

# IMPROVING ACADEMIC ADVISEMENT THROUGH PREDICTIVE ANALYTICS AND PROACTIVE INTERVENTIONS



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# STUDENT SUCCESS

- ❖ Retention
- ❖ Progression
- ❖ Graduation



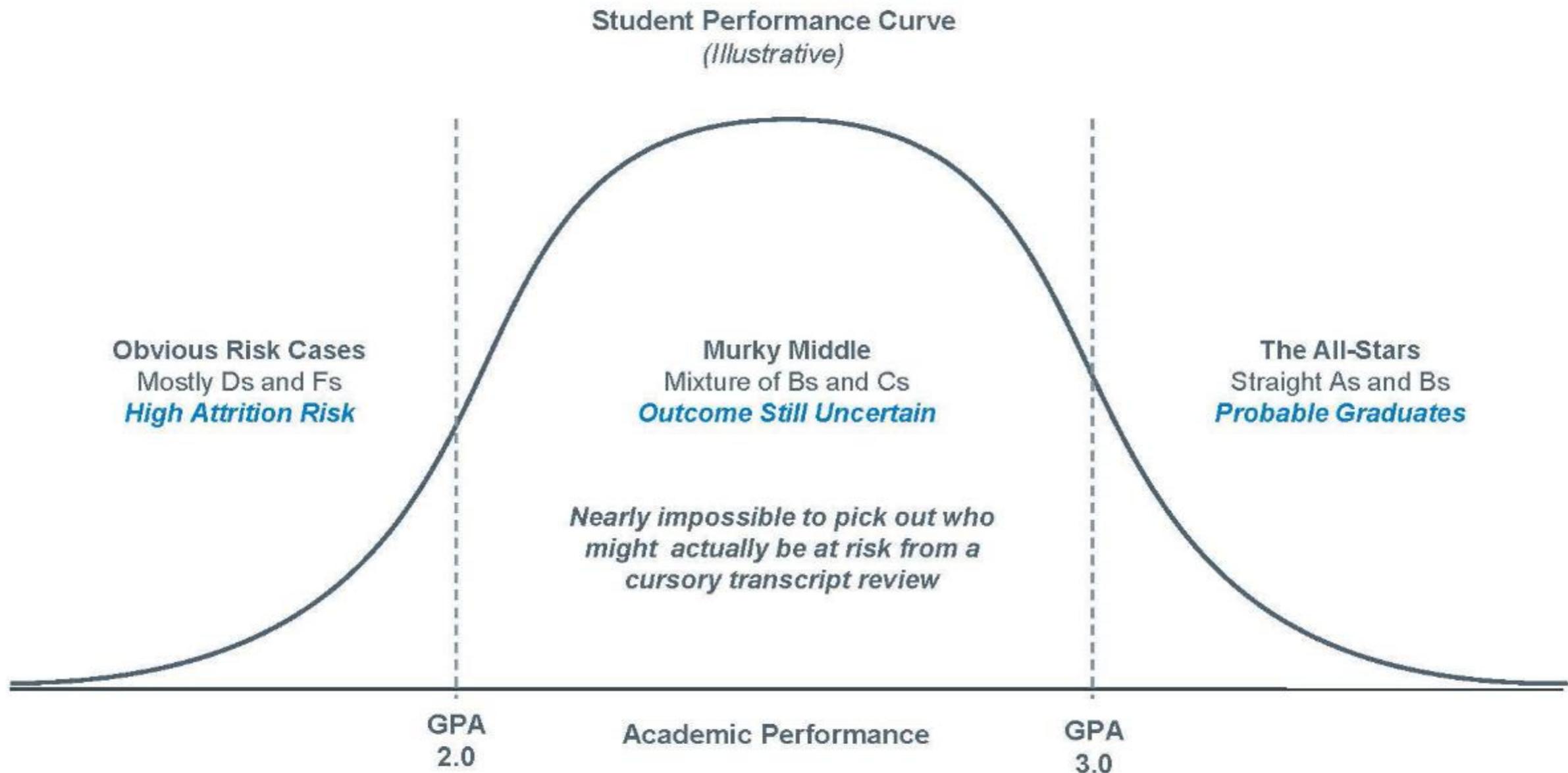
# STRATEGIC GOAL

## Goal One

**Become a national model for undergraduate education by demonstrating that students from all backgrounds can achieve academic and career success at high rates**



# THE ADVISEMENT CHALLENGE: THE MURKY MIDDLE



# ACADEMIC ADVISEMENT

2011:

Ratio +2x standard

750:1

1200:1

Complicated structure

Some faculty advisors

Some departments hired advisors

No common record keeping

Little systematic tracking

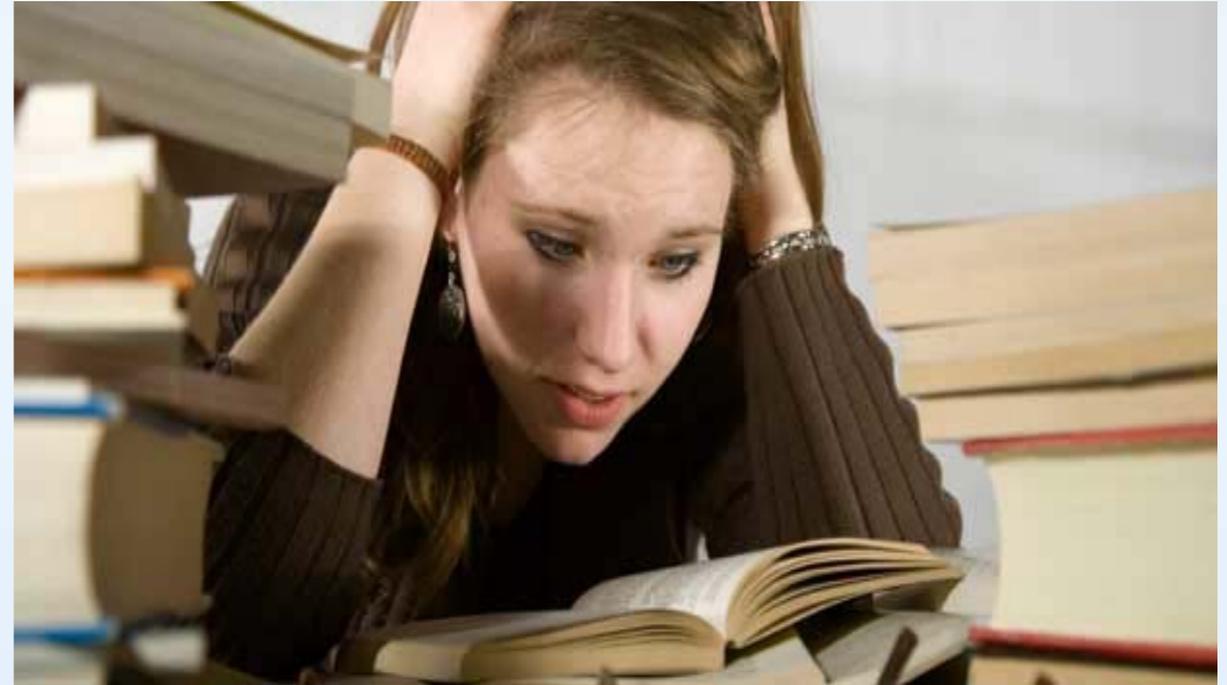
Little coordination

No one responsible for progression and graduation



# PROBLEMS FOR ALL

- = Problems for Students
  - Excess Hours
  - Excess Time
  - Excess Cost
- = Problems for the University



# WHAT IS STUDENT-CENTERED ADVISING?

- Individualized Education Planning
- Pro-active Risk targeting
- Personalized interventions



Goal: Organize advisement in a manner that gives students the information that they need to make decisions that lead to increased retention, progression and graduation

# ACADEMIC ADVISEMENT

## Engaged Campus Community

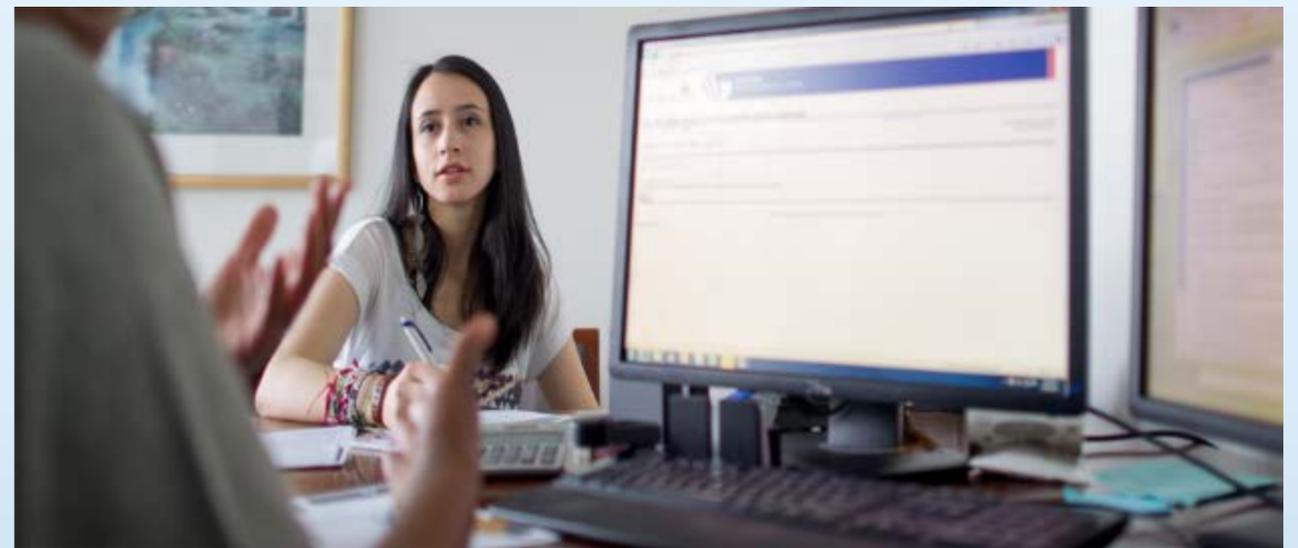
- Senior Leadership
- Data Governance-Registrar
- Human Resources
  - Clarification of Advisor Roles
  - Skills and competencies
  - Common salary structure
- Space
- Faculty engagement
- Partnerships and Coordinated Care
- Analytic insight from EAB
- Integration of EAB with academic advisement
- Consolidation with Ga Largest 2-Year College



# ACADEMIC ADVISEMENT

## Drilling Down

- Changed ***culture*** to focus on progression and graduation
- Changed ***structure*** to support timely interventions
  - University Advisement Center
  - College Offices of Academic Assistance
  - Advisement Board
  - Transition Advisors
  - Graduation Counselors
- Added new ***systems***
  - Better Tracking
  - Use of Data



# ACADEMIC ADVISEMENT TODAY

Today:

300:1

Professional advisors

Every student assigned

Extensive tracking

Comprehensive metrics

Common training

Collaboration between  
units



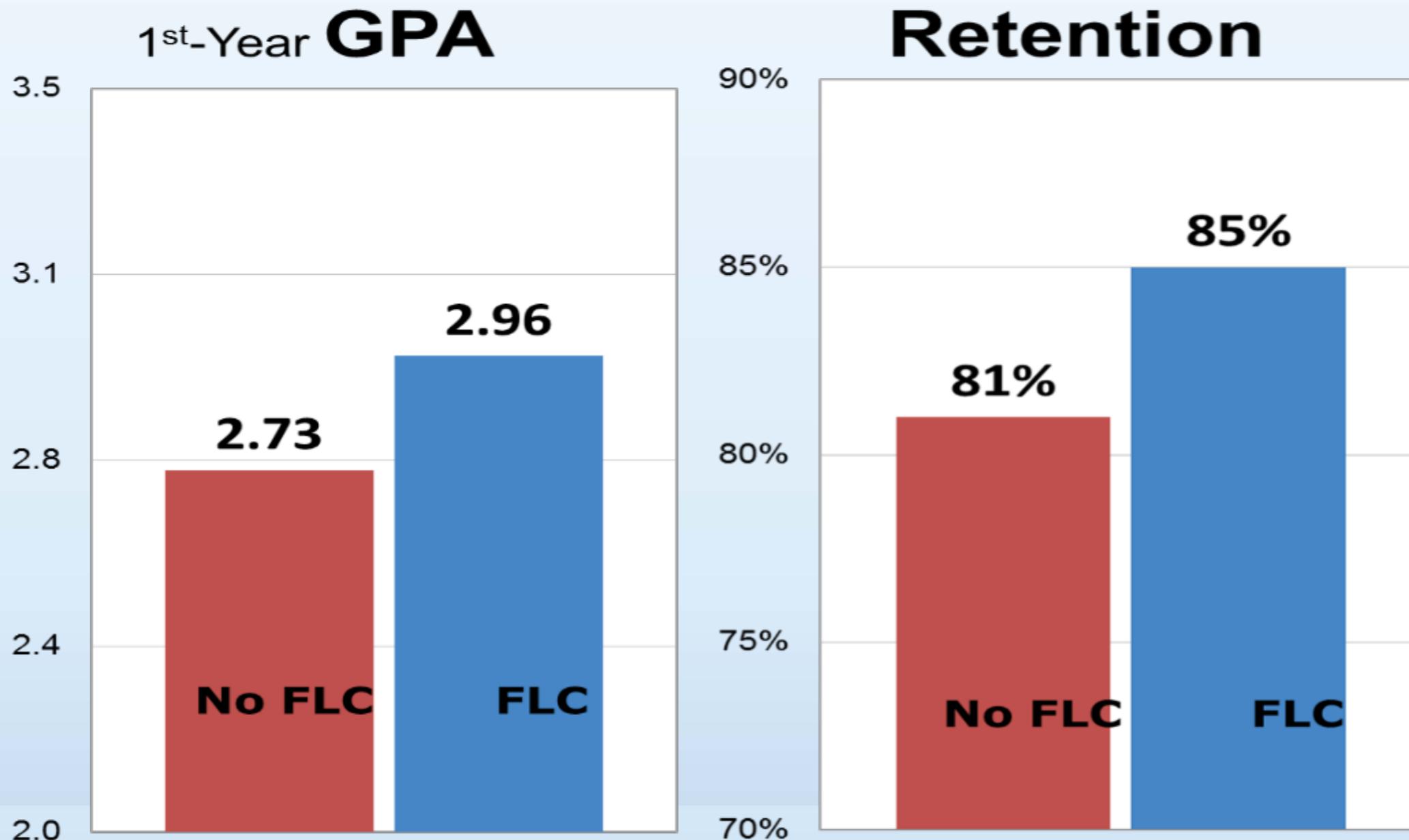
# ADDITIONAL CHANGES TO GSU

- Freshmen Registration Model
- Strengthened & Revamped Math Instruction
- Created Alternative Majors to Premium Programs
- Reduction of Major Changes



# FRESHMAN LEARNING COMMUNITIES & META MAJORS

Freshman Learning Communities with Block Schedules of 5 to 6 courses: **95% of non-Honors Freshmen** (Opt-out model)



# A Data-Driven Approach

# DATA AND ANALYTICS

- **Collect Data**
- **Pilot**
- **Revise**
- **Scale**



# ADVISOR – STUDENT MANAGEMENT

## MASTER POPULATION ADVISING DASHBOARD

UAC

2018 -2019

**TOTAL POPULATION (by name) 18112**

Action Status	Current Term Count	Current Term Percent
ADV: In Person	1554	9%
ADV: Another Advisor	1148	6%
ADV: Phone	1	0%
ADV: Email	16	0%
ADV: Group- MA Session	272	2%
ADV: Outreach- Housing	1	0%
ADV: Outreach- MOSS	1	0%
ADV: Other Programming	0	0%
RVW: Contacted- Phone	23	0%
RVW: Contacted- Email	3616	20%
RVW: Contacted- Schedule Checked	304	2%
	11176	62%

CHECK: All population represented? **TRUE 100%**

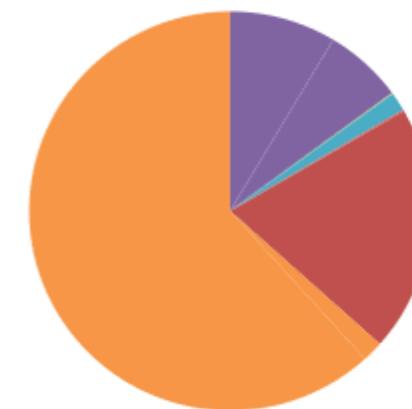
Action Status	Current Term Count	Current Term Percent
Action Status - Advised	6632	37%
Actions Status - Reviewed	304	2%
Blank	11176	62%

CHECK: All population represented? **TRUE 100%**

Fall 2019 Registration Status	Current Term Count	Current Term Percent
Registered	0	0.0%
Registered- Incorrect Schedule	0	0.0%
Plans to Register- No Barriers	0	0.0%
Plans to Register- Program Admission Reqs	0	0.0%
Student Dropped for Nonpayment	0	0.0%
AIP Hold	0	0.0%
Balance Hold	0	0.0%
Other Holds (DoS, Parking, Housing, LSP/ESL, Library, IM, etc...)	0	0.0%
Called- Left Voicemail	0	0.0%
Email Sent	0	0.0%
Transient	0	0.0%
Study Abroad	0	0.0%
Not Planning to Register- One Term	0	0.0%
Not Planning to Register- Multiple Terms	0	0.0%
Transitioning to PC Campus	0	0.0%
Transitioning to ATL Campus	0	0.0%
Transferring (Permanent)	0	0.0%
Will Not Return (Permanent)	0	0.0%

**Action Status - Current Term**

- ADV: In Person
- ADV: Another Advisor
- ADV: Phone
- ADV: Email
- ADV: Group- MA Session
- ADV: Outreach- Housing
- ADV: Outreach- MOSS
- ADV: Other Programming
- RVW: Contacted- Phone
- RVW: Contacted- Email
- RVW: Contacted- Schedule Checked



**Fall Registration Status**

- Registered
- Registered- Incorrect Schedule
- Plans to Register- No Barriers
- Plans to Register- Program Admission Reqs
- Student Dropped for Nonpayment
- AIP Hold
- Balance Hold
- Other Holds (DoS, Parking, Housing, LSP/ESL, Library, IM, etc...)
- Called- Left Voicemail
- Email Sent
- Transient
- Study Abroad
- Not Planning to Register- One Term
- Not Planning to Register- Multiple Terms
- Transitioning to PC Campus
- Transitioning to ATL Campus

# ADVISEMENT: GPS ADVISING

## Predictive Analytics

- **10 years** of data
- **2.5 million** grades
- **144,000** student records
- **800+** analytics-based alerts
- **30,000** students tracked daily



# STUDENT PROFILE OVERVIEW

Thady Ourada

Overview | Success Progress | Reports / Alerts | Class Info | Major Explorer | Calendar | Assignments | Communications

Course Grade GP	Repeated Courses	Withdrawn Courses	Missed Success Metrics	Cumulative GPA
0	1	5	4	3.86

Credits Attempted for Spring 2014: 22 credits, 8 classes

Total Credits Earned: 67.31

Credit Completion % at this Institution: 70%

**English**  
with a concentration in Literature  
College of Arts & Sciences

Medium Risk

STUDENT ID: 738490541

CLASSIFICATION: Junior

MOST RECENT ENROLLMENT: Fall Semester 2014

Advisors: Latoya White, Steven Kilpatrick, Tim Brown, Nick Saboe

Tutors

Categories: Athletes, Honors

Tags: scholarship, Women's Soccer

Manage Tags

Staff Alerts

Event to...

Message Student

Add a Note on this Student

Add a Reminder to this Student

Report On Advising

Schedule an Appointment

Issue an Alert

Edit User Settings

Impersonate User



Student Info

Student View

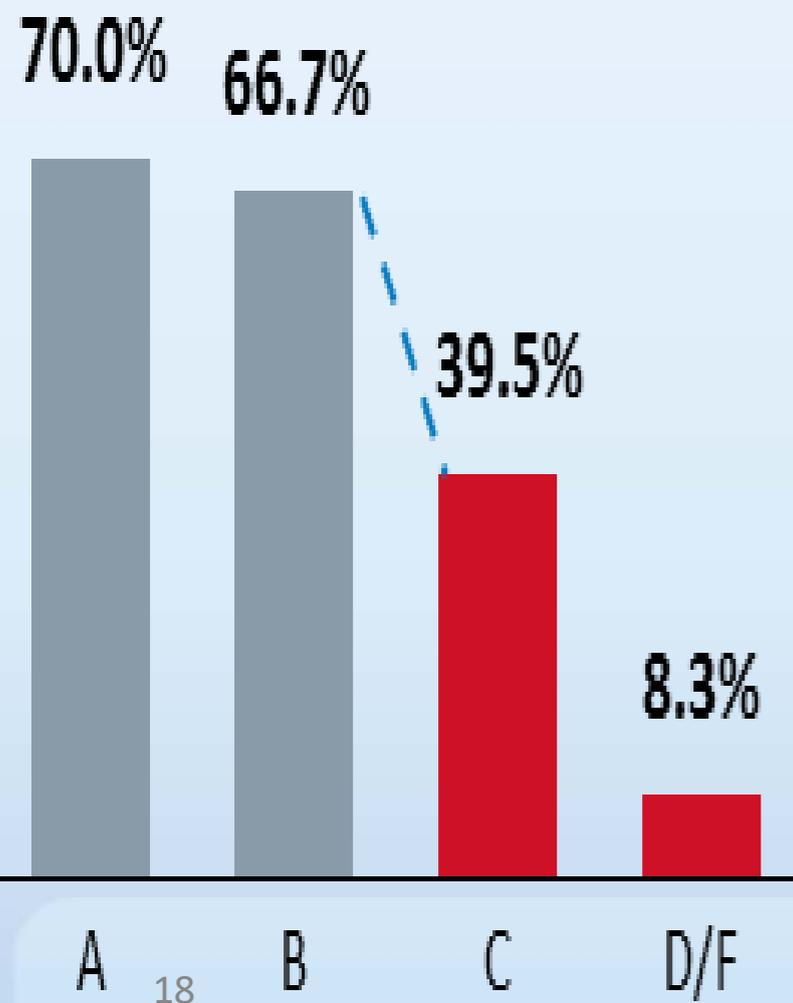
## Quick overview of Student Profile:

- Risk Analysis
- GPA, Credits
- Repeated Courses
- Categories and Tags
  - Student Contact Information

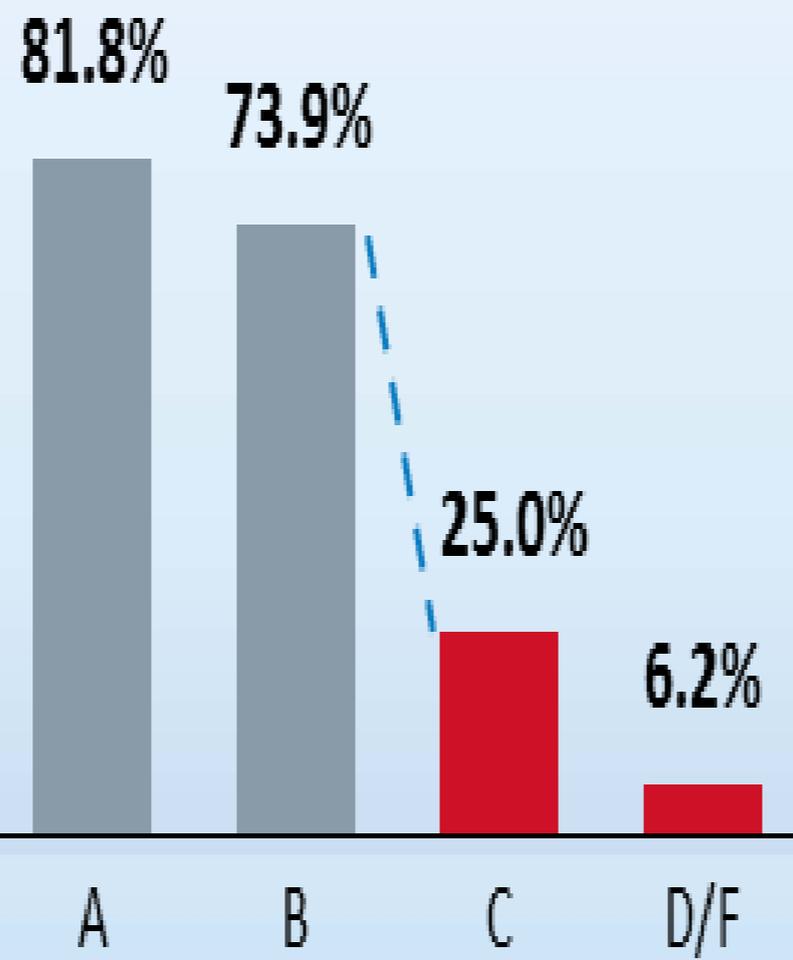
# ALERTS BASED ON HISTORICAL RPG DATA

## Graduation Rate in Major by Introductory Course Grade

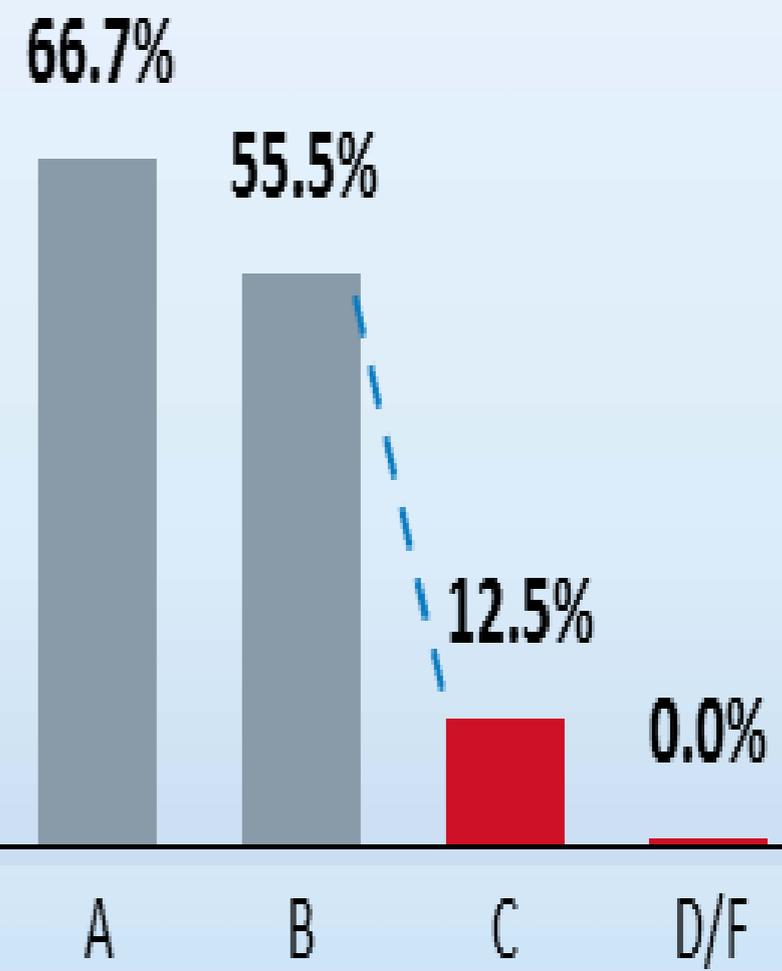
**Introduction to Chemistry**  
*Natural Science majors*



**Comparative Politics**  
*Political Science majors*



**Music Theory I**  
*Music majors*



# ACADEMIC SUCCESS MARKERS

## Chemistry (B.S.)

Semester 1	Semester 2
<ul style="list-style-type: none"> <li>• Complete 1 of ENGL 1101, ENGL 1102 or ENGL 1103 (C or Better)</li> <li>• Complete MATH 1113 or Higher (B- or Better)</li> <li>• Complete CHEM 1211K (B- or Better)</li> </ul>	<ul style="list-style-type: none"> <li>• Complete ENGL 1102 or 1103 (C or Better)</li> <li>• Complete MATH 2211 or Higher (B- or Better)</li> <li>• Complete CHEM 1212K (B- or Better)</li> <li>• <i>Maintain a cumulative GPA of 2.25 or Better</i></li> </ul>
Semester 3	Semester 4
<ul style="list-style-type: none"> <li>• Complete CHEM 2400 (B- or Better)</li> <li>• Complete MATH 2212 (C or better)</li> <li>• Complete PHY 2211k (C or better)</li> </ul>	<ul style="list-style-type: none"> <li>• Complete CHEM 3410 (C or better)</li> <li>• PHY 2212k ( B- or Better) (C or better)</li> <li>• <i>Maintain a cumulative GPA of 2.25 or Better</i></li> </ul>
Semester 5	Semester 6
<ul style="list-style-type: none"> <li>• Complete CHEM 4000 with a C or Better</li> <li>• Complete CHEM 4110 with a C or Better</li> </ul>	<ul style="list-style-type: none"> <li>• Complete CHEM 4010 with a C or Better</li> <li>• Complete CHEM 4120 with a C or Better</li> </ul>
Semester 7	Semester 8
<ul style="list-style-type: none"> <li>• Complete CHEM 4160 with a B- or better</li> </ul>	<ul style="list-style-type: none"> <li>• Complete CHEM 4190 with a C or Better</li> </ul>

# SUCCESS MARKERS

**Campus**  
Student Success Collaborator

Spring Semester 2

## Brigid Abood

Overview | **Success Progress** | Reports / Alerts | Class Info | Major Explorer | More

### Success Markers

The student has missed guidelines for progress. Acting on them can help get the student back on track for successful completion.

Completed  **Missing**  Upcoming

**4 missed markers**

Notification	Outcome
<b>JOUR100 / COURSE</b> Recommended grade: B- Complete between 13 and 20 credits	Did not register
<b>JOUR101 / COURSE</b> Recommended grade: B- Complete between 20 and 40 credits	Did not register
<b>JOUR200 / COURSE</b> Recommended grade: B- Complete between 40 and 80 credits	Did not register

**Staff Alerts**

- Message Student
- Add a Note on this Student
- Add a Reminder to this Student
- Report On Advising
- Report On Tutoring
- Schedule an Appointment
- Add to Watch List
- Send an Alert
- Edit User Settings
- Impersonate User

**Student Info**

# NOTES AND HISTORY

Campus Student Success Collaborative

Campus Acad... Spring Semester ...

### Notes About Student

DATE	CREATED BY	NOTE	NOTE REASONS	COMPLETE?	ATTACHMENTS
02/03/2016	Jenise Scaffold	UACFJS: email: emailed student regarding spring registrat...	RVW: Contacted	--	<a href="#">edit</a>
11/06/2015	Shantia Stroud	Status Change: ADV: In Person. UACFSS; WI; FF15; stdt cam...		--	<a href="#">edit</a>
11/02/2015	Joshua Walker	Status Change: ADV: In Person. UACFJDW: WI: MA: UACFJDW: ...		--	<a href="#">edit</a>
08/25/2015	Neia Omer	Status Change: ADV: In Person. UACFNAO: WI: Std came in t...		--	<a href="#">edit</a>
07/30/2015	Catelyn Holt	Status Change: ADV: Group, UAC CNH 7/30/15 - student atte...		--	<a href="#">edit</a>

Age: 19  
 DOB: 12/20/1996  
 Address: 115 Steverson Ct Woodland, GA 31836  
 Email: [awillis22@student.gsu.edu](mailto:awillis22@student.gsu.edu)  
 Home: 7063802193  
 Login Status: Login not allowed  
[Allow Ashanta to login](#)

Student View

### Progress Reports

DATE	CLASS	PROFESSOR	COMMENT	AT RISK?	ALERT REASONS
10/02/2015	HIST 2110 SURVEY OF U.S. HISTORY	Alyson Tadjer		Yes	<a href="#">Detail</a>
10/01/2015	BIOL 2106 INTRO TO THE BIOL SCIENCES	Matthew Brewer		No	<a href="#">Detail</a>
10/01/2015	PHIL 2010 INTRODUCTION TO PHILOSOPHY	Edward Cox		No	<a href="#">Detail</a>
09/30/2015	ENGL 1101 ENGLISH COMPOSITION I	Donna Wroble		No	<a href="#">Detail</a>
09/22/2015	SOCI 1101 INTRODUCTION TO SOCIOLOGY			No	<a href="#">Detail</a>

### Advisor Reports

DATE	REPORT FILED ON	COURSE	FOLLOW-UP	SUMMARY
02/03/2016 01:03 PM	02/03/2016			UACFJS: WI: cohort #15: st...
01/11/2016 01:05 PM	01/11/2016			UACFNAO: WI: Std came into

Reports and notes tab allows you to see the advisor reports, professor submitted progress reports, early alerts, and any additional notes on the student.



# ADVANCED SEARCH

Search for

Advanced Search [Switch To Simple Search](#)

**Student Information** First Name, Last Name, Student ID, Category, Tag, Major, Gender, Race, Watch L

First Name?	Last Name?	Student ID
<input type="text"/>	<input type="text"/>	<input type="text"/>
Race:	Watch List (In Any of These)?	
<input type="text" value="All"/>	<input type="text" value="All"/>	
Category (In Any of these)?		
<input type="text" value="All"/> <input text"="" type="button" value="All"/> <input 322="" 691="" 759"="" 953="" data-label="List-Group" type="button" value="+&lt;/input&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/table&gt;&lt;p&gt;&lt;b&gt;Area of Study&lt;/b&gt; College/School, Degree, Concentration, Major&lt;/p&gt;&lt;p&gt;&lt;b&gt;Performance Data&lt;/b&gt; GPA, Hours, Credits&lt;/p&gt;&lt;p&gt;&lt;b&gt;Current Term Data&lt;/b&gt; Classification, Course, Section, Section Tag, Term GPA&lt;/p&gt;&lt;p&gt;&lt;b&gt;Assigned To&lt;/b&gt; Advisor, Tutor, Coach&lt;/p&gt;&lt;/div&gt;&lt;div data-bbox="/> <ul style="list-style-type: none"><li>• Strategic outreach:</li><li>• Target student populations based on risk level.</li><li>• Key intervention times</li><li>• Registration reviews</li><li>• Missed markers</li></ul>		

# MAJOR EXPLORER

The screenshot shows the 'Major Explorer' interface for student Asamah Malik. The page is divided into several sections:

- Header:** 'Campus Student Success Collaborative' with navigation menus for 'Campus Acad...' and 'Spring Semester...'. The Georgia State University logo is prominently displayed.
- Student Profile:** 'Asamah Malik' with tabs for 'Overview', 'Success Progress', 'Reports / Notes', 'Class Info', 'Major Explorer', and 'More'.
- Current Major:** 'Physics' at the 'College of Arts & Sciences' with a 'Predicted Risk Level' of 'Medium'. A list of 'Related Careers' includes 'Chemical Technician', 'College / University Administrator', 'College Professor / Instructor', 'Data / Data Mining Analyst', and 'Elementary School Teacher'.
- Search For Majors And Careers:** A search bar with a dropdown arrow.
- Major Options:** A table listing other majors like 'Psychology' (Low risk) and 'Marketing' (Low risk) with their respective colleges and related careers.
- Staff Alerts:** A sidebar menu with options like 'Message Student', 'Add a Note on this Student', 'Report On Advising', and 'Schedule an Appointment'.
- Student Info:** A sidebar showing personal details: Age: 19, DOB: 03/25/1996, Address: 420 Highland Pkwy, Fairburn, GA 30213-4257, Email: amalik15@student.gsu.edu, and Login Status: 'Login not allowed' with a link to 'Allow Asamah to login'.



Major Explorer Allows you to see the student's current major along with related careers to that Major.

It also allows you search for other majors or careers and will show you information on that specific career.

# CAREER

The screenshot shows the Georgia State University Career Center interface for a student named Saira Sandhu. The page is titled "Saira Sandhu" and includes navigation tabs for Overview, Success Progress, Reports / Notes, Class Info, Major Explorer, and More. A sidebar on the left contains various icons for navigation. The main content area is titled "Selected Career" and features the "Account Executive" role. Below this, there are sections for "National Hiring Statistics" (provided by Burning Glass), "Salary" (\$91K - \$94K), "Hiring Demand" (High), "Education And Experience Requirements", "Education" (with a bar chart showing 6% for Associate's, 75% for Bachelor's, 2% for Graduate/Prof. Degree, and 18% for High School Degree), "Experience" (with a bar chart showing 12% for <2 years, 53% for 2-5 years, 26% for 5-8 years, and 8% for >8 years), and "Foundation Skills Most Requested By Employers" (listing 15 skills). On the right side, there are "Staff Alerts" and "Student Info" panels. A red arrow points from the "Account Executive" title to the "Student Info" panel.

**Account Executive**  
Manages communications with business clients that buy services from a company, such as advertising or banking services, or manages sales accounts. Works with a set of clients over time, and recruits new clients. Promotes products developed specifically for a client, such as an advertising campaign, or matches clients with available services or products.

**Related Titles:** Sales Representative, Sales Manager, Account Manager / Representative, Marketing Specialist, Sales Supervisor, Business Development Executive, Technical Sales Representative, Program Manager, Buyer / Purchasing Agent, Financial Services Sales Agent, Customer Service Manager

**National Hiring Statistics** Provided by Burning Glass  
Statistics for this career, and its related titles, are derived from nationwide, online job postings from the last 12 months.

**Salary**  
\$91K - \$94K

**Hiring Demand**  
High

**Education And Experience Requirements**  
Minimum education and experience levels typically required by employers.

**Education**

Associate's Degree	6%
Bachelor's Degree	75%
Graduate/Prof. Degree	2%
High School Degree	18%

**Experience**

<2 years	12%
2-5 years	53%
5-8 years	26%
>8 years	8%

**Foundation Skills Most Requested By Employers**

1. Communication Skills
2. Organizational Skills
3. Presentation Skills
4. Writing
5. Customer service
6. Planning
7. Management
8. Problem Solving
9. Creativity
10. Research
11. Leadership
12. Detail-Oriented
13. Self-Starter
14. Multi-Tasking
15. Multi-Tasking

**Staff Alerts** 0

I want to...

- [Message Student](#)
- [Add a Note on this Student](#)
- [Add a Reminder to this Student](#)
- [Report On Advising](#)
- [Schedule an Appointment](#)
- [Add to Watch List](#)
- [Edit User Settings](#)
- [Impersonate User](#)

**Student Info**

Age: 23  
DOB: 06/20/1992  
Address:  
3136 Tuscan Ridge Dr  
Snellville, GA 30039

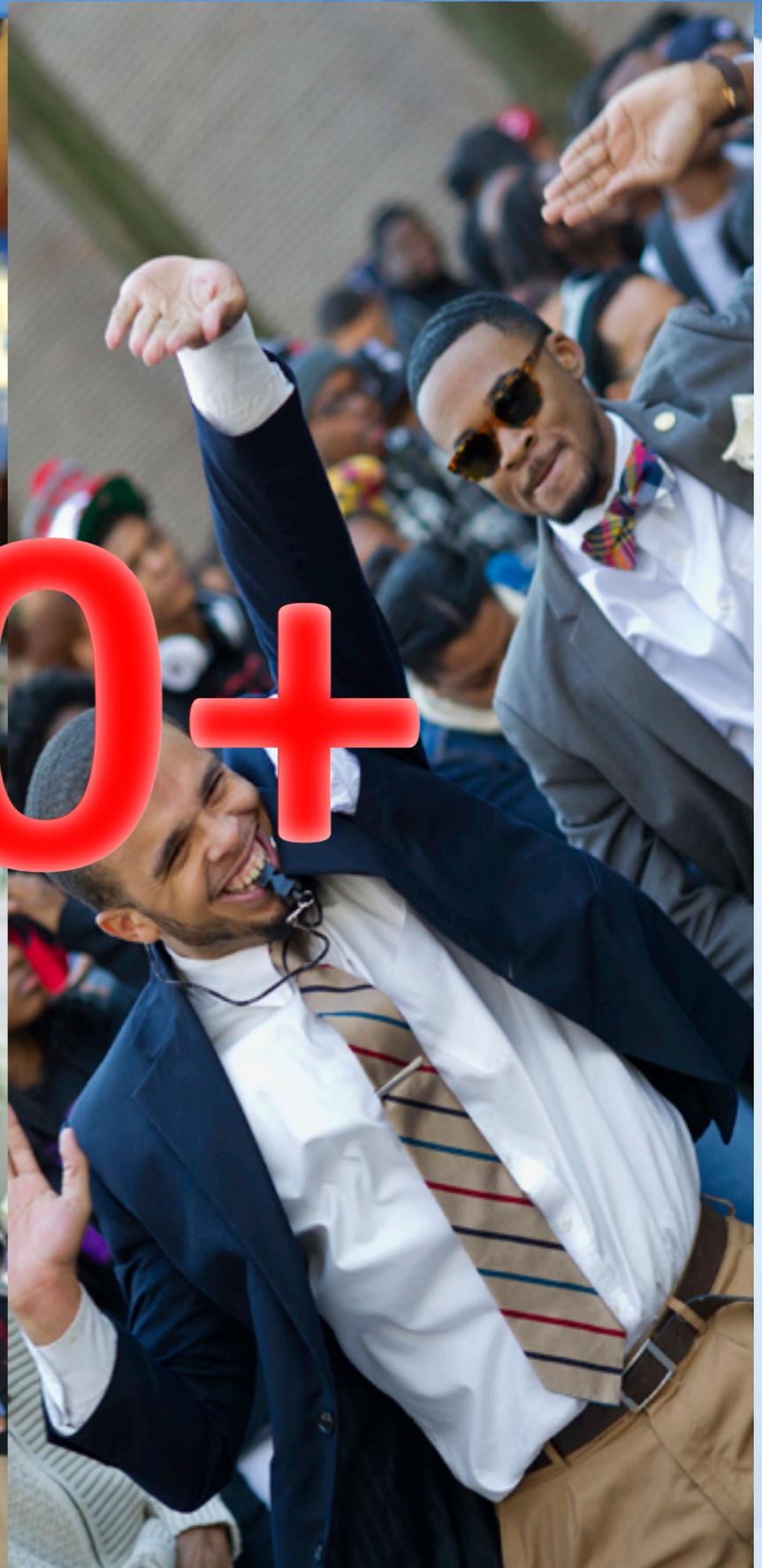
Email: [ssandhu3@student.gsu.edu](mailto:ssandhu3@student.gsu.edu)  
Home: 7709228576  
Cell: 6789073971

Login Status:  
Login not allowed  
[Allow Saira to login](#)

Student View



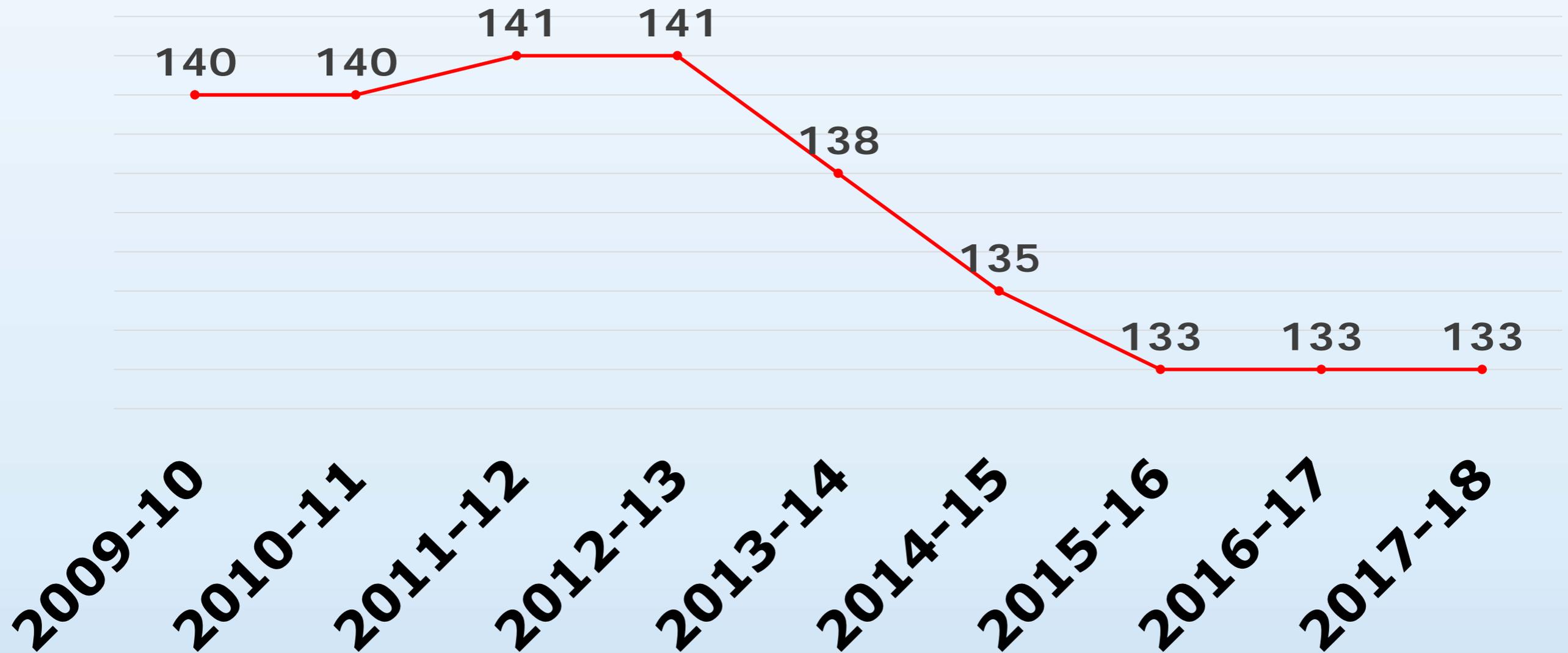
When you click on a specific career it will give you detailed information on the chosen career.



53,000+

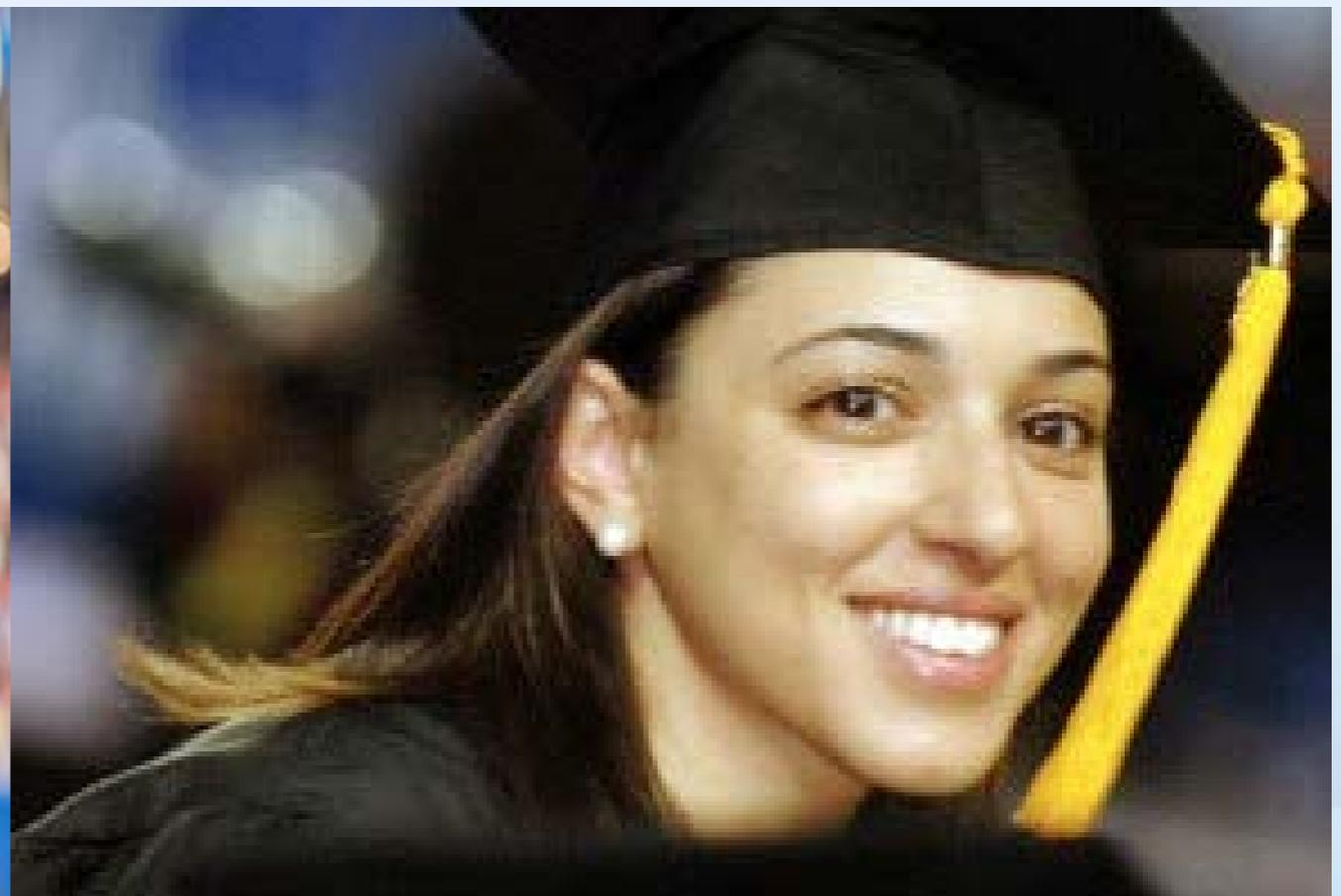
# DECLINE IN WASTED CREDIT HOURS

## Credit Hours at Completion: All Students



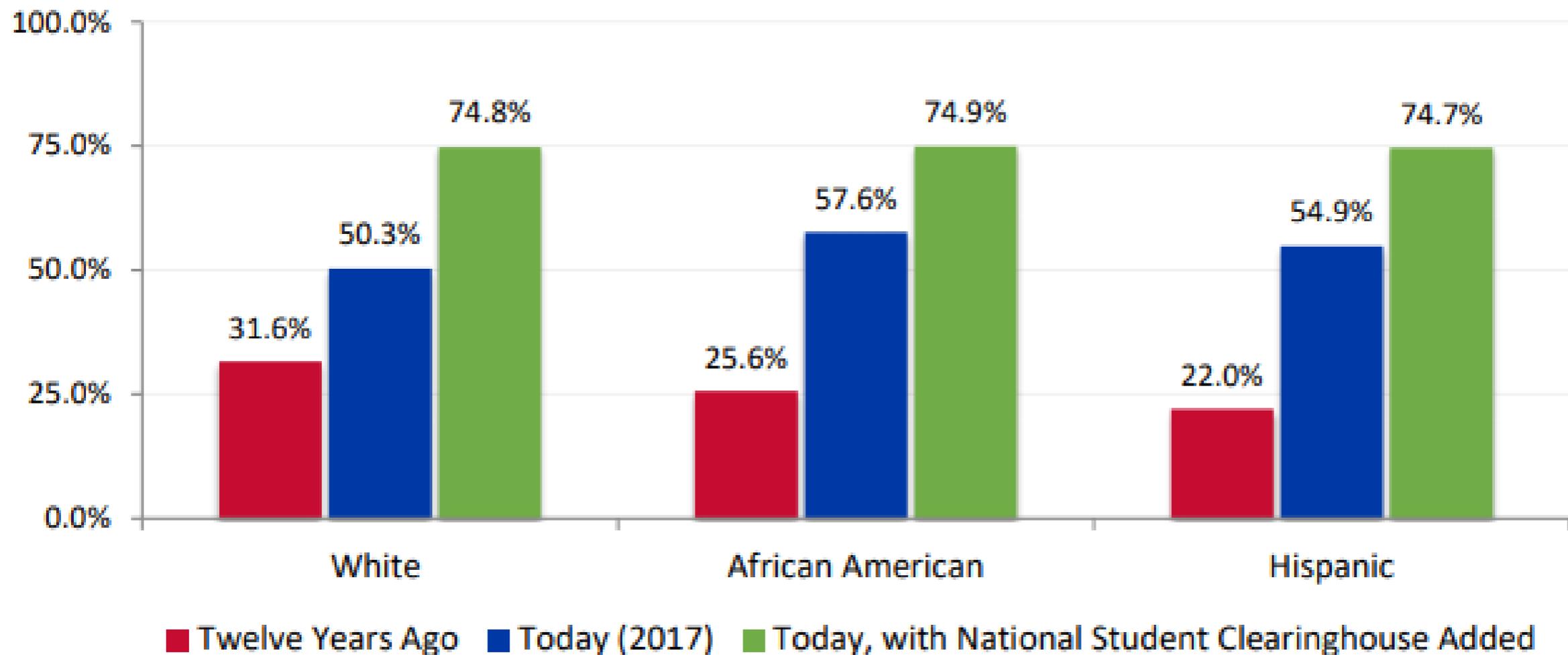
# BACHELOR'S DEGREES AWARDED

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	8-YR Change
<b>AFRICAN AMERICAN</b>	1,001	1,322	1,440	1,550	1,692	1,825	1,977	2,017	2,035	<b>103%</b>
<b>PELL</b>	1,298	1,648	1,835	2,007	2,052	2,501	3,379	3,428	3,473	<b>168%</b>
<b>HISPANIC</b>	196	300	328	372	414	435	443	501	558	<b>185%</b>



# GRADUATION RATES BY RACE & ETHNICITY

**6-Year Graduation Rates Among First-Time Full-Year Freshman:  
Bachelor's Degrees**



# TRANSITION STUDENTS: 2 TO 4 YEAR

## PC Students:

2 yr. to 4 yr. degree completion

Admissions Process

30 credit hours completed

2.00 GPA

Student Benefit:

Associates degree awarded upon  
completion of 60 credit hours

## UAC - PC Students:

### UAC-PC Transition Services:

Transition Advisement  
Services

2yr. & 4 yr. Degree  
requirements

### Coordinated Care:

UAC- ATL Advisor

Financial Aid

Registration

# RESULTS 2 – YEAR CAMPUSES

## 2018

Retention Rate SP 18=70%

3 Yr. Graduation Rate SP 16 = 11.9%

## 2016

Retention Rate SP 16=63.4

3 Yr. Graduation Rate SP 17 = 13%

