

# Preferences of Agricultural Students for Academic Content and Structure at a Branch Campus Location<sup>1</sup>



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## Abstract

The University of Florida's Indian River Research and Education Center, a branch campus located in Fort Pierce, Florida, offers coursework in the areas of agribusiness management, horticultural science, and agricultural education and communication. A survey of current and potential students in the local area was conducted to assess responder preferences for academic content and structure of agricultural programs at the branch campus. Results show that responders were most interested in coursework at the graduate level and internship opportunities. Preferences were found for evening courses and take home tests. Responders did not have preferences for course length or season (time of year). Survey results have been used to evaluate and develop teaching policies and programs at the branch campus. Results may be useful to other land-grant institutions considering the development or expansion of teaching programs at their branch campuses.

## Introduction

Branch campuses provide a niche market approach to education. Miller and Pilcher (2000) found that courses offered at branch campuses fulfill important educational needs for place-bound or non-traditional students. Family and work responsibilities often prohibit these students from relocating and attending school in the manner of typical 18- to 22-year-old students (Zenger and Walker, 2000). While they may be atypical, students at branch campuses do have unique characteristics, such as increased age and more real-world experience, which they bring to the classroom. Furthermore, they are often actively involved in the learning process and assimilate new

knowledge into the broad spectrum of their current lives (Imel, 2001; Miller and Pilcher, 2001).

The University of Florida Institute of Food and Agricultural Sciences has eighteen research and education centers throughout the state of Florida. Nine of these centers are considered branch campuses since faculty at those locations offer coursework at the undergraduate and graduate level. In 1998, a teaching program was established at the Indian River Research and Education Center (IRREC), located in Fort Pierce, on the east coast of Florida between West Palm Beach and Daytona Beach. Like most branch campuses in Florida, IRREC is located in a community much smaller than that found around the main campus of a typical land-grant university. IRREC lies in a predominantly agricultural community in the heart of the Indian River citrus region. Cattle production in the form of cow-calf operations is common in the area, however environmental horticulture, and the production of ornamentals is also an economically important industry.

The teaching program at IRREC was established to deliver coursework in agribusiness management, horticultural science, environmental horticulture, and agricultural education and communication to the local community and region. The program was designed for students who have completed an Associate of Arts degree from a local community college and now desire to complete a Bachelor of Science degree in agribusiness management or horticultural sciences. Completion of the degree requires students to enroll in a combination of courses taught in traditional classrooms with faculty at IRREC and courses offered through distance technology (i.e., Internet delivery, interactive

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videoconferencing, videotape) taught by University of Florida faculty located throughout the state. Most courses are taught in the evenings to accommodate the majority of the students who work during the day.

Teaching policies at a main or branch campus are important factors in a students' educational experience. DesJardins et al. (1999) found a significant link between institutional policies and student behavior in the college application and enrollment process. Recruitment efforts are ineffective and retention problems occur when individual student goals and the practices of the institution are not congruent (DesJardins et al., 1999). A branch campus of a university that caters to place-bound or non-traditional students, such as IRREC does, has a limited pool of potential applicants. Thus, it is essential for faculty and staff at a branch campus location to consider carefully the campus's teaching policies and educational programs in relation to the academic goals of its students. Therefore, the objective of this research is to assess student preferences for academic content and structure at IRREC and to use that information to make recommendations for changes in campus teaching policies and procedures.

## Methods

A survey of currently enrolled and potential future students of IRREC was conducted to assess student preferences for academic content and structure and to evaluate current teaching policies and procedures. The survey instrument (reviewed and approved by the University of Florida Institutional Review Board, #2001-17) was a 12-page booklet that consisted of six different sections including demographics (age, marital status, etc.), employment (employment status, type of business, etc.), education (previous education level, currently enrolled in courses, etc.), academic content (preferences for subject areas, etc.), academic structure (preferences for day of the week, time of day, etc.), and comments (Minton and Willett, 2002).

In spring of 2001, 814 surveys were mailed to current University of Florida students with residences in the four-county area surrounding IRREC, graduating students from

the local community college, and a random sample of Chamber of Commerce members in the four-county area. (The four-county area includes Indian River, St. Lucie, Martin, and Okeechobee counties.) These three groups were targeted since each could potentially contribute valuable and varied information to the results of the survey. For example, University of Florida students have been exposed to upper level education at a major land-grant university. They know what they like and dislike about their experience and can provide insight into the structure of programs at IRREC. New associate degree graduates from the local community college have definitive expectations for their upper level college experience. Knowledge of those expectations will help IRREC focus its programs to better address students' expectations. Local agricultural businesses, as

**Table 1. Demographics, Employment, and Education Frequencies from Survey of Current and Potential Agricultural Students at a Branch Campus<sup>z</sup>**

QUESTION AND RESPONSES	VALID RESPONSES (#) <sup>y</sup>	VALID RESPONSES (%) <sup>x</sup>
<i>Which of the following age groups best describes you?</i>		
0-25	79	32.9
26-50	104	43.3
51+	57	23.8
	240	100.0
<i>What is your ethnic origin?</i>		
Caucasian (white)	215	90.0
African American	5	2.1
Hispanic	10	4.2
Asian	4	1.7
Native American	3	1.3
Other	2	0.8
	239	100.0
<i>In which one of the following counties do you reside?</i>		
Indian River	44	18.3
St. Lucie	86	35.8
Martin	52	21.7
Okeechobee	28	11.7
Alachua	18	7.5
Other	12	5.0
	240	100.0
<i>How would you best describe where you live?</i>		
In the City	97	40.4
Outskirts of Town	123	51.3
In Farming Area	20	8.3
	240	100.0
<i>Which of the following best describes your employment status?</i>		
Employed	203	84.6
Unemployed	37	15.4
	240	100.0
<i>In which one of the following counties do you work?</i>		
Indian River	34	16.7
St. Lucie	66	32.4
Martin	41	20.1
Okeechobee	25	12.3
Alachua	20	9.8
Other	12	5.9
Combination	6	2.9
	204	100.0
<i>Which of the following best describes the organization for which you work?</i>		
Government/Public Education	30	14.8
Government/Public Non-Education	17	8.4
Business Agriculture	39	19.2
Business Non-Agriculture	114	56.2
Not-for-Profit	3	1.5
	203	100.0

## Preferences of Agricultural

represented by Chamber of Commerce members, may employ current students and graduates of IRREC. These business owners expect certain skills and knowledge from their employees.

Two hundred fifty of the 814 surveys mailed were completed and returned for an overall response rate of 31%. Studies show this to be an acceptable rate of response (Alreck and Settle, 1985; Harvey, 1987; Kanuk and Berenson, 1975; Weisberg et al., 1996). Data were analyzed with Statistical Package for the Social Sciences (SPSS) Version 10.0 and included descriptive statistics, frequency analysis, and one-sided and two-sided Chi square analyses (Norusis, 2000). Statistical significance was determined at  $P = 0.05$ . For statistical reasons, responses from the three groups were pooled during analysis.

## Results and Discussion

Frequency analysis of response variables in the areas of demographics, employment, and education are presented in Table 1. From those responses, a list of characteristics or profile was created for a typical responder. This typical responder is white, between the ages of 26 and 50, and lives in St. Lucie County, in an area described as the “outskirts of town.” The

typical responder is currently employed in St. Lucie County by a non-agricultural business with fewer than 50 employees. The responder has worked for the company for fewer than five years and is an owner or CEO of the company. An associate's degree is the highest level of education completed by the typical responder. The responder is not taking any college courses at the current time.

Preferences for academic content are presented in Table 2. Survey participants report an interest in internship opportunities. Given IRREC's close proximity to local industry and businesses, IRREC faculty and staff should develop strong community and industry ties to provide students with ample opportunities for internships. Among the subject areas offered at IRREC, respondents were most interested in agribusiness management, followed by agricultural education and communication, and finally horticultural science. When asked specifically about horticultural science areas, 64 percent were most interested in plant production courses, with two-thirds of those expressing an interest in citrus and one-third having an interest in vegetables. This was not surprising since IRREC is located in the Indian River citrus region. Animal science, landscape

architecture, and food science and human nutrition are majors not currently offered at IRREC in which respondents expressed a strong interest. These parallel the many cow-calf operations and the growing ornamental industry in the local area, as well as society's increasing interest in human nutrition and health. Should personnel at IRREC make programmatic changes, these subject areas warrant careful consideration.

Survey results from the academic structure questions are shown in Table 3. Fifty-nine percent of the responders strongly prefer credit-granting coursework at the undergraduate or graduate levels. There was some interest in life-long learning opportunities through audit or certificate programs. Most responders had no preference for course length, time of the year, or day of the week for taking courses. Those having a preference indicate that they prefer courses of eight weeks in length or less, during the fall or summer, on Tuesdays or Wednesdays. There was a strong preference for evening courses, followed by course offerings in the

**Table 1 (continued). Demographics, Employment, and Education Frequencies from Survey of Current and Potential Agricultural Students at a Branch Campus<sup>z</sup>**

QUESTION AND RESPONSES	VALID RESPONSES (#) <sup>y</sup>	VALID RESPONSES (%) <sup>x</sup>
<i>How many persons are employed by this organization?</i>		
0-50	120	60.6
50+	78	39.4
	198	100.0
<i>Which of the following best describes the position you hold within this organization?</i>		
Owner/CEO	60	29.4
Manager	40	19.6
Professional/Technical	34	16.7
Sales/Outreach	9	4.4
Clerical	19	9.3
Staff	34	16.7
Farm Crew Member	3	1.5
Other	5	2.5
	204	100.0
<i>How long have you worked for this organization?</i>		
0-5 years	103	50.5
6-10 years	37	18.1
11+ years	64	31.4
	204	100.0
<i>Which of the following is the highest level of education you completed?</i>		
High School Diploma	8	3.4
Some College	54	22.8
Associates Degree	99	41.8
Bachelors Degree	32	13.5
Some Graduate	10	4.2
Graduate Degree	34	14.3
	237	100.0
<i>Are you currently taking any college courses?</i>		
No	141	58.5
Yes	100	41.5
	241	100.0

<sup>z</sup> Frequencies reported for demographics, employment, and education variables that were statistically significant at  $P \leq 0.05$ .

<sup>y</sup> Number of valid responses differs for each question. Total number of responses = 250.

<sup>x</sup> Percentages may not add to 100.0 due to rounding.

**Table 2. Academic Content Frequencies from Survey of Current and Potential Agricultural Students at a Branch Campus<sup>z</sup>**

QUESTION AND RESPONSES	VALID RESPONSES (#) <sup>y</sup>	VALID RESPONSES (%) <sup>x</sup>
<i>Would you be interested in internship opportunities to further your educational development?</i>		
Yes	114	47.9
No	77	32.4
Don't Know	47	19.7
	238	100.0
<i>Which of these IRREC subject areas are you MOST interested in?</i>		
Agribusiness Management	74	45.7
Horticultural Science	38	23.5
Agricultural Education & Communication	50	30.9
	162	100.0
<i>Which of these Horticultural Science subject areas are you MOST interested in?</i>		
Vegetable Production	29	22.1
Environmental Horticulture	35	26.7
Citrus Production	55	42.0
Postharvest Physiology	12	9.2
	131	100.0
<i>Which of these other majors are you MOST interested in?<sup>w</sup></i>		
Agricultural & Biological Engineering	6	3.8
Agricultural Operations Management	20	12.8
Animal Sciences	28	17.9
Entomology & Nematology	3	1.9
Fisheries/Aquatic Science	13	8.3
Landscape Architecture	28	17.9
Food Science & Human Nutrition	26	16.7
Forestry	6	3.8
Natural Resources	7	4.5
Soil & Water Science	3	1.9
Turfgrass Science	2	1.3
Wildlife Ecology	14	9.0
	156	100.0

<sup>z</sup> Frequencies reported for academic content variables that were statistically significant at  $P \leq 0.05$ .

<sup>y</sup> Number of valid responses differs for each question. Total number of responses = 250.

<sup>x</sup> Percentages may not add to 100.0 due to rounding.

<sup>w</sup> Majors not currently offered at IRREC.

morning. For recruitment and retention purposes, faculty and staff at IRREC could consider course schedules to meet those student preferences. Survey respondents strongly prefer courses delivered live in the classroom versus those offered through distance education. The Internet/World Wide Web, however, was preferred by two-thirds of the twenty-one percent who indicated a preference for some method of distance education. Respondents overwhelmingly preferred face-to-face interaction with the professor followed by email contact. Exams that can be taken at home followed by proctored tests in a classroom setting were the preferred methods of testing. This suggests respondents were more comfortable with traditional course structures and may not be familiar with newer designs of distance education. Most respondents anticipated personally funding their education; however, a number of survey participants expect to use outside funding sources. Providing financial assistance or scholarship programs could help attract and recruit students at IRREC.

### Summary

Results of the survey will be helpful for faculty and staff at IRREC with developing new academic

policies and evaluating existing policies. Specific survey-based recommendations for IRREC include fostering ties to the local agribusiness community, designing course schedules to meet student preferences, and creating a financial assistance program. Incorporating these recommendations into policy decisions should enable IRREC to structure its agricultural programs to attract greater numbers of new students and provide a better educational experience to its current students. Faculty and staff at IRREC are currently using these results to target programmatic changes. As a result, the subject areas of citrus production and agricultural finance have been identified for potential new faculty positions. A proposal to offer certificate programs is being prepared. Course offerings are being expanded to incorporate more options during the summer semesters and to offer morning courses. A brochure promoting financial assistance opportunities is also being prepared to aid recruitment efforts. While this survey provided information specific for IRREC, the results may be useful to other land-

grant institutions considering the development or expansion of teaching programs at their branch campuses. Similar surveys could be conducted for other branch campuses of the University of Florida, other universities, and for disciplines other than agriculture.

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**Table 3. Academic Structure Frequencies from Survey of Current and Potential Agricultural Students at a Branch Campus<sup>z</sup>**

QUESTION AND RESPONSES	VALID RESPONSES (#) <sup>y</sup>	VALID RESPONSES (%) <sup>x</sup>
<i>What level of coursework are you most interested in?</i>		
Audit or Certification	42	18.8
Undergraduate Level	58	26.0
Graduate Level	74	33.2
Not Interested in Coursework	49	22.0
	223	100.0
<i>What is your preferred course length?</i>		
16 weeks	52	23.9
8 weeks or less	72	33.0
No Preference	94	43.1
	218	100.0
<i>What is your preferred time of year for taking courses?</i>		
Spring	18	8.4
Summer	28	13.0
Fall	40	18.6
Winter	10	4.7
No Preference	119	55.3
	215	100.0
<i>What is your preferred day of the week for taking courses?</i>		
Monday	20	9.1
Tuesday	36	16.4
Wednesday	29	13.2
Thursday	17	7.8
Friday	2	0.9
Saturday	8	3.7
Sunday	2	0.9
No Preference	105	47.9
	219	100.0
<i>What is your preferred time of day for taking courses?</i>		
Morning	66	29.7
Afternoon	23	10.4
Evening	94	42.3
No Preference	39	17.6
	222	100.0
<i>Which of the course delivery types would you MOST prefer?</i>		
Internet/World Wide Web	26	13.9
Videoconference	6	3.2
Video Tape	2	1.1
Local Television	5	2.7
Lab	15	8.0
Live Lecture	133	71.1
	187	100.0
QUESTION AND RESPONSES	VALID RESPONSES (#) <sup>y</sup>	VALID RESPONSES (%) <sup>x</sup>
<i>Which of the methods of interacting with your professor would you MOST prefer?</i>		
Chat Room	8	4.3
Email	35	18.6
Fax	1	0.5
Telephone	3	1.6
Face to Face	141	75.0
	188	100.0
<i>Which of the testing methods would you MOST prefer?</i>		
Proctored, in a Classroom Setting	70	39.5
Proctored, not in a Classroom Setting	12	6.8
Take Home	95	53.7
	177	100.0
<i>Should you decide to pursue additional education, how do you anticipate funding the endeavor?</i>		
Self-Funded	93	43.3
Outside Funded	60	27.9
Combination: Self-Funded and Outside	62	28.8
	215	100.0

<sup>z</sup> Frequencies reported for academic structure variables that were statistically significant at  $P \leq 0.05$ .

<sup>y</sup> Number of valid responses differs for each question. Total number of responses = 250.

<sup>x</sup> Percentages may not add to 100.0 due to rounding.

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