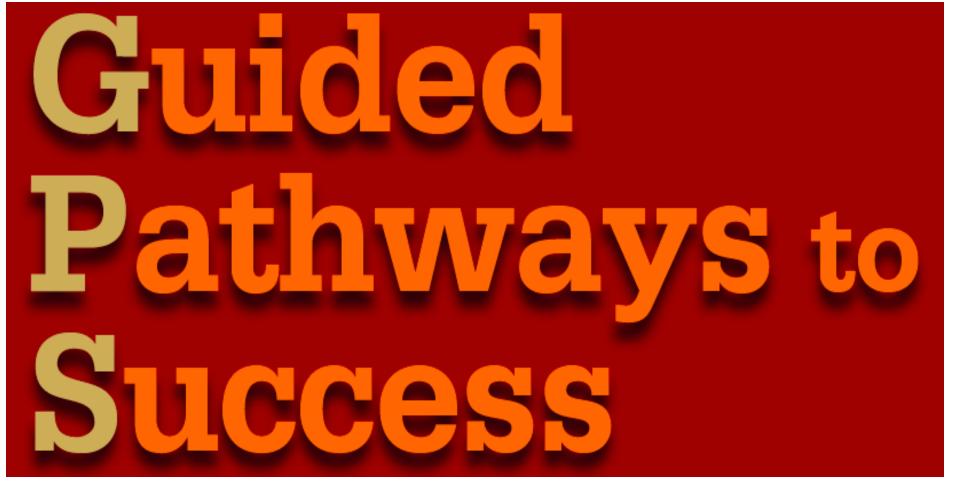
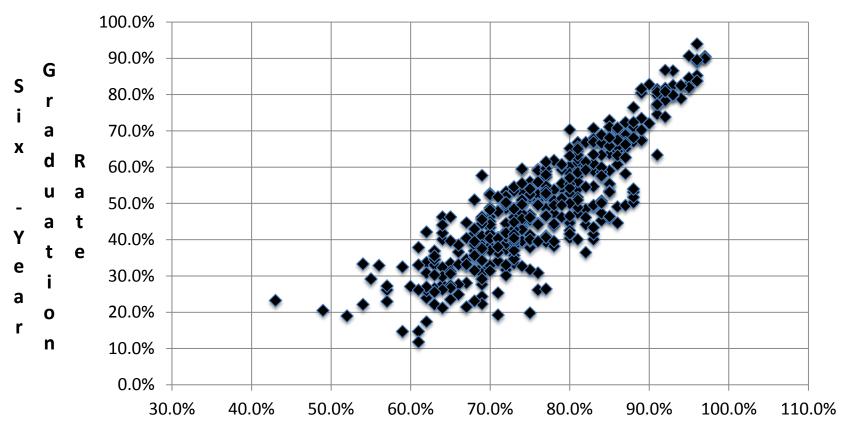
ACADEMIC MAPS: A CORE ELEMENT OF GUIDED PATHWAYS



OUR CHALLENGES

- > LOW GRADUATION RATE
- > TOO MUCH TIME TO A DEGREE
- > EXCESS HOURS
- > HIGH COSTS & TOO MUCH DEBT

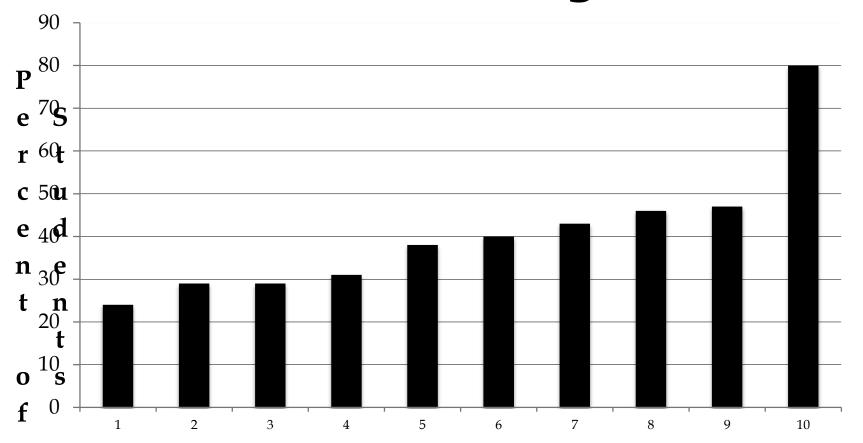
Institutions Have a Large Effect on Graduation Rates*



First to Second Year Retention

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

Institutions Have a Large Effect on Excess Hours and the Cost to Students is Huge*



Ten Public Universities

*~54,600 students graduating from the SUS in 2011, ~1 million excess hours at a cost of \$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

	STUDENT ON MAP	STUDENT OFF MAP
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*

Source	Percentage of Total (n=21.5 excess hours)
Withdrawals	20.2%
Course Failed	11.2%
Course Repeated	7.0%
Upper Level Course not Required	19.3%
Lower Level Course not Required	31.1%
Transfer Course not Required	11.1%
Change of Major	5555

^{*}n=~39,989 students graduating in the State University System of Florida includes all undergraduate students, FTIC, AA, etc.: Source SUS Reports

Why Students Drift

- Insufficient advising
- 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
- 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),

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), 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), 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

AFS 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)

Recommended Course of Study to Transfer into Various Majors

Business

Business (200), Accounting (201), Business Administration (202), Economics (203), Finance (204), Financial Services (205), Logistics (206), Management (207), Marketing (208), Transportation (209), Fashion Merchandising (210), Applied Management (211, Business Forensics (212), Financial Management (213), Forensic Accounting (214), Human Resource Management (215), Hospitality Management (216), Aviation Management (217), Event Management (218), Risk Management and Insurance (219), Agriculture Business/Operations (220), Supervision and Management (221)

Computer Science and Information Systems

Computer Science and Information Systems (300), Computer Science (301), Computer Engineering (302), Information Science (303), Information Systems (304), Computer Networking (305), Information Technology (306), Management Information Systems (307), Computer Information Systems (308), Computer Systems Networking and Telecommunications (309), Information Technology Management (310)

Education

Education (400), Art Education (401), Elementary Education (402), English Education (403), Exceptional Education (404), Health Education (405), Middle School Education (406), Music Education (407), Physical Education (408) Science Education (409), Secondary Education (410), Social Science Education (411), Mathematics Education (412), Dance Education (413), Child Development (414), Early Childhood Education (415)

Engineering, Architecture and Construction

Engineering, Architecture and Construction (500), Architecture (501), Building Construction Management (502), Civil Engineering (503), Electrical Engineering (504), Interior Design (505), Mechanical Engineering (506), Nuclear Engineering (507), Engineering Technology - General (508), Geomatics (509)

Chemistry Degree Requirements

Requirements for the Chemistry B.S. degree program

General Chemistry	CHM 1045 & 1045L; 1046 & 1046L or CHM 1050, 1050L; 1051, 1051L
Analytical Chemistry	CHM 3120 & 3120L; 4130 & 4130L
Inorganic Chemistry	CHM 4610, 4610L
Organic Chemistry	CHM 2210; 2211, 2211L
Physical Chemistry	CHM 4410, 4410L; 4411, 4411L
General Physics (calculus based)	PHY 2048C; 2049C
Calculus I, II, and III	MAC 2311; 2312; 2313

No required course with a grade below C- can be applied toward any of the degree programs in the Chemistry Department.

CHEMISTRY DEGREE REQUIREMENTS

2010-2011 AS CHEM BS CHEMISTRY B.S. (120 credits) 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 CHM 191* (General Chemistry I)¹ Spring CHM 192** (General Chemistry II)² FallMTH 142 (Calculus II) MTH 141 (Calculus I) Sophomore Year CHM 212 (Quantitative Analysis)¹ CHM 292^{††} (Organic Chemistry II and Laboratory)² FallSpring PHY 204, 274 (Elementary Physics II) CHM 291[†] (Organic Chemistry Lecture I) PHY 203, 273 (Elementary Physics I) MTH 244 (Differential Equations) MTH 243 (Multivariate Calculus) Junior Year Spring CHM 432 (Physical Chemistry II)² CHM 335 (Physical Chemistry Lab)¹ FallCHM 431(Physical Chemistry I)¹ CHM 412 (Instrumental Methods of Analysis)² CHM 414 (Instrumental Methods of Analysis Lab)² PHY 205, 275 (Elementary Physics III) Senior Year CHM 353 (Undergraduate Research) Spring CHM 353 (Undergraduate Research) FallCHM 401 (Intermediate Inorganic Chemistry)¹ CHM 402 (Physical Inorganic Laboratory)² CHM 441 (Chemistry of Biological Systems)² CHM 425 (Advanced Organic Laboratory)¹ CHM 492 (Seminar in Chemistry)² CHM 427 (Intermediate Organic Chemistry)¹ * CHM 101, 102 may be used to substitute ** CHM 112, 114 may be used to substitute CHM 227 may be used to substitute ^{††} CHM 226 + CHM 228 may be used to substitute Only offered Fall semesters Only offered Spring semesters

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

A successful implementation of academic maps required a series of steps to achieve the desired results

Challenge

Solution

Results

- Students could not enroll in the courses they needed
- Built **Demand Analysis** to monitor need and open
 sections for students
- Small improvement in retention and graduation; little to no reduction in excess hours

 Students lack a clear path to graduation

- Introduced maps for all majors
- Slight improvement in retention and graduation;
 no reduction in excess hours

- Students continued to take courses that were **not** "on map"
- Added Milestone courses with hold on registration and required students to select area of interest or major upon entering
- 6% point increase in retention rate and almost 17% point increase in 4-yr. graduation rate; number of students with >120 hours decreased from 30% to less than 5%

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

Preserve flexibility

Reduce lost credits

Simplify course selection

Maximize credit attempts

 Clear course choices along with "barriers" that keep students on the path to graduation.

Academic Maps



THREE IMPORTANT POINTS

- 1. [If at all possible] Do not ask your faculty colleagues to enter the information (they did so when they set the catalog).
- 2. Send final map to faculty for approval.
- 3. Allow departments to adjust maps once a year.

Steps For Designing Maps - I

- 1. Don't complicate the process- paper and pencil will get you started.
- 2. Select a format.
- 3. English and Mathematics are in term I.
- 4. Complete the requirements for the major.

Steps For Designing Maps - II

- 5. Sequence the General Education courses to be completed in four to six terms, e.g., for 36 hours include six to nine hours a term.
- 6. Match major requirements with General Education to identify courses that satisfy both requirements.
- 7. Fill in Milestone courses or actions that must be completed in that term.
- 8. Keep a running tally of Milestone courses because many majors will require the same courses as Milestones, particularly in mathematics and statistics.

Four Aspects of Academic Maps

- 1. The Academic Maps: term by term list of courses with critical courses or actions that MUST BE completed in the listed term.
- 2. Academic Policies.
- 3. Advising Policies.
- 4. Communication Policies.

Academic maps: four essential components – the narrative, sample schedule, milestones and employment opportunities

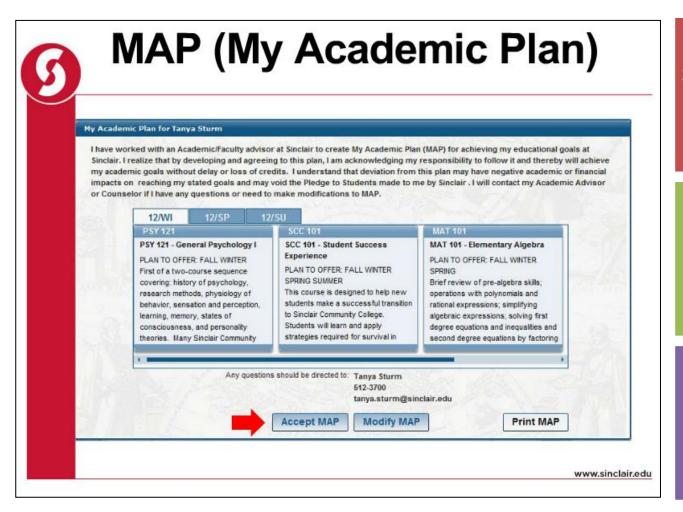
The narrative explains the **use** of academic maps and any specific information about degree requirements, including admissions requirements

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

List of Representative Job Titles and Potential Employers Criminology/Criminal Justice is an interdisciplinary field of study. Included are the contributions and approaches of many of the social and behavioral sciences, as well as areas of study such as law and ethics, as they relate to the phenomenon of crime. The criminology/criminal justice major prepares students for employment in a wide variety of criminal justice agencies, under local, state and federal jurisdictions, as well as the private sector. This major can also serve as a foundation for graduate study in criminology, law, social work, sociology, psychology, and government including public administration.

Sample Schedule		Milestones		
TERM 1	Hrs.	TERM 1		
ENC1101	3	Complete ENC1101		
LS Math	3	GPA ≥ 2.0 and in good academic standing		
LS Natural Science w/Lab	4			
Elective/minor	3	The milestones identify critical		
Elective	1	courses for timely progress and the		
Total hours	14	last semester in which they can be completed for on-time graduation .		
TERM 2	Hrs.	Critical grades for Milestone		
ENC1102 or other second English	3	courses may be included.		
LS Math (STA1013/2122)	3	Complete LS Mathematics course		
LS History/Humanities/Fine Arts	3	GPA ≥ 2.0 and in good academic standing		
CGS2060	3			
Elective/minor	3			
Total hours	15			

Example: Sinclair Community College presents courses as defaults in their registration system



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:

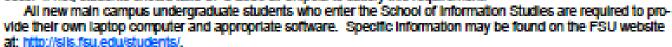
http://flashmedia.sinclair.edu/dl/dept/advising/presenter/online_registration/index.htm

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 LAN-GUAGE 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.



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



FRESHMAN YEAR

1st Semester	S	em. Hrs.	2nd Semester		Sem. Hrs.
ENC 11011	Communication Skills I	3	ENC 1102 ¹	Communication Skills II	3
CGS 1060	Intro to Microcomputer Use	3	STA 202384	Intro to Statistics	ã
MAC 1140a	Precalculus Algebra	3	PSY 2012:	General Psychology	ä
COP 1822 ^a	Intro to Web Authoring & Design	3	COP 1700 ^a	Intro to Database Management	3
XXXXXXXXXX	ELECTIVE	2-3	CIS 1000 ⁶	Intro to Computing Systems	3
SLS 1101	Orientation	1		, ,	_
TOTAL		15-16	TOTAL		15

SOPHOMORE YEAR

1st Semester	Se	m. Hrs.	2nd Semester		Sem. Hrs.
XXXXXXXXX	GORDON RULE WRITING	3	X00X X000X ¹	GORDON RULE WRITING	3
COP 2000 ²	Intro to Computer Programming	3	SPC 2608	Effective Public Speaking	3
ECO 2013a	Macroeconomics	3	X00XX00XX	NATURAL SCIENCE	3
XXXXXXXXX	GENERAL ED. ELECTIVE	3	COP 2800 ⁶	JAVA Programming	3

Example: UNC Charlotte has progression courses to identify students who are off-track and require them to seek guidance

	, in the second	reshman Year			
		Credit	General	W/O	
Course Number	Course Title	Hours	Education	Course	Notes
Fall Semester					
ENGL 1101	Writing and Inquiry in Academic Contexts I	3	X		
MATH 1100	College Algebra and Probability	3	X		
XXXX XXXX	Natural Science w / lab	4	X		
LBST 11XX	LBST 1100 Series: Arts and Society	3	X		
BUSN 1101	Introduction to Business & Professional Development	3			Progression Course
Spring Semester	•				
ENGL 1102	Writing and Inquiry in Academic Contexts II	3	X		
MATH 1120	Calculus	3	X		Progression Course
INFO 2130	Introduction to Business Computing	3			Progression Course
LBST 2101	Western Cultural and Historical Awareness	3	X		
XXXX XXXX	Non-Business Elective	3			

Sophomore Year						
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes	
ACCT 2121	Principles of Accounting I	3			Progression Course	
ECON 2101	Principles of Economics - Macro	3	X		Progression Course	
STAT 1220	Elements of Statistics I	3	X		Progression Course	
XXXX XXXX	Natural Science	3	X			
LBST 2102	Global and Intercultural Connections	3	X			
Spring Semester						
ACCT 2122	Principles of Accounting II	3			Progression Course	
ECON 2102	Principles of Economics - Micro	3			Progression Course	
XXXX XXXX	Writing Intensive Course	3	X	W		
LBST 22XX	LBST 2200 Series: Ethical Issues and Cultural Critique	3	X			
XXXX XXXX	Non-Business Elective	3				

Academic maps identify milestones—the critical courses/actions for timeline completion

Registration system flags students who withdraw or do not register for milestone courses

Students are placed on hold until advisors meet with students

Credit: https://academics.uncc.edu/sites/academics.uncc.edu/files/media/Accounting-APS-Jan- 2013.pdf

Accelerated Degrees with Block Schedules for Meta-Majors



▲ Find It ▲ College Websites Text Version Make This Website Talk

· Future Students · Current Students · Faculty/Staff · Alumni

ABOUT ACADEMICS

ADMISSIONS

FINANCIAL AID

RESEARCH

NEWS/EVENTS

LIBRARIES

EMPLOYMENT

SEARCH (

LOG-IN

Welcome >> Academics >> Academic Programs >> Notable Programs >> Accelerated Study In Associate Programs

Accelerated Study In Associate Programs

About ASAP [+]
Additional ASAP Program Details [+]
Current ASAP Students [+]
ASAP Staff [+]
ASAP Alumni/ae [+]
ASAP Events
ASAP in the News
Contact ASAP
Prospective ASAP Students & Counselors [+]



http://www.cuny.edu/academics/programs/notable/asap.html

Block Schedule for Business Meta-Major

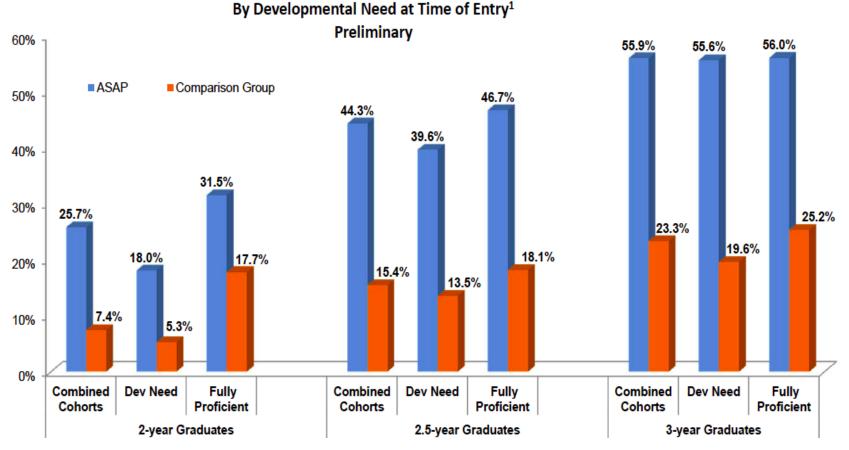
ASAP Block Program Sample

Business Administration (A.S.)

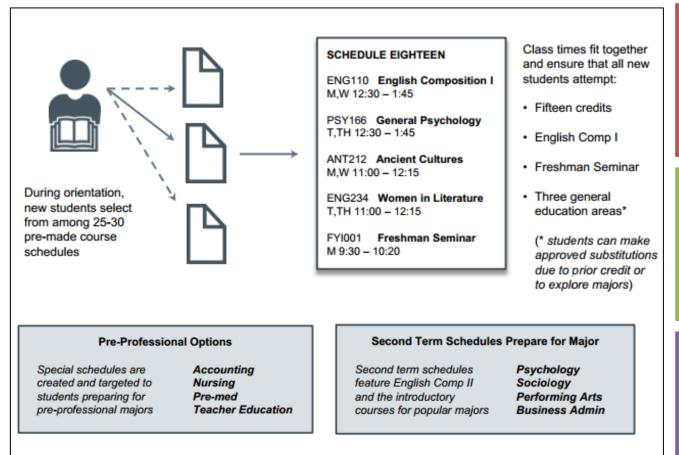
HOURS	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8:00-8:50 AM			ENGLISH		ENGLISH		
9:00-9:50 AM		BUSINESS COMMUNICATION	COMPOSITION	BUSINESS COMMUNICATION	COMPOSITION	INTRODUCTION	
10:00-10:50 AM		MARKETING	COMPUTER	MARKETING	COMPUTER	TO HEALTH	
11:00-11:50 AM			FUNDAMENTALS		FUNDAMENTALS	ASAP SEMINAR	
12:00-12:50 PM		REVIEW SESSION	REVIEW	DEVIEW SESSION		AJAI JEIIIIIAN	
1:00-1:50 PM		NEVIEW JEJJION	SESSION	REVIEW SESSION			

ASAP Program Results

Chart 1: Graduation Rates for Combined ASAP and Comparison Group Cohorts:



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



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

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

Credit: CUNY Lehman College, "Building Guided Pathways to Success," Education Advisory Board

Social/Behavioral Sciences Block Schedule

ENG110.G02FY

M,W 11:00 – 12:15

English Composition I

SOC166.B01FY

T.TH 9:30 - 10:45

Fundamentals of Sociology

POL166.F02FY

M,W 9:30 - 10:45

American Political System

AMS111.C01FY

T,TH 11:00 - 12:15

American Culture: Value & Tradition

FYI001.04FY

T 12:30 - 1:20

Freshman Seminar

FIU has developed a comprehensive system for integrating maps into their student advising system



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

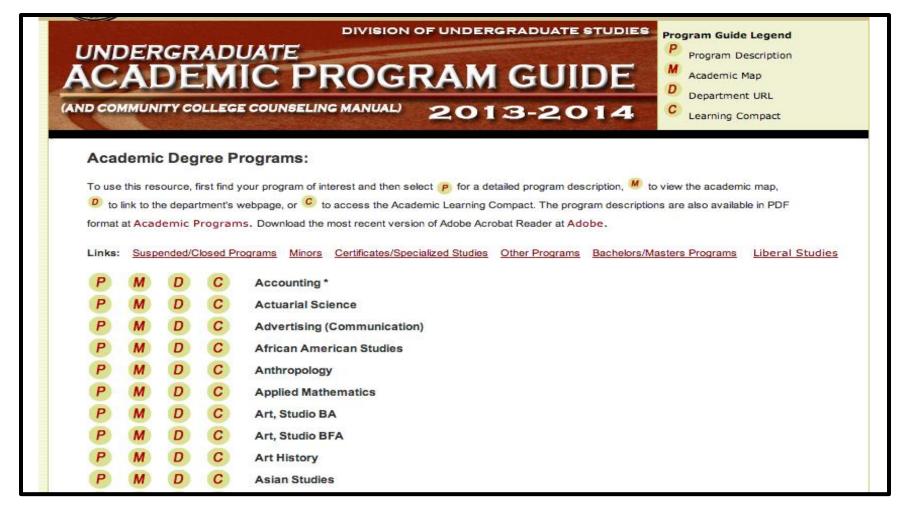
Example: Florida International University Milestone Courses with Critical Grades

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

Academic Map in Chemistry for a Transfer Student

Term Hours: Fall Term 2013 Complete PHY2048/2053 or CHM2210 if not completed prior to transferring to FIU. Both are required. **Course Group** Course **Course Description** Critical Course Notes Credit Required Hours Indicator CHEMISTRY C 2048 or PHY2053 or CHM2210 are 4 00 LOWER Note Critical Grade Based on DIVISION **Predictive Analytics** PREREQUISITES C CHEMISTRY 1.00 LOWER DIVISION PREREQUISITES Intro to Analytical CHM 3120 Intro Analyt Chem В 3.00 Chemistry Intro to Analytical CHM 3120L Intr Analyt Chm Lab 1 00 C Chemistry 3000-4000 Level 3.00 Global Learning Recommended Electives 3000-4000 Level 3 00 Elective Outside of Major Electives

PLACE MAPS TOGETHER IN A CONSPICUOUS LOCATION TO ALLOW STUDENTS TO BROWSE AND COMPARE



Milestone Courses by Major and by Term

Major	Lower Division Students	Term 1	Term 2	Term 3
Accounting	26	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

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/.
- 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, PARENTS AND FACULTY.
- THEY MUST BE EASY TO FIND ON THE WEBSITE AND EASY TO UNDERSTAND.
- MAPS MUST BE INTEGRATED INTO EVERY ASPECT OF THE ACADEMIC EXPERIENCE.

MAPS BENEFITS STUDENTS

- >STUDENTS SAVE TIME AND MONEY
- > AVOID UNNECESSARY COURSES
- > REDUCE TIME TO DEGREE
- > 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

Year	Students with Excess Hours	4-year Graduation Rate
2000	7,382	44.2%
2006	3,011	
2009	1,540	61.1%*

^{*2008} cohort 4 year graduation rate

MAPS BENEFIT INSTITUTIONS

- DEPARTMENTS KNOW THE NUMBER OF META-MAJORS AND THEIR PROGRESS TOWARD A DEGREE
- ➤ DEPARTMENTS CAN PREDICT STUDENT NEED FOR COURSES
- > CLASSROOMS CAN BE SCHEDULED OPTIMALLY
- > FACULTY CAN PLAN FOR THE FUTURE
- > ADVISORS CAN BE EFFECTIVE UTILIZED

RECOMMENDATIONS

- DEVELOP ACADEMIC OR META-MAJOR MAPS FOR ALL PROGRAMS
- COHORT BASED ENROLLMENT BY META-MAJOR/MAJOR
- BLOCK SCHEDULING TO FACILITATE
 EMPLOYMENT WHERE APPROPRIATE
- USE PREDICTIVE ANALYTICS TO ADVISE STUDENTS INTO AN APPROPRIATE META-MAJOR OR MAJOR

