

**Indiana State University's Submission to**  
**"Exploring the Evidence"**  
**Robert Guell**

**The Institution**

Indiana State University is a four-year public university with more than 11,000 students. Located in Terre Haute, Indiana, ISU serves a largely traditional first-year population that is 60% first-generation, 52% male, 91% in-state, and 18% non-white. The majority of the students come from within 75 miles of Terre Haute with 45% living on campus.

**Our First-Year Seminars**

Indiana State University has not one, but seven distinct first-year academic seminars offered in three of the University's six colleges. These seminars, typically taught by tenure-track faculty, are required parts of the majors within these Colleges and carry either one or two credit hours. These are in addition to the Student Academic Services Center's *University 101*. University 101 began at ISU in 1995 as a means by which student athletes could learn NCAA rules and evolved to also become a required course in the Academic Opportunity Program (ISU's program for conditionally admitted students) and the Open Preference Program.

Each of the Colleges' seminars are staffed and funded within the specific College. University 101 sections designed for students in the Academic Opportunity Program are staffed by professionals who work in the SASC while the sections designed for Open Preference students are staffed by tenure-track faculty. Table One below outlines the student populations, course titles and descriptions for each of the seminars.

Though the courses are distinct, they have a common goal of orienting students to be successful at the university, in the college, and in the major. Time-management, study skills, behavioral advice as well as major specific advice is offered.

Table One  
First-Year Seminars at Indiana State University

Course	Title	Credit Hours	Population	Description
University 101	Learning in the University Community	2	Athletes, Academic Opportunity Program, Open Preference	A course to help students make a successful transition into the University by introducing the concepts and values of a university education, of liberal studies, and of preparation in the disciplines of study; by fostering a sense of tradition, community, and diversity of ideas and people; by developing critical thinking skills as well as academic and personal skills necessary for success; and by providing an introduction to the resources and services of the University.
Nursing 104	Introduction to Nursing	2	All Nursing majors	An orientation course for students entering or exploring nursing as a possible professional career. Two class-room hours per week.
Business 101	Freshman Business Experience I	1	All Business Majors	This course will connect beginning students to college life and the College of Business. Students will learn behaviors and skills that will contribute to academic success and will learn about resources available in the academic community.
MCT 131	Introduction to Manufacturing Technology	2	Manufacturing Technology Majors	An orientation course for manufacturing technology students.
MCT 133	Introduction to Architectural and Construction Technology	2	Construction Technology Majors	An orientation course for architectural and construction technology students.
IMT 130	Introduction to Industrial and Mechanical Technology	2	Mechanical Technology Majors	Orientation to the student's major field—mechanical, automotive, or packaging technology.
AST 130	Introduction to Aerospace Technology	2	Aerospace Technology Majors	Orientation to student's major field. Course includes University and department policies and procedures, aerospace courses, graduation requirements, and career aspiration and planning. Required of all students in the Department of Aerospace Technology.
ECT 130	Introduction to Electronics and Computer Technology	2	Electronics and Computer Technology Majors	Orientation to the student's major field—electronics and computer technology. For beginning students.

## Methodology

The most recently conducted study shows the impact of first-year seminars within and not within learning communities using a logistic and linear regression to look at the marginal impact of these seminars on retention and first-semester GPA, respectively (while holding HS diploma type, HS GPA, HS Rank, SAT, first-generation status, family income, gender, race, learning community and first-year residence hall participation constant.) The logistic regression parameter estimates are then turned into marginal impact estimates by inserting mean variable quantities for the control variables into the logistic function and determining how much the predicted dependent variable changes when the instrument (first-year seminar participation) is invoked.

$$Y = \beta_0 + \beta_{pe} X_{pe} + \beta_{pgm} X_{pgm}$$

where

$Y$  = 1 if retained, =0 otherwise,

$X_{pe}$  a vector of pre-entry variables,

$X_{pgm}$  a vector of programmatic variables (Learning Communities, First-Year Residence Halls and First-Year Seminars) =1 if in; 0 otherwise

## Results

Success at Indiana State University is measured from our perspective and the students. Students do not enter a university in order to be retained. They enter in order to graduate. They are far more likely to graduate when they achieve than when they fail. Grades clearly matter to students as they assess their own likelihood of graduating. Still our retention of them is the reason many first-year program offices exist and the reason these offices are funded.

As Table 2 indicates, the results for the control variables are (mostly) as one would expect. Better students do better. Students with higher high school GPAs, those with higher test scores, those coming from high income households, those who took a college preparatory high school curriculum and those from families with at least one college educated parent get better grades. Interestingly, only high school grades seem to have an important and anticipated impact on retention. Demographically, our male students are more likely to be retained, but do worse in their courses. Similarly our African-American students are retained at levels similar to those as white students (holding the other variables constant) but they do worse in their coursework.

Programmatically, learning community and first-year residence hall participation have a significant effect on retention as well as on first semester grades. First-year seminar participation alone has no statistically significant impact on retention but has a statistically significant impact on first-semester grades. This latter impact is partly attributable to the fact that the grades in the seminars themselves are higher than overall grades but there appears to be a larger impact than that alone.

Table 2  
Logistic and Linear Regression Results

Variable	Logistic Regression Estimate on Retention	Statistical Significance	Linear Regression Estimate on Grades	Statistical Significance
Intercept	-0.5751		0.4782	***
Male	0.1876	**	-0.0986	***
African-American	0.2214		-0.1043	**
White	-0.4399	*	0.0511	
SATM	0.0006		0.0003	*
SATV	-0.0015	**	0.0003	*
HSGPA	0.6894	***	0.6018	
HSRANK	0.0061		0.0042	***
First-Gen	-0.3257	**	-0.0972	***
Income Cat 2	0.1893		0.0799	*
Income Cat 3	0.0402		0.0410	
Income Cat 4	0.2390	*	0.0897	**
College Prep HS	0.0644		0.0311	
FYRH	0.1539	*	0.0931	***
FY Seminar	0.0290		0.1446	***
Learning Community	0.1786	*	0.0909	***

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