

# Academic Advising Strategies to Support Undergraduate Student Success

## A.S. Leaflet R3278

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### Overview

Undergraduate academic advising is an integral part of the student experience at Iowa State University (ISU). The Animal Science department at ISU relies almost solely on faculty members to advise and mentor undergraduate students as part of their teaching responsibilities. Incoming freshmen are matched with advisers based on their interests, career paths, and backgrounds before starting their first semester at ISU. Transfer students are initially placed with a transfer coordinator who is well versed in transfer credit evaluations and policies. Ideally, students will stay with the same adviser throughout their academic career, but they are given the option to request an advising change if their goals evolve over time or if they develop a close working relationship with another faculty adviser. The objective of our undergraduate advising program is to match students to an adviser that can provide both academic and career mentoring in the area that best suits the individual. Advising capacities, adviser specialties, and future enrollment must be taken into account when assigning new advisees to a faculty adviser. Coordination of this type of program requires a large amount of data collection and qualitative data analysis in order to make all of the pieces fit properly. This approach may seem tedious at times, but it has proven to provide the utmost support for the undergraduate students in the Animal Science department at ISU.

### Placing Incoming Freshmen with an Academic Adviser

All incoming Animal Science, Dairy Science, and General Pre-Veterinary undergraduates must attend a face-to-face orientation session prior to the start of their first semester. During these sessions the incoming freshmen will build a class schedule, become familiar with our department, and meet other students in their major. Prior to the conclusion of each session every student is required to fill out a student interest survey card. The student interest survey allows the student to identify aspects of their background, rank their favorite species, list their discipline interests, and identify their desired career path. These data are compiled from seven face-to-face freshmen orientation sessions and gives us an insight into what each individual student hopes to achieve during their future semesters in our department. The student interest survey cards are then sorted

based on information provided by the individual. In some cases we match a student to an adviser based on primary species interest. In other cases we match a student to an adviser based on a discipline or career interest.

The primary species and career interests of our incoming freshman are provided in Table 1. These data were compiled during a poll of new students in the second week of the fall 2017 semester (N = 271 first-semester freshmen). It is important to note that two additional career categories were omitted from Table 1 due to the lack of interest expressed by our incoming freshmen. Only 2.26% (6 students) expressed an interest in a career in zoo or kennel management while only 4.13% (11 students) expressed interest in animal research with a Bachelor of Science degree. The majority of incoming freshmen who have the desire to pursue animal research in some form have their sights set on an advanced graduate degree within an animal science discipline (M.S. or Ph.D.).

**Table 1. Desired career paths of incoming freshmen by their primary species interests (N=271)**

	Farm Mgmt.	Animal Industry	Graduate School (M.S. or Ph.D.)	Veterinary Medicine (D.V.M.)	TOTAL
	Percentage (%)				
Beef	0.75	4.14	3.01	7.52	<b>15.42</b>
Dairy	1.88	1.50	--	2.63	<b>6.01</b>
Swine	0.75	3.76	1.50	3.38	<b>9.39</b>
Horses	1.13	0.38	1.13	9.77	<b>12.41</b>
Sheep	0.38	0.38	--	0.75	<b>1.51</b>
Goats	--	--	0.38	0.75	<b>1.13</b>
Poultry	0.38	--	--	0.75	<b>1.13</b>
Comp. <sup>1</sup>	--	1.88	0.75	32.71	<b>35.34</b>
Lab. An <sup>2</sup>	--	--	--	0.38	<b>0.38</b>
Exotics <sup>3</sup>	--	0.38	0.75	9.40	<b>10.53</b>
<b>TOTAL</b>	<b>5.27</b>	<b>12.42</b>	<b>7.52</b>	<b>68.04</b>	<b>93.25*</b>

\*Zoo/kennel management and animal research with a B.S. degree were omitted from the table due to low interest

<sup>1</sup>Companion animals

<sup>2</sup>Laboratory animals include mice, rats, rabbits

<sup>3</sup>Exotic animals include zoo animals and wildlife species

### Academic Advising of Transfer Students

Transfer students make up roughly 20% of the student population in the animal science department. These students

are also required to complete an orientation session prior to the start of their first semester at ISU. However, transfer students can choose from a face-to-face session that takes place in the spring or an online orientation. Those students who choose the online option will typically work with the transfer coordinator via phone in order to build their schedule. In either case, the student is required to complete the student interest survey prior to attending classes at ISU. Although transfers complete the interest survey, they are not assigned to an academic adviser in the same manner as our freshmen. Transfer students come to ISU with a large variety of completed coursework from all over Iowa and the U.S., which can be difficult to evaluate. In addition, transfer students face challenges that are different than those experienced by our incoming freshmen. It is common for these students to experience some form of “transfer shock” due to a sudden change in course rigor, class size, and social comfort. “Transfer shock” typically results in a decreased grade point average in their first semester at a four year institution. The first semester is a critical time for transfer students psychologically, socially, and academically. This is also the time when most of the course articulation issues are handled. It is most efficient to have one adviser keeping up on transfer articulation agreements and policies as they may change frequently. We believe that it is in the best interests of these students to have an academic adviser that is well versed in transfer policies, credit evaluations, and existing articulation agreements in order to aid them in their transition to ISU. Therefore, all incoming transfer students are placed with a transfer coordinator in their first semester of classes. However, if a transfer student prefers to work with an academic adviser within a given discipline or species-specific focus, they are given the option to request a new adviser after their first semester in the Animal Science department.

The career interests of our incoming transfer students are provided in Table 2. This data was compiled during a poll of new students in the second week of the fall 2017 semester (N = 56).

**Table 2. Career goals of incoming transfer students.**

Transfer Program	Farm Mgmt.	Animal Industry	Zoo or Kennel	Animal Research (B.S)	Graduate School (M.S. or Ph.D.)	Veterinary Medicine (D.V.M.)	Total
	Percentage (%)						
2yr	9.3	15.1	5.7	5.7	3.8	35.8	<b>75.4</b>
4yr	3.8	3.8	--	1.9	1.9	13.2	<b>24.6</b>
<b>Total</b>	<b>13.1</b>	<b>18.9</b>	<b>5.7</b>	<b>7.6</b>	<b>5.7</b>	<b>49.0</b>	<b>100</b>

### The Role of the Academic Adviser

Each adviser will meet with their advisees at least once a semester, typically prior to course registration. This allows the student to get feedback or suggestions on courses that they are planning to take in the following semester. However, it is not uncommon for an advisee to request multiple meetings with their adviser each semester in order to get advice on coursework, internships, study abroad, and research opportunities. The adviser-advisee relationship is different for every student. Some students are happy with meeting only once a semester, but a large proportion of our students want to meet more frequently in order to develop a strong relationship with the adviser.

Advisers are able to track a student’s progress using a tool called the ISU degree audit. The degree audit allows the adviser to get up-to-date information on the courses that have been completed, are in progress, or have been transferred in from another institution. The degree audit is specifically organized according to the animal or dairy science major course requirements. It also includes any courses that are required for declared minors or options. Once grades are submitted at the end of the term, the adviser has access to that information.

### Academic Advising Personnel

In 2017, the number of active advisers in the Animal Science department grew to 28. This total includes 27 faculty advisers and the addition of 1 professional staff transfer coordinator. Advising capacities range from 20 to 85 students per adviser, depending on the teaching appointment of the faculty member. In 2016, only 22 of our faculty members held academic advising roles at a time when enrollment was at an all-time high. The recent new faculty hires with high teaching and advising roles has alleviated some of the strains on the program. It is of the utmost importance to maintain the number of advisers that we currently have in order to avoid overloading faculty members that have split appointments in teaching, extension, and research. Care must be taken to rapidly replace advisers when role changes, retirements, and promotions occur in order to keep the program moving forward.

### Advising Strategy Success

Every student should feel comfortable speaking to their adviser about opportunities or challenges that arise throughout their academic career. Each year, less than 2% of our current undergraduates request an adviser change, which indicates that the vast majority of advisees are comfortable with their adviser assignment. Career mentoring and additional guidance has contributed to a job placement rate of 98% for graduates of the Animal Science department within six months of graduation. This rate includes placement within an animal industry as well as those that continue their education with a graduate or veterinary degree (M.S., Ph.D., and D.V.M).