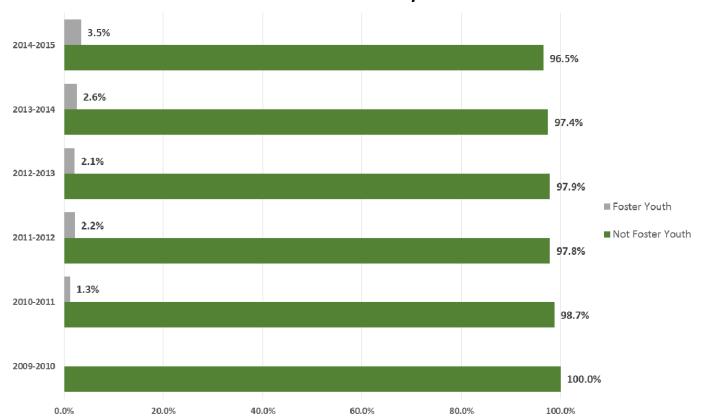


# PROGRAM REVIEW – UNDUPLICATED HEADCOUNT BY FOSTER YOUTH STATUS

2015-16

## **Mathematics: Basic Skills**

### **Distribution of Student Headcount by Foster Youth Status**



### **Unduplicated Headcount and Distribution by Foster Youth Status**

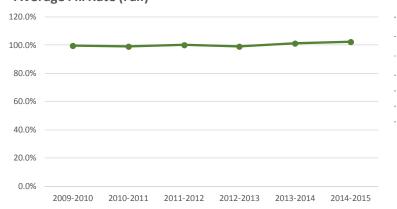
	200	9-2010	201	0-2011	201	1-2012	201	2-2013	201	3-2014	201	.4-2015
	N	% of Total										
Not Foster Youth	2,226	100.0%	2,102	98.7%	1,762	97.8%	1,840	97.9%	1,942	97.4%	2,281	96.5%
Foster Youth		0.0%	27	1.3%	39	2.2%	40	2.1%	51	2.6%	82	3.5%
Total	2,226	100.0%	2,129	100.0%	1,801	100.0%	1,880	100.0%	1,993	100.0%	2,363	100.0%

# PROGRAM REVIEW – ENROLLMENT AND FILL RATE 2015-16

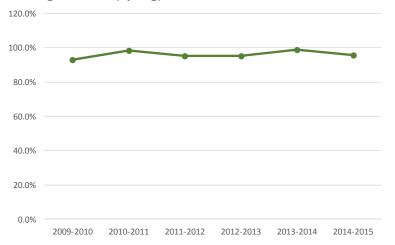
## **Mathematics: Basic Skills**

### **Average Fill Rates for Each Semester by Academic Year**

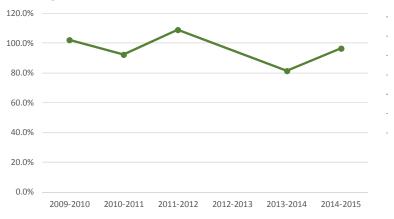
#### Average Fill Rate (Fall)



#### Average Fill Rate (Spring)



#### **Average Fill Rate (Summer)**





# PROGRAM REVIEW – ENROLLMENT AND FILL RATE 2015-16

## **Mathematics: Basic Skills**

### Key Enrollment Data for Each Semester by Academic Year

#### FALL Enrollment/ Avg. Fill **Enrollment Max. Seats Total Sections** Section Rate 2009-2010 1,419 1,422 13 109.2 99.8% 2010-2011 1,323 1,332 11 120.3 99.3% 2011-2012 1,228 1,224 11 111.6 100.3% 2012-2013 1,228 1,242 10 122.8 98.9% 2013-2014 1,259 1,242 14 89.9 101.4% 2014-2015 1,273 1,242 14 90.9 102.5%

## **SPRING**

	Enrollment	Max. Seats	Total Sections	Enrollment/ Section	Avg. Fill Rate
2009-2010	1,252	1,350	11	113.8	92.7%
2010-2011	1,419	1,440	12	118.3	98.5%
2011-2012	1,083	1,140	10	108.3	95.0%
2012-2013	1,202	1,260	10	120.2	95.4%
2013-2014	1,243	1,260	14	88.8	98.7%
2014-2015	1,343	1,407	16	83.9	95.5%

### **SUMMER**

	Enrollment	Max. Seats	Total Sections	Enrollment/ Section	Avg. Fill Rate
2009-2010	184	180	2	92.0	102.2%
2010-2011	166	180	2	83.0	92.2%
2011-2012	196	180	2	98.0	108.9%
2012-2013	0	0	0		
2013-2014	142	174	3	47.3	81.6%
2014-2015	170	176	5	34.0	96.6%

### FTES/FTEF by Academic Year

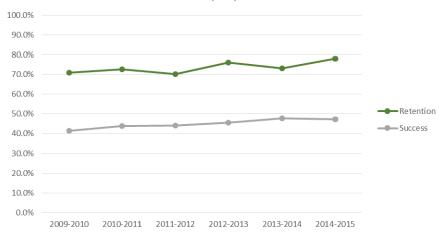
	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
GWC Total	38.8	40.8	42.6	41.8	37.6	35.8
Mathematics: Basic Skills	67.9	68.3	92.3	99.2	73.8	57.6



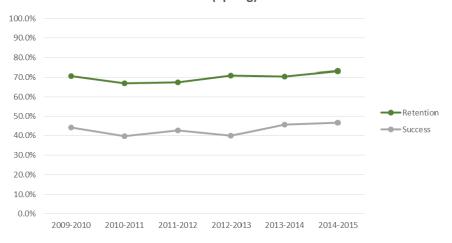
## PROGRAM REVIEW – OVERALL RETENTION AND SUCCESS 2015-16

### **Mathematics: Basic Skills**

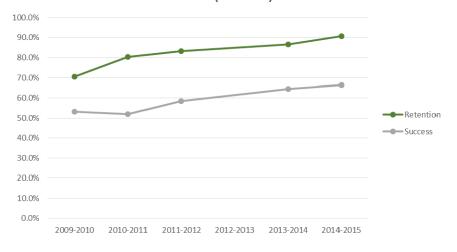
#### Overall Retention & Success Rates (Fall)



#### Overall Retention & Success Rates (Spring)



#### **Overall Retention & Success Rates (Summer)**



#### **Notes**

- Retention is the percentage of students who enrolled in a course who did not withdraw and received a valid grade.
- Success is the percentage of students who enrolled in a course and received a passing or satisfactory grade (defined as grades of A,B,C,P,IA,IB,IC, or IPP)
- Data are unduplicated by semester for each department. Data for multiple semesters or departments are not unduplicated.

#### **Key Data**

- The overall retention and success rates for Fall Basic Skills Mathematics courses increased between Fall 2012 and Fall 2014. The retention rate went from 76.1% to 78.0%, and the success rate increased from 45.6% to 47.3%.
- The overall retention and success rates for Spring Basic Skills Mathematics courses increased between Spring 2013 and Spring 2015. The retention rate went from 71.0% to 73.0%, and the success rate increased from 40.1% to 46.5%.
- The overall retention and success rates for Summer Basic Skills Mathematics courses increased between Summer 2011 and Summer 2014. The retention rate went from 83.2% to 90.6%, and the success rate rose from 58.4% to 66.5%.



# **PROGRAM REVIEW – OVERALL RETENTION AND SUCCESS** 2015-16

## **Mathematics: Basic Skills**

FALL			
	Enrollment	Retention	Success
2009-2010	1,315	71.0%	41.4%
2010-2011	1,251	72.7%	43.7%
2011-2012	1,141	70.2%	44.0%
2012-2013	1,199	76.1%	45.6%
2013-2014	1,243	73.2%	47.6%
2014-2015	1,275	78.0%	47.3%

## **SPRING**

	Enrollment	Retention	Success
2009-2010	1,223	70.6%	44.1%
2010-2011	1,317	66.9%	39.7%
2011-2012	1,031	67.4%	42.7%
2012-2013	1,203	71.0%	40.1%
2013-2014	1,230	70.5%	45.7%
2014-2015	1,343	73.0%	46.5%

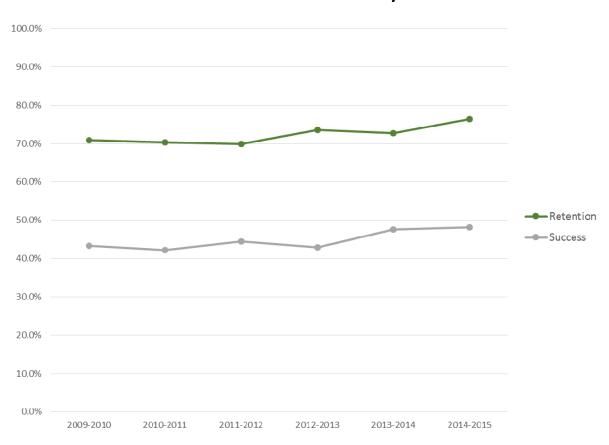
### **SUMMER**

	Enrollment	Retention	Success
2009-2010	169	70.4%	53.3%
2010-2011	148	80.4%	52.0%
2011-2012	173	83.2%	58.4%
2012-2013			
2013-2014	141	86.5%	64.5%
2014-2015	170	90.6%	66.5%

# **PROGRAM REVIEW – OVERALL RETENTION AND SUCCESS** 2015-16

## **Mathematics: Basic Skills**

### **Overall Retention and Success Rates by Academic Year**



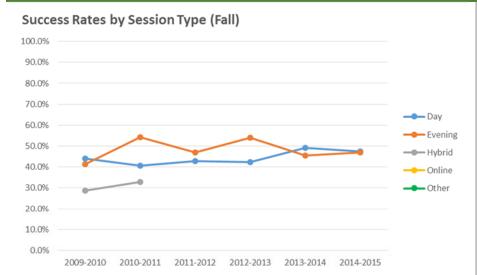
### **Enrollment, Retention Rates and Success Rates by Academic Year**

	Enrollment	Retention	Success
2009-2010	2,707	70.8%	43.3%
2010-2011	2,716	70.3%	42.2%
2011-2012	2,345	69.9%	44.5%
2012-2013	2,402	73.5%	42.8%
2013-2014	2,614	72.6%	47.6%
2014-2015	2,788	76.4%	48.1%

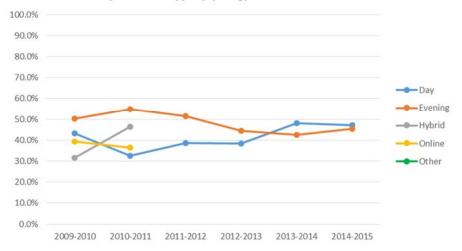


## PROGRAM REVIEW – SUCCESS BY SESSION TYPE 2015-16

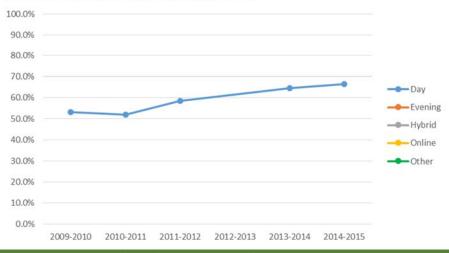
### **Mathematics: Basic Skills**



#### Success Rates by Session Type (Spring)



#### Success Rates by Session Type (Summer)



#### **Notes**

- Retention is the percentage of students who enrolled in a course who did not withdraw and received a valid grade.
- Success is the percentage of students who enrolled in a course and received a passing or satisfactory grade (defined as grades of A,B,C,P,IA,IB,IC, or IPP)
- Other for Session Type includes Honors, Saturday, Self-Paced, Teach3, Independent/Directed Study, and Parachute classes.
- Enrollment, retention and success data are duplicated, since many students enroll in more than one course in a semester.

#### **Key Data**

- Success rates were generally higher for evening sessions of Fall Basic Skills Mathematics courses than for daytime sessions over the past six academic years, with the exception of Fall 2013 and Fall 2014. However, the success rate for evening sessions decreased between Fall 2012 and Fall 2014, while the success rate of daytime sessions increased.
- Success rates for Spring Basic Skills
   Mathematics courses followed a similar
   pattern. The success rate for evening
   sessions was higher than that of daytime
   sessions until the Spring 2014 semester.
   The success rate of daytime sessions
   increased between Spring 2013 and
   Spring 2015, while that of evening
   sessions decreased.
- Basic Skills Matheamtics has only offered daytime courses during the Summer since the 2009-2010 academic year. Success rates in Summer Basic Skills Mathematics courses increased between the Summer 2011 and Summer 2014 semesters.



# PROGRAM REVIEW – SUCCESS BY SESSION TYPE 2015-16

## **Mathematics: Basic Skills**

FALL						
Enrollment						
	Day	Evening	Hybrid	Online	Other	Total
2009-2010	807	338	170			1,315
2010-2011	714	370	167			1,251
2011-2012	798	343				1,141
2012-2013	859	340				1,199
2013-2014	727	516				1,243
2014-2015	733	542				1,275
Retention						
2009-2010	69.9%	73.7%	71.2%			71.0%
2010-2011	71.6%	75.1%	72.5%			72.7%
2011-2012	69.4%	71.9%				70.2%
2012-2013	75.9%	76.5%				76.1%
2013-2014	74.1%	71.9%				73.2%
2014-2015	79.5%	75.8%				78.0%
Success						
2009-2010	44.0%	41.4%	28.8%			41.4%
2010-2011	40.8%	54.3%	32.9%			43.7%
2011-2012	42.7%	47.1%				44.0%
2012-2013	42.3%	54.1%				45.6%
2013-2014	49.1%	45.5%				47.6%
2014-2015	47.5%	47.0%				47.3%

SUMMER						
Enrollment						
	Day	Evening	Hybrid	Online	Other	Total
2009-2010	169					169
2010-2011	148					148
2011-2012	173					173
2012-2013						
2013-2014	141					141
2014-2015	170					170
Retention						
2009-2010	70.4%					70.4%
2010-2011	80.4%					80.4%
2011-2012	83.2%					83.2%
2012-2013						
2013-2014	86.5%					86.5%
2014-2015	90.6%					90.6%
Success						
2009-2010	53.3%					53.3%
2010-2011	52.0%					52.0%
2011-2012	58.4%					58.4%
2012-2013						
2013-2014	64.5%					64.5%
2014-2015	66.5%					66.5%

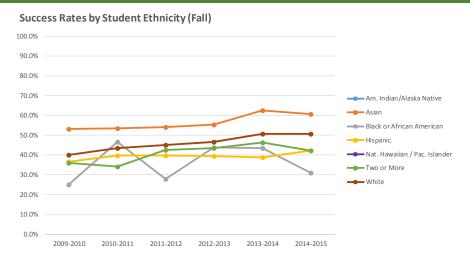
SPRING						
Enrollment						
	Day	Evening	Hybrid	Online	Other	Total
2009-2010	713	342	89	79		1,223
2010-2011	791	359	82	85		1,317
2011-2012	711	320				1,031
2012-2013	859	344				1,203
2013-2014	713	517				1,230
2014-2015	843	500				1,343
Retention						
2009-2010	70.5%	73.4%	70.8%	59.5%		70.6%
2010-2011	63.3%	72.4%	75.6%	68.2%		66.9%
2011-2012	64.7%	73.4%				67.4%
2012-2013	71.0%	70.9%				71.0%
2013-2014	71.2%	69.4%				70.5%
2014-2015	74.6%	70.4%				73.0%
Success						
2009-2010	43.2%	50.3%	31.5%	39.2%		44.1%
2010-2011	32.5%	54.9%	46.3%	36.5%		39.7%
2011-2012	38.7%	51.6%				42.7%
2012-2013	38.3%	44.5%				40.1%
2013-2014	48.0%	42.6%				45.7%
2014-2015	47.2%	45.4%				46.5%

**Note:** "Other" for Session Type includes Honors, Saturday, Self-Paced, Teach3, Independent/Directed Study, and Parachute classes.

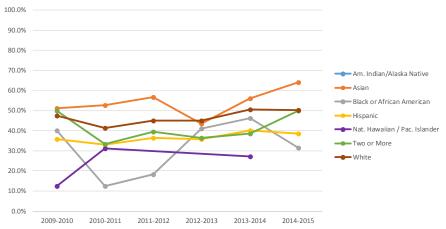


## PROGRAM REVIEW – SUCCESS AND RETENTION BY ETHNICITY 2015-16

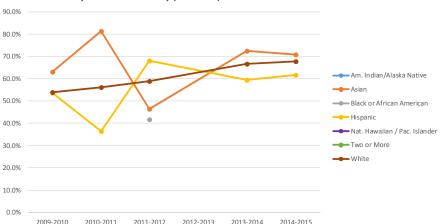
### **Mathematics: Basic Skills**



#### Success Rates by Student Ethnicity (Spring)



#### Success Rates by Student Ethnicity (Summer)



#### **Notes**

- Retention is the percentage of students who enrolled in a course who did not withdraw and received a valid grade.
- Success is the percentage of students who enrolled in a course and received a passing or satisfactory grade (defined as grades of A,B,C,P,IA,IB,IC, or IPP)
- Enrollment, retention and success data are duplicated, since many students enroll in more than one course in a semester.
- In cases where the total enrollment in a semester is 10 or less, data have been excluded from the analysis in order to protect individuals' privacy.

#### **Key Data**

- Success rates for Fall Basic Skills
   Mathematics courses varied widely by
   student ethnic groups. Asian students
   have generally had the highest success
   rates over the last six years. The
   success rates for Asian, Hispanic and
   White students increased between Fall
   2012 and Fall 2014, while it decreased
   for all other student ethnic groups.
- Success rates for Spring Basic Skills
   Mathematics courses have likewise
   varied widely by student ethnic
   groups. Asian students have generally
   had the highest success rates over the
   last six years, along with White
   students in Spring 2013. The success
   rates for all ethnic groups increased
   between Spring 2013 and Spring 2015,
   with the exception of African American
   students.
- Success rates for Summer Basic Skills
   Mathematics courses have varied
   widely by student ethnic groups and
   fluctuated in recent years. The success
   rates for Asian students increased
   between Summer 2012 and Summer
   2014, and the success rate of White
   students increased between Summer
   2011 and Summer 2014. However, the
   success rate of Hispanic students
   decreased over the same period.



# **PROGRAM REVIEW – SUCCESS AND RETENTION BY ETHNICITY** 2015-16

## **Mathematics: Basic Skills**

Enrollment								
	Am. Indian/Alaska		Black or African		Nat. Hawaiian /	Two or		
	Native	Asian	American	Hispanic	Pac. Islander	More	White	Tota
2009-2010		263	20	399		36	530	1,315
2010-2011		250	15	429		38	479	1,251
2011-2012		213	25	428		61	389	1,143
2012-2013		237	16	451		46	401	1,199
2013-2014		236	23	488		54	413	1,243
2014-2015		196	29	576		59	385	1,27
Retention								
2009-2010		78.3%	75.0%	70.2%		61.1%	68.9%	71.09
2010-2011		78.8%	80.0%	72.0%		60.5%	71.0%	72.79
2011-2012		77.5%	60.0%	69.6%		65.6%	68.9%	70.19
2012-2013		78.5%	56.3%	75.2%		69.6%	76.6%	76.19
2013-2014		83.1%	69.6%	70.3%		68.5%	72.6%	73.29
2014-2015		86.2%	65.5%	75.9%		74.6%	77.9%	78.09
Success								
2009-2010		53.2%	25.0%	36.6%		36.1%	40.0%	41.49
2010-2011		53.6%	46.7%	39.9%		34.2%	43.6%	43.79
2011-2012		54.0%	28.0%	39.7%		42.6%	45.2%	44.09
2012-2013		55.3%	43.8%	39.5%		43.5%	46.6%	45.69
2013-2014		62.7%	43.5%	38.9%		46.3%	50.8%	47.69
2014-2015		60.7%	31.0%	42.4%		42.4%	50.6%	47.39

### SPRING

Enrollment								
	Am. Indian/Alaska		Black or African		Nat. Hawaiian /	Two or		
	Native	Asian	American	Hispanic	Pac. Islander	More	White	Total
2009-2010		247	20	372	16	36	492	1,223
2010-2011		266	24	449	16	63	476	1,317
2011-2012		203	22	381		48	324	1,031
2012-2013		242	22	472		55	372	1,203
2013-2014		209	26	527	11	52	373	1,230
2014-2015		217	38	588		60	404	1,343
Retention								
2009-2010		73.3%	60.0%	69.1%	37.5%	80.6%	70.7%	70.6%
2010-2011		72.6%	45.8%	64.8%	56.3%	65.1%	67.4%	66.9%
2011-2012		73.9%	36.4%	65.4%		66.7%	67.9%	67.4%
2012-2013		69.8%	68.2%	70.3%		72.7%	73.4%	71.0%
2013-2014		77.5%	69.2%	65.5%	72.7%	65.4%	74.8%	70.5%
2014-2015		80.2%	60.5%	70.6%		75.0%	73.5%	73.0%
Success								
2009-2010		51.0%	40.0%	35.8%	12.5%	50.0%	47.4%	44.1%
2010-2011		52.6%	12.5%	33.0%	31.3%	33.3%	41.4%	39.7%
2011-2012		56.7%	18.2%	36.5%		39.6%	45.1%	42.7%
2012-2013		43.4%	40.9%	35.8%		36.4%	44.9%	40.1%
2013-2014		56.0%	46.2%	40.2%	27.3%	38.5%	50.4%	45.7%
2014-2015		64.1%	31.6%	38.6%		50.0%	50.2%	46.5%



# **PROGRAM REVIEW – SUCCESS AND RETENTION BY ETHNICITY** 2015-16

## **Mathematics: Basic Skills**

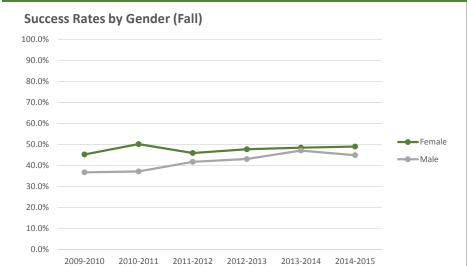
SUMMER								
Enrollment								
	Am. Indian/Alaska		Black or African		Nat. Hawaiian /	Two or		
	Native	Asian	American	Hispanic	Pac. Islander	More	White	Total
2009-2010		38		41			63	169
2010-2011		27		41			57	148
2011-2012		28	12	66			51	173
2012-2013								
2013-2014		29		47			51	141
2014-2015		24		73			56	170
Retention								
2009-2010		71.1%		78.0%			69.8%	70.4%
2010-2011		85.2%		80.5%			80.7%	80.4%
2011-2012		75.0%	75.0%	90.9%			82.4%	83.2%
2012-2013								
2013-2014		89.7%		80.9%			86.3%	86.5%
2014-2015		87.5%		91.8%			87.5%	90.6%
Success								
2009-2010		63.2%		53.7%			54.0%	53.3%
2010-2011		81.5%		36.6%			56.1%	52.0%
2011-2012		46.4%	41.7%	68.2%			58.8%	58.4%
2012-2013								
2013-2014		72.4%		59.6%			66.7%	64.5%
2014-2015		70.8%		61.6%			67.9%	66.5%

**Note:** In cases where the enrollment for a student racial or ethnic group is 10 or fewer students, data have been suppressed to protect individuals' privacy. Data for these students are still included in the total column, along with data for students whose race or ethnicity is unknown. The subtotals for each student racial or ethnic group therefore may not add up to the total column.

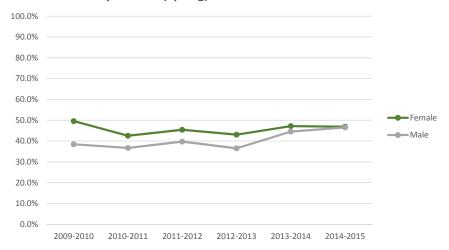


## PROGRAM REVIEW – SUCCESS AND RETENTION BY GENDER 2015-16

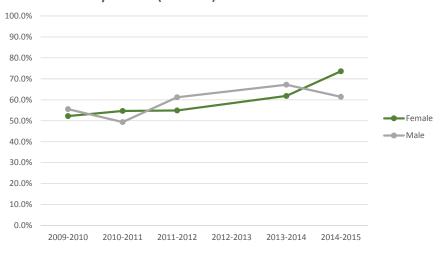
## **Mathematics: Basic Skills**



#### Success Rates by Gender (Spring)



#### Success Rates by Gender (Summer)



#### **Notes**

- Retention is the percentage of students who enrolled in a course who did not withdraw and received a valid grade.
- Success is the percentage of students who enrolled in a course and received a passing or satisfactory grade (defined as grades of A,B,C,P,IA,IB,IC, or IPP)
- Enrollment, retention and success data are duplicated, since many students enroll in more than one course in a semester.
- In cases where the total enrollment in a semester is 10 or less, data have been excluded from the analysis in order to protect individuals' privacy.

#### **Key Data**

- Success rates have consistently been higher for female students than male students in Fall Basic Skills Mathemathics courses. The success rates for both male and female students increased from Fall 2012 to Fall 2014. During this period, the success rate of females increased from 47.7% to 49.0%, and the success rate of males increased from 43.0% to 44.9%.
- Success rates have likewise consistently been higher for female students than male students in Spring Basic Skills Mathemathics courses. The success rates for both male and female students increased from Spring 2013 to Spring 2015. During this period, the success rate of female students increased from 43.1% to 46.9%, and the success rate of male students increased from 36.5% to 46.5%.
- The success rates of male and female students in Summer Basic Skills Mathemathics courses have fluctuated. The success rates for both male and female students increased between the Summer 2011 and Summer 2014 semesters. The success rate of female students increased from 54.9% to 73.6% and the success rate for male students increased from 61.2% to 61.5%.



# **PROGRAM REVIEW – SUCCESS AND RETENTION BY GENDER**2015-16

## **Mathematics: Basic Skills**

FALL			
Enrollment			
	Female	Male	Total
2009-2010	739	569	1,315
2010-2011	652	582	1,251
2011-2012	614	518	1,141
2012-2013	631	553	1,199
2013-2014	681	544	1,243
2014-2015	694	568	1,275
Retention			
2009-2010	72.1%	69.6%	71.0%
2010-2011	77.1%	68.0%	72.7%
2011-2012	74.1%	65.4%	70.1%
2012-2013	76.2%	75.8%	76.1%
2013-2014	75.6%	70.8%	73.2%
2014-2015	78.1%	77.5%	78.0%
Success			
2009-2010	45.2%	36.7%	41.4%
2010-2011	50.2%	37.1%	43.7%
2011-2012	45.9%	41.7%	44.0%
2012-2013	47.7%	43.0%	45.6%
2013-2014	48.5%	47.1%	47.6%
2014-2015	49.0%	44.9%	47.3%

SUMMER			
Enrollment			
	Female	Male	Total
2009-2010	113	54	169
2010-2011	64	81	148
2011-2012	82	85	173
2012-2013			
2013-2014	76	64	141
2014-2015	72	96	170
Retention			
2009-2010	67.3%	75.9%	70.4%
2010-2011	85.9%	75.3%	80.4%
2011-2012	80.5%	84.7%	83.2%
2012-2013			
2013-2014	85.5%	87.5%	86.5%
2014-2015	95.8%	86.5%	90.6%
Success			
2009-2010	52.2%	55.6%	53.3%
2010-2011	54.7%	49.4%	52.0%
2011-2012	54.9%	61.2%	58.4%
2012-2013			
2013-2014	61.8%	67.2%	64.5%
2014-2015	73.6%	61.5%	66.5%

SPRING			
Enrollment			
	Female	Male	Total
2009-2010	629	580	1,223
2010-2011	630	668	1,317
2011-2012	555	458	1,031
2012-2013	666	523	1,203
2013-2014	659	550	1,230
2014-2015	717	606	1,343
Retention			
2009-2010	74.6%	66.4%	70.6%
2010-2011	71.9%	62.6%	66.9%
2011-2012	71.9%	62.2%	67.4%
2012-2013	73.6%	67.9%	71.0%
2013-2014	72.4%	68.4%	70.5%
2014-2015	73.5%	72.4%	73.0%
Success			
2009-2010	49.6%	38.4%	44.1%
2010-2011	42.5%	36.7%	39.7%
2011-2012	45.4%	39.7%	42.7%
2012-2013	43.1%	36.5%	40.1%
2013-2014	47.2%	44.5%	45.7%
2014-2015	46.9%	46.5%	46.5%

SPRING

**Note:** Students whose gender is not known are included in the total enrollment count but not in the subtotals for males and females, so male and female enrollment does not equal the total in some cases.



# PROGRAM REVIEW – OVERALL RETENTION AND SUCCESS BY SPECIAL POPULATION GROUPS

2015-16

## **Mathematics: Basic Skills**

### **Overall Retention Rates for Special Populations by Academic Year**

	20	09-2010	20	10-2011	20	011-2012	20	012-2013	20	013-2014	20	014-2015
	N	Retention Rate										
<b>Economically Disadvantaged St</b>	atus											
Not Economically Disadvantaged	1,552	70.7%	1,386	70.3%	984	68.7%	901	73.8%	883	75.9%	916	78.5%
Economically Disadvantaged	1,155	71.0%	1,330	70.4%	1,361	70.8%	1,501	73.4%	1,731	71.0%	1,872	75.3%
Veterans												
Not Veteran	2,663	70.6%	2,638	70.1%	2,249	69.6%	2,319	73.4%	2,518	72.7%	2,692	76.0%
Veteran	44	86.4%	78	76.9%	96	76.0%	83	77.1%	96	70.8%	96	86.5%
Disability Status												
No Disability	2,600	71.1%	2,587	70.5%	2,202	70.1%	2,258	73.6%	2,436	73.4%	2,570	77.5%
Disability	107	64.5%	129	67.4%	143	66.4%	144	72.2%	178	62.4%	218	62.4%
Foster Youth												
Not Foster Youth	2,707	70.8%	2,680	70.4%	2,296	70.1%	2,349	73.8%	2,540	72.9%	2,695	76.5%
Foster Youth			36	66.7%	49	61.2%	53	62.3%	74	64.9%	93	72.0%
Total	2,707	70.8%	2,716	70.3%	2,345	69.9%	2,402	73.5%	2,614	72.6%	2,788	76.4%

### **Overall Success Rates for Special Populations by Academic Year**

	2009	9-2010	20	10-2011	20	11-2012	20	12-2013	20	13-2014	20	14-2015
	N	Success Rate										
Economically Disadvantaged Status												
Not Economically Disadvantaged	1,552	42.5%	1,386	42.1%	984	43.9%	901	41.4%	883	50.2%	916	50.5%
Economically Disadvantaged	1,155	44.4%	1,330	42.4%	1,361	44.9%	1,501	43.7%	1,731	46.3%	1,872	46.9%
Veterans												
Not Veteran	2,663	42.9%	2,638	42.0%	2,249	44.4%	2,319	42.7%	2,518	47.5%	2,692	47.5%
Veteran	44	70.5%	78	50.0%	96	45.8%	83	47.0%	96	50.0%	96	64.6%
Disability Status												
No Disability	2,600	43.5%	2,587	42.6%	2,202	45.1%	2,258	43.0%	2,436	48.6%	2,570	49.2%
Disability	107	38.3%	129	34.9%	143	34.3%	144	41.0%	178	34.3%	218	34.9%
Foster Youth												
Not Foster Youth	2,707	43.3%	2,680	42.3%	2,296	44.5%	2,349	43.1%	2,540	47.8%	2,695	48.2%
Foster Youth			36	36.1%	49	42.9%	53	30.2%	74	40.5%	93	44.1%
Total	2,707	43.3%	2,716	42.2%	2,345	44.5%	2,402	42.8%	2,614	47.6%	2,788	48.1%

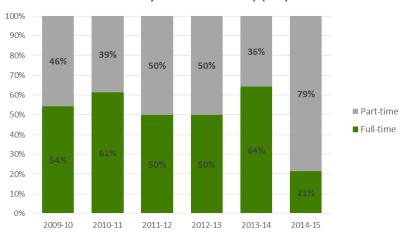
**Note:** In cases where the total enrollment in a semester is 10 or less, retention and success data have been excluded from the analysis in order to protect individuals' privacy.

# **PROGRAM REVIEW – COURSES TAUGHT BY FACULTY TYPE** 2015-16

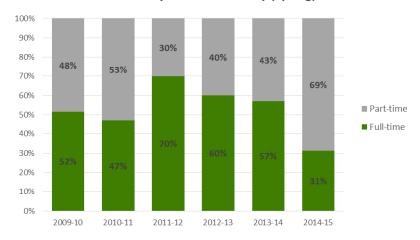
## **Mathematics: Basic Skills**

### Distribution of Courses Taught by Full-Time and Part-Time Faculty

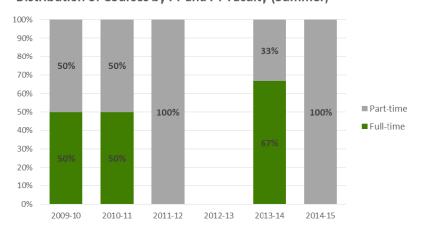
#### Distribution of Courses by FT and PT Faculty (Fall)



#### Distribution of Courses by FT and PT Faculty (Spring)



#### Distribution of Courses by FT and PT Faculty (Summer)





# PROGRAM REVIEW – COURSES TAUGHT BY FACULTY TYPE 2015-16

## Mathematics: Basic Skills

## **Courses Taught by Full-Time and Part-Time Faculty**

FALL				
	Full-Time (%)	Part-Time (%)	FT Courses	PT Courses
2009-10	54%	46%	19	16
2010-11	61%	39%	19	12
2011-12	50%	50%	15	15
2012-13	50%	50%	15	15
2013-14	64%	36%	27	15
2014-15	21%	79%	9	33
Total	50%	50%	104	106

SPRING				
	Full-Time (%)	Part-Time (%)	FT Courses	PT Courses
2009-10	52%	48%	16	15
2010-11	47%	53%	16	18
2011-12	70%	30%	21	9
2012-13	60%	40%	18	12
2013-14	57%	43%	24	18
2014-15	31%	69%	15	33
Total	51%	49%	110	105

SUMMER				
	Full-Time (%)	Part-Time (%)	FT Courses	PT Courses
2009-10	50%	50%	3	3
2010-11	50%	50%	3	3
2011-12	0%	100%		6
2012-13				
2013-14	67%	33%	4	2
2014-15	0%	100%		10
Total	29%	71%	10	24