

Most Commonly Withdrawn Courses

Background

When students enroll in, but fail to complete a course, it costs the student and the state money, reduces available classroom space, and increases the amount of time for the student to complete their degree. Clearly, many withdrawals are necessary for personal and academic reasons, but when withdrawals become excessive they pose a significant burden on the student, the college, and the state. This report examines the percentage of courses from which students withdraw and then focuses on the courses with the highest percentage of withdrawals statewide and by college.

Methodology

The dataset for this analysis begins with all college preparatory and college credit courses from 2007-08 to 2009-10. There were a total of 3,157 separate courses with 6,608,926 enrollments. For the purposes of this analysis, a course enrollment is defined as a student enrolled in a given course. Since students take multiple courses each semester, each student may have multiple enrollments. The sum of all course enrollments for all students serves as the denominator when calculating the percentage of withdrawals. Given the large number of courses, many courses are offered at a limited number of colleges or are simply taken by a small number of students. To address this, the list of courses was limited to those with at least 3,000 course enrollments system-wide (meaning an average of at least 1,000 students took that course over a three year period). This reduced the number of courses included in the analysis to 213. Since they are the most commonly offered course they still account for 5,898,773 course enrollments (89% of all enrollments). To determine the percentage of withdrawals, the number of course enrollments with a final grade of W (withdrawal), WU (unofficial withdrawal), WF (withdrawal fail), or WP (withdrawal pass) were counted and divided by the total number of course enrollments for each different course. It is important to remember that the courses in this report are ranked by the percentage of enrollments that resulted in withdrawals, not by the total number of withdrawals. There are courses, such as ENC1101, that have high numbers of withdrawals but low percentages. This report focuses on those with high percentages since they represent courses that students are disproportionately struggling to complete.

Findings

Exhibit 1 shows the total course enrollments, by college and system-wide. Between 2007-08 and 2009-10 there were 668,854 withdrawals, representing 11.3% of the total course enrollments. However, this percentage varies among colleges, from a low of 6.3% at Chipola College to a high of 15.5% at State College of Florida, Sarasota-Manatee.



EXHIBIT 1: WITHDRAWALS AS A PERCENTAGE OF TOTAL COURSE ENROLLMENTS, BY COLLEGE, 2007-08 THROUGH 2009-10

College	# Withdrawals	Total Course Enrollments	Percent Withdrawn
Brevard Community College	22,517	206,574	10.9%
Broward College	48,469	469,706	10.3%
College of Central Florida	7,096	99,036	7.2%
Chipola College	1,737	27,560	6.3%
Daytona State College	14,851	203,554	7.3%
Edison State College	16,013	180,930	8.9%
Florida State College at Jacksonville	29,655	364,179	8.1%
Florida Keys Community College	1,032	14,239	7.2%
Gulf Coast Community College	12,232	83,212	14.7%
Hillsborough Community College	40,994	349,120	11.7%
Indian River State College	20,879	169,582	12.3%
Florida Gateway College	3,984	37,221	10.7%
Lake-Sumter Community College	5,279	55,689	9.5%
State College of Florida, Manatee-Sarasota	27,758	179,439	15.5%
Miami Dade College	106,018	931,165	11.4%
North Florida Community College	1,579	15,965	9.9%
Northwest Florida State College	10,692	100,446	10.6%
Palm Beach State College	45,483	388,259	11.7%
Pasco-Hernando Community College	8,612	105,596	8.2%
Pensacola State College	17,536	150,345	11.7%
Polk State College	14,159	117,971	12.0%
St. Johns River State College	9,230	82,053	11.2%
St. Petersburg College	38,618	340,744	11.3%
Santa Fe College	26,403	222,419	11.9%
Seminole State College of Florida	24,452	185,755	13.2%
South Florida Community College	2,192	32,854	6.7%
Tallahassee Community College	27,827	241,747	11.5%
Valencia College	83,557	543,413	15.4%
System	668,854	5,898,773	11.3%

Source: Division of Florida Colleges



More critical than the number of withdrawals is which courses tend to produce the most withdrawals. Personal problems, such as medical or financial hardships, should affect all courses equally. But if a course consistently results in a high percentage of withdrawals, it suggests that there are other kinds of challenges at work. **Exhibit 2** shows the 25 courses with the highest percentage of withdrawals. Some courses are only offered at one or two colleges so this analysis is limited to those offered at three colleges or more. Although these courses cover a variety of disciplines, it is clear that math and science tend to produce the most withdrawals.

EXHIBIT 2: COURSES WITH THE HIGHEST PERCENTAGE OF WITHDRAWALS, 2007-08 THROUGH 2009-10

Course	Course Name	Number of Colleges	Withdrawals	Total Enrollments	Percent Withdrawn
MACX114	Trigonometry	26	8,872	46,922	18.9%
MACX233	Calculus for Business & Social Science I	26	9,075	48,192	18.8%
MACX311	Calculus I	26	5,038	27,832	18.1%
ACGX021	Accounting Principles	3	1,208	7,029	17.2%
CHMX045	General Chemistry	27	6,698	39,480	17.0%
MACX147	Precalculus Algebra/Trigonometry	13	2,185	13,586	16.1%
MACX140	Precalculus Algebra	25	7,479	46,795	16.0%
MACX105	College Algebra	28	44,535	278,759	16.0%
MACX312	Calculus with Analytic Geometry	23	2,318	14,572	15.9%
FREX120	Elementary French I	16	1,007	6,374	15.8%
CHMX020	Chemistry for Liberal Studies I	8	1,559	9,977	15.6%
MATX033	Intermediate Algebra	28	42,622	277,215	15.4%
ENCX002	Developmental English - Sentence	3	852	5,583	15.3%
MATX020	College Preparatory Mathematics I	8	7,174	47,162	15.2%
BSCX085	Anatomy & Physiology	16	9,191	60,764	15.1%
BSCX010	General Biology	28	8,404	56,533	14.9%
SPNX120	Elementary Spanish I	27	7,142	48,069	14.9%
MVKX111	Freshman Keyboard	16	531	3,579	14.8%
CHMX025	Introduction to General Chemistry	18	4,873	32,932	14.8%
MATX024	Basic Algebra	27	30,127	207,285	14.5%
LITX120	World Literature since Renaissance	10	818	5,682	14.4%
PHYX048	General Physics with Calculus I	21	1,393	9,691	14.4%
CHMX032	General Chemistry Science Allied Fields	10	921	6,564	14.0%
MATX012	Developmental Arithmetic with Algebra	19	12,973	93,865	13.8%



REAX105 College Reading I 7 613 4,447 13.8%

Source: Division of Florida Colleges

This list, however, may not apply equally to all colleges. For example, Palm Beach State College (Palm Beach) is the only college to offer ACG X022. That course was excluded from Exhibit 2 but at Palm Beach, that course has the highest percentage of withdrawals. So, **Exhibit 3** shows the five courses with the highest percentage of withdrawals for each college. For this analysis, only courses with at least 90 enrollments at the college over the three year period were included.

EXHIBIT 3: THE FIVE COURSES WITH THE HIGHEST PERCENTAGE OF WITHDRAWALS AT EACH COLLEGE, 2007-08 THROUGH 2009-10

College	Top Five Courses* Withdrawn				
	1	2	3	4	5
Brevard Community College	FREX120	HUMX020	MACX233	MACX114	MACX311
Broward College	ASTX002	MACX233	MACX114	MACX147	MACX105
College of Central Florida	MACX311	BSCX010	MACX114	MACX140	ENCX210
Chipola College	BSCX093	SPNX120	MACX312	CHMX045	ESCX000
Daytona State College	WOHX022	CHMX045	EUHX000	ENCX210	MVKX111
Edison State College	MVKX111	FREX120	MACX311	SYGX430	MACX233
Florida State College at Jacksonville	CHMX045	CHMX020	MACX147	MACX114	PHYX048
Florida Keys Community College	ARHX051	ECOX023	CHMX045	MGFX106	ECOX013
Gulf Coast Community College	RELX000	CHMX046	MATX024	CHMX045	ARTX750
Hillsborough Community College	ENLX012	MACX114	PGYX401	MACX311	CHMX032
Indian River State College	PHIX100	PHYX048	MACX312	GEAX000	CHMX045
Florida Gateway College	MACX233	SPNX120	MACX311	CGSX570	ECOX023
Lake-Sumter Community College	MACX140	MACX233	MACX114	MACX311	ENCX210
State College of Florida, Manatee-Sarasota	PHIX100	ENCX010	CHMX032	ACGX021	BSCX085
Miami Dade College	MACX114	AMLX020	ENLX012	MACX233	MACX311
North Florida Community College	LITX110	BSCX086	SLSX103	BSCX010	MATX024
Northwest Florida State College	CHMX045	BSCX011	BSCX010	REAX001	CHMX046
Palm Beach State College	ACGX022	RELX300	PHIX100	MACX114	MACX311
Pasco-Hernando Community College	ENLX012	MATX024	SPNX120	MACX233	CHMX046
Pensacola State College	MACX147	MACX233	CHMX210	PHYX053	ENCX002
Polk State College	BSCX010	MACX114	MACX105	MATX033	MATX024
St. Johns River State College	PHYX053	PHYX048	REAX105	INRX002	ASTX002
St. Petersburg College	FREX120	MACX114	SPNX120	AMLX010	SPCX608
Santa Fe College	WOHX012	WOHX022	CHMX025	MVKX111	INPX390
Seminole State College of Florida	METX010	ANTX000	MACX114	MACX233	ANTX410
South Florida Community College	BSCX085	SPNX120	MATX024	ECOX023	ECOX013
Tallahassee Community College	PHIX100	ENCX210	MACX311	MACX114	CHMX045



Valencia College FREX120 MATX020 PGYX401 ENLX012 LITX120

Source: Division of Florida Colleges

For more information please contact:

Dr. John Hughes, Associate Vice Chancellor for Evaluation John.Hughes@fldoe.org, (850) 245-9482

^{*} See Appendix A for course names.





Florida Department of Education Dr. Eric J. Smith, Commissioner

The Florida College System
Dr. Willis N. Holcombe, Chancellor
Dr. Judith Bilsky, Executive Vice Chancellor

Phone: (850) 245-0407 325 West Gaines Street, Suite 1544 Tallahassee, Florida 32399-0400 www.fldoe.org/cc/

Appendix A: Course Numbers and Names

Number	Name
ACGX021	Accounting Principles
ACGX022	Accounting Principles
AMLX010	Colonial to the Civil War/Reconstruction
AMLX020	Civil War to Present
ANTX000	Introduction to Anthropology
ANTX410	Introductory Cultural Anthropology
ARHX051	Introduction to Art History II
ARTX750	Ceramics I
ASTX002	Descriptive Astronomy
BSCX010	General Biology
BSCX011	General Biology (Cont.)
BSCX085	Anatomy and Physiology I
BSCX086	Anatomy and Physiology II
BSCX093	Anatomy and Physiology I w/Prereq
CGSX570	Microcomputer Software Packages I
CHMX020	Chemistry for Liberal Studies I
CHMX025	Introduction to General Chemistry
CHMX032	General Chemistry Science Allied Fields
CHMX045	General Chemistry I
CHMX046	General Chemistry II
CHMX210	Organic Chemistry
ECOX013	Principles of Macroeconomics
ECOX023	Principles of Microeconomics
ENCX002	Developmental English - Sentence
ENCX010	Developmental English - Paragraph
ENCX210	Technical Writing
ENLX012	English Literature through 18th Century
ESCX000	Introduction to Earth Science

EUHX000	Survey of Western Civilization I
FREX120	Elementary French I, Concentrated
GEAX000	World Regional Geography
HUMX020	Introduction to Humanities
INPX390	Human Relations at Work
Number	Name
INRX002	Introduction to International Relations
LITX110	World Literature through Renaissance
LITX120	World Literature since Renaissance
MACX105	College Algebra
MACX114	Trigonometry
MACX140	Precalculus Algebra
MACX147	Precalculus Algebra/Trigonometry
MACX233	Calculus for Business & Social Science I
MACX311	Calculus I
MACX312	Calculus with Analytic Geometry
MATX020	College Prep Mathematics I
MATX024	Basic Algebra
MATX033	Intermediate Algebra
METX010	Gen Descriptive Intro to Atmosphere
MGFX106	Mathematics for Liberal Arts I
MVKX111	Freshman Keyboard
PGYX401	Basic B & W Film Photography
PHIX100	Introduction to Logic
PHYX048	General Physics with Calculus I
PHYX053	General Physics I
REAX001	College Prep Reading
REAX105	College Reading I
RELX000	Introduction to Religion



RELX300	World Religions
SLSX103	Living/Learning in Knowledge Based Env
SPCX608	Public Speaking
SPNX120	Elementary Spanish I, Concentrated

SYGX430	Marriage and the Family
WOHX012	World History I
WOHX022	World History II