

# ACADEMIC MAPS: A CORE ELEMENT OF GUIDED PATHWAYS

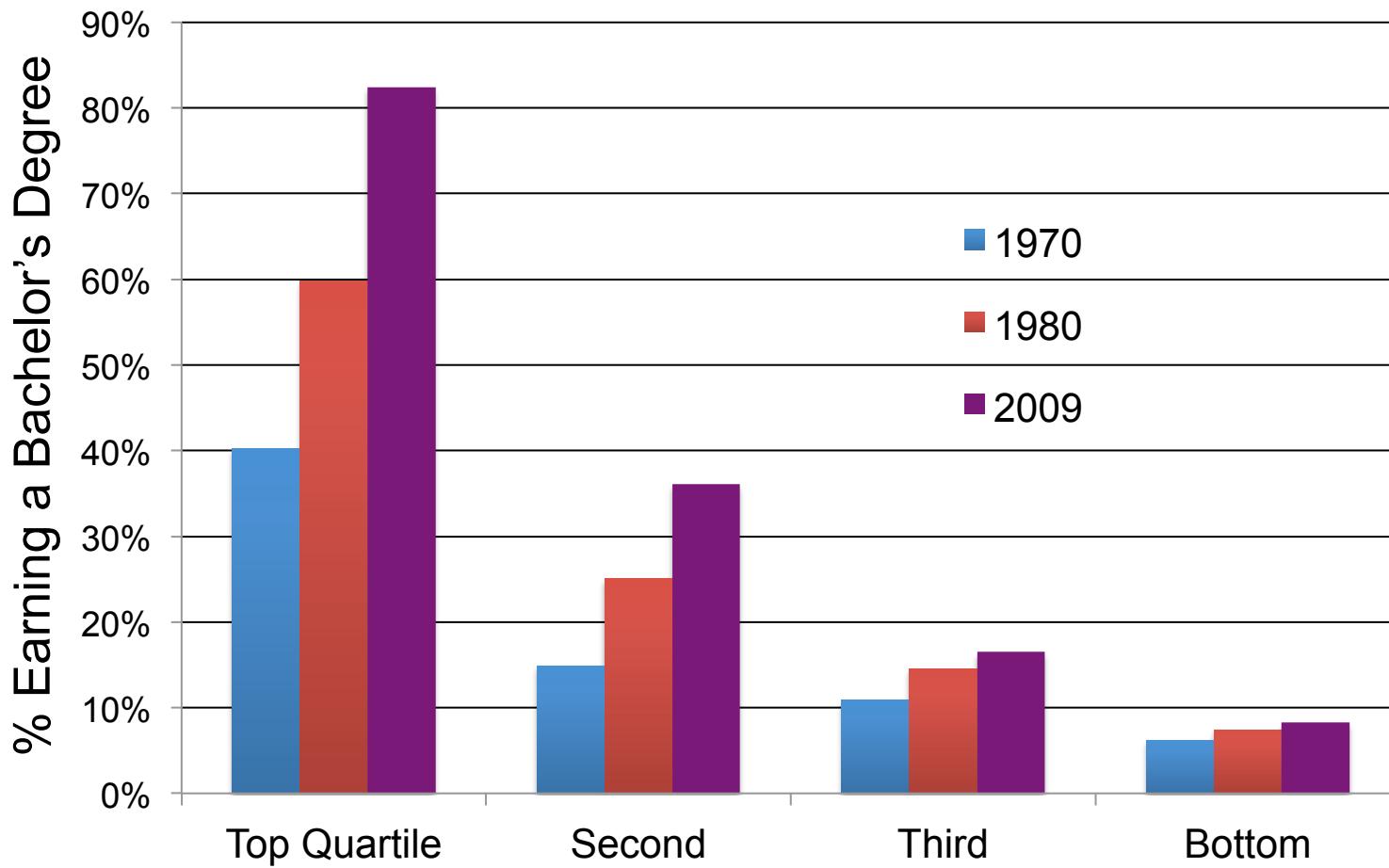
(Lawrence Abele)

# Guided Pathways to Success

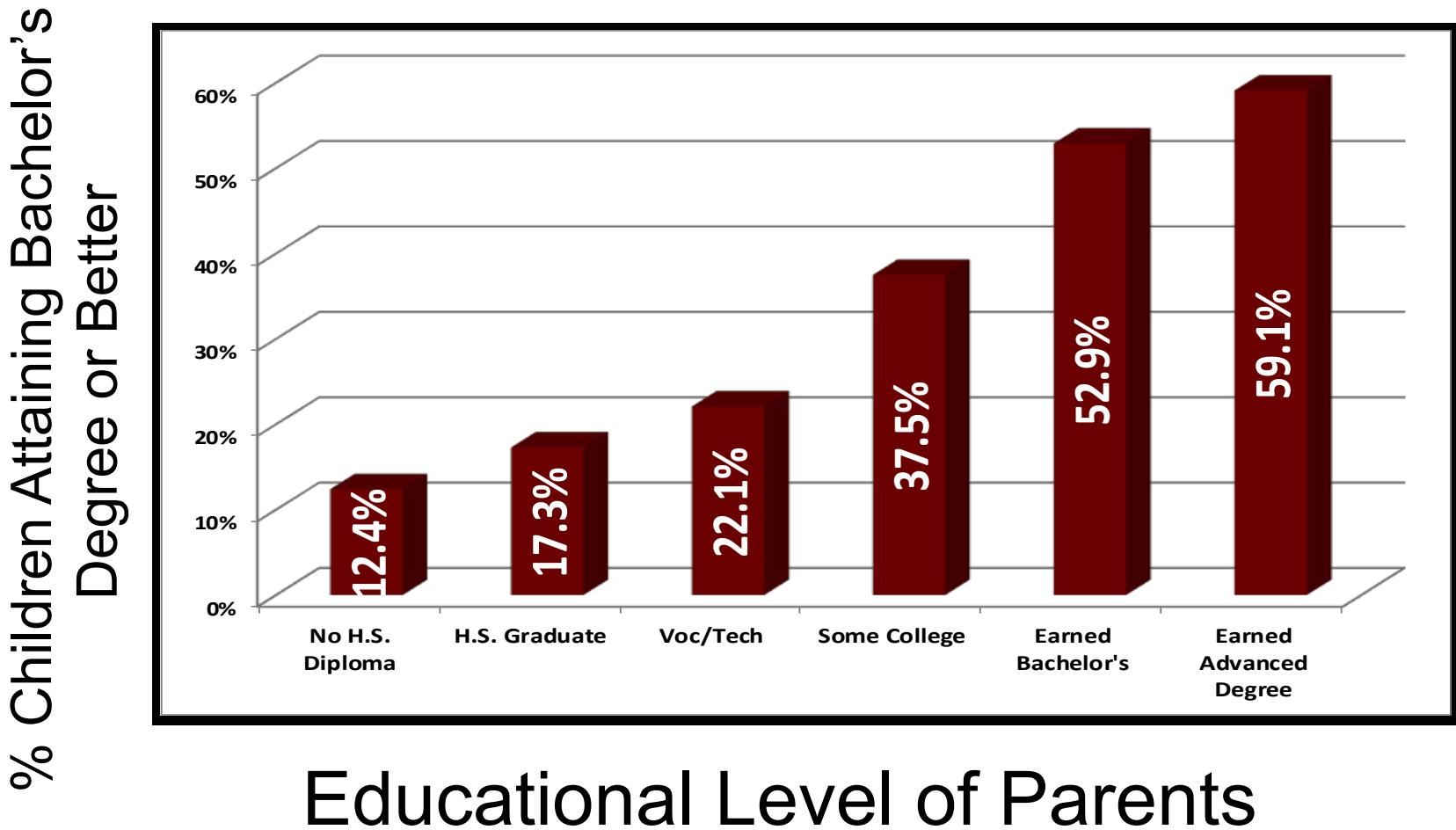
# Our Challenges

- LOW GRADUATION RATE
- TOO MUCH TIME TO A DEGREE
- EXCESS HOURS
- HIGH COSTS
- TOO MUCH DEBT
- EDUCATIONAL INEQUALITY

# The Education Gap by income has increased significantly since 1970



# The advantages of parents' educational levels are transferred to their children



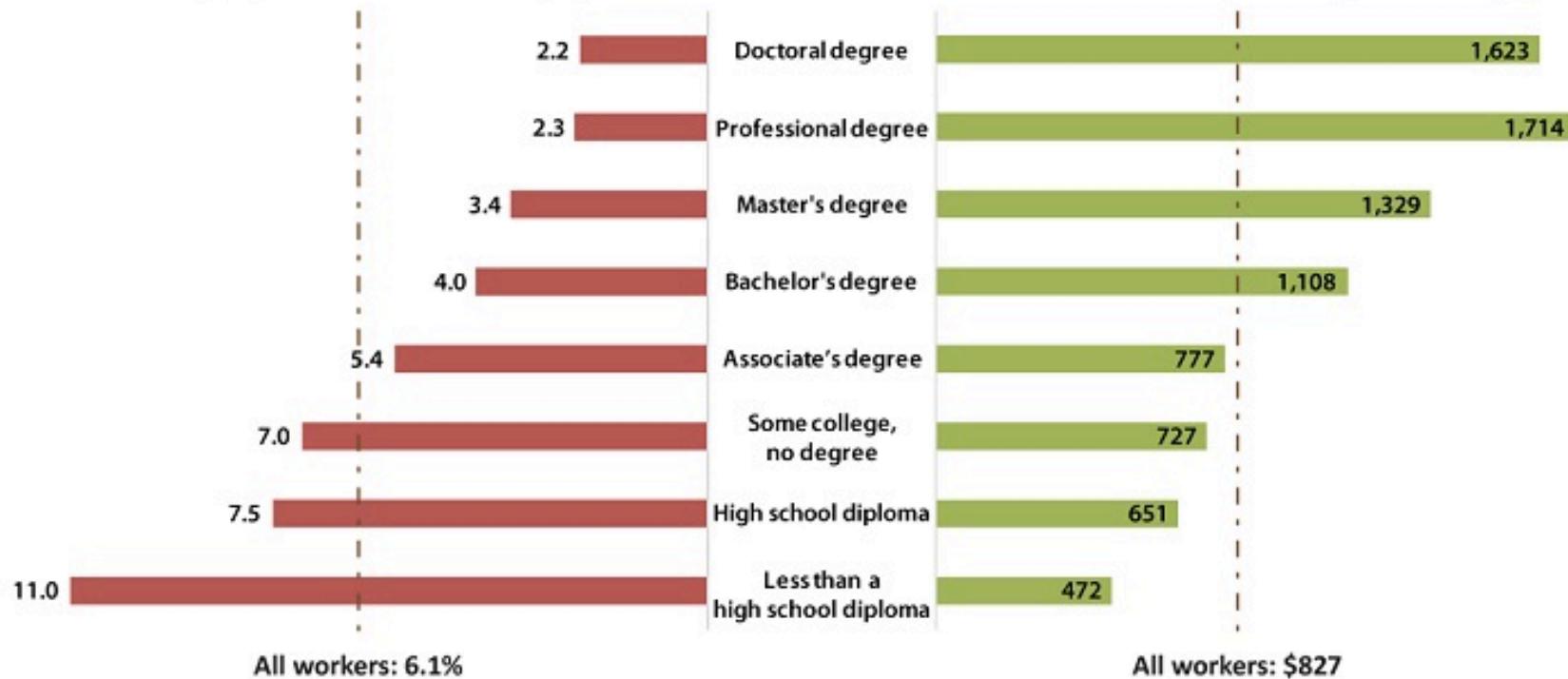
Source: Chronicle of Higher Education, August 27, 1999

# A college degree is a huge economic advantage

## Earnings and unemployment rates by educational attainment

Unemployment rate in 2013 (%)

Median weekly earnings in 2013 (\$)



Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.

Source: Current Population Survey, U.S. Bureau of Labor Statistics, U.S. Department of Labor

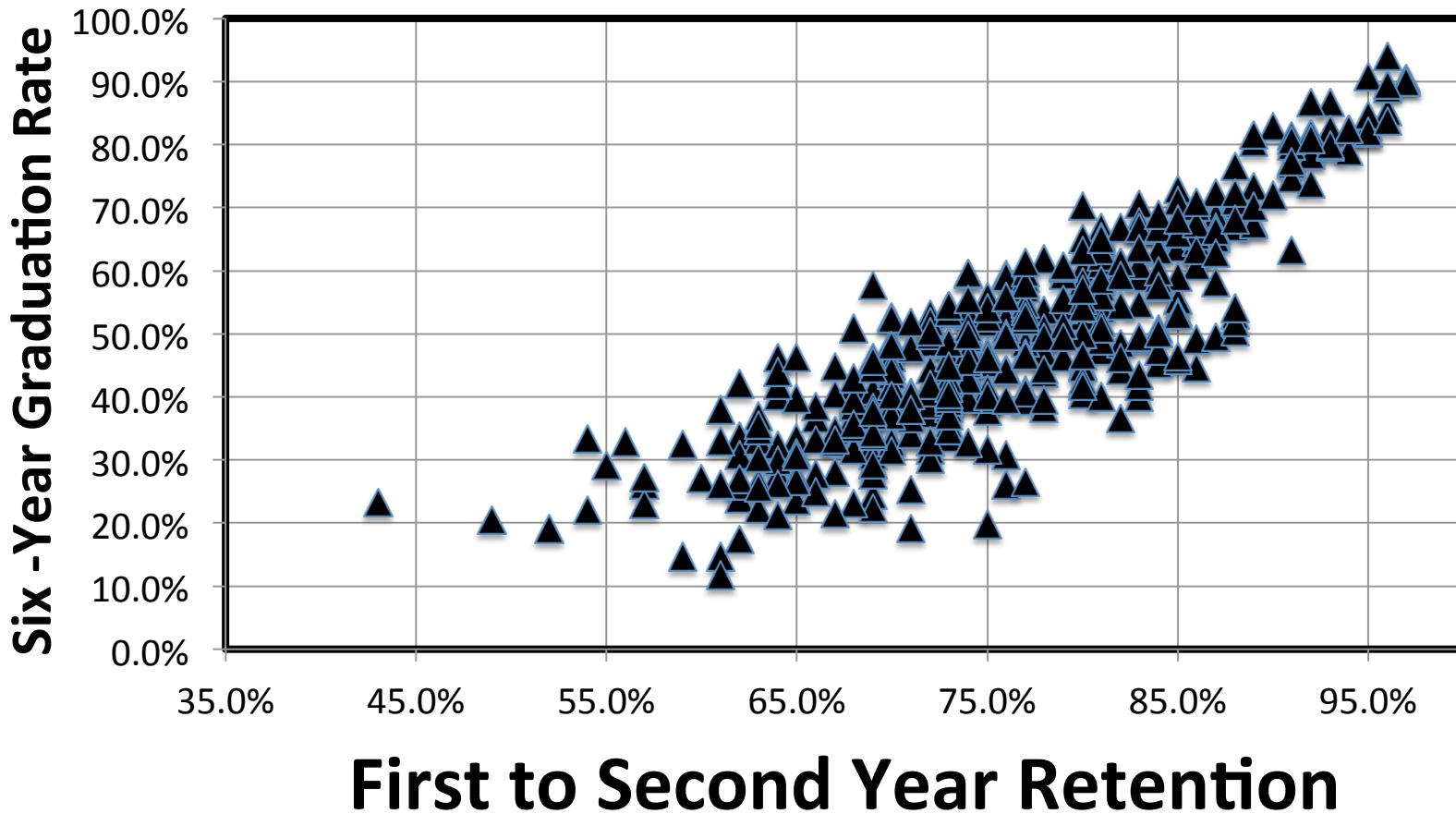
# Student Achievement Measure\*: six year outcomes for students who started at four-year publics\*\*

State	Total rate	Starting institution	Different 4-yr	Different 2-yr	Still Enrolled	Not Enrolled
Nat'l	62.85%	49.80%	9.55%	3.51%	14.44%	22.71%
FL	56.42%	45.27%	9.46%	1.69%	13.90%	29.68%

\*\*Data: National Student Clearinghouse Research Center,  
Signature Report 8, 2008 Entering cohort

\*<http://www.studentachievementmeasure.org/>

# Institutional Policies Have a Large Effect on Graduation Rates\*

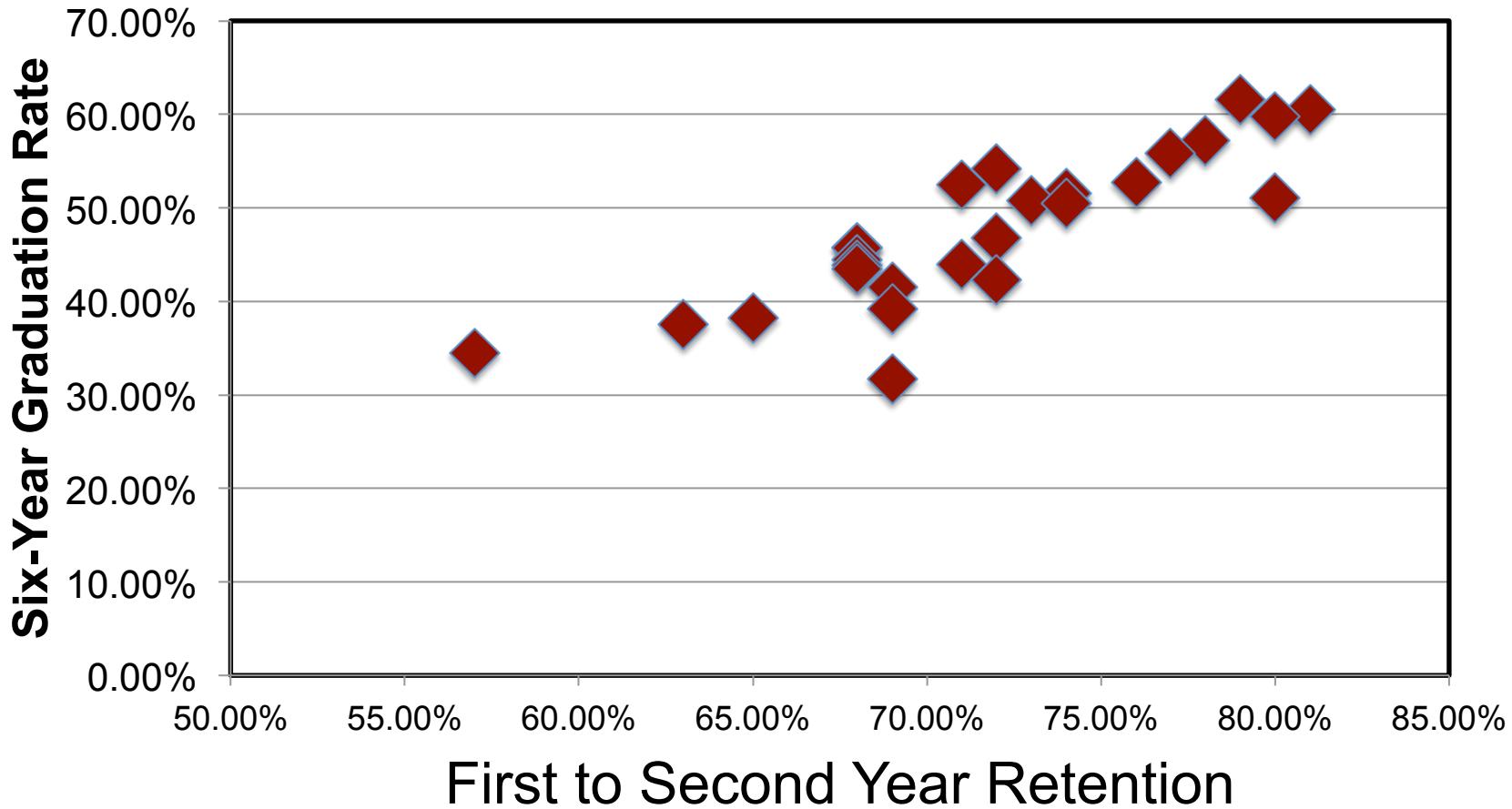


- 2011-IPEDS retention and graduation rates for public universities with an entering class >200, n=525

# Twelve variables used to compare universities

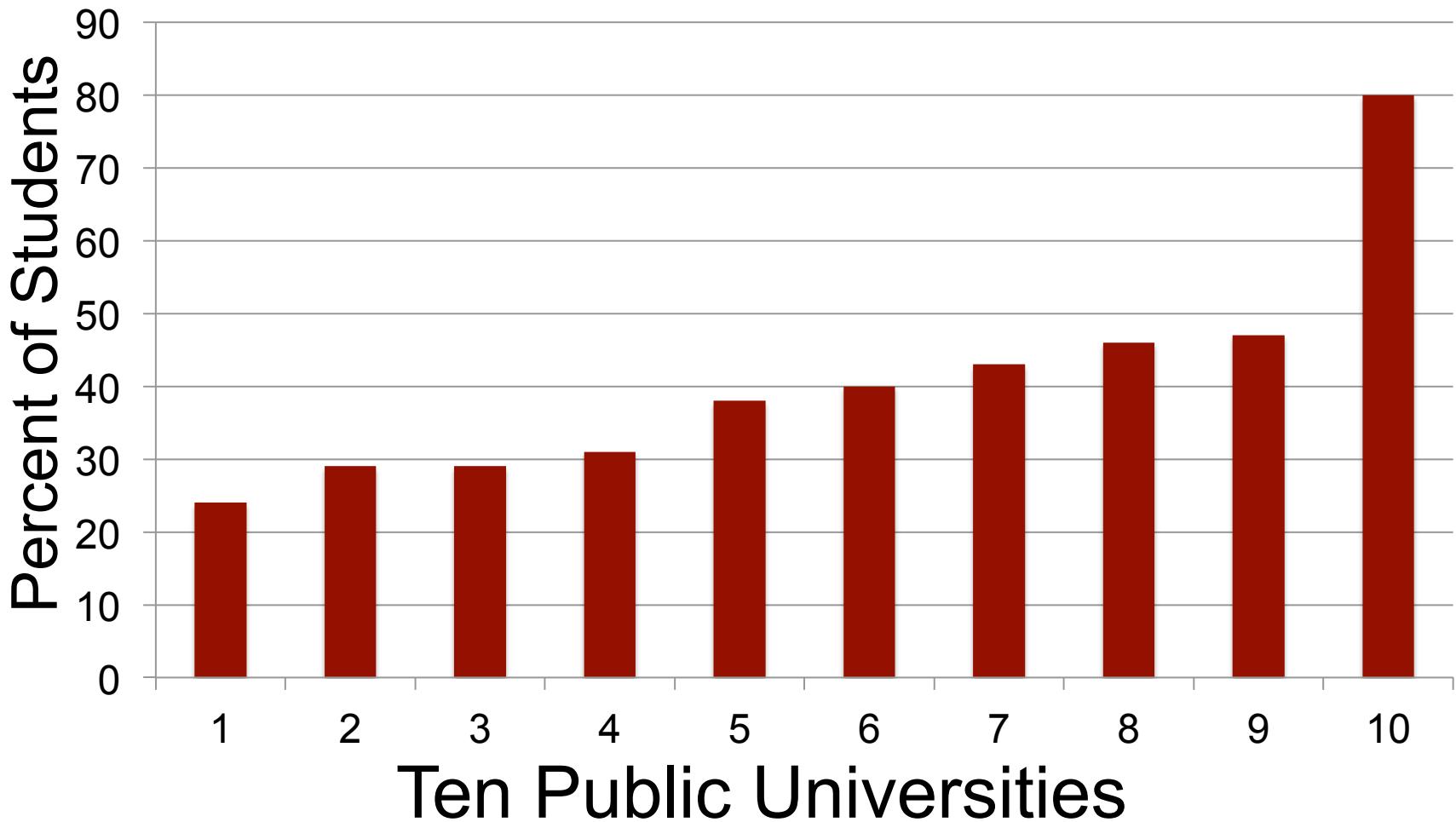
- Standardized test score,
- High school gpa,
- % Pell,
- Selectivity.
- Size,
- Commuter or residential
- Expenditures per student,
- Carnegie classification,
- Age structure of students
- Public or private
- % STEM degrees ,
- % Part-time

# Similar Colleges Can Differ in Retention and Graduation Rates



Twenty-five comparable colleges based on 12 variables: Standardized test score, High school gpa, % Pell, Selectivity, Size, Commuter or residential, Expenditures per student, Carnegie classification, Age structure of students, Public or private, % STEM degrees ,% Part-time

# Institutional policies have a large effect on excess hours\*



\*~54,600 students graduating from the State University System of Florida in 2011, ~1 million excess hours at a cost of more than \$200 million to students in tuition, at 2011 rates.

# Distribution of Excess Hours by Student Type\*

n	Type	Mean	Median	Range
1785	FTIC	135.5	131	120-254
1037	AA	135.9	131	120-269
261	Transfer**	137.6	133	120-254
3,083		135.9	131	120-269

\* None of these students have applied for graduation.

\*\* Transferred from another university without a degree.

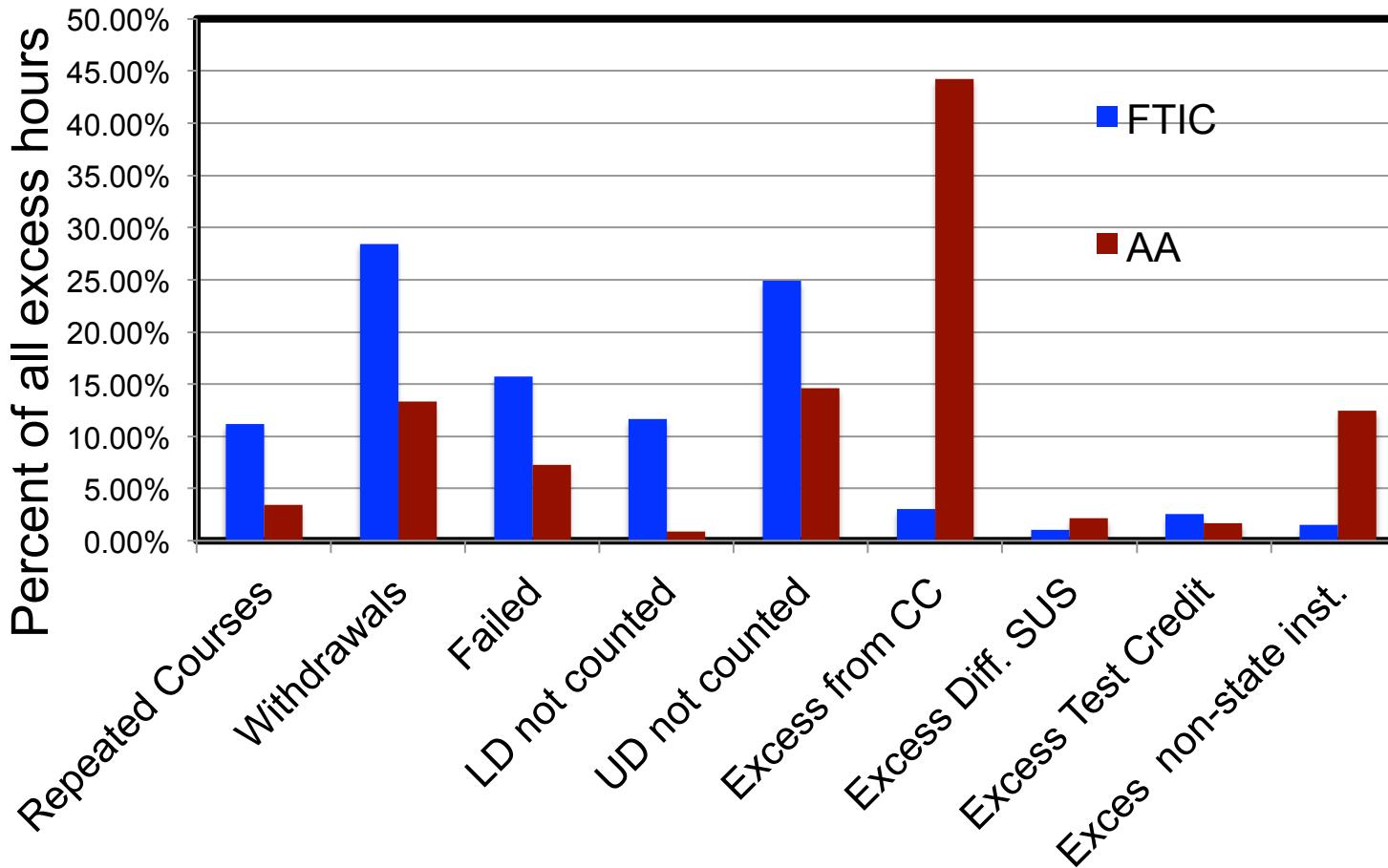
Sample of students with > 120 hours from a SUS institution

# A TALE OF TWO STUDENTS

	<b>STUDENT ON MAP</b>	<b>STUDENT OFF MAP</b>
YEARS IN SCHOOL	FOUR	TEN
TOTAL CREDITS	129	224
TUITION AND FEES	~\$22,000	~\$38,000
TOTAL COST	~\$76,000	~\$190,000
LOST SALARY*	0	~(\$270,000)
ADDITIONAL COST	0	+~\$400,000

\*Average starting salary in discipline

# Source of Excess Hours



State University System of Florida Report on 2002-03 baccalaureate graduates, n=28,673  
(15,178 FTIC and 13,495 AA transfer)

# Why Students Drift

- Catalogs are difficult to understand
- General Education requirements are confusing
- Cannot enroll in the required class: not offered, time conflicts with other classes, etc.
- Do not understand course prerequisites and/or course sequencing
- Insufficient advising
- Course withdrawals, repeats and failures
- Changing majors late in academic career



# GENERAL EDUCATION REQUIREMENTS

## ***Basic Liberal Studies Requirements: [2 courses must include the Diversity (D) overlay]***

**English Communication:** 6 credits; 3 credits must be in a writing course

Writing (ECw): ELS 112, 122 (nonnative speakers); HPR 326; WRT 104, 105, 106, 201, 227, 235, 302, 303, 304(D), 305(D), 333.

General (EC): COM 100(D), 110(D); LIB 120; PHL 101.

**Fine Arts and Literature (A):** 6 credits; 3 credits in Fine Arts and 3 credits in Literature

Fine Arts: ARH 120(D), 251(D), 252(D); ART 101, 207; FLM 101(D), 203(D), 204(D), 205(D); HPR 105, 124, 201A, 202A, 324; LAR 201; MUS 101(D), 106(D), 111, 292(D), 293(D); PLS 233; SPA 320(D); THE 100, 181, 351(D), 352(D), 381, 382, 383.

Literature: AAF 247(D), 248(D); CLA 391(D), 395(D), 396(D), 397(D); CLS 160(D); ENG 110(D), 160(D), 241(D), 242(D), 243(D), 247(D), 248(D), 251(D), 252(D), 260(D), 262(D), 263(D), 264(D), 265(D), 280(D), 300(D), 302(D), 303(D), 304(D), 317(D), 355(D), 357(D), 358(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HPR 105, 125, 201A, 202A; RUS 391(D), 392(D); SPA 305(D), 306(D), 307(D), 308(D); WMS 317(D).

**Language/Culture (FC):** 6 credits

- Demonstration of competence through the intermediate level by examination or successfully completing through 104 (living language) or 302 (classical language)
- Two-course sequence (or one course at the 113 level) in a previously studied language through at the appropriate level (all D): ARB 103, 104; CHN 103, 104; FRN 103, 104; GER 103, 104; GRK 301, 302; HBW 103, 104; ITL 103, 104, 111; JPN 103, 104; LAN 193, 194; LAT 301, 302; POR 103, 104; RUS 103, 104; SPA 103, 104, 111, 113, 210.
- Two-course sequence (or one course at the 111 level) in a language not previously studied (or studied for less than two years in high school) through the beginning level: ARB 101, 102; CHN 101, 102; FRN 101, 102; GER 101, 102; GRK 101, 102; HBW 101, 102; ITL 101, 102; JPN 101, 102; LAN 191, 192; LAT 101, 102; POR 101, 102; RUS 101, 102; SPA 101, 102.
- Study abroad in an approved program for one semester
- Major in a foreign language
- Formerly registered international students, students with recognized immigrant status, or naturalized citizens (at Dean's discretion)
- Two courses in Cross-Cultural Competence: CPL 300(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HIS 132(D), 171(D), 172(D), 180(D), 311(D), 327(D), 374(D), 375(D); HPR 201F, 202F; LET 151L(D), 151Q(D), 151R; NRS 300; PHL 331(D); RLS 131(D); SPA 320(D), TMD 224(D); six credits of a full-semester approved Intercultural Internship in a foreign country through the Office of Internships and Experiential Education

**Letters(L):** 6 credits

AAF 150(D), 201(D), 355(D), 356(D); APG 327; BGS 392(D); CLS 160(D), 235; EGR 316(D); ENG 110(D), 160(D), 243(D), 251(D), 252(D), 280(D), 355(D), 356(D); FRN 391(D), 392(D), 393(D); HIS 111, 112, 113(D), 114(D), 116, 117, 118(D), 130(D), 132(D), 141(D), 142(D), 145(D), 146(D), 150(D), 160(D), 171(D), 172(D), 180(D), 304, 305, 310(D), 311(D), 314, 323(D), 327(D), 332(D), 333(D), 340(D), 341(D), 346(D), 351(D), 355(D), 356(D), 374(D), 375(D); HPR 107, 201L, 202L, 307; JOR 110(D); LAR 202(D); LET 151L(D), 151Q(D), 151R(D); NUR 360(D); PHL 101, 103, 204, 210(D), 212(D), 215, 217(D), 235, 314, 316(D), 321, 322, 323(D), 325(D), 328(D), 331(D), 346, 355; PSC 341, 342; PSY 310; RLS 111(D), 125, 126, 131(D); WMS 220(D), 315(D), 320(D)

**Mathematics(MQ):** 3 credits satisfied by MTH 141

BUS 111, CSC 101, 201; HPR 108, 201M, 202M; MTH 106, 107, 108, 109, 111, 131, 141; PSC 109; STA 220.

**Natural Sciences(N):** 6 credits; satisfied by PHY

APS 190, 210, 211; APG 201(D); AST 108, 118; AVS 101(D); BCH 190; BIO 101, 102, 105, 106, 286(D); BPS 201; CHM 100, 101, 103, 112; GEO 100, 102, 103, 110, 113, 120; HPR 109, 201N, 202N; MIC 190; NFS 207; NRS 190; OCG 110, 123, 131; PHY 109, 111, 112, 140, 185, 186, 203, 204, 205, 273, 274, 275; PLS 150, 190; TMD 113

**Social Sciences(S):** 6 credits

APG 200(D), 202, 203(D), 301(D); CPL 202(D); ECN 100(D), 201, 202, 306, 381(D); EDC 102(D); EEC 105, 310, 356; GEG 101(D), 104(D), 202(D); HDF 225; HPR 110(D), 201S, 202S; HSS 130; JOR 110(D); KIN 123(D); LIN 200(D); MAF 100; NUR 150(D); PSC 113(D), 116(D), 274(D), 288; PSY 103(D), 113(D), 232(D), 235(D), 254(D), 255(D); SOC 100(D), 212(D), 230(D), 240(D), 242(D), 274(D); TMD 224(D), WMS 150(D)

# A PARTIAL LIST OF COURSE REQUIREMENTS FOR A HISTORY MAJOR

(Select at least 2 courses from AMH, WHO, EUH and 1 from ASH)

**EUH 3530.** *England, the Empire and the Commonwealth* (3). This course offers a history of Great Britain and the Empire-Commonwealth since 1783 and developments within the Commonwealth itself. Some consideration is given to post-World War II changes within Britain and to Britain's foreign affairs.

**HIS 2050.** *The Historian's Craft* (3). In this course, students learn how to conduct primary source historical research, and turn their research findings into a high-quality paper based on professional history standards.

**HIS 3464.** *History of Science* (3). This course is a study of the mutually-shaping relationships between social and political ideas and the histories of the various sciences.

**HIS 3491.** *Medicine and Society* (3). This course examines the development of public health and the history of medicine in the United States from the colonial period to the present. Topics cover changes in the medical knowledge, the medical profession, government responsibilities, and public responses; how individuals accept, modify, or react to medical authority; how race, class, gender, and ethnicity shape health practices and the delivery of medical care; how the health of a community can be protected; and what constitutes a public health hazard.

**LAH 1093.** *Latin America: A Cross-Cultural History* (3). This course is a cross-cultural history of Latin America focusing on women, Native Americans, African-Americans, mestizos, and mulattoes in historical context. The course does not count as credit toward the history major.

**WOH 1023.** *The Modern World to 1815* (3). This liberal studies course deals with the origins and development of political, economic, social, and intellectual antecedents of the modern world from the end of the Middle Ages to 1815. Students who have previous college credit in Western civilization courses covering the same general chronological period cannot receive credit for WOH 1023. May not be taken by students with test credit in European history.

**WOH 1030.** *The Modern World Since 1815* (3). This liberal studies course deals with the origins and development of political, economic, social, and intellectual antecedents in the modern world since 1815. Students who have previous college credit in Western civilization courses covering the same general chronological period cannot receive credit for WOH 1030. May not be taken by students with test credit in European history.

\***AMH 3472.** *Evolution of Law, Crime, and Justice in American Society: 1865 to the Present* (3). This course serves as an intermediate level survey of the social and political developments in the fields of crime and law from the end of the Civil War to the present. Its focus is on the changing definitions of criminal behavior, regional patterns of crime, the changing nature of punishment, and Constitutional issues relating to crime.

**AMH 3540.** *Military History of the United States* (3). This course is a survey of both the military experiences and issues in American history. The course analyzes war, its economic issues, technological developments, politics, and other factors that have influenced the military aspects of American history.

\***AMH 3544.** *The United States and Vietnam, 1941-1975* (3). This course examines the involvement of the United States in Vietnam from World War II through the fall of Saigon in 1975 and considers the legacy of this experience for American foreign relations and society.

**AMH 3930r.** *Studies in U.S. History* (3). This course includes examination of a special topic related to U.S. history. Topics vary. The course may be repeated as topics vary to a maximum of nine semester hours.

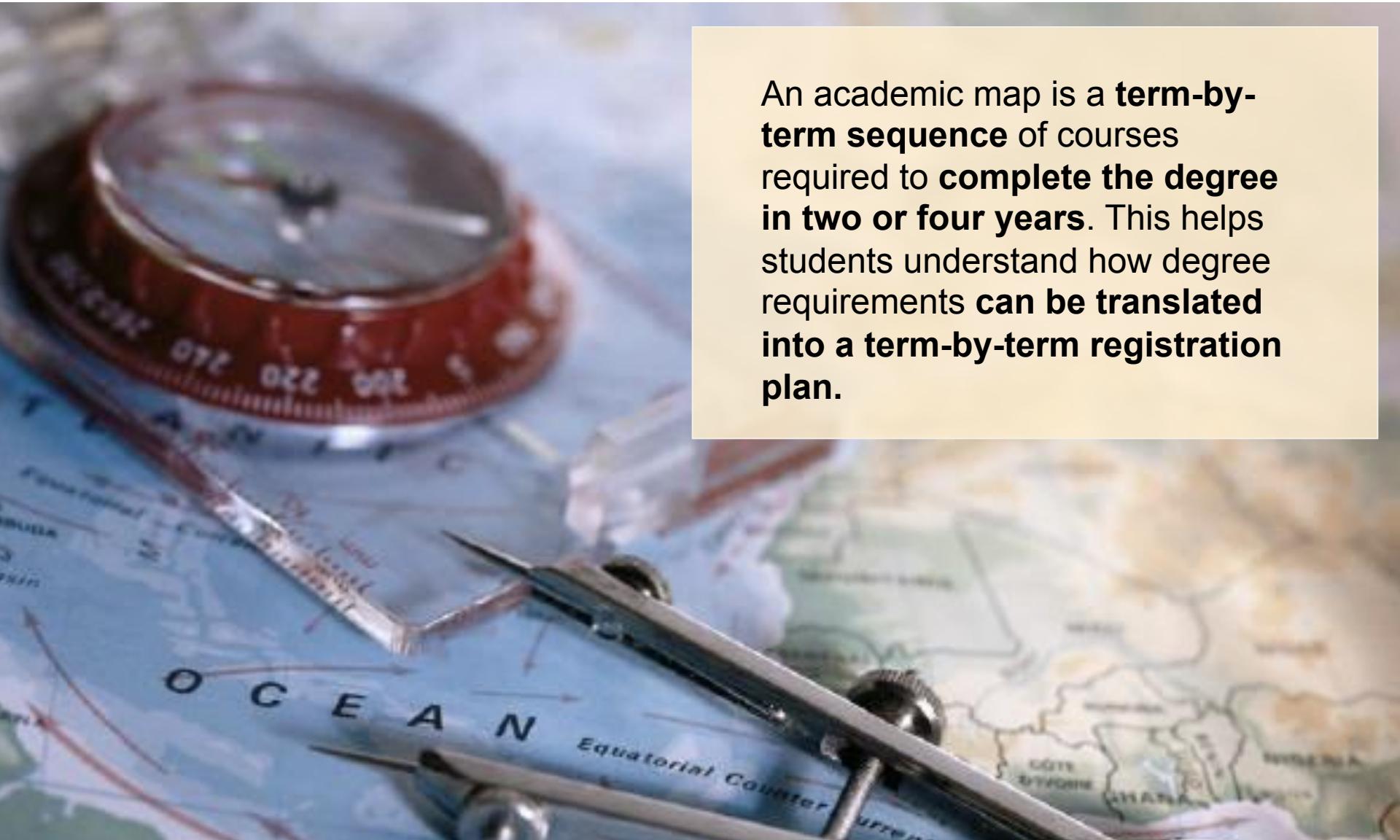
**AMH 4110.** *Colonial America to 1763* (3). This course studies and compares the founding and development of the English colonies in North America.

**AMH 4130.** *Revolutionary America, 1760-1788* (3). This course examines the political, social, and economic history of British America from the end of the Seven Years War to the ratification of the U.S. Constitution. Emphasis is placed on the origins, course, and aftermath of the colonial rebellion that became the American Revolution and led to the founding of the U.S. The course considers the fundamental causes of the Revolution and the many ways in which the former colonies were transformed by the experience.

**AMH 4172.** *The Civil War Era* (3). This course offers an in-depth study of the twenty years from 1845 to 1865. Emphasis is placed on the coming of the Civil War, the secession crisis, and on both the military and nonmilitary events of the war years.

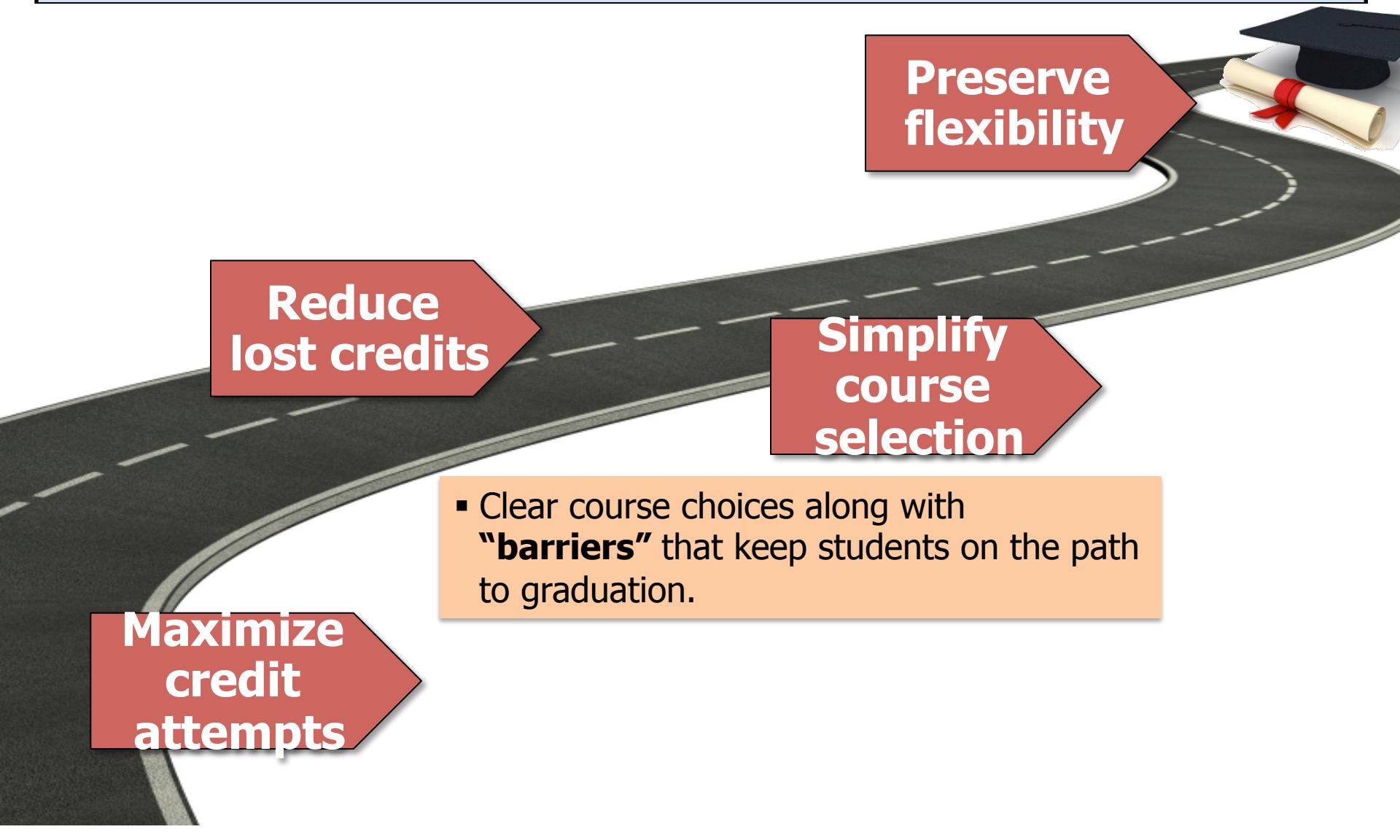
**AMH 4173.** *Post-Civil War America, 1865-1890* (3). This course analyzes post-Civil War America with emphasis on the black role in American society and the attempt to heal the wounds of the Civil War. Topics include the rise of big business, labor unions, and the last frontier

# Academic Maps



An academic map is a **term-by-term sequence** of courses required to **complete the degree in two or four years**. This helps students understand how degree requirements **can be translated into a term-by-term registration plan**.

# Providing students with a clear pathway to success is possible through a number of promising strategies



Preserve flexibility

Reduce lost credits

Simplify course selection

- Clear course choices along with “**barriers**” that keep students on the path to graduation.

Maximize credit attempts

# Important Points

- Academic maps begin with the requirements established by the faculty and published in the institution catalog or bulletin. The process is not making any changes to the curriculum.
- These requirements are then reformatted into a term-by-term sequence of courses required to complete the degree in two or four years. The faculty have final approval of all maps.

# Academic maps: Four essential components—the narrative, sample schedule, milestones, and employment opportunities

MY GUIDED PATHWAY TO SUCCESS					
Admission Requirements for Major					
Description of Major					
Sample Academic Schedule					
Term	Course Title	Credit Hours	Area	Recommended Grade	Milestones & Notes
1	English Composition	3	Core A1	C	Milestone: Must complete this course this term
2	MAT 105 College Algebra	3	Core A2	B	Must complete this course by end of term 2
3	HI 101 American History	3	Core E	C	
4	BI 105 General Biology	3	Core D	C	
5	BI 105L Biology Laboratory	1	Core D	C	
6	AHUM 101 Art History	3	Core C	C	
Total Hours		16			

The narrative explains the **use of academic maps** and any specific information about **degree requirements**, including admissions requirements.

The sample schedule outlines **which courses** should be taken in **which specific term** in order to **satisfy all requirements**.

The **milestones** identify **critical courses** for timely progress and the last semester in which they can be completed for **on-time graduation**. **Critical grades for Milestone courses may be included**.

**Links to Employment Information**

## Employment Information

National Association of Colleges and Employers

<http://naceweb.org/salary-resources/index.aspx>

Occupational Outlook Handbook <http://www.bls.gov/ooh/>

Build your Future <http://www.onetonline.org/>

# Chemistry Degree Requirements

2010– 2011

## **AS\_CHEM\_BS**

B.S. (120 credits)

## **CHEMISTRY**

<http://www.chm.uri.edu/>

Requirement for transfer from University College to the College of Arts & Sciences:

CHM 191, 192; minimum of 24 earned credits, cumulative average of 2.0 or better.

### **Freshman Year**

<i>Fall</i>	CHM 191* (General Chemistry I) <sup>1</sup>	<i>Spring</i>	CHM 192** (General Chemistry II) <sup>2</sup>
	MTH 141 (Calculus I)		MTH 142 (Calculus II)

### **Sophomore Year**

<i>Fall</i>	CHM 212 (Quantitative Analysis) <sup>1</sup>	<i>Spring</i>	CHM 292 <sup>††</sup> (Organic Chemistry II and Laboratory) <sup>2</sup>
	CHM 291 <sup>†</sup> (Organic Chemistry Lecture I) <sup>1</sup>		PHY 204, 274 (Elementary Physics II)
	PHY 203, 273 (Elementary Physics I)		MTH 244 (Differential Equations)
	MTH 243 (Multivariate Calculus)		

### **Junior Year**

<i>Fall</i>	CHM 335 (Physical Chemistry Lab) <sup>1</sup>	<i>Spring</i>	CHM 432 (Physical Chemistry II) <sup>2</sup>
	CHM 431 (Physical Chemistry I) <sup>1</sup>		CHM 412 (Instrumental Methods of Analysis) <sup>2</sup>
	PHY 205, 275 (Elementary Physics III)		CHM 414 (Instrumental Methods of Analysis Lab) <sup>2</sup>

### **Senior Year**

<i>Fall</i>	CHM 353 (Undergraduate Research)	<i>Spring</i>	CHM 353 (Undergraduate Research)
	CHM 401 (Intermediate Inorganic Chemistry) <sup>1</sup>		CHM 402 (Physical Inorganic Laboratory) <sup>2</sup>
	CHM 425 (Advanced Organic Laboratory) <sup>1</sup>		CHM 441 (Chemistry of Biological Systems) <sup>2</sup>
	CHM 427 (Intermediate Organic Chemistry) <sup>1</sup>		CHM 492 (Seminar in Chemistry) <sup>2</sup>

\* CHM 101, 102 may be used to substitute

\*\* CHM 112, 114 may be used to substitute

<sup>†</sup> CHM 227 may be used to substitute

<sup>††</sup> CHM 226 + CHM 228 may be used to substitute

<sup>1</sup> Only offered Fall semesters

<sup>2</sup> Only offered Spring semesters

**Basic Liberal Studies Requirements: [2 courses must include the Diversity (D) overlay]**

# ACADEMIC MAP: A DEFAULT SCHEDULE FOR A HISTORY MAJOR

## SCHEDULE

TERM 1	Hrs.
ENGLISH 1	3
MATHEMATICS FOR LIBERAL STUDIES	3
MODERN WORLD TO 1815	3
HUMANITIES ELECTIVE	3
FOREIGN LANGUAGE	3
Total hours	15
TERM 2	Hrs.
ENGLISH II	3
STATISTICS	3
BIOLOGY FOR NON-MAJORS	3
FOREIGN LANGUAGE	3
MODERN WORLD SINCE 1815	3
Total hours	15
TERM 3	Hrs.
A HISTORY OF THE US TO 1877	3
FINE ARTS ELECTIVE	3
FOREIGN LANGUAGE	3
AFRICAN HISTORY & CIVILIZATION	3
HUMANITIES ELECTIVE	3
Total hours	15

## MILESTONES

TERM 1
Overall GPA 2.5 or higher
Complete MATHEMATICS
Complete ENGLISH I
TERM 2
Overall GPA 2.5 or higher
Complete ENGLISH II
Complete STATISTICS
TERM 3
Overall GPA 2.5 or higher
COMPLETE SIX HOURS OF HISTORY

Sinclair Community College presents courses as defaults in their registration system

## MAP (My Academic Plan)



### My Academic Plan for Tanya Sturm

I have worked with an Academic/Faculty advisor at Sinclair to create My Academic Plan (MAP) for achieving my educational goals at Sinclair. I realize that by developing and agreeing to this plan, I am acknowledging my responsibility to follow it and thereby will achieve my academic goals without delay or loss of credits. I understand that deviation from this plan may have negative academic or financial impacts on reaching my stated goals and may void the Pledge to Students made to me by Sinclair. I will contact my Academic Advisor or Counselor if I have any questions or need to make modifications to MAP.

12/WI	12/SP	12/SU
<b>PSY 121</b> <b>PSY 121 - General Psychology I</b> PLAN TO OFFER: FALL WINTER First of a two-course sequence covering: history of psychology, research methods, physiology of behavior, sensation and perception, learning, memory, states of consciousness, and personality theories. Many Sinclair Community	<b>SCC 101</b> <b>SCC 101 - Student Success Experience</b> PLAN TO OFFER: FALL WINTER SPRING SUMMER This course is designed to help new students make a successful transition to Sinclair Community College. Students will learn and apply strategies required for survival in	<b>MAT 101</b> <b>MAT 101 - Elementary Algebra</b> PLAN TO OFFER: FALL WINTER SPRING Brief review of pre-algebra skills; operations with polynomials and rational expressions; simplifying algebraic expressions; solving first degree equations and inequalities and second degree equations by factoring
<a href="#">View Details</a>	<a href="#">View Details</a>	<a href="#">View Details</a>
<a href="#">Accept MAP</a>	<a href="#">Modify MAP</a>	<a href="#">Print MAP</a>

Any questions should be directed to: **Tanya Sturm**  
512-3700  
tanya.sturm@sinclair.edu



[www.sinclair.edu](http://www.sinclair.edu)

Students meet with advisors to develop personalized degree maps

Map is loaded into the registration system and courses are presented to student as default courses

Students can opt out and register for other courses, with a warning

Credit: [http://flashmedia.sinclair.edu/dl/dept/advising/presenter/online\\_registration/index.htm](http://flashmedia.sinclair.edu/dl/dept/advising/presenter/online_registration/index.htm)

# Florida International University has developed a comprehensive system for integrating maps into their student advising system

## Graduation Success Initiative

The Graduation Success Initiative (GSI) helps students to:

**Explore**

Find the right major



**Focus**

Stay on track

**Graduate**

Finish on time



**MyMajorMatch** (interest inventory)

Students can take an on-line assessment to gauge their interest and skill across areas

**MyMajor** (academic maps)

Provide admissions criteria, course sequence, and career opportunities for each major

Differentiated maps for two-year transfer vs. 4-year students

**My\_e\_advisor** (registration flag)

Provides immediate feedback to students and advisors on progress

Alerts students and advisors if students are off-track

Credit: <https://ugrad.fiu.edu/gsi/index.html>

# Florida International University Milestone Courses with Critical Grades

Spring Term 2013

Term Hours: 14  
Cum GPA: 2.000

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Common Prerequisites	CHM 1046	Gen Chemistry II	3.00	B	Note Critical Grade Based on Predictive Analytics
Common Prerequisites	CHM 1046L	Gen Chem Lab II	1.00	B	
UCC English Composition	ENC 1102	Writing and Rhetoric II	3.00		
Common Prerequisites	MAC 2312	Calculus II	4.00	B	Also satisfies UCC Second Quantitative Reasoning course. (1) See endnotes
UCC Social Inquiry - Foundations of Social Inquiry			3.00		(1) See endnotes



Source:<http://mymajor.fiu.edu/browse?area=PHSCEN&campus=MMC&go=Browse>

# Chipola College has Maps by Major for Students Intending to Transfer

## Entrance Requirements

FSU WILL DENY ADMISSION TO ANY STUDENT WHO HAS NOT SATISFIED THE STATE FOREIGN LANGUAGE REQUIREMENT.

FSU requires competency in oral communications for graduation. If students took a speech course in high school or were members of a debate team, they may exempt this requirement during the FSU admissions process. If not, students should take SPC 2608 at Chipola to satisfy this requirement.

All new main campus undergraduate students who enter the School of Information Studies are required to provide their own laptop computer and appropriate software. Specific information may be found on the FSU website at: <http://sis.sfu.edu/students/>.

An additional prerequisite for this program is PHI 2630 (or a general ethics class); it is not offered at Chipola.



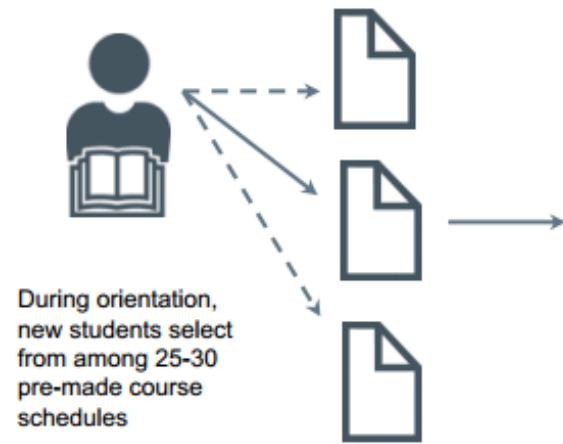
## FRESHMAN YEAR

1st Semester	Sem. Hrs.	2nd Semester	Sem. Hrs.		
ENC 1101 <sup>a</sup>	Communication Skills I	3	ENC 1102 <sup>b</sup>	Communication Skills II	3
CGS 1060	Intro to Microcomputer Use	3	STA 2023 <sup>b</sup>	Intro to Statistics	3
MAC 1140 <sup>b</sup>	Precalculus Algebra	3	PSY 2012 <sup>b</sup>	General Psychology	3
COP 1822 <sup>b</sup>	Intro to Web Authoring & Design	3	COP 1700 <sup>b</sup>	Intro to Database Management	3
XXX XXXX <sup>b</sup>	ELECTIVE	2-3	CIS 1000 <sup>b</sup>	Intro to Computing Systems	3
SLS 1101	Orientation	1			
<b>TOTAL</b>	<b>15-16</b>	<b>TOTAL</b>	<b>15</b>		

## SOPHOMORE YEAR

1st Semester	Sem. Hrs.	2nd Semester	Sem. Hrs.		
XXX XXXX <sup>b</sup>	GORDON RULE WRITING	3	XXX XXXX <sup>b</sup>	GORDON RULE WRITING	3
COP 2000 <sup>b</sup>	Intro to Computer Programming	3	SPC 2608	Effective Public Speaking	3
ECO 2013 <sup>b</sup>	Macroeconomics	3	XXX XXXX <sup>b</sup>	NATURAL SCIENCE	3
XXX XXXX	GENERAL ED. ELECTIVE	3	COP 2800 <sup>b</sup>	JAVA Programming	3
	NATURAL SCIENCE	1	XXX XXXX <sup>b</sup>	HUMANITIES	1

# At CUNY Lehman College, entering students are required to choose from pre-built course schedules



SCHEDULE EIGHTEEN	
ENG110	English Composition I M,W 12:30 – 1:45
PSY166	General Psychology T,TH 12:30 – 1:45
ANT212	Ancient Cultures M,W 11:00 – 12:15
ENG234	Women in Literature T,TH 11:00 – 12:15
FYI001	Freshman Seminar M 9:30 – 10:20

Class times fit together and ensure that all new students attempt:

- Fifteen credits
- English Comp I
- Freshman Seminar
- Three general education areas\*

(\* students can make approved substitutions due to prior credit or to explore majors)

Students register during orientation for a pre-made schedule that satisfies a number of GE requirements

Students continue to enroll in blocks of courses together for the second term

## Pre-Professional Options

Special schedules are created and targeted to students preparing for pre-professional majors

Accounting  
Nursing  
Pre-med  
Teacher Education

## Second Term Schedules Prepare for Major

Second term schedules feature English Comp II and the introductory courses for popular majors

Psychology  
Sociology  
Performing Arts  
Business Admin

Students can opt out and register for other courses, to explore majors

# Business Meta-Major Map

## ACADEMIC MAP

This map is a term-by-term sample course schedule. The milestones listed to the right of each term are designed to keep you on course to graduate in four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. The Liberal Studies (General Education) and Elective courses must be selected to satisfy all area, literature, lab, and other requirements unless your program meets these requirements with major courses. Milestones are courses and special requirements necessary for timely progress to complete a major. Missing milestones will result in one of two types of map registration stops. The first level (*Degree Map Offtrack*) is placed following grade posting if the student has missed a milestone (course and/or GPA) for the first time in the major. If a student is in non-compliance with milestones for two (2) consecutive semesters (excluding summers), a *Major Change Required* stop is placed on the student's registration.

### SAMPLE SCHEDULE\*

TERM 1	Hrs.	Area
Required English course	3	
Algebra or other Pre-calculus	3	
Microeconomics	3	
General Education	3	
Elective	3	
Total Hours	15	

TERM 2	Hrs.	Area
Second English requirement	3	
Calculus	3	
Macroeconomics	3	
Elective	3	
General Education	3	
Total Hours	15	

TERM 3	Hrs.	Area
Statistics	3	
Financial Accounting/Principles I	3	
Microcomputer Applications	3	
General Education (Natural Science)	3	
Business elective	3	
Total Hours	15	

TERM 4	Hrs.	Area
Managerial Accounting/Principles II	3	
Elective	3	
General Education	3	
Elective (Non-business)	3	
General Education	3	
Total Hours	15	

### MILESTONES

TERM 1
Complete required English course
Algebra or other Pre-calculus
GPA of 2.7 or higher

TERM 2
Complete second English course
Complete calculus
GPA of 2.8 or higher

TERM 3
Financial Accounting
GPA of 2.9 or higher

TERM 4
Complete all admission requirements & apply
GPA 2.9 or higher

# Science Meta-Major Map

## SAMPLE SCHEDULE\*

TERM 1	Hrs.	Area
Required English course	3	
Algebra or Calculus	3/4	
General Chemistry I (with laboratory)	4	
General Education	3	
Elective	3	
Total Hours	16	

TERM 2	Hrs.	Area
Second English requirement	3	
General Chemistry II (with laboratory)	4	
Calculus II	4	
General Education	3	
Elective	3	
Total Hours		

TERM 3	Hrs.	Area
Calculus III	5	
General Biology I (with laboratory)	4	
Physics I (with laboratory)	5	
General Education	3	
Elective		
Total Hours	17	

TERM 4	Hrs.	Area
Physics II (with laboratory)	5	
General Biology II (with laboratory)	4	
General Education	3	
Elective	3	
Total Hours	15	

## MILESTONES

TERM 1
Complete required English course
Complete one mathematics course
TERM 2
Complete second English course
Complete Calculus I
Complete Chemistry I
TERM 3
General Biology
Physics I
TERM 4
Physics II
General Biology II
Calculus III

# Place Maps together in a conspicuous location to allow students to browse and compare

**DIVISION OF UNDERGRADUATE STUDIES**

**UNDERGRADUATE  
ACADEMIC PROGRAM GUIDE**  
**(AND COMMUNITY COLLEGE COUNSELING MANUAL)**    **2013-2014**

**Program Guide Legend**

- P** Program Description
- M** Academic Map
- D** Department URL
- C** Learning Compact

**Academic Degree Programs:**

To use this resource, first find your program of interest and then select **P** for a detailed program description, **M** to view the academic map, **D** to link to the department's webpage, or **C** to access the Academic Learning Compact. The program descriptions are also available in PDF format at [Academic Programs](#). Download the most recent version of Adobe Acrobat Reader at [Adobe](#).

Links: [Suspended/Closed Programs](#) [Minors](#) [Certificates/Specialized Studies](#) [Other Programs](#) [Bachelors/Masters Programs](#) [Liberal Studies](#)

<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Accounting *
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Actuarial Science
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Advertising (Communication)
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	African American Studies
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Anthropology
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Applied Mathematics
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Art, Studio BA
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Art, Studio BFA
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Art History
<b>P</b>	<b>M</b>	<b>D</b>	<b>C</b>	Asian Studies

# Key Academic Policies

- Require early declaration of interest area (a meta-major) or major.
- Require every student without a major to attend a “choosing a major” workshop and have a major selected by 30 hours.
- Establish Milestones for each term (key courses, factors, or events that must be completed by a specific time in order to stay on track). These courses **must be** offered when needed.
- Rationalize general education requirements.

# Key Advising Policies

- Assist students with choosing a major through workshops, the Career Center and web resources, e.g., <http://www.bls.gov/ooh/> and <http://www.onetonline.org/>, <http://www.mynextmove.org/>
- Monitor student registration and grades for milestone courses.
- Every student “off-map” **must be mandated** to meet with an advisor in person (or electronically).
- Students must change majors if they are “off-map” two consecutive terms.

# Key Communication Policies

- Earning a degree is a two or four year process.
- Maps must be part of every communication with students, faculty and families.
- They must be easy to find on the institution's website and easy to understand.
- Maps must be integrated into every aspect of the academic process.

# Maps Benefit Students

- Students save time and money.
- They avoid unnecessary courses.
- Maps reduce time to degree.
- Students always know where they are and where they are going.

Providing students with a clear path to graduation reduces excess hours, significantly reduces costs, and improves time to graduation

<b>Year</b>	<b>Students with Excess Hours</b>	<b>4-year Graduation Rate</b>
2000	7,382	44.2%
2006	3,011	53.2%
2009	1,540	61.2%

# Maps Benefit Institutions

- Departments know the number of majors and meta-majors and their progress toward a degree
- Departments can predict students' needs for courses
- Classrooms can be optimally scheduled
- Faculty can plan for the future
- Advisors can be effectively utilized

# Milestone Courses by Major and by Term

<b>Major</b>	<b>Lower-Division Students</b>	<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>
Accounting	588	Algebra	Calculus	Statistics
Biology	1307	Algebra	Calculus	Statistics
Chemistry	188	Algebra	Calculus	Finite Math
Criminology	405	Algebra	Mathematics	Statistics
Dietetics	617	Algebra	-----	Statistics
Economics	93	Algebra	Statistics	Trigonometry
Psychology	637	Algebra	Statistics	Mathematics

A photograph of a young man with dark skin, curly hair, and glasses, smiling broadly. He is wearing a grey t-shirt with a graphic of a green and blue character. The background is blurred.

# Questions?

# Percentage: Degrees/Seniors

I	43.9%	71.8%	65.1%	50.6%	74.9%
II	47.3%	63.7%	73.9%	52.3%	79.1%
III	45.3%	70.1%	77.1%	45.8%	84.1%
IV	46.1%	70.9%	68.1%	48.6%	78.2%

# Student Achievement Measure\*: Six Year Outcomes for Students Who Started at Two-Year Publics

State	Total rate	Starting institution	Diff. 2-yr	Diff. 4-yr	Sub. 4-yr Inst.	Total 4-yr	Still Enr.	Not Enr.
Nat'l	36.29%	23.90%	3.02%	9.38%	6.61%	14.99%	20.07%	43.64%
FL	52.27%	41.80%	1.81%	8.65%	8.99%	17.64%	12.88%	34.85%

\*\*Data: National Student Clearinghouse Research Center,  
Signature Report 8, 2008 Entering cohort, State Suppl.

\*<http://www.studentachievementmeasure.org/>

# Another format option

YEAR 1	<b>Semester 1 Fall</b>		<b>Semester 2 Spring</b>		<b>Total</b>	
	ENGL 1303	First Year Writing I*	3	ENGL 1304	First Year Writing II*	
	PSYC 1300 or SOC 1300	Introduction to Psychology or Introduction to Sociology*	3	GENB 3302	Connecting Bauer to Business	
	MATH 1314	Calc. for Business & Life Sciences	3	ACCT 2331	Accounting Principles 1 - Financial	
	HIST 1377	The United States to 1877*	3	MATH 1313	Finite Math with Applications	
	MIS 3300	Intro to Computers and MIS	3	ECON 2305	Macroeconomic Principles	
<b>Semester Hours</b>		<b>15</b>	<b>Semester Hours</b>		<b>15</b>	<b>30</b>
YEAR 2	<b>Semester 1 Fall</b>		<b>Semester 2 Spring</b>		<b>Total</b>	
	ECON 2304	Microeconomic Principles*	3	CORE	Life & Physical Science*	
	ACCT 2332	Accounting Principles 2 -Managerial	3	POLS 1336	US & Tx Constitutions & Polis*	
	STAT 3331	Statistical Analysis for Bus Apps I	3	MARK 3337 or COMM 3356	Professional Selling, or Business and Professional Speaking	
	HIST 1378	The United States Since 1877*	3	FINA 3332	Principles of Financial Mgmt	
	CORE	Life &Physical Science*	3	MANA 3335	Intro to Org Behavior & Mgmt	
<b>Semester Hours</b>		<b>15</b>	<b>Semester Hours</b>		<b>15</b>	<b>30</b>
YEAR 3	<b>Semester 1 Fall</b>		<b>Semester 2 Spring</b>		<b>Total</b>	
	POLS 1337	U.S. Government*	3	CORE	Language, Philosophy & Culture*	
	INTB 3354	Introduction to Global Business	3	INTB 3355	Global Environment of Business	
	SCM 3301	Serv & Manufacturing Operations	3	MANA Elec	3000-4000 level mgmt course	
	MARK 3336	Elements of Marketing Admin	3	MANA Elec	3000-4000 level mgmt course	
	MANA Elec	3000-4000 level mgmt course	3	Advd Bus Elec	3000-4000 level business course	
<b>Semester Hours</b>		<b>15</b>	<b>Semester Hours</b>		<b>15</b>	<b>30</b>
YEAR 4	<b>Semester 1 Fall</b>		<b>Semester 2 Spring</b>		<b>Total</b>	
	CORE	Creative Arts*	3	GENB 4350	Business Law and Ethics*	
	MANA Elec	3000-4000 level mgmt course	3	MANA Elec	3000-4000 level mgmt course	
	MANA Elec	3000-4000 level mgmt course	3	Advd Elec	3000-4000 level course	
	Advd Bus Elec	3000-4000 level business course	3	Advd Elec	3000-4000 level course	
	Gen Elec	1000-4000 level course	3	Gen Elec	1000-4000 level course	
<b>Semester Hours</b>		<b>15</b>	<b>Semester Hours</b>		<b>15</b>	<b>30</b>
						<b>120</b>

\*State of Texas Core Curriculum

# Public Safety/Criminology

## Meta-Major Map

### SAMPLE SCHEDULE\*

TERM 1	Hrs.	Area
Required English course	3	
Mathematics course	3	
General Education (Science)	4	
Elective (Minor)	3	
Seminar	1	
Total Hours		

TERM 2	Hrs.	Area
Second English requirement	3	
Statistics	3	
Computer Science	3	
Elective (Minor)	3	
General Education	3	
Total Hours	15	

TERM 3	Hrs.	Area
Criminology course	3	
Criminology course	3	
Elective (Minor)	3	
General Education	3	
General Education	3	
Total Hours	15	

TERM 4	Hrs.	Area
Criminology course	3	
Criminology course	3	
General Education	3	
General education	3	
Elective (Minor)	3	
Total Hours	15	

### MILESTONES

TERM 1
Complete required English course

TERM 2
Complete second English course
Complete Mathematics requirements

TERM 3
Complete Elective for Minor
Complete Statistics

TERM 4
Complete at least two Criminology courses

# Milestone courses Terms 1-4 for Business majors = Business Meta-major Map

- Algebra/Pre-calculus
- Calculus for Business
- Accounting I
- Accounting II
- Microeconomics
- Macroeconomics
- Computer Applications for Business
- Business Statistics\*\*