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Academic Advising Strategies to Support Undergraduate Student Success

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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)

<table>
<thead>
<tr>
<th>Species</th>
<th>Farm Mgmt.</th>
<th>Animal Industry</th>
<th>Graduate School (M.S. or Ph.D.)</th>
<th>Veterinary Medicine (D.V.M.)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef</td>
<td>0.75</td>
<td>4.14</td>
<td>3.01</td>
<td>7.52</td>
<td>15.42</td>
</tr>
<tr>
<td>Dairy</td>
<td>1.88</td>
<td>1.50</td>
<td>--</td>
<td>2.63</td>
<td>6.01</td>
</tr>
<tr>
<td>Swine</td>
<td>0.75</td>
<td>3.76</td>
<td>1.50</td>
<td>3.38</td>
<td>9.39</td>
</tr>
<tr>
<td>Horses</td>
<td>1.13</td>
<td>0.38</td>
<td>1.13</td>
<td>9.77</td>
<td>12.41</td>
</tr>
<tr>
<td>Sheep</td>
<td>0.38</td>
<td>0.38</td>
<td>--</td>
<td>0.75</td>
<td>1.51</td>
</tr>
<tr>
<td>Goats</td>
<td>--</td>
<td>--</td>
<td>0.38</td>
<td>0.75</td>
<td>1.13</td>
</tr>
<tr>
<td>Poultry</td>
<td>0.38</td>
<td>--</td>
<td>--</td>
<td>0.75</td>
<td>1.13</td>
</tr>
<tr>
<td>Comp.¹</td>
<td>--</td>
<td>1.88</td>
<td>0.75</td>
<td>32.71</td>
<td>35.34</td>
</tr>
<tr>
<td>Lab. An²</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.38</td>
<td>0.38</td>
</tr>
<tr>
<td>Exotics³</td>
<td>--</td>
<td>0.38</td>
<td>0.75</td>
<td>9.40</td>
<td>10.53</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5.27</td>
<td>12.42</td>
<td>7.52</td>
<td>68.04</td>
<td>93.25</td>
</tr>
</tbody>
</table>

*Zoo/kennel management and animal research with a B.S. degree were omitted from the table due to low interest
¹Companion animals
²Laboratory animals include mice, rats, rabbits
³Exotic 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>
<thead>
<tr>
<th>Transfer Program</th>
<th>Farm Mgmt.</th>
<th>Animal Industry</th>
<th>Zoo or Kennel</th>
<th>Animal Research (B.S)</th>
<th>Graduate School (M.S. or Ph.D.)</th>
<th>Veterinary Medicine (D.V.M.)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2yr</td>
<td>9.3</td>
<td>15.1</td>
<td>5.7</td>
<td>5.7</td>
<td>3.8</td>
<td>35.8</td>
<td>75.4</td>
</tr>
<tr>
<td>4yr</td>
<td>3.8</td>
<td>3.8</td>
<td>--</td>
<td>1.9</td>
<td>1.9</td>
<td>13.2</td>
<td>24.6</td>
</tr>
<tr>
<td>Total</td>
<td>13.1</td>
<td>18.9</td>
<td>5.7</td>
<td>7.6</td>
<td>5.7</td>
<td>49.0</td>
<td>100</td>
</tr>
</tbody>
</table>

**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).