



DOUBLING FLORIDA JOB OPPORTUNITIES FOR BIOLOGY AND PSYCHOLOGY MAJORS

Each year, roughly 500,000 American students graduate with degrees in biology or psychology nationwide and 24,500 graduate with these degrees in Florida. Yet only roughly one-fifth of students at both the national level and in Florida are awarded graduate degrees in those fields or medicine—the traditional career path for those disciplines. For the many more who will join the workforce, what steps can they take to boost their career success?

Burning Glass Technologies job market data show that with a few extra skill sets, psychology and biology majors can double the number of entry-level job openings available to them, and raise their potential salary by \$16,000 or more.

There are real stakes to this question. Psychology and Biology are the second and fourth most common majors, respectively, among bachelor's degree graduates.¹

Together they represent more than 10% of all bachelor's degrees awarded. Yet studies of census data by the [Georgetown Center on Education and the Workforce](#) show that recent graduates of these majors have [below-average entry-level earnings](#).

Recently, Burning Glass examined how graduates can unlock the [hidden value of degrees in liberal arts](#). The same pattern seems to be true with biology and psychology degrees, which are part of the sciences but aren't usually part of the discussion of STEM skills. In each case, by acquiring skills which build upon their major, but which are not typically part of the standard course of study, students can expand the scope of jobs for which they can qualify and increase their earnings potential.

By building skills in statistics, computer programming, or advanced biology topics, graduates of biology degree programs can double the number of entry-level job openings for which they can qualify and increase their earnings potential by up to \$21,000 per year.

Perhaps students don't have to choose between studying what they love and making a living.

BIOLOGY DEGREES STATE OF FLORIDA DATA

SKILLS	Entry Level Openings (2016)*	Sample Occupations	Avg. Entry Level Advertised Salary	Ave. Entry Level Wage Premium
Core Biology	6,433	<i>Medical Lab Technician, Research Associate, Clinical Research Coordinator</i>	\$60,475	-----
ADDITIONAL SKILLS				
<i>Specialized Biology</i>	403	<i>Microbiologist, Biochemist</i>	\$56,238	\$13,364
<i>Statistics & Data Analysis Skills</i>	1,017	<i>Biostatistician, Data Analyst, Business Intelligence Analyst</i>	\$68,910	\$9,127
<i>Programming</i>	1,142	<i>Computer Programmer, Web Developer</i>	\$61,874	\$21,799
Total Extension Occupations	3,223		\$61,874	\$14,763

¹ National Center for Education Statistics, Integrated Postsecondary Education Data System, 2014-2015 academic year.

*To determine the total number of openings for each occupation, Burning Glass used a combination of job postings and data from the Bureau of Labor Statistics to measure the number of available open positions in 2016. For the purposes of this report, entry level is defined as requiring less than two years of experience.

PSYCHOLOGY DEGREES

Psychology is perhaps the most varied undergraduate program. Graduates from more quantitative and science-based programs can qualify for additional jobs in STEM fields such as statistics and medical research if they acquire the relevant skills and experiences. Graduates in the humanities or social sciences can qualify for human resources and marketing roles if they acquire the relevant business skills. These extended roles nearly double the number of entry-level openings available to graduates and offer a significant salary premium.

STATE OF FLORIDA DATA

SKILLS	Entry Level Openings (2016)*	Sample Occupations	Avg. Entry Level Advertised Salary	Ave. Entry Level Wage Premium
Core Psychology	7,255	<i>Admissions Counselor, Youth Worker, Social Worker</i>	\$43,976	-----
ADDITIONAL SKILLS				
<i>Statistics & Data Analysis Skills</i>	804	<i>Data Analyst, Statistician, Business Intel. Analyst</i>	\$60,143	\$16,167
<i>Medical Research & Chemistry</i>	461	<i>Clinical Research Coordinator, Clinical Data Manager</i>	\$49,342	\$2,343
<i>Business Analysis, Project Management, and Business Process</i>	1,850	<i>Business Analyst, Business Intelligence Analyst, Operations Analyst</i>	\$44,477	\$5,366
<i>Marketing</i>	2,004	<i>Market Research Analyst, Marketing Specialist</i>	\$44,477	\$501
<i>Human Resources</i>	2,706	<i>Human Resources Assistant, Recruiters</i>	\$49,686	\$5,710
Total Extension Occupations	7,825		\$48,753	\$10,299

As with liberal arts students, the lesson here is that perhaps students don't have to choose between studying what they love and making a living. Many of these skills can be picked up during college as part of minors, concentrations, or specializations. They can even be learned outside of college through boot camps or other short-term training programs. Students and parents are all too mindful of college costs and the burden of college debt. But with the right data, and the right course planning, degrees in biology and psychology can lead to fulfilling careers outside the traditional career paths.

ABOUT BURNING GLASS TECHNOLOGIES

Burning Glass Technologies delivers job market analytics that empower employers, workers, and educators to make data-driven decisions. Burning Glass is reshaping how the job market works, with data that identify the skill gaps that keep job seekers and employers apart and tools that enable both sides to bridge that gap and connect more easily. The company's artificial intelligence technology analyzes hundreds of millions of job postings and real-life career transitions to provide insight into labor market patterns. This real-time strategic intelligence offers crucial insights, such as which jobs are most in demand, the specific skills employers need, and the career directions that offer the highest potential for workers.

ABOUT THE FLORIDA CONSORTIUM OF METROPOLITAN RESEARCH UNIVERSITIES

The Florida Consortium of Metropolitan Research Universities is the first of its kind collaboration in higher education. The Florida Consortium is comprised of Florida International, University of Central Florida, and University of South Florida, the state's largest research universities that account for 167,000 students or 48 percent of the State University System of Florida enrollment. The Florida Consortium is focused on producing more career-ready graduates with lower debt and adaptable skills that employers value.