#GRADINITIATIVE2025 SYMPOSIUM
October 17-18, 2018
www.calstate.edu/GraduationInitiative
Alisha Sharma

Associated Student President
California State University Chico
Timothy M. Renick
Vice President, Enrollment Management and Student Success
Vice Provost
Georgia State University
Creating a Student-Centered University through Data and Analytics

Timothy M. Renick, Ph.D.
Sr. Vice President for Student Success
twitter: @tim_renick
The Challenge in Front of Us

Baccalaureate Degree Attainment by Age 24 by Family Income Quartile

PERCENT OF LOW INCOME STUDENTS IN U.S. PUBLIC SCHOOLS 2013
National Average: 51%
• 32,500 Students on the Atlanta campus
• Research University status achieved in 1995
• 50,000+ Students as of 2016 with Perimeter College Consolidation
Graduation Rates by Race & Ethnicity

Where we were: 2003

- **WHITE**: 31.6%
- **AFRICAN AMERICAN**: 25.6%
- **HISPANIC**: 22%

[Bar chart showing graduation rates by race and ethnicity for 2003]
Changing Demographics: Race & Ethnicity

Minorities

- Fall 2008: 53%
- Fall 2009: 53%
- Fall 2010: 54%
- Fall 2011: 56%
- Fall 2012: 59%
- Fall 2013: 60%
- Fall 2014: 63%
- Fall 2015: 65%
- Fall 2016: 66%
- Fall 2017: 67%
Low-Income Students

Percent of Georgia State Undergraduates on PELL

- Fall 2007: 31%
- Fall 2008: 32%
- Fall 2009: 48%
- Fall 2010: 51%
- Fall 2011: 56%
- Fall 2012: 58%
- Fall 2013: 59%
- Fall 2014: 59%
- Fall 2015: 59%
- Fall 2016: 59%
- Fall 2017: 59%
-$40 million Appropriations Cuts
Are We the Problem?
Challenge: Summer Melt
Summer Melt

Fall 2015

Confirmed GSU Freshman Who Never Attended Any College: 278

- Non-white: 76%
- First Generation: 45%
- Low Income: 71%
- Avg. High School GPA: 3.34
The Hidden Obstacles to Enrollment

• Federal Financial Aid Application
• Verification Request
• State of Georgia Immunization Proof
• Taking Placement Exams
• Registering for Classes
Portal to Guide Students Through Next Steps

Which resources matter most to you?

- Select any of our student services that interest you, and we'll add appropriate information to your path.

A Few Recommendations:

- **Child Care**
  On campus and nearby child care options to help while you are in class.
- **First Generation to Attend College**
  Resources to help new students learn the ropes and lingo of college.
- **Commuting Services**
  Learn the different ways you can get to and from campus.
- **Student Technologies**
  Get help with all apps, gadgets, and sites that can enhance your campus experience.

All Student Services:

- **Tutoring & Academic Support**
  A great resource for help outside the classroom for your work inside the classroom.
- **Housing Services**
  Resources to help you find a place to stay near campus.
- **Career Guidance**
  Helping you find the right career path and prepare you for the job market. It's never too early to start!
- **Clubs and Activities**
  Grow and have fun! Get involved in one of our many on-campus activities.
- **Mentorships**
  Helping you connect with experienced students who can help guide your way.
24/7 Responses
Using a Chat Bot on Smart Devices
One-Year Drop in Summer Melt: 22%

+324 Students
Challenge: Choosing An Academic Path
Overwhelming Choices

- Lost
- Confused
- Unsure
- Unclear
- Perplexed
- Disoriented
- Bewildered
# Academic Guides with Live Job Data

## Program Picker

**Take control of your future! Explore majors and certificates that work for you.**

**You chose this...**

<table>
<thead>
<tr>
<th>Nursing A.S.</th>
<th>Medical Office Assistant Certificate</th>
<th>Radiologic Technology A.A.S</th>
<th>Health Studies A.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learn More</strong></td>
<td><strong>Learn More</strong></td>
<td><strong>Learn More</strong></td>
<td><strong>Learn More</strong></td>
</tr>
<tr>
<td><strong>Selected</strong></td>
<td><strong>Selected</strong></td>
<td><strong>Selected</strong></td>
<td><strong>Selected</strong></td>
</tr>
</tbody>
</table>

**Classes/Credits**
- **Nursing A.S.** 20 classes / 60 credits
- **Radiologic Technology A.A.S.** 20 classes / 55 credits
- **Health Studies A.S.** 20 classes / 62 credits

**Time to Complete**
- **Nursing A.S.** 2 years
- **Radiologic Technology A.A.S.** 2 years
- **Health Studies A.S.** 2.25 years

**Financial Aid**
- **Nursing A.S.** May not be Financial Aid eligible
- **Radiologic Technology A.A.S.**
- **Health Studies A.S.**

**Total Tuition**
- **Nursing A.S.** $9,176 in state
- **Radiologic Technology A.A.S.** $8,850 in state
- **Health Studies A.S.** $9,427 in state

**Outcomes**
- **Nursing A.S.** High rate of transfer to 4-year colleges
- **Radiologic Technology A.A.S.** Students seek employment or another stackable certificate
- **Health Studies A.S.** High rate of transfer to 4-year colleges

**Average Salary**
- **Nursing A.S.** $38,500 / $51,100 with BA degree
- **Radiologic Technology A.A.S.** $37,819
- **Health Studies A.S.** $42,774 / $51,553 with BS degree

**Hiring Demand**
- **Nursing A.S.** 129 job posts
- **Radiologic Technology A.A.S.** 137 job posts
- **Health Studies A.S.** 459 job posts

**Find more options**
Freshman Learning Communities with block schedules of 5 to 6 courses: 95% of non-Honors freshmen (Opt-out model)

1st Year GPA

- No FLC: 2.73
- FLC: 2.96

Retention

- No FLC: 81%
- FLC: 85%
Choice Architecture: Meta Majors

Business
Education
Exploratory
STEM
Humanities & Arts
Health Professions
Policy/Social Science
Challenge: Gateway Courses
Pre-Calculus, College Algebra, Intro to Statistics

• DFW Prior to Change: 43%
DFW Today: 28% (35% drop)

• Number of Students enrolled in courses taught through the MILE, 2016-17: 8,500

+1,275 Students Passing
## Adaptive Learning at Scale

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Students</th>
<th>Sections</th>
<th>DFW</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 1101</td>
<td>American Government</td>
<td>4694</td>
<td>55</td>
<td>16.3%</td>
</tr>
<tr>
<td>MATH 1070</td>
<td>Elementary Statistics</td>
<td>2701</td>
<td>76</td>
<td>25.2%</td>
</tr>
<tr>
<td>ECON 2105</td>
<td>Principle of Macroeconomics</td>
<td>2340</td>
<td>38</td>
<td>19.2%</td>
</tr>
<tr>
<td>PSYC 1101</td>
<td>Introduction to General Psychology</td>
<td>2252</td>
<td>26</td>
<td>21.8%</td>
</tr>
<tr>
<td>POLS 2401</td>
<td>Global Issues</td>
<td>2250</td>
<td>35</td>
<td>18.9%</td>
</tr>
<tr>
<td>FILM 2700</td>
<td>History of the Motion Picture</td>
<td>2226</td>
<td>59</td>
<td>15.2%</td>
</tr>
<tr>
<td>ECON 2106</td>
<td>Principles of Microeconomics</td>
<td>2122</td>
<td>31</td>
<td>24.7%</td>
</tr>
<tr>
<td>MATH 1101</td>
<td>Introduction to Mathematical Modeling</td>
<td>2019</td>
<td>56</td>
<td>26.5%</td>
</tr>
<tr>
<td>MATH 1111</td>
<td>College Algebra</td>
<td>1540</td>
<td>45</td>
<td>20.2%</td>
</tr>
<tr>
<td>SOCI 1101</td>
<td>Introductory Sociology</td>
<td>1432</td>
<td>29</td>
<td>20.2%</td>
</tr>
<tr>
<td>MATH 1113</td>
<td>Pre-calculus</td>
<td>1289</td>
<td>34</td>
<td>27.5%</td>
</tr>
<tr>
<td>CHEM 1211</td>
<td>Principles of Chemistry I</td>
<td>1096</td>
<td>37</td>
<td>17.2%</td>
</tr>
<tr>
<td>BIOL 1103</td>
<td>Introductory Biology I</td>
<td>1051</td>
<td>48</td>
<td>24.8%</td>
</tr>
</tbody>
</table>
Eliminating Bottlenecks: Peer Tutors

Supplemental Instruction (SI)

Course GPA
No SI: 2.41
SI: 2.91

One-Year Retention
No SI: 83.5%
SI: 91.2%

Students: 9,700
Challenge: Staying On Track
Advisement: GPS Advising

Predictive Analytics Project with EAB

10 YEARS OF DATA | 2.5 MILLION GRADES | 800+ ANALYTICS-BASED ALERTS

144,000 STUDENT RECORDS

30,000 STUDENTS TRACKED DAILY
## Academic Program Maps: B.S. in Chemistry

### Semester 1
- Complete 1 of ENGL 1101, ENGL 1102 or ENGL 1103 (C or Better)
- Complete MATH 1113 or Higher (B- or Better)
- Complete CHEM 1211K (B- or Better)
- Complete ENGL 1102 or 1103 (C or Better)
- Complete MATH 2211 or Higher (B- or Better)
- Complete CHEM 1212K (B- or Better)
- Maintain a cumulative GPA of 2.25 or Better

### Semester 2
- Complete ENGL 1102 or 1103 (C or Better)
- Complete MATH 2211 or Higher (B- or Better)
- Complete CHEM 1212K (B- or Better)
- Maintain a cumulative GPA of 2.25 or Better

### Semester 3
- Complete CHEM 2400 (B- or Better)
- Complete MATH 2212 (C or Better)
- Complete PHY 2211K (C or Better)

### Semester 4
- Complete CHEM 3410 (C or Better)
- PHY 2212K (B- or Better) (C or Better)
- Maintain a cumulative GPA of 2.25 or Better

### Semester 5
- Complete CHEM 4000 with a C or Better
- Complete CHEM 4110 with a C or Better

### Semester 6
- Complete CHEM 4010 with a C or Better
- Complete CHEM 4120 with a C or Better

### Semester 7
- Complete CHEM 4160 with a B- or better

### Semester 8
- Complete CHEM 4190 with a C or Better
Alerts Based on Historical RPG Data

Graduation Rate in Major by Introductory Course Grade

**Introduction to Chemistry**
Natural Science majors

- A: 70.0%
- B: 66.7%
- C: 39.5%
- D/F: 8.3%

**Comparative Politics**
Political Science majors

- A: 81.8%
- B: 73.9%
- C: 25.0%
- D/F: 6.2%

**Music Theory I**
Music majors

- A: 66.7%
- B: 55.5%
- C: 12.5%
- D/F: 0.0%
55,104
Results: Increased Retention

Increased Average First Term Retention
Fall to Spring Retention

- **Fall 2010**: 83.4%
- **Fall 2011**: 84.6%
- **Fall 2012**: 87.9%
- **Fall 2013**: 89.0%
Results: Decline in Time to Degree

Credit Hours at Completion: All Bachelors Students


Credit Hours:

- 2009-10: 140
- 2010-11: 140
- 2011-12: 141
- 2012-13: 141
- 2013-14: 138
- 2014-15: 135
- 2015-16: 133

Results: Decline in Time to Degree
ROI for Students

$18 million

Savings to the Class of 2018 in tuition and fees when compared to the Class of 2012
Confounding Expectations

STEM Degrees Conferred Since 2011 (enrollment change)

Black: +114% (14%)
Black Male: +153% (15%)
Hispanic: +275% (24%)
Impacts
Growing Recognition
The Calculus of Student Success: ROI

1-point increase in retention = 325 students

Average student tuition & fees annually/student = $9,800

ROI for each 1-point increase = $3.18 million/year

The Cost of Inaction
Georgia State Undergraduate Degrees Awarded

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>4,222</td>
</tr>
<tr>
<td>2016-17</td>
<td>7,047</td>
</tr>
</tbody>
</table>

INCREASE:
+2,825 (+67%)
## Bachelor’s Degrees Awarded Annually

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2016 - 17</th>
<th>6-Year Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>African American</strong></td>
<td>1,001</td>
<td>2,040</td>
<td>+1,039</td>
<td>+103%</td>
</tr>
<tr>
<td><strong>Pell</strong></td>
<td>1,298</td>
<td>2,957</td>
<td>+1,659</td>
<td>+128%</td>
</tr>
<tr>
<td><strong>Hispanic</strong></td>
<td>196</td>
<td>509</td>
<td>+313</td>
<td>+160%</td>
</tr>
</tbody>
</table>
Graduation Rates by Race & Ethnicity

- **White**
  - 2003: 31.6%
  - Today: 50.4%
  - Today, with Clearinghouse Data Added: 76.4%

- **African American**
  - 2003: 25.6%
  - Today: 58.4%
  - Today, with Clearinghouse Data Added: 77.5%

- **Hispanic**
  - 2003: 22.0%
  - Today: 57.6%
  - Today, with Clearinghouse Data Added: 76.7%
#1 in Degrees Conferred to African Americans

## Top 100 Degree Producers: Non-Profit Universities

2016 African-American Bachelor's - All Disciplines Combined

<table>
<thead>
<tr>
<th>Institutions</th>
<th>State</th>
<th>Total</th>
<th>%Grads</th>
<th>%Chg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Georgia State University</td>
<td>GA</td>
<td>1805</td>
<td>38%</td>
<td>8%</td>
</tr>
<tr>
<td>2 FAMU</td>
<td>FL</td>
<td>1584</td>
<td>95%</td>
<td>6%</td>
</tr>
<tr>
<td>3 University of Maryland-University College</td>
<td>MD</td>
<td>1409</td>
<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>4 University of Central Florida</td>
<td>FL</td>
<td>1316</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>5 North Carolina A &amp; T State University</td>
<td>NC</td>
<td>1196</td>
<td>80%</td>
<td>7%</td>
</tr>
<tr>
<td>6 Howard University</td>
<td>D.C.</td>
<td>1160</td>
<td>90%</td>
<td>-6%</td>
</tr>
<tr>
<td>7 Florida Atlantic University</td>
<td>FL</td>
<td>1087</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td>8 Florida International University</td>
<td>FL</td>
<td>1020</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>9 University of Memphis</td>
<td>TN</td>
<td>1011</td>
<td>33%</td>
<td>3%</td>
</tr>
<tr>
<td>10 The University of Texas at Arlington</td>
<td>TX</td>
<td>992</td>
<td>13%</td>
<td>-7%</td>
</tr>
</tbody>
</table>

Source: Diverse Issues in Higher Education