**Professional Science Masters (PSM) Degree in Animal and Food Science**

**Graduate Program Policy Statement**

**Part I. Program History**

**A. *Purpose***

The Department of Animal & Food Sciences offers B.S. degrees in Animal Science, Pre-veterinary Medicine and Animal Biosciences, and Food Science. We anticipate that a new Professional Science M.S. (PSM) degree in Animal and Food Sciences will serve the needs of multiple groups of individuals. First, we have a successful program that in 2017, placed approximately 35 of 45 students of our students that applied to Veterinary Schools. Almost all students who are not accepted to Veterinary School on their first attempt, continue to apply a second or even third time. Thus, gaining more educational experience and showing an ability to excel in graduate level courses readily assists these students during their subsequent applications. Graduates that major in animal science are interested in pursuing careers in the animal industries and the PSM can provide graduates with new tools for pursuing a science-related careers in cooperative extension, industry, government, service, non-profit or other fields related to the animal and/or food sciences. Thirdly, there are individuals in the workplace that seek additional training that can be used to enhance their core competencies in an ever rapidly evolving job market. The PSM degree in Animal and Food Sciences is not automatically a terminal degree. However, it should be clear that obtaining this degree usually will not provide adequate preparation of pursuing a Ph.D. degree that would normally be obtained by completing a research-based M.S. plan of study.

Students completing the Professional Science M.S. (PSM) degree in Animal and Food Sciences will:

1. Expand knowledge and skills in the animal and food sciences

2. Acquire knowledge and skills in areas of leadership, organization, project management, organizations and entrepreneurship

3. Apply knowledge through design and completion of a problem-solving project

B. ***Date of Permanent Status***

The PSM in Animal or Food Science is scheduled to start in Fall, 2018.

C. ***Degrees Offered***

Professional Science Master’s in Animal or Food Science, College of Agriculture and Natural Resources

**Part II. Admission**

A. ***Admission Requirements***

 Applicants must submit all materials directly to the University Office of Graduate and Professional Education using the online admission process before admission can be considered. Admission applications are available at: https://grad‐admission.udel.edu/apply/

On a 4.0 system, a G.P.A. of at least 3.0 is preferred. Applications will be evaluated based on a combination of record of academic or professional achievement, 3 letters of recommendations, and a personal statement describing how the completion of the PSM will contribute to their professional goals.

Applicants must take the GRE Aptitude Test and should have a minimum of 300 combined on verbal and quantitative reasoning.

Students for whom English is not their first language the recommended minimum scores are 100 on the TOEFL examination and/or IELTS of 6.5.

Admission to the PSM in Animal or Food Science is based on selections made by the department graduate committee in compliance with University policies and procedures. Admission is selective and competitive based on the number of well-qualified applicants and the limits of available faculty and facilities. Those who meet stated minimum academic requirements are not guaranteed admission, nor are those who fail to meet those requirements necessarily precluded from admission if they offer other appropriate strengths.

B. ***Background Requirements***

A Bachelor’s degree from an accredited program and preferably from a curriculum based on biological sciences (e.g., but not limited to, Animal Science, Food Science, Biology, Nutrition, Physiology, Genetics, Microbiology, or Biochemistry) is required for admission.

C. ***Application Deadlines***

Applications will be taken on a continuing basis to allow for admittance in either the Fall, Spring, or Summer Semesters. The deadlines for each semester are given below.

Fall: August 1

Spring: December 1

Summer: May 1

D. ***Types of Admission***

1) Regular Admission: Regular status is offered to students who meet all of the

established entrance requirements.

2) Conditional Admission: Successful applicants are typically admitted conditionally

because stated information is self‐reported and uploaded documents are

unofficial. Fulfilling the conditions stated on an offer of conditional admission by

the first date of graduate coursework is critical, so the instructions stated on the

letter must be followed carefully. Failure to clear all stated conditions by the

start of graduate coursework may result in revocation of admission to the

graduate program.

E. ***University Statement***

Admission to the graduate program is competitive. Those who meet stated requirements are not guaranteed admission, nor are those who fail to meet all of those requirements necessarily precluded from admission if they offer other appropriate strengths.

**Part III. Academic : Professional Science Masters (PSM) in Animal or Food Sciences**

A. ***Degree Requirements***

The Professional Science Master’s (PSM) in Animal and Food Science is intended for applicants who want to further their academic training in animal or food science but who are not research-oriented. This degree requires satisfactory completion of 30 hours of graduate level course work, including 16 credits of graduate-level coursework, 5 credits of an in-depth project, an ethics course and 6 credits of PSM PLUS coursework. The 16 credits of coursework must include 12 graduate credits in Animal and Food Sciences (ANFS) courses.

The degree candidate will prepare and submit a problem-solving project report under the supervision of their faculty advisor. This project may be an action program, the development of a plan to address a pertinent problem, the development of materials or methodology suited to the student's situation, or the development and execution of research appropriate to the profession. A formal project report must be submitted to and approved by the candidate's faculty advisor and the ANFS graduate committee. The student and faculty advisor are responsible for the content and length of the paper and the paper will follow established formatting guidelines. A maximum of five-credit hours are awarded for satisfactory completion of this project paper. Upon completion of the paper, the student shall be required to present a public seminar on the work and to pass an oral examination given by the candidate's committee. This examination shall cover both course-work and the paper.

**Credit Requirements: 30 cr.**

**A. Animal OR Food Science Core (16 cr.)**

* 16 credit hours of graduate-level courses of which twelve must be ANFS courses with a focus on animal science OR food science including Seminar ANFS 665 - Seminar (1cr.)

**B. Ethics Course (3 cr.) Select one course.**

* [UAPP 650 - Values and Ethics of Leadership (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* [BUAD 840 - Ethical Issues in Domestic and Global Business Environments (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)

**C. Problem Solving Project and Seminar (5 cr.)**

* [ANFS 666 (5 cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)

**D. PSM Plus courses (6 cr.) Select two courses.**

**Leadership and Organization**

* [BUAD 870 - Managing People, Teams, and Organizations (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* BUAD 878 - Leading Across Boundaries (3 cr.)
* [UAPP 604 - Leadership in Organizations (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* [UAPP 697 - Leading Organizations in Public & NP Sectors (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)

**Project Management, Operations or Entrepreneurship**

* [BUAD 835 - Managing New Product Development Projects (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* [ENTR 616 – Applied Creativity (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* ENTR 658 – Application Development for New Technology (3 cr.)
* [ENTR 660 - High Technology Entrepreneurship (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* [MISY 840 - Project Management and Costing (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* [UAPP 689 - Information Technology & Management of Public & NP Orgs (3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)
* UAPP 684 Performance Management and Program Evaluation  [(3cr.)](http://catalog.udel.edu/preview_program.php?catoid=12&poid=5940&hl=professional&returnto=search&print)

 **Statistics**

## STAT 608 -Surveys and Economic Experiments

## BISC 643 - Biological data analysis

## STAT 656 - Biostatistics

A student may request additional coursework be counted from a previous degree or from another institution and department. Partitions are presented to the Chair who renders a decision after consultation with the Graduate Committee and relevant faculty. A minimum GPA of 3.0 is required for this program.

Transfer credits

Up to six credits may be transferred from courses applicable toward the degree, provided that the credits have not been applied to obtain a different degree. The transfer must be approved by the Executive committee, and if necessary, in consultation with the department that offers the (potentially) equivalent course.

2) Electives - none

Committees for exams or thesis

New students will be assigned an advisor and committee of 2 additional faculty.. The student has the responsibility to meet with their advisor and committee members to plan their course of study in the program. Advice will be given concerning course selection based on interests and undergraduate/graduate background. Our program is sufficiently small that we are able to give individualized attention to graduate students. There is no thesis option in this program.

B. ***Timetable and definition of satisfactory progress towards the degree***

1. Academic load and progress

The PSM program will follow the University of Delaware, Office of Graduate and Professional Education recommended policy for determining students’ failure to make satisfactory progress towards degree requirements and time limits for completion. Students may be enrolled on a full‐time (9 credits per

term) or part‐time (fewer than 9 credits per term) basis.

2) Grade and GPA requirements

Students must have a minimum overall cumulative grade point average of 3.0 to be eligible for the degree. In addition, the grades in courses specifically required for the degree program must average at least 3.0. All graduate-numbered courses taken with graduate student classification at the University of Delaware are applied to the cumulative index. Credit hours and courses for which the grade is below "C-" do not count toward the degree even though the grade is applied to the index.

**Academic Probation**

The Office of Graduate Studies monitors the academic progress of all graduate students and notifies students in writing of all academic deficiencies. The cumulative GPA after each 9-hour increment determines academic standing. In addition to the University policy regarding minimum grade point averages, some departments require graduate students to maintain certain performance minima in their programs of study in all or in particular courses. Failure to meet the stated minima may lead to academic dismissal from the program.

**Part IV. Assessment Plan**

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| Assessment plan for PSM in Animal or Food Science |
| Objectives | Strategic Activities | Measures | Short-term Outcomes | Long-term Impact |
|  |  |  |  |  |
| 1. Expand knowledge and skills in the animal and food sciences | Course work covering the disciplines of animal or food science | Faculty evaluation of student progress in courseworkSurveys of graduate students in the program and post-graduation  | Students are prepared for subsequent coursework | Graduates enjoy long term success in animal and food science careers. |
| 2. Acquire knowledge and skills in areas of leadership, organization, project management, organizations and entrepreneurship | Coursework in ethics, communication, leadership, entrepreneurship, management, statistics and other approved courses | Surveys of students focusing on their experiences in these classesSurveys of graduates to determine the utility of these classes to their careerFaculty evaluation of student progress in coursework | Course work for the PSM degree helped students secure initial employmentStudents and graduates report applying knowledge from courses to work settings  | Graduates enjoy long term success in animal and food science careers |
| 3. Apply knowledge through design and completion of a problem-solving project | Identify a problem and potential solution and design project to solve the problem. | Quality of the project study design and results Faculty evaluation of quality and scope of the project | Surveys of graduates to determine the utility of their project experience to their career | Graduates enjoy long term success in animal and food science careers |

**Part V. Financial aid**

A. Financial Awards

There are no financial awards for this degree.

**Part VI. Departmental Operations**

A. General student responsibilities

* 1. Up-to-date addresses, etc.
	2. Department of Animal & Food Science
	3. 44 Townsend Hall
	4. Newark, DE 19716
	5. Phone: 302-831-2524
	6. Fax: 302-831-2822
	7. Laboratories and research equipment. None
	8. Hazardous Chemical Information Act.
	9. Vehicles. No department vehicles are provided.
	10. Keys, offices, mail, telephone, copy machine, computer terminals, etc.
	11. All graduate students in the Department of Animal & Food Science are given keys to the graduate office; are allowed use of the graduate office computers; are allowed access to the department photocopy machine (a limited monthly copy allotment is granted all graduate students); are allowed access to the department fax machine; and can access department supplies for such things as paper, pens, notepads and staples.

Access to Student Records

Students wishing to review their Departmental file must submit a written request to the Graduate Program Director at least 24 hours in advance. Students must review the file in the presence of departmental staff or faculty and are not permitted to remove a file from Wolf Hall but may photocopy documents from their folder. All access to student records is in accordance with the Family Educational Rights and Privacy Act.

Standards of Student Conduct

A) Academic honesty

All graduate students are subject to University of Delaware regulations regarding [academic honesty](http://www.udel.edu/stuguide/09-10/code.html#honesty).

B) Laboratory Safety and Research Regulations

Graduate students performing laboratory research are subject to all University regulations regarding safety, use of human subjects and animals, and hazardous/radioactive material use and disposal. These guidelines may be found in the University of Delaware Policies and Procedures Manual. Students participating in off campus internship experiences are expected to fully comply will all safety regulations of the workplace.

C) Contact information

It is the responsibility of all students to ensure that their contact information on file with the university is current (mailing address, phone number, email address). It is also the student’s responsibility to regularly monitor their email, phone and mail for important notices regarding their enrollment.

D). Departmental facilities

Occasionally student's graduate assistantship or other assignments may require the use of departmental laboratories or other facilities. Keys to laboratories, etc., are maintained in the Department office and will be issued based on faculty and Department Chair approval.

Any assignments that require the expenditure of departmental funds (e.g. data collection activities) require departmental approval in advance and are processed through the department in which the work is to be done.