

DEPARTMENT OF ANIMAL SCIENCE
Curricular Outcomes

Students should demonstrate the ability to:

1. understand and manage scientific information from the animal sciences.

- to show that they can effectively summarize source materials.
- to show that they can synthesize, analyze, and come to conclusions about multiple source materials, demonstrating an ability to discern useful relationships among the sources.
- to show that they can make an argument for a judgment or a proposed action based on source materials.
- to show that they can explain scientific information to lay audiences who need to understand a and/or use that information.

Evidence for assessment: oral and written summaries, abstracts, annotated bibliographies; reviews of literature, introductions to scientific articles, research papers; oral and written proposals, position papers; articles for the popular press, technical bulletins with fact sheets, oral presentations to lay audiences, power-point slides, web pages, promotional materials

2. think systemically about the animal sciences.

- to show that they can analyze an animal science system into its component parts and describe and examine the parts individually.
- to show that they can place an entity related to the animal sciences into a larger system and that they can describe how that entity fits into the system and how it is related to other entities in the system.

Evidence for assessment: multiple-choice tests; essay tests questions; class projects; homework

3. give effective oral presentations

- to show that they can prepare and deliver a presentation in such a way that it effectively communicates the speakers' objectives.
- to show that in professional occasions that call for speaking, students can conduct themselves with the confidence and naturalness that mark a successful professional, paying attention to the value of the presentation for the audience.
- to show that they can effectively and appropriately use presentational technologies, Power Point, slides, posters, handouts, transparencies, etc.
- to show that they can address an audience clearly and coherently in situations that call for extemporaneous speaking, including answering questions.

Evidence for assessment: video-tapes of formal and informal speaking, in-class assessments

4. engage in clear and careful scientific inquiry.

- to show that they can apply deliberate and thorough observational skills in conducting an experiment or laboratory exercise.
- to show that they can summarize and organize data and render them in a way that is accurate and comprehensible in both verbal and graphical modes.
- to show that they can move from scientific data to generalizations based on those data and also draw conclusions from data to support the objective of the experiment or laboratory exercise.

Evidence for assessment: lab reports, lab notebooks, oral or written scientific papers, posters

5. apply critical thinking to solving problems related to the animal sciences.

- to show that they can identify, define, and analyze a problem: what it is that generates the problem, what is given, what is unknown, and what are the criteria for viable solutions to the problem.
- to show that they can determine what information is appropriate to solving the problem and then find it, assess its authority and validity, and use it effectively
- to show that they can integrate and apply information from pertinent disciplines to the solution of problems in animal systems.
- to show that they can evaluate the solutions according to the established criteria, choose the most viable solution, and make a convincing case for that solution.

Evidence for assessment: oral and written project proposals, business plans, technical reports; essay test questions; oral and written project reports

6. develop and utilize the personal and professional attributes that mark a successful Animal Sciences graduate

- to show that they can work effectively in teams, demonstrating that they have a good grasp of strategies for making teams work efficiently and for dealing productively with conflict.
- to show that they have good managerial and interpersonal skills: the ability to motivate others, to work together to solve problems, and to make productive use of the knowledge and diverse abilities of different people.
- to show that they have developed, honed, and exercised their leadership potential.
- to show that they continue to seek out educational opportunities as a way of growing both professionally and personally.

Evidence for assessment: reports from advisors; participation in personal and professional development workshops, such as the Leadership Development Seminar; participation in pre-professional and professional organizations; participation in internships; teaching assistantships