# Graduate Student Handbook 2021-2022

## Department of Agronomy Purdue University



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## **INDIANA**



Before Europeans entered Indiana in the late 1600's, successive groups of Indian tribes inhabited the area. The French established three forts in the early 1700's, one, Fort Quiatenon, was located near Lafayette. The area was ceded to the British in the 1760's, and then to America after the Revolutionary War. After Indiana became the 19th state in 1816, pioneers began arriving in the state in large numbers. Settlers from states south and east of Indiana came in search of the highly productive Indiana farmland. In the 20th century, the state has seen a change from an agricultural economy to

one emphasizing manufacturing. Agriculture, though, remains a strong force in the state's economy.

Indiana's landscape varies from the wooded hills in the southern part of the state, flat fertile farmland in its central section to swamps and marshes in the north. Points of interest range from such natural features as sand dunes, caves and lakes to the man-made Indianapolis Motor Speedway, scene of the internationally known Memorial Day 'Indy 500' 500-mile automobile race and the 'Brickyard 400'. We have 4 distinct seasons. Our average annual rainfall is 40 inches, average summer temperature is 70-80°F, and average winter temperature is 25-35°F.

Indiana is known affectionately as the "Hoosier State" and its inhabitants are known as "Hoosiers". Famous Hoosiers include Benjamin Harrison (our 23rd President), James Whitcomb Riley, Kurt Vonnegut, Jr., John Dillinger (gangster and bank robber in the 30's), Jim Davis (creator of Garfield), Orville Redenbacher, Tony Stewart and Dan Quayle. Michael Jackson, Jon McLaughlin, Axl Rose, John Mellencamp, David Letterman, Larry Bird and actors Steve McQueen and James Dean all hail from Indiana. Twenty-four Purdue graduates were selected for space flight, including Neil Armstrong and Eugene Cernan, the first and last men on the moon. (http://www.in.gov/core/about.html)

## Indiana agriculture

Agriculture is big business in Indiana. There are 61,000 farms with over 14.7 million acres devoted to agricultural production. The annual value of agricultural products exceeds \$5.1 billion. Corn, soybeans, wheat and forages are the principle agronomic crops. Nationally, Indiana ranks first in duck production; second in popcorn, tomatoes, and egg production; fourth in soybeans and mint production; fifth in corn and hog production; and seventh in turkey production. As an exporter, Indiana exports over \$2 billion in agricultural products annually and is the largest trading partner with Canada of any of the fifty states.

## The Lafayette/ West Lafayette Community

Lafayette and West Lafayette, Indiana lie on Interstate Highway 65, 63 miles northwest of Indianapolis and 105 miles southeast of Chicago. The two cities, separated by the Wabash

River, have a combined population of 101,248 (2014 census). The community has much to offer as a place to live. Housing is high quality and affordable. The public schools are excellent and benefit from a close interaction with the university. More than 60 churches of all major denominations, an art museum, historical museum and 1600 acres of public parks add to the quality of life. There are two hospitals that serve the community (Franciscan Health Lafayette and Indiana University Health Arnett).

The economy of the area is strong and diverse. Employment is high and offers a broad range of opportunities. Purdue is the single largest employer. A rapidly growing manufacturing industry is also present which includes metals, corn processing, automobiles, machine tools, pharmaceuticals and chemicals.

Nearby points of scenic and historic interest include Fort Quiatenon, an early French settlement located approximately 3 miles southwest of West Lafayette on South River Road and Prophetstown State Park just a mile east of Battle Ground Park where William Henry Harrison fought the Battle of Tippecanoe. Nearby parks and recreation areas include Shades and Turkey Run State Parks and Lake Shafer and Lake Freeman.

The Purdue University Horticulture Gardens (0.5 acres) are botanical gardens located on the Purdue campus, adjacent to the Horticulture building at 625 Agriculture Mall Drive. Established in 1982, the gardens display a wide diversity of plants, including nearly 200 species of perennial flowers and foliage plants, and over 300 cultivars of annual flowers and garden vegetables. The gardens are open to the public year-round, seven days a week.

Information taken from the following websites: http://www.in.gov/dnr/parklake/, http://www.indianaoutfitters.com/statemap.html, www.agclassroom.ore/kids/stats/indiana.pdf, and http://en.wikipedia.org/wiki/Lafayette,\_Indiana.

## International Center of West Lafayette

The International Center of West Lafayette (not a part of Purdue University) exists to create cross-cultural connections between the diverse residents of Greater Lafayette through education, the arts, cultural events, cultural information and assistance, and housing. It is located at 523 Russell Street, West Lafayette IN 47906, info@intlctr.org / Phone: (765) 743-4353.

The International Center was founded in 1971 to foster a spirit of international cooperation and understanding. To continue this effort, we offer a wide range of activities designed to provide patrons with greater knowledge of other languages and cultures. Their programs are designed to benefit both international visitors as well as long-time community residents. All programs are held at the International Center (unless otherwise noted), and all are welcome to participate. Please contact them with any questions or ideas for future programs!

## Shuttle Services

There are four transportation companies providing shuttle service between Purdue University and the two nearest airports (Indianapolis and Chicago O'Hare), Chicago, and Indianapolis.

• <u>To Indianapolis Airport</u>

Lafayette Limo (765-497-3828; www.lafayettelimo.com/) has shuttles leaving every 2 hours, 9 times a day. The fare is \$27.00 one-way and \$50.00 round trip. There are lower rates for children.

 <u>To Chicago O'Hare Airport</u> Express Air Coach (765-743-3120; www.eacshuttle.com) provides shuttle service. Lafayette Limo – Limited availability – view their website <u>www.lafayettelimo.com</u>

<u>Connecting Chicago, Purdue, and Indianapolis</u> Reindeer Shuttle (765-637-5124 http://reindeershuttle.com).

<u>Connecting Purdue with Chicago suburbs.</u> Specializing in weekend transportation for college students
 Suburban Express (217-344-5500)

## PURDUE UNIVERSITY

Founded in 1869, Purdue University ranks among the 25 largest colleges and universities in the nation. Today 38,190 (Spring 2017) students are enrolled at the West Lafayette campus with an additional 30,000 enrolled at the four regional campuses and ten Statewide Technology sites. Diversity and opportunity are characteristics of the University. Students today represent all 50 states and 127 countries. Purdue offers nearly 200 majors within 10 colleges and over 7,400 courses. Among Purdue's 260,000 alumni are Nobel Prize winners, astronauts, and three U.S. Secretaries of Agriculture.

The College of Agriculture at Purdue has about 288 faculty and a total of 2,069 staff and faculty involved in teaching, extension and research and offers more than 30 undergraduate degree programs through its 11 academic departments. Each of these departments also offer Master's and Ph.D. degree programs.

- Most of the research in the College is conducted through the Indiana Agricultural Experiment Station. Through the Experiment Station, and grants and contracts about 75 million dollars are invested in agricultural research each year.
- The Cooperative Extension Service is the primary out-reach and technology transfer arm of the College of Agriculture. Over 250 county agents supported by 75 technical specialists provide local access to the information and resources found at the University.
- Innovative service programs in the College include the Crops Diagnostic Training and Research Center and the Plant and Pest Diagnostic Laboratory. Thee programs provide continuing education and technical services to the crop production industries of the states.

## INTERNATIONAL STUDENTS and SCHOLARS

If you are an international student, there are many programs that will help you adapt and get the most out of your experience here at Agronomy. The central focus for International Programs is

The Office of International Students and Scholars (ISS). ISS is committed to the internationalization of Purdue University by providing appropriate services and support to international clientele and various University departments and offices. The office seeks to enhance the academic, cultural, and social pursuits of students and scholars from abroad through knowledge and expertise in recruitment, admissions, immigration, advising, and cross-cultural programming. ISS is a constituent unit of Purdue's <u>Office of International Programs</u>.

Office Hours: Monday - Friday 8:00 a.m. - 5:00 p.m. Walk-in Hours: Monday, Tuesday, Wednesday, Friday: 9:00 - 11:30 a.m. and 1:30 - 4:00 p.m. Thursday: 1:30 - 4:00 p.m. only Counselors are only available during walk in hours, except by appointment.

The Purdue International Integration Initiative ("P3i") encompasses many programming elements coordinated by the Office of International Programs. P3i seeks to provide cultural, educational, service and social opportunities whereby international students will enhance their American educational experience and contribute to the globalization of Purdue and the greater community.

Opportunities abound with P3i programs. Interested in making friends with an American family? Check out the <u>International Friendship Program (IFP)</u>. Interested in sharing your culture with Americans, young and old alike? Be an <u>Educational Exchange Program (EEP)</u> volunteer. Would you like to make a difference in the community by doing volunteer work? If so, check out the <u>Boiler Out! Volunteer Program</u>. Want to educate others about your country at special times of the year? Participate in International Education Week with activities in the Greater Lafayette community. Want to explore Indiana and surrounding places of interest? Sign up for a <u>GO</u> <u>Purdue! Trip</u>. Are you ready to share a meal, discuss differing cultural perspectives and just "hang out" with new friends? Join in the fun of Friday night <u>Perspectives</u>. The opportunities are endless to make your stay at Purdue a positive and life-changing adventure.

Check out the links to each of these P3i programs for more details.

<u>Multinational Integration Xchange (MIX)</u>: MIX is a presidential initiative designed to assist undergraduate students in crossing cultural bridges in order to get to know other students from around the world. Through programming and an innovative cross-cultural certification, students are incentivized to take risks to move out of their comfort zones to build relationships across domestic and international boundaries. For more information, look at www.ippu.purdue.edu/MIX/.

International Friendship Program (IFP): Offered to new international students, this program provides the opportunity to meet and become friends with an American individual or family living in the Greater Lafayette area. IFP is a unique program that literally hundreds of students and community residents have benefited from over the past twenty years. www.ippu.purdue/edu/Programs/IFP/

<u>Educational Exchange Program (EEP)</u>: Provides an opportunity for greater international awareness and cultural understanding for the Greater Lafayette community. ISS matches requests for cultural presentations from local teachers and event organizers with interested international students and scholars.

<u>Boiler Out! Volunteer Program</u>: The Boiler Out! Volunteer Program provides international students with meaningful community service projects that reflect its three core values of

Outreach, Understanding, and Teamwork. Participants do a variety of volunteer work alongside American students and local community members. www.ippu.purdue.edu/Programs/BoilerOut/biolerOut.cfm

<u>Perspectives</u>: International students are encouraged to share their perspective and experience other perspectives through fun events, food, trips. Perspectives takes place on Friday evenings or on Saturday at the end of every week. We meet in different locations across campus and occasionally enjoy trips into the community to offer new experiences and opportunities to connect with new friends. We learn about and celebrate American holidays or traditions too. It's a great way to meet other students and scholars from all over the world in a relaxed setting.

Designed as an ongoing orientation program, Perspectives makes Purdue a little smaller place through activities which are often planned with the help of student clubs, campus departments, and community organizations.

International Programs sends out an events newsletter every week with Perspectives activities and other opportunities. Contact International Programs at <u>IPprograms@purdue.edu</u> for more information or to be included in the newsletter mailing list.

Each fall and spring semester ISS student volunteers help new international students with matters such as arrival pick-up, ISS check-in process, and general orientation needs.

<u>International Education Week:</u> Since August 2000, Purdue has proudly ranked 2nd or third in total international student enrollment among U.S. universities. During International Education Week (IEW), celebrated internationally the third week in November, Purdue international student and scholar volunteers share some of the special aspects of their cultures with select schools and classrooms.

## FINANCIAL INFORMATION

All Purdue graduate students at the West Lafayette campus use the *my*Purdue web portal as the source for financial account information. You will use *my*Purdue to pay tuition, any fees associated with graduation and more.

**Before Using** *my***Purdue.** Read <u>http://www.purdue.edu/onepurdue/ESA/studentinfo.shtml</u>. It includes important information that both returning and new students need to know. Links to video demonstrations of *my*Purdue also are on this page. (You will need to enter a valid Purdue Career Account username and password to access the demos. If you do not know your username, instructions on how to find it are on this page: <u>http://help.itap.purdue.edu/2550</u>.)

## To access *my*Purdue—

- 1. Go to the *my*Purdue login page: <u>https://mypurdue.purdue.edu</u>
- 2. Enter your Career Account username and password.

If you have problems accessing *my*Purdue, read this page: <u>https://help.itap.purdue.edu/3447</u>. If you need help using *my*Purdue, contact the ITaP Customer Service Center at: E-mail: itap@purdue.edu; Phone: (765) 494-4000; Online: <u>www.itap.purdue.edu/help</u>

#### Fees

All graduate students, regardless of employment, are required to pay a portion of the tuition and fees.

- A research or teaching assistantship and fellowship appointment provides a salary and fee remission of all but a nominal portion of the tuition and fees. Currently students on an appointment pay \$303 per fall and spring semesters and \$151.50 per summer session. Graduate students on appointment pay the fees in four payments.
- New and continuing graduate students who are not on an appointment (assistantship or fellowship) currently pay \$347.85 per credit hour if a resident of Indiana and \$948.30 per credit hour for non-resident. New and continuing International non-resident graduate students not on an appointment pay \$1,018.30 per credit hour. An installment plan is offered to spread payments into four payments (including interest) each semester except for the summer term which has only one payment. Graduate students not on an appointment pay at least the first installment of fees and tuition at the time of registration for each semester.

Students should be aware that if payment is not submitted by the established due dates, a late fee of \$17.50 is applicable.

Graduate Student Staff and Fellows Fee Deferment Procedures—Special fee deferment arrangements have been made for graduate student staff and grad fellows <u>whose first installment</u> <u>of the fees is due before their first paycheck</u>. The University will temporarily defer fees and establish due dates each year for four equal installments of fees and housing if their graduate staff appointment is approved and processed into the bursar system. (No action is necessary on behalf of the student).

Students should be aware that while the University will not charge the normal \$50 deferment fee, if payment is not submitted by the established due dates, a late fee of \$17.50 is applicable.

Payment for any amounts assessed over and above the deferment should also be satisfied online to avoid registration cancellation.

Students should contact the Bursar's Office with questions at <u>installmentplan@purdue.edu</u>.

## Insurance

Graduate staff who are employed half-time or more are eligible for participation in the University-subsidized Graduate Student Staff Health Plan. (Note: Fellowship recipients are not eligible for this plan but have their own plan option.) To obtain coverage, graduate staff members should follow the directions appropriate to their citizenship on the Graduate Staff Benefits Web site, <u>http://www.purdue.edu/hr/audience/gradstaff.html</u>. Eligible graduate staff members who enroll in the plan will have deductions taken automatically from their monthly pay. Coverage is continuous, including the summer, as long as the graduate staff member is

employed in an eligible position. The plan is designed to meet University guidelines for insurance coverage for international graduate staff. Internationals who wish to waive coverage in this plan must show proof of other appropriate coverage.

http://www.purdue.edu/hr/Benefits/gradStaff/index.html

## DEPARTMENT OF AGRONOMY

The Department has 39 faculty and 14 adjunct faculty within three general areas (see next page):

- Crops and the Changing Environment
- Soils and Land Use
- Water, Air and Climate

Among these are a number of USDA Agricultural Research Service faculty housed in the department and at the USDA National Soils Erosion Laboratory.

## DEPARTMENTAL AREAS OF SPECIALIZATION

Within each degree (MS and PhD), there are six areas of research specialization that can be indicated on your plan of study:

- Genetics & Crop improvement
- Crop Physiology & Ecology
- Cropping Systems
- Landscape & Hydrologic Processes
- Soils & Biogeochemistry
- Meteorology & Climatology

These areas of specialization do not appear on your diploma but do appear on your official transcript.

#### AGRONOMY FACULTY

NAME	EXPERTISE	EMAIL	PHONE NUMBER
c	ROPS AND THE CHANGING E	NVIRONMENT	
Joseph Anderson	Plant Molecular Genetics	janderson@purdue.edu	765-494-4777
Shaun Casteel	Soybean Production	scasteel@purdue.edu	765-494-0895
Gebisa Ejeta	Sorghum Genetics & Breeding	gejeta@purdue.edu	765-494-4320
Bruce Erickson	AGRY Distance Education & Outreach Director	berickso@purdue.edu	765-494-7540
Corey Gerber	Purdue Diagnostic Training & Research Center	cgerber@purdue.edu	765-496-3755
Karen Hudson	Plant Molecular Genetics (USDA/ARS)	kkaczoro@purdue.edu	765-494-8057
Yiwei Jiang	Turfgrass & Perennial Plant Physiology	yjiang@purdue.edu	765-494-0651
Keith Johnson	Forage Management	johnsonk@purdue.edu	765-494-4800
Jianxin Ma	Comparative Plant Genomics & Soybean Genetics	maj@purdue.edu	765-496-3662
Mohsen Mohammadi	Small Grains Breeding & Genetics	mohamm20@purdue.edu	765-496-6851
Robert Nielsen	Corn Production	rnielsen@purdue.edu	765-494-4802
Katy Martin Rainey	Soybean Breeding & Genetics	krainey@purdue.edu	765-494-1212
Torbert Rocheford	Maize Genetics & Genomics	torbert@purdue.edu	765-494-9243
Lee Schweitzer	Plant Physiology	lschweit@purdue.edu	765-494-4789
Steven Scofield	Plant Molecular Biology (USDA/ARS)	scofield@purdue.edu	765-494-3674
Daniel Szymanski	Plant Molecular Genetics (BTNY/AGRY)	dszyman@purdue.edu	765-494-8092
Mitch Tuinstra	Maize Genetics & Plant Breeding	drmitch@purdue.edu	765-494-9093
Daniel Quinn	Corn Production	djquinn@purdue.edu	765-494-8071
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Tony Vyn	Cropping Systems	tyvn@purdue.edu	765-496-3757
Diane Wang	Genotype x Environment Modeling	drwang@purdue.edu	765-494-5111
Cankui Zhang	Crop Physiology	dzhang@purdue.edu	765-496-6889
	COLLAND LAND U	CP	
	SOIL AND LAND U	SE	
			(
Shalamar Armstrong	Environmental Soil Science	sarmstro@purdue.edu	765-496-0256
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Sylvie Brouder James Camberato Davide Cammarano	Plant Mineral Nutrition Soil Fertility Precision Agriculture & Crop Modeling	sbrouder@purdue.edu jcambera@purdue.edu dcammar@purdue.edu	765-496-1489 765-496-9338 765-494-4026
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Ronald Turco Soil Microbiology & Biochemistry, Department Head rturco@purdue.edu 765-494-8077 ∀g e 765-494-9610 Quinlai Zhuang Biogeochemical Gas Modeling (EAPS/AGRY) qzhuang@purdue.edu

#### **GENERAL CONTACTS**

#### **DEPARTMENTAL CONTACTS**

Departmental Head Ron Turco

Operations Manager: Social Media, Outreach, Department Event Planning, Alumni, Newsletter Melinda Smith

Main Office Receptionist: Conference room reservations, Break room problems, Event food ordering, Master key, Copying/Printing, Poster production, Mail Connie Foster

Administrative Assistant: Web Content Management / Plant Science Social Event Coordinator/ Events, Travel Brandon Chafin

Administrative Assistant: TA Coordinator/ Academic Scheduling Deputy Dawn Bull

Graduate Program Chair Rich Grant

Graduate Student Administrator: Graduate Scholarship and Awards Holly McIntire

Extension Coordinator Lexie Hayenga

### Business Office Personnel Lacy Raub, Business Manager Cheryl Long Tracy Linn

#### Office/ Desk Assignments Jason Deitrich

Academic IT Specialist Lead Tom Pluimer

#### **Agronomy Graduate Program Committee**

Laura Bowling Richard Grant, Chair Yiwei Jiang Mohsen Mohammadi Diane Wang Tony Vyn Cankui Zhang

#### **Agronomy Safety Committee**

Rachael Stevens Brandon Chafin Jason Deitrich, Chair Linda Lee

#### FACILITY CONTACTS

LILY and P&S Building Manager Jason Deitrich

LILY Plant Growth Greenhouse Coordinator Mike Woodard Ron Steiner (AGRY)

#### Agronomy Center for Research and Education (ACRE) Superintendent Rachael Stevens

Indiana Corn Soybean Innovation Center Manager

Jason Adams

### Ag Alumni Seed Controlled Environment Phenotyping Facility Director

Yang Yang

## Assistantships, Fellowships, Scholarships and Awards

#### **Research Assistantships (RAs)**

Research assistantship appointments (commonly  $\frac{1}{2}$  time FTE appointments) are often a part of faculty research projects. A  $\frac{1}{2}$  time FTE appointment translates to an annual average of 20 hours/week of work on one or more projects defined by the professor employing you. This effort does not represent time you can spend on your specific research project unless specifically approved by your professor. Ask your professor about their availability if he/she has not already spoken to you about them.

### **Teaching Assistantships (TAs)**

A limited number of teaching assistantship appointments (commonly <sup>1</sup>/<sub>4</sub> time FTE appointments) are available within the department. Ask your professor about their availability.

All students for which English is not their primary language must prove English proficiency. Proficiency is verified by the Oral English Proficiency Program (OEPP). The OEPP is responsible for certifying the oral English proficiency of all international graduate students who have been identified by their departments as prospective teaching assistants. This is the first step in ensuring that potential language barriers do not negatively affect undergraduate instruction. The program meets this responsibility in three ways: (1) screening potential teaching assistants by administering the Oral English Proficiency Test (OEPT), (2) by reviewing the results of departmental screening procedures used by Math and the School of Languages and Cultures, and (3) by requiring certification through the successful completion of the Program's instructional component (ENGL 62000) for those who are not certified through the OEPT.

The Oral English Proficiency Test (OEPT) is a computer-based, semi-direct test of oral English proficiency developed and administered by the OEPP. Because the test is computer mediated, all test takers experience the same interface without the variability introduced by different interlocutors in face-to-face interviews. The OEPT consists of 12 items with a variety of prompt types—test, graphic, and audio. Examinees have 2 minutes to prepare their item responses and 2 minutes to respond. Most examinees complete the test and the short survey that follows in about an hour. See the Agronomy Graduate Coordinator to sign-up for OEPT.

- OEPP Offices—8th floor of Young Hall
- OEPT Testing Site—Stanley Coulter ITaP labs
- OEPP Website <u>http://www.purdue.edu/oepp/</u>
- OEPT Practice Test Website <u>http://oepttutorial.org/Default.aspx?p=test</u>

Graduate students are exempted from taking the OEPT who have provided evidence of a high level of oral proficiency with the following test scores: at least 27 on the speaking portion of the TOEFL iBT; at least 8 on the IELTS speaking section; at least 76 on the speaking portion of the Pearson Test of English (PTE); at least 50 on the Test of Spoken English (TSE).

International students from official English-speaking counties are also exempt from taking the OEPT. Those countries include: Anguilla, Antigua and Barbuda, Australia, Bahamas, Barbados, Belize, Bermuda, Botswana, British Virgin Islands, Canada, Cayman Islands, Christmas Island,

Cook Islands, Dominica, Fiji, Gambia, Ghana, Gibraltar, Grenada, Guyana, Isle of Man, Jamaica, Kenya, Lesotho, Liberia, Malawi, Micronesia, Montserrat, New Zealand, Nigeria, Norfolk Island, Papua New Guinea, Philippines, Pitcarin Islands, Republic of Ireland, Sierra Leone, Singapore, St. Helena, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, South Africa, South Sudan, Swaziland, Tanzania, Trinidad and Tobago, Turks and Caicos Islands, Uganda, United Kingdom, Zambia, and Zimbabwe.

## Fellowships

A large number of fellowships are available at Purdue for top students. Applications will be requested at various times during the year.

- George Washington Carver Fellowship
- Charles C. Chappelle Fellowship
- David M. Knox Fellowship
- Lynn Fellowship
- Special Initiatives Fellowship

## **Bilsland Graduate School Dissertation Fellowship**

This fellowship is intended for students within the last 6 months of finishing their Ph.D. The intention is for those truly about ready to finish, and new procedures basically will ensure such (the intention of the donating family). Award is for 6 months, with mandatory supplement (by department of major professor) to bring it up to the normal 1/2 research assistantship. Documents required include 1) a letter of support from the major professor explaining the need for assistance, 2) the student's CV (maximum 4 pages, including a brief summary of research progress), and 3) a copy of the student's transcript (unofficial is OK).

Other Fellowships (See Graduate School web site <a href="http://www.gradschool.purdue.edu/funding/">http://www.gradschool.purdue.edu/funding/</a> )

- Department of Agriculture National Needs Graduate Fellowships (NNF)
- Department of Education Graduate Assistance in Areas of National Need (GAANN); Jacob Javits Foundation Fellowship
- National Aeronautics and Space Administration (NASA) Earth System Science Fellowship Program; Goddard Coastal Research Graduate Fellowship Program; Graduate Student Researchers Fellowship (GSRP); Harriet G. Jenkins Pre-Doctoral Fellowship
- National Institutes of Health (NIH) National Research Service Award (NRSA) Research Training Grants; National Research Service Award (NRSA) Fellowships
- National Institute for Occupational Safety and Health (NIOSH) Training Grant
- National Science Foundation Graduate Research Fellowship; Integrative Education Research Training (IGERT); Vertical Integration of Research and Education in the Mathematical Sciences (VIGRE)
- Radioactive Waste Management Fellowship
- Paul and Daisy Soros Fellowships for New Americans (<u>http://www.pdsoros.org</u>)

## Student Awards and Scholarships

There are a wide range of departmental scholarships possible at various points along your program of study. Funds associated with these scholarships offset University charges (typically travel, tuition, or fees) and are not direct income to the student. They include :

• George D. Scarseth Scholarship (Travel award to ASA meetings)

- Bauman-Doolittle Endowment Fund (Travel award to professional meetings)
- Loyal F. "Pete" Bauman Memorial Fund (Travel award to ASA meetings)
- John Axtell Graduate Student Scholarship in Plant Breeding and Genetics
- Wyman E. Nyquist Memorial Graduate Scholarship
- Marvin and Barbara Phillips Memorial Graduate Scholarship
- Wayne P. Rothgeb Memorial Graduate Scholarship
- Joe L. White Graduate Student Scholarship in Soil Chemistry and Mineralogy
- Stanley A. Barber Memorial Scholarship in Soil Fertility and Plant Nutrition
- Dow AgroSciences Endowment Scholarship

There are also a wide range of awards, largely awarded near the end of your program of study. The monetary awards are direct income for the student. Available awards include:

University and College

- Frederick N. Andrews Environmental Travel Grant
- A.H. Ismail Interdisciplinary Doctoral Research Travel Award
- Teaching Academy Graduate Teaching Award
- Excellence in Teaching Award

## Departmental

- Graduate Student Award for Outstanding Teaching
- Graduate Student Award for Outstanding Extension
- Graduate Student Award for Outstanding Master's Student Research
- Graduate Student Award for Outstanding Ph.D. Student Research
- M.O. Pence Award (Agronomy Extension and/or Applied Research)
- Stevan J. Kristof Outstanding Graduate Student in Remote Sensing Award
- Jerry V. Mannering Award in Soil Conservation and Management
- Ohlrogge Award for Innovation in Agronomic Research

#### <u>National</u>

- American Society of Agronomy
- Crop Science Society of America
- American Seed Research Foundation
- J. Fielding Reed/Phosphate and Potash Institute

## Opportunities for expanding your graduate student experience

Teaching experiences: Available teaching experiences vary depending on the type of funding you have for your degree.

All students can gain certifications through the CIE College Teaching Development Program (<u>https://www.purdue.edu/cie/CTDP/index.html</u>). The College Teaching Development Program is open to all faculty, staff, postdocs, and graduate students. We define teaching broadly (classes, mentoring, advising, etc.), and have designed these programs to meet varied goals. The program

consists of two certificates. The two certificates are standalone and can be completed in any order. The Practice Certificate can also be completed multiple times with different emphases. Below are descriptions, as well as the requirements to complete each certificate.

<u>Certificate of Foundations in College Teaching</u>: The Foundations Certificate uses workshop participation and reflection to provide an overview of evidence-based teaching practices and strategies. Participants will complete a series of four workshops organized by CIE, focusing on the fundamentals of college teaching. Following each workshop, participants, will complete a guided reflection relating the workshop material to their past, current, and future teaching and mentoring activities. Requirements of the certificate include:

- Attend all four workshops in the foundational workshop series in a single iteration of the program (it will be offered at least once each semester).
- Thoughtfully answer all reflection questions between each workshop.
- Write an overall guided reflection following completion of the entire series of workshops.

<u>Certificate of Practice in College Teaching</u>: The Practice Certificate is an inquiry-based, semester-long program that requires participants have a teaching role, broadly defined, during the semester or summer term in which they complete the certificate. Participants identify a challenge/opportunity that they will address that semester using evidence-based practices, in consultation with a faculty mentor of their choosing. Participants may complete the Practice Certificate multiple times over different semesters, as long as they have a teaching role during that semester. Each time a participant completes the Practice Certificate, they must choose a different area of emphasis. Participants are encouraged to choose topics relevant to their specific teaching role; this can involve new mentoring practices in advising, a lab, or office hours; designing new assessments or learning activities; or enhancing a series of professional development workshops for colleagues. The following are some examples of potential emphases: engagement, student motivation, assessment, diversity and inclusion, mentoring students, etc. Requirements of the certificate include:

- Submit a proposal (using the provided template) at least a week before the semester/term or your mentorship/advising project will begin.
- Read and summarize several scholarly articles related to your topic.
- Meet with a mentor at least three times during the semester to discuss your topic.
- Apply what you have learned to your teaching.
- Complete a guided reflection (using the provided template) on your experience addressing your challenge/opportunity this semester.

All students on RA appointments would require a specific TA appointment to gain formal experience and will need agreement of your RA position employer. To gain this formal experience, students:

- Must pass 'Oral English Proficiency Program' or have evidence of English proficiency (if non-native English speaker) and
- Can request to be added to a list of those desiring TA experience for the coming year.
- If not given a TA assignment, can attain the Center for Instructional Development 'Certificate of Foundations in College Teaching' that is based on workshop participation and reflection to provide an overview of evidence-based teaching practices and strategies

If given a TA assignment, can attain the Center for Instructional Development 'Certificate of Practice in College Teaching': This Certificate is an inquiry-based, semester-long program that requires participants have a teaching role, broadly defined, during the semester or summer term in which they complete the certificate. Participants identify a challenge/opportunity that they will address that semester using evidence-based practices, in consultation with a faculty mentor of their choosing. Participants may complete the Practice Certificate multiple times over different semesters, as long as they have a teaching role during that semester. Participants are encouraged to choose topics relevant to their specific teaching role; this can involve new mentoring practices in advising, a lab, or office hours; designing new assessments or learning activities; or enhancing a series of professional development workshops for colleagues.

If a student has a Fellowship, they cannot be a formal TA, but can explore informal teaching opportunities for classes that do not have formal TA positions associated with them. Contact professors directly for such opportunities.

Extension Experiences: Extension opportunities (Defined as conducting presentations that are important to work, environment and life experience of an audience) will <u>not be required but</u> <u>promoted</u>. If such an experience is desired, students:

- Must pass 'Oral English Proficiency Program' or have evidence of English proficiency in accordance with TA English ability requirements (if non-native English speaker) <u>and</u>
- Must take and pass AGRY 59700 (Communicating With The Public), 1 Cr Hr: "This course will prepare students being trained as agronomy professionals to enhance their communication skills so they can successfully interact with the public.", Offered in alternate years. Typically offered Spring., <u>and</u> are encouraged to take ASEC 52000 (Foundations of Agricultural Education, Extension, and Communication), 3 Cr. Hrs. "Critical analysis of the historical and philosophical assumptions, current strategic intents and relevant policies underpinning the discipline of agricultural education inclusive of Extension education and agricultural communication and project the impact existing economic, social and political issues may have in this field in the next 15 to 25 years." Instructor permission required. Typically offered Fall.

Availability of opportunities will be coordinated through Dr. Corey Gerber.

## AGRONOMY GRADUATE STUDENT ASSOCIATION

The Agronomy Graduate Student Organization is an organization that consists of all students engaging in research or pursuing an advanced degree in the Agronomy Department at Purdue University. The purpose of the AGRY GSO is to provide AGRY graduate students with opportunities

- (1) to enhance and enrich their graduate career at Purdue;
- (2) to promote academic and social communication among AGRY students and faculty;
- (3) to provide a forum for AGRY students to voice concerns and expectations; and

(4) to support the creation of ad-hoc committees and the achievement of their goals.

The Graduate Student Association is composed of all graduate students and is an official student organization at Purdue. Membership and participation are free from discrimination on the basis

of race, religion, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran.

The elected officers of the AGRY GSO are: President, Vice President, Treasurer, Secretary, diversity officer and public relations officer. AGRY GSO officer duties include, but are not limited to:

- Acting as a liaison between the Graduate Students of the Department and the Faculty. They must ensure that they are the channel of communication between the Graduate Students and the Departmental Faculty and represent the students in all possible decisions that involve graduate students.
- Organizing and helping with fundraisers and social events in the department (chili cook off, bake sale, stay warm contest, etc.).
- Attending every open staff meeting to keep student presence in departmental activities and to keep the student community updated.
- Organizing activities of interest to the Graduate Students (seminars, workshops, professional presentations, social gatherings, sports activities, etc.)
- Promoting equal rights and opportunities among graduate students in the departments independent of race, religion, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran.
- Organizing two "callouts" per semester inviting all graduate students, to discuss items in the agenda related to graduate student life and future plans of the committee.
- Promoting at all times a happy family environment in the department and unity between faculty, staff and students.

**Term of office and election process:** A total of SIX (6) Agronomy Graduate Student Officers and Representatives (collectively termed Grad Reps) are elected by an open election to serve a one-year term. Nominations for all elected officers will be taken starting in April. A list of nominees will be distributed to all current AGRY students at least one-week prior to elections. Elections will be held by electronic ballot the first week of May. Officers must be elected by a majority of members voting in the election and ballots may be cast via email or written vote. Only nominees stated prior to the elections shall be listed on the ballot; however, write-in candidates are accepted. Candidates receiving the majority vote must accept the position, orally or written, before he/she assumes office.

On the day of the meeting, graduate students that are nominated are asked to stand up and say few words if they want to. Election is done anonymously by writing 5 names per person on a piece of paper. These "ballots" are collected and then counted in front of the graduate students. The five names with more votes immediately become graduate student reps. In the event of a tie for the fifth member then the current graduate reps will make an internal vote to pick one of the candidates. The sixth name(s) with more votes would become "alternate or backup" graduate reps.

Should an acting Grad Rep step down from office or graduate mid-term, a replacement will be elected at a special election to fill the position. Alternate or backup Grad Reps would become a

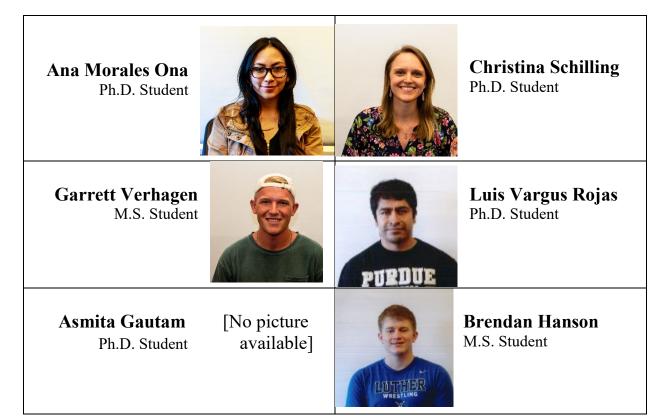
Grad Rep. If they are no longer available, then a special election (online) would be held to choose the pending Rep. The replacement Grad Rep will serve for the remainder of the term, which will conclude at the end of the spring semester for the school year in which the student took office. After serving one term, should a Grad Rep wish to retain the office s/he may do so by nomination or self-nomination and be part of the election process again.

**Internal review:** Grad student reps will hold an internal review process every mid semester, if at these reviews a majority of the grad reps concludes that one or more of the members is not being useful and active in its role (no interest) then this person can be removed from their status as Grad Rep. This decision would be reported to the department with an explanation on the reason(s) why the person(s) are being removed and they would be replaced immediately by the alternate Grad Reps or through the special election process.

An officer of the AGRY GSO is also selected by the AGRY GSO to be a senator in the Purdue Graduate Student Government (PGSG). An officer is also appointed by the department to the College of Agriculture Graduate Student Advisory Board.

For 2021-22 the officers are:

- President- Ana Morales
- Vice President- Christina Schilling
- o Treasurer- Garrett Verhagen
- o Secretary- Asmita Gautam
- Diversity Officer- Luis Vargas Rojas
- Public Relations Officer- Brenden Hanson



Currently Chance Clark is the PGSG Senator and Ana Morales Ona is the representative to the College of Agriculture Graduate Student Advisory Board.

## RESEARCH FACILITIES

Purdue Agricultural Research Farms (http://www.agriculture.purdue.edu/pac/locations.html)

Agronomy Center for Research and Education (4540 U.S. 52 West, West Lafayette, IN 47906): (ACRE) Located northwest of West Lafayette and the Purdue campus on State Road 52. This 1408-acre farm is site for more than 150 research projects conducted by some 50 university researchers. Studies range from basic to applied science and include: plant breeding and genetics, crop production, and soil management, plant physiology, soil fertility, weed control, disease and insect resistance and control, and variety performance evaluation for corn, soybeans, and small grains, and soil microbial community analysis. New facilities include a Crop Protection Laboratory (a state-of-the-art facility designed with personal safety, environmental safety, and functional use in mind), the Beck Center (described below) and the Indiana Corn and Soybean Innovation Center (described below). A field with a rainout shelter is being added this year. The Agronomy Farm is administered through the Agronomy Department, but research is also conducted by the Departments of Botany/Plant Pathology and Entomology.



Purdue Agricultural Centers: Indiana has over 300 soil types and multiple microclimates. Each section of farmland reacts differently to fertilizers, cultural practices, pesticides, and tillage systems. Each parcel of forest reacts differently to different management practices. Director of Purdue Agricultural Centers is Jerry Fankhauser. The Purdue Agricultural Centers are distributed around the state to represent all soil and climate conditions:

• Davis Purdue Agricultural Center: (DPAC) Swine production research is the emphasis of this center located approximately 15 miles north northeast of Muncie in Randolph County. Other research includes a natural forest habitat area and agronomic crops. The original gift of 156 hectares was given to Purdue in 1917 by Martha Davis in memory of her son. Contact Superintendent Jeff Boyer, jboyer@purdue.edu

• Feldun Purdue Agricultural Center: (FPAC) Located in Lawrence County near Bedford, the

original 193 hectares were donated to Purdue in 1914 by Moses Fell Dunn. A limestone quarry on the farm, worked under contract, helps support research projects. Current research

includes beef cattle, forestry, and row crops. Feldun is also the home of the Indiana Beef Evaluation Program bull test station. Contact Superintendent Brad Shelton, sheltonb@purdue.edu

- Northeast Purdue Agricultural Center: (NEPAC) This 425 acre site near Columbia City in Whitley County was acquired in 1990. Primary research interests at this site are on agronomic crops. Contact Superintendent Stephen Boyer, sboyer@purdue.edu
- **Pinney Purdue Agricultural Center**: (PPAC) Located on the Porter-LaPorte County line, the original 197 hectares were a gift in 1919 from Myra Pinney Clark, in honor of her father, William Pinney. An additional 63 hectares were acquired from Wayne Pinney in 1979. The farm is noted by researchers for its three distinct soil types. Research is conducted under irrigation and on agronomic and vegetable crops. Contact Superintendent Gary Tragesser, gtragess@purdue.edu
- Southeast Purdue Agricultural Center: (SEPAC) This farm is located in Jennings County (Butlerville, IN) on the typical, hard to manage soils of the region. The soils have low organic matter content and are highly erosive. It is active in row crop, forage and forestry research. A major study of drainage and water quality by agronomists and ag engineers is conducted at SEPAC. Contact Superintendent Joel Wahlman, jwahlman@purdue.edu
- Southern Indiana Purdue Agricultural Center: (SIPAC) Located in Dubois County near the Patoka Reservoir, the center covers 526 hectares, including the Patoka Forest Project. It was donated to Purdue by the citizens of southern Indiana in 1952 to conduct research on the sandstone-shale derived soils of the area. Livestock, forage, and forestry research are conducted on this farm. Contact Superintendent Jason Tower, towerj@purdue.edu
- Southwest Purdue Agricultural Center: (SWPAC) The 71 hectares site near Vincennes (Knox County) was purchased in 1979 for research on fruits, vegetables and agronomic crops. Development has included trickle and overhead irrigation systems. Contact Superintendent Dennis Nowaskie, nowaskie@purdue.edu
- Throckmorton Purdue Agricultural Center: (TPAC) Located eight miles south of Lafayette in Tippecanoe County, the farm covers 120 hectares and was a gift of Dr. George Throckmorton in memory of his father in 1935. Its rolling Raub silt loam soil is used primarily for row crop research. This center has a distinguished history of entomology, soil erosion, crop rotation, and tillage research. Contact Superintendent Jay Young, jayyoung@purdue.edu.

## **Greenhouse Facilities**

The greenhouse facilities are located on the south side of the Life Science Building. The Life Science greenhouse complex is composed of 57 individual growing rooms totaling approximately 54,000 square feet. The growing rooms are connected to the greenhouse service building (head house) where soil and miscellaneous supplies are stored. The greenhouse service building also has two rooms that house growth chambers. The greenhouse complex also includes a pesticide mixing and storage room, commercial soil mixer/sterilizer, and two 15-

square-foot autoclaves. This facility is shared by three departments; Agronomy, Botany and Plant Pathology, and Biological Sciences. Students wishing to conduct research in these areas should speak with their major professors as to the space(s) available. Ron Steiner (AGRY) is are in charge of greenhouse operations.

### Beck Agricultural Center

The Beck Agricultural Center (4540 U.S. 52 West, West Lafayette, IN 47906) offers outstanding flexible resources for meetings, conferences, workshops, and retreats associated with Agriculture education. Located at the Agronomy Center for Research and Education, the Center offers the opportunity to combine hands-on field experience with classroom presentations and discussions. For more information or to schedule an event at the Beck Agricultural Center contact: Beck Center Coordinator (Lauren Lee), phone 765-583-0590, or email <u>beckcenter@purdue.edu</u>.

Indiana Corn and Soybean Innovation Center – Serves as a hub that brings together farmers, industry, University faculty and students for a data revolution. By using state-of-the-art technology to measure and analyze characteristics of crops, they are able to translate information about individual plants to field scale. This new 25,500 square foot facility is located at the ACRE. The center uses automated systems such as drones and advanced sensors to collect billions of measurements that will quantify differences in plant characteristics such as canopy area, leaf area, height and photosynthetic activity. (Contact Jason Adams, adams314@purdue.edu, phone: 765-494-2007).

Purdue Alumni Seed Controlled Environments Phenotyping Facility – This 7,300 square feet, state-of-the-art facility has two large climate chambers, each containing conveyors and robots to move and care for plants. Growth areas are linked to a series of automated imaging stations that will also be accessible to image plants from any campus greenhouse or growth space.

William H. Daniel Turfgrass Research and Diagnostic Center- The Daniel Center (1340 Cherry Lane, West Lafayette, IN 47907) is located just north of campus and adjacent to one of two 18-hole campus golf courses. It has an educational facility and turfgrass research plots. There are 9 hectares at the Daniel Center dedicated to turf research. Glenn Hardebeck is the Manager of the Center and can be reached at 765-496-6566.

## MISCELLANEOUS FACILITIES AND SERVICES

#### Desks

A desk with file storage will be assigned to you in Lilly Hall 3-400 on arrival. If you do not have a desk, contact Jason Deitrich. You must clean out your desk and files 7 days after your graduation date.

## Copier/Printers

Copiers are available on the second and third floors of Agronomy. These copiers/printers are not

to be used for mass production of documents or the printing of theses/dissertations. Personal copies of documents are charged \$.05 per copy. Payment for use should be given directly to Connie Foster, Receptionist (Main office: Lilly 2-452). The main office copy machine can make pdf files and scan.

A wide format printer/plotter is available in the Main office (Lilly 2-452) for use in creating posters. A laminator is also available. Please see Connie Foster (main office administrator) regarding policies of use for these machines. <u>Please have someone double check your poster before printing!</u>

## **Computer Services**

Purdue's computing and network facilities support the University's instruction, research, and service missions. Proper use of computing and network facilities respects all University regulations, contracts with University suppliers, and all local, state, and federal laws. Improper use may have serious consequences.

Because of security concerns, personally-owned computers are not allowed to "plug in" to the University network.

Availability of computers connected to the university network

- The department does not provide computers for each graduate student, however many faculty members do provide their graduate students with leased computers. In addition, many computers are found in individual faculty laboratories. Check with your Advisor for more information.
- Computers are also available in the Soils Resource Study Center, located in room 3-419. Although these computers are primarily for undergraduate teaching purposes, they are available to graduates when not in use by undergraduates. Check with the Study Center staff first, please.
- There are University-maintained computer labs located across campus in which students can log in with their University "Career Account." The nearest lab is LILY G-431. To find other labs on campus visit <u>https://www.purdue.edu/apps/ics/LabMap</u>. Another useful url that details resources for new students is <u>http://www.itap.purdue.edu/learning/index.cfm</u>.

The network drive (H:) used with the Career Account in campus labs is mapped automatically on Agronomy computers.

If you have any computer/ computer facilities problems or questions, contact Agricultural Information Technology (AgIT) at <a href="mailto:agithelp@purdue.edu">agithelp@purdue.edu</a> or call x48333.

A number of *Network server drives* are mapped on departmental computers upon login: You will log onto the Agronomy computers using your career account username and password (this is the same as your email username and password).

U: drive Use this drive for your data and documents. It will allow you to move between

computers. Only you have access to this drive - no one else can edit or delete files here.

**S: drive** Use this to share files with others. Agronomy forms, class materials and laboratory records are commonly found on this drive. Anyone has delete or change access to most files on this drive. Certain folders are read-only, including a forms folder containing many department or Purdue forms.

**W: drive** Is intended to be used for temporary storage space. If you place something on the W drive, please remember to remove it after the usage term has ended.

### Usage rules on network drives:

- No program files of any type on U: or S:, including zipped files or executable types, with the exception of a few provided for use in Agronomy classes. No entertainment or personal files of any type, including music or pictures. Resumes and research photos are acceptable.
- No one except you should log in using your ID. Please log out when finished using any computer because it ensures that your data is saved. Your screen will lock after 15 minutes of unattended usage on any PC in the department. If you walk away and someone else needs to use the PC, they will not be able to log in.
- Please don't save data to your desktop as these files will not be backed up. Save important files to your U: Drive. Please save research data to your lab S: drive.

#### Agronomy Supported Applications:

SigmaPlot ArcGIS a system for authoring, serving, and using geographic information.
Microsoft Office 365/2019 Professional are the supported Microsoft applications including Word, Excel spreadsheet, PowerPoint presentation, and Access database software.
SAS statistical analysis software.
SigmaPlot scientific plotting and graphics software.

McAfee VirusScan antivirus software.

Adobe Reader is used for PDF Documents and Ghostview is used for viewing postscript files.

## Student-owned Computer Software Purchases

Purdue negotiates the availability of several software packages for student installation *on personally owned machines* through University sponsorship or at a reduced cost. Eligibility for the software below depends on requirements outlined within the product's software licensing agreement between vendor and Purdue University. Active student registration with the University is required.

Software installed on personal machines must be completely uninstalled when association with the University ends unless product license specifically allows continued use.

*OnTheHub* sells a range of software negotiated under Purdue's campus agreements for students, including **Microsoft Office**, **Visual Studio** and **Adobe Creative Cloud**. In addition, Purdue's

OnTheHub web store offers other specially priced software for term purchase, such as **SPSS**, **Minitab**, **Parallels**, and **SAS JMP**. Be sure to carefully review product details for system requirements, included features, and the length of time your purchase entitles you to use the product. Products available are contingent on eligibility, and may depend on specific student enrollment. Only the products you are eligible to buy will be displayed. Software ordered through OnTheHub can be downloaded directly to your computer for installation or, at an additional charge for shipping and handling, delivered on CD/DVD disc.

Please note that the OnTheHub Web Store is an independent retailer Purdue partners with to provide software purchases for faculty, staff, and students *on their personally-owned machines*. Software licenses and media purchased from OnTheHub are nonrefundable. Questions regarding purchases or store services should be directed to OnTheHub. They will be able to provide you the most knowledgeable and immediate response to your issue.

Sponsoring organizations within Purdue cover the cost of some software products for undergraduate and graduate student use on personally-owned machines. Product availability is determined by the number of unused product licenses and any agreement limitations on distribution. Click the links below to get more information on availability. Current University sponsored software for students includes:

٠	<u>MathType</u>	•	<u>PyMOL</u>	•	<u>SecureCRT</u>
٠	<u>McAfee Viruscan</u>	٠	<u>SAS</u>	٠	<u>SecureFX</u>
•	NVivo	•	SAS IMP	•	VirusScan

The following products are only available to graduate students:

<u>SPSS</u>
 <u>SPSS Amos</u>

Additional software for student use on personally owned machines may be found through these online University resources:

- <u>Secure Purdue</u>
- ITaP Research Computing (RCAC)
- Purdue University Licensed Software (PULS) by ECN
- Library of Chemistry Software

## Email

ITaP (Information Technology at Purdue) provides email storage (maximum of 500MB) for University users. Most Agronomy students and staff access their mail using Microsoft Outlook. There are two types of University email accounts:

- <u>Office 365</u>—basic email and calendaring account. This can be accessed using Microsoft Outlook or other email clients, by MAC computer clients, or by using the Internet webbased access at <u>http://portal.office.com</u>.
- <u>Exchange</u>—enhanced email account by adding email along with calendar (appointments), contacts and tasks. This can only be accessed by using Microsoft Outlook, MAC Entourage, or by using the Internet web-based access <u>https://exchange.purdue.edu</u>. Please contact <u>agithelp@purdue.edu</u> or call x48333 for an Exchange account.

## University Password Policies

Purdue University has recently instituted strict password policies. Agronomy, as part of the University network systems, and a member of the BoilerAD domain, must abide by these password and security policies. Purdue's password and security policies can be found at: http://www.purdue.edu/policies/pages/information\_technology/v\_1\_2.html.

Password Requirements: All passwords must be changed at least every 120 days. Use the following link to change your password <u>https://www.purdue.edu/apps/account</u>. All passwords must conform to the standards for creating strong passwords located at: <u>http://www.purdue.edu/securepurdue/bestPractices/passStandards.cfm</u>.

- Passwords must contain at least 1 letter.
- Passwords must contain at least 1 number or punctuation mark.
- Passwords must be at least 8 characters long.
- Passwords must contain more than 4 unique characters.
- Passwords must not contain easily guessed words (e.g. Purdue, itap, boiler).
- Passwords must not contain your name or parts of your name (e.g., Bill, Julie, Bob, or Susan).
- New passwords must be different than the previous password (re-use of the same password will not be allowed for one (1) year).
- Passwords must not be inserted into e-mail messages or other forms of electronic communication without the use of encryption.
- Passwords should never be written down and left in plain sight, or stored in plain text online. If a password must be written down, it should be stored in a secure location.

#### Libraries

The University libraries on the West Lafayette Campus hold book and periodical collections of more than 1,800,000 volumes housed in 15 schools and departmental libraries. About 18,000 serial titles are received, including periodicals and serial publications of societies, instruction, and the federal and state governments. Local library resources are supplemented by the three million items of research materials held by the Center for Research Libraries in Chicago. Through Purdue's membership in the center, faculty and graduate students are assured of fast access to this material through the Interlibrary Loan Office in the HSSE library. More information on the libraries is available by internet at <u>http://www.lib.purdue.edu/about</u> or call 765/494-2900. Purdue Libraries include:

Archives and Special Collections: Stewart Center, 4th floor
Aviation Technology Library: Airport Terminal, TERM, Room 163
Black Cultural Center Library: 1100 3rd Street
M. G. Mellon Library of Chemistry: Wetherill Lab of Chemistry, WTHR, Room 301
Earth, Atmosphere and Planetary Science Library: HAMP 2215B
Siegesmund Engineering Library: Potter, Room 160
Hicks Repository, Undergraduate Library: HIKS, Ground floor
Humanities, Social Sciences and Education Library: Stewart Center, Room 150
Engineering and Life Sciences Library: Wilmeth Active Learning Center (WALC)
Parrish Library of Management and Economics: Krannert Building, KRAN, 2nd Floor

Mathematics Sciences Library: Mathematics Sciences Building, MATH, 311
Pharmacy, Nursing, and Health Sciences Library: Heine Pharmacy Bldg, RHPH, Room 272
Physics Library: Physics Building, Room 290
Veterinary Medicine Library: Lynn Hall of Veterinary Medicine, LYNN, Room 1133

Other Locations around Purdue where materials are available: **Compact Storage**: Room B849, Undergraduate Libraries, Lower Level **Film Library**: Room B853, Undergraduate Library, Lower Level **Special Collections**: Room 428, Stewart Center

In-person access to the library collection and services of Ball State, Indiana, and Indiana State universities are also available to Purdue students and faculty under a cooperative agreement.

## Phone Calls

Phones are located in offices and most laboratories in the department. They are to be used for Purdue Business only. For long distance calls from off campus (i.e. Agronomy Center for Research and Education) call the Purdue Operator (494-4600) and indicate you want to make a call.

<u>To Call</u>	Dial
Purdue University number	5 digit extension
Off-campus number	7 + seven-digit number
Long Distance (Univ. Business)	$7 + 1 + area \ code + number$
Purdue Operator	0
Directory Assistance	7 + 1 + 765 + 555-1212
Long Distance (Personal)	7 + 0 + area code + number, press 0 for options
International	7 + 011 + country code + city code + number

## Keys to the Kingdom

Advisors can request keys on behalf of graduate students for the outside doors, offices, and laboratories. With applicable permissions, additional keys can be requested for access to other laboratories or areas as it becomes necessary.

To request keys, your advisor must submit an electronic request using URL: <u>https://purdueagcommunication.formstack.com/forms/key\_request\_form</u> to Jason Deitrich. Keys can be received from Lilly Stores (LILY G103) within 1-2 days after submitting your request form. The Master Key is also available which opens most Lilly Hall doors. If you need to enter a room and do not have a key, <u>sign out</u> the Master Key in the Main Office and return it promptly when finished. **7 days after your graduation date, you will need to return your keys.** 

## Parking on Campus

Any person operating and/or parking a motor vehicle on campus, must comply with all Purdue University Traffic and Parking Regulations.

License plates serve as an individual's parking permit. Parking in parking garages may require a garage access card if electronic verification is not working. Some parking spaces require special permits be displayed including those that are reserved, for university vehicles or handicap accessible. Any vehicle that is parked on campus needs to be linked to an active Purdue permit to avoid receiving a ticket, and each permit holder is responsible for maintaining the accuracy of vehicle information in the online account for parking enforcement. This includes but is not limited to vehicle make and model, license plate number and expiration date.

There are three types of parking permit: A, B, ad C.

- Any registered student may purchase a C-Permit provided their local place of residence is outside an area at least 1.5 miles from campus may purchase a "C" permit for \$100 per year. In general, the limits are Airport Road, the Wabash River, Cherry Lane and the railroad tracks bordering the south edge of campus.
- Students employed by Purdue at least 30 hours per week (3/4 assistantship) are eligible to purchase an "A" permit for \$250 per year or a "B" permit for \$100 per year.

New parking permits may be purchased online at <u>https://purdue.t2hosted.com</u> by choosing 'Purchase a New Permit' and following the instructions. While you may list multiple vehicles per online account, only three may be actively linked to a permit. Of the three linked vehicles, only one may be parked on campus at any given time. During the purchase process, please confirm that your campus department and building are listed correctly.

If you purchase an "A" permit, a garage access card for use in the gated parking garages will be sent to you via campus mail by Aug. 10. Garage access cards that were issued for the prior year become invalid as of Aug. 15 of the present year and should be destroyed at that time.

**Disability Parking**: If you have disability parking needs or related questions, please contact Susan Black, Parking assistant manager, at <u>seblack2@purdue.edu</u> or (765) 494-9493. Parking permits must be returned to Parking Facilities upon ineligibility. Use or possession of forged, stolen, altered, transferred or invalid permits may result in a citation, immobilization and/or towing of the vehicle, criminal charges and/or disciplinary action through the University. No refunds will be issued after March 1st.

*Student Housing Parking:* Students living in a Residence Hall, Hawkins Hall or in Purdue Village, need to contact their residence main office for information about obtaining a permit.

Parking and permit questions should be directed to Parking and Transportation Services at (765) 494-9497 or <u>parking@purdue.edu</u>.

## Veterans Assistance

The <u>Veterans Success Center</u> is located at the Union PMU 284/286. Student veterans are encouraged to stop by and learn about available services. The Veterans Success Center also offers "Green Zone" faculty and staff awareness training. Learn more about services available to

veterans at <u>www.purdue.edu/veterans</u> or by contacting the Coordinator of Military Veteran and Nontraditional Student Programs (<u>dogtags@purdue.edu</u>).

Programming and services offered include: Process GI BILL Benefits, Yellow Ribbon Program, Veterans Work Study, Office for the Purdue Student Veterans Organization, PAVE peer to peer and orientation program, Representative from the Center for Career Opportunities every Monday from 12-1 p.m., student study lounge, computer access with CAC reader, and frequent guests (Dept. of Veterans Affairs Representatives, employers wishing to hire Veterans). **Contact Information:** *101 N. Grant St. West Lafayette, Indiana 47906, (765) 494-7638 (Voice) (765) 494-1545 (Fax), dogtags@purdue.edu* 

## WHAT TO DO

## Before you start your 1<sup>st</sup> semester

All new students must

- Register for AGRY 601 or AGRY 59800-042 'Introduction to Graduate Research' (1 CR.)
- Complete the following programs:
  - 1. "Respect Boundaries: Sexual Violence Awareness Program"
    - All students will be notified of the requirement by email and receive periodic email reminders. Students may access Respect Boundaries through <u>Brightspace</u> <u>purdue.brightspace.com</u>). You will find the course also at *mycourses.purdue.edu*. There are three modules associated with the program. Students must complete all three modules to obtain credit for this program. Students are expected to complete the program by September 30th. *If not completed in a timely manner, holds will be put on myPurdue accounts*.
  - 2. <u>Equal Access/Equal Opportunity Harassment and Discrimination: Prevention</u> <u>and Response.</u>

The focus of the program is to make new students aware of the University's policies and procedures relating to harassment and discrimination and their responsibility to comply with such policies to foster a positive and inclusive environment free from discrimination and harassment. You access the training at the webcert training portal at <u>https://www.eventreg.purdue.edu/webcert/landing\_page.aspx</u>. After the successful completion of the training, provide the Agronomy Graduate Coordinator with a copy of the form stating the program has been completed. *You will not be able to register for your second semester courses until this is completed.* 

## 3. Responsible Conduct of Research (RCR) Training-

Upon completing your new hire paperwork, go to the following link to complete RCR Training.

http://purdue.edu/gradschool/research/rcr/index.html.

Print the completion report and give a copy to the Agronomy Graduate Coordinator. Also send a copy to <u>RCRTraining@purdue.edu</u>. *You will not be able to register for your second semester courses until this is completed*. • All new Ph.D. students must schedule an appointment with Holly to review the 'Supplement to Ph.D. Plan of Study' Form. This form documents which coursework you have taken that fulfills the 'Core Science Requirements for the Ph.D. Degree described under 'Ph.D. Degree Requirements' below. Any additional coursework to fulfill these requirements should be taken as early as possible in your degree program but are not to be documented on your Plan of study (ePOS).

### Before you work in the greenhouse or field

Before you work in the greenhouse or field, you must take the <u>WPS (Worker Protection</u> <u>Standards training.</u> Online WPS training is available at:

[//www.youtube.com/watch?v=z2RGYppZw\_E&feature=youtu.be]. Once, viewed, send email to Brian McDonald (<u>bnmcdonald@purdue.edu</u>) providing: Your name, Date viewed, EPA Approval Number of training video.

## Before you drive a vehicle on University Business

To be eligible to drive a university vehicle, the student must complete a <u>Request for Driver</u> <u>Authorization Form RM01</u> and a General Disclosure and Consent Form for Motor Vehicle Reports (available on the Risk Management Website). Student must have a valid U.S. driver's license. Upon completion, print a copy of your certification and bring to the Agronomy Business Office. You will not be able to drive a vehicle until business office has a copy.

Risk Management Website: https://www.purdue.edu/business/risk\_mgmt/Vehicle\_Use\_Info/index.html

Student drivers operating vans on University Business must be at least 20 years of age, have at least two years of licensed driving experience, and must complete Risk Management's Purdue Passenger Van Training prior to operating a van on University Business. Passenger van training must be completed annually (login to Risk Management Website to access passenger van training).

Student drivers are allowed to operate a Vehicle on University Business while within the United States or Canada only. Student drivers may not operate a Vehicle on University Business or for any other University purpose in any other country. Graduate Students traveling abroad on official University Business are an exception to this restriction.

Students with the following violations will be declined (not allowed to drive):

1) Three (3) or more moving violations in the past 3 years (includes seatbelt violations)

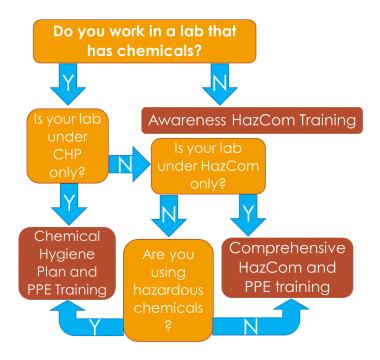
2) Two (2) or more at-fault crashes in the past 3 years

3) Any of the following: alcohol or drug-related driving offenses, refusal to submit to a blood alcohol test, reckless driving, leaving the scene of an accident, any felony crime committed with a vehicle.

## Before you start working in a lab

<u>Safety Training</u>. Safety is everyone's responsibility so never hesitate to speak up when you see a problem area. Several types of training are offered.

Which training should you take? **First**, ask your supervisor or designated safety person for your lab what you will be doing in the lab or field. What hazards are there? Will you be working with chemicals? Will you be using chemicals based on the manufacturer's directions? You can use the following flowchart to clarify the right training for you:



Each lab has been designated to be under CHP or HazCom requirements as well as any Personal Protection Equipment (PPE) or LockOut/TagOut (LOTO) training that is required. Check the door to the lab for this information.

Based on the designation for all labs that you will be working in complete the appropriate training indicated below:

- <u>Chemical Hygiene Plan (CHP)</u> 2 options choose <u>ONLY 1</u>.
  - 1. PI/Safety person gives training

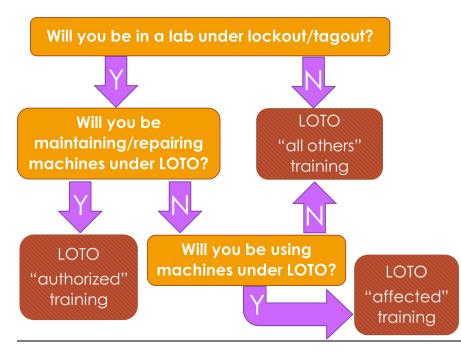
That person will ask you to read the highlighted areas from the CHP manual, go over them with you for clarification, model how to work with items in the lab, demonstrate the correct Personal Protective Equipment (PPE) to use and the location of it. Once that is completed, fill out the Appendix A of the CHP manual, which is the form entitled "Lab-Specific Training Certification Form". This sheet is in the new employee packet or you can print another copy from the CHP manual (https://www.purdue.edu/ehps/rem/documents/programs/chp2014.pdf).

2. Online training- covers everything in the CHP manual.

- a. <u>http://purdue.vividlms.com/</u>
- b. Register as a new user and complete the 3 parts of the Purdue University Lab Safety Fundamentals online training (you need your Purdue account to be activated).
- c. Once you have completed and passed, a certificate will be at the end of the training or emailed to you. Print it out and place in your lab's safety binder.
- d. Fill out the Appendix A of the CHP manual, which is the form entitled "Lab-Specific Training Certification Form". This sheet is in the new employee packet or you can print another copy from the CHP manual (https://www.purdue.edu/ehps/rem/documents/programs/chp2014.pdf).
- <u>HazCom Training (Right to Know)</u> 2 options choose <u>ONLY 1.</u>
  - 1. <u>Awareness HazCom training</u>
    - a. only if you work in a "chemical-free" environment (computer lab, office, etc)
    - b. <u>https://www.purdue.edu/ehps/rem/training/old%20ot/hazcomaware/hazcomaware.</u> <u>htm</u>
    - c. Takes about 15 min, done only once
    - d. Print the certificate of completion and give it to Brandon Chafin. If you belong to a lab, you can place the certificate in the safety binder associated to it instead.
  - 2. <u>Comprehensive HazCom training</u>
    - a. Required when chemical use or exposure is a routine or significant part of the job and **does not involve the "laboratory use of hazardous chemicals**"
    - b. <u>https://www.purdue.edu/ehps/rem/training/old%20ot/hazcomcomp/hazcomcomp.</u> <u>htm</u>
    - c. Takes about 45 min, need to be taken annually
    - d. Print the certificate of completion and place in lab safety binder
- <u>Personal Protection Equipment (PPE)Training</u> 2 options choose <u>ONLY 1</u>
  - Lab-specific PPE training
    - a. The lab supervisor will identify for you if and what PPE are needed to work in a given lab.
    - b. Once you have been modeled what PPE you need, there will be a form in the safety binder for you to sign off on.
    - c. A copy of the PPE manual is available for reference in the lab safety binder or online (<u>https://www.purdue.edu/ehps/rem/documents/programs/PPEPolicy.pdf</u>).
  - Online PPE training
    - a. <u>https://www.chem.purdue.edu/chemsafety/Training/PPETrain/ppetonline.htm</u>
    - b. Select the topic that your supervisor identified necessary
    - c. Take the test and print the certificate of completion to place in the lab safety binder

## LockOut/TagOut (LOTO) Training

The training to take depends on the type of work you will be doing and where you will be working:



The LOTO training is given by REM personal several times a year, you will receive an email when training is occurring soon. Contact Chloé de Perre if you need training and you don't know if sessions are planned.

One LOTO training session covers all 3 different levels of training but "all others" and "affected" just stay the first 30 min of the session. The "authorized" level requires another 30 min of training, for a total of 1h.

Only "authorized" employees need to take the training annually, all other employees need it only once.

- If you are working with <u>biological hazards</u>, read the Biological Safety manual that can be found here: <u>https://www.purdue.edu/ehps/rem/documents/programs/bioman.pdf</u>. Your supervisor can mark the areas that pertain to the lab you will be working in. Once that is completed, fill out the "Purdue Biological Safety Awareness Certification" sheet that is in the new employee packet. This sheet will then be placed in your safety binder.Additional training
- Contact your supervisor to find out what additional training you need. Examples include: Roll Over Protection training, Audiograms, Respiratory training, Fall Protection training, Fork Truck training, Hazardous Material Shipping, Bloodborne Pathogen Exposure, Laser Safety, Tractor dangers

• Note that if at any time you work in a new lab, start working with chemicals, start working in the greenhouse, etc. you need to take the correct training or copy your certificates for the safety records in your new lab.

If you have any safety-related questions, please ask your supervisor/safety person or find a safety committee member if they are unable to answer it.

Refer to the Agronomy Safety website for additional guidance or answers to any questions: <a href="http://www.ag.purdue.edu/agry/safety">www.ag.purdue.edu/agry/safety</a>

## Before you complete your first semester

- As part of the 'Introduction to Graduate Research course", you will:
  - Develop your first year Individual Development Plan (IDP) addressing your first goals in professional development.
  - Prepare a short research proposal to be used to seek Advisory Committee participation
  - File a 'Draft Plan of Study' listing the coursewoerk that you anticipate taking through your degree program (see Plan of Study section below).
  - If you are a PhD student you must also file the Supplement to the Plan of Study to document how you intend to fulfill the core PhD area prerequisites (see below).
- Begin forming your advisory committee

## Before you begin your second year

- Evaluate progress using your Individual Development Plan and prepare your IDP for year 2.
- Gain the approval of your advisory committee for your research proposal.
- Although it is not necessary to complete the seminar requirement, we also advise you to have participated in and document your attendance at
  - 6 of the required 14 seminars if you are a PhD student
  - 3 of the required 5 seminars if you are a MS student.

## IF YOU HAVE AN ACCIDENT/INJURY

Injuries consist of heat stress related, lacerations to any degree, strains, contusions, punctures, etc.

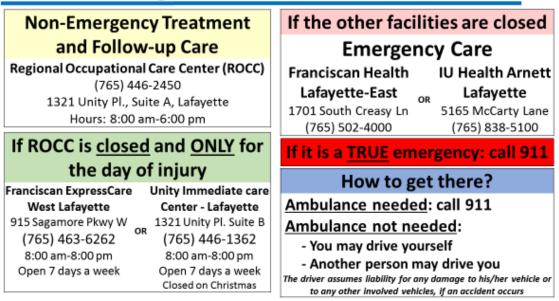
**If an injury occurs in the laboratory or field,** call 911 if it is an emergency. Please contact your supervisor <u>immediately</u> or as soon as possible, and they will fill out a "first injury report", which needs to be submitted to REM (copy Jason Deitrich) within 24h.

An "accident/near-miss investigation report" also needs to be sent to REM and Jason Deitrich when the causes of the incident have been identified.



Any <u>"near miss"</u> needs to be reported. A near miss is classified as an accident that could have occurred if someone or something didn't step in. Have your supervisor fill out a "near-miss/accident investigation report" and sent to REM and Chloé de Perre.

## Where to get treatment



Do NOT get treatment from PUSH or your regular doctor for work related injuries.

### TO REPORT AN EMERGENCY

To report an emergency, Call 911. To obtain updates regarding an ongoing emergency, sign up for Purdue Alert text messages, view <u>www.purdue.edu/ea</u>

There are 300 **Emergency Telephones** outdoors across campus and in parking garages that connect directly to the PUPD. If you feel threatened or need help, push the button.

### IF THERE IS AN EMERGENCY

In general:

- If there is an emergency in your building you will be expected to evacuate the building
- If there is an emergence outside your building you will be expected to shelter-in-place

### IN YOUR BUILDING

If you hear a **fire alarm** during class, immediately suspend class, evacuate the building, and proceed outdoors. Do not use the elevator.

You must immediately obey evacuation alarms and orders. Tell others to evacuate. No one may remain inside a building when an evacuation is in progress. Classes in session must cease and immediately evacuate the building.

- If involved with hazardous research or doing a dangerous procedure, immediately shut down operations that could create additional hazards if left unattended. Evacuate as soon as possible.
- When you evacuate, take keys, coat, purse and any other critical personal items with you to the Evacuation/Emergency Assembly Area (EAA).
- REMEMBER, IN CASE OF A FIRE, IT IS IMPORTANT TO NOT DELAY EVACUATION. Close doors as rooms are vacated.
- Assist those who need help, but do not put yourself at risk attempting to rescue trapped or injured victims. Note location of trapped and injured victims and notify emergency responders.
- Walk calmly but quickly to the nearest emergency exit. Use stairways only. Do not use elevators. Keep to the right side of corridors and stairwells as you exit. Remain in EAA until roll is taken and instructions are given.
- Do not reenter the building until authorized fire or police department personnel give the "All Clear" instruction.

Specific Emergency Assembly Area Location (EAA) locations after you have <u>evacuated</u> your building:

### Lilly Hall of Life Sciences (LILY)

• <u>Primary location</u> (*outside*, in an area away from the building): There are three assembly areas for Lilly Hall in an evacuation situation. If you are leaving Lilly Hall via the main entrance or via the northeast exits, walk to the grassy area in front of Smith Hall. Those leaving from the southwest (Corridor #2) and dock exits walk south, go around the greenhouses and meet in the grassy area south of the head house. Those leaving the southwest or northwest exits (Corridors 3 and 4) proceed to the grassy area east of Lilly Hall.

• <u>Secondary location</u> (*inside a nearby building* in case of inclement weather): those exiting the main and northeast entrances of Lilly Hall proceed to Smith Hall. Those leaving via the southeast (Corridor #1) and walk to the Hanson Building. Those exiting from the southwest and northwest doors (Corridors 3 and 4) may carefully cross Russell Street to Poultry and/or Grounds Department buildings. Those exiting the dock area and the south (corridor 2) may go to LSPS. Do not enter the greenhouses for shelter.

### Life Science Plant and Soils (LSPS)

- <u>Primary location</u> (*outside*, in an area away from the building): In the area just south of the greenhouse head house. Do not stay in the greenhouses for shelter.
- <u>Secondary location</u> (*inside a nearby building* in case of inclement weather): Those exiting the west side of LSPS may carefully cross Russell Street to the gravel parking lot and/or Grounds Department buildings. Those exiting east may walk to the Hanson Building. Do not stay in the greenhouses for shelter.

### OUTSIDE YOUR BUUILDING

You need to shelter in-pace. For both Lilly Hall of Life Sciences (LILY) and Life Science Plant and Soils (LSPS)

If notified of a **Shelter in Place requirement for a tornado warning**, suspend class and shelter in the basement. You are to travel to the nearest stairwell and walk down to the basement corridors. Do not use elevators to travel to the basement.

If notified of a **Shelter in Place requirement for a hazardous material release, or a civil disturbance**, including a shooting or other use of weapons, suspend class and shelter in the classroom, shutting the door and turning off the lights.

If you are directed to shelter in place, but you are unaware of the specific reason, proceed to the lowest level of the building but continue to seek additional information by all possible means to determine the type of incident. Once you have determined the type of emergency, follow the below chart:

EMERGENCY	SHELTER IN PLACE OPTIONS FOR CONSIDERATION
Weather-Related - Tornado Warning	Basement corridors, basement offices, basement restrooms Or the lowest level of the building (stay away from windows and doors)
Hazardous Materials (HAZMAT) Release	Remain or find an unaffected office or work area and close windows and doors.

Civil Disturbance - active	Seek a safe location, preferable a room without windows
shooter	that can be locked or secured by barriers.

The All Hazards Outdoor Warning Sirens will <u>not</u> be used to send an all clear signal. Seek additional information by all means possible to include *Purdue ALERT* (on your phone), Purdue Campus Emergency Status webpage (), TV and radio channels..

### TO VERIFY SUSPENSION OF CLASSES OR CAMPUS CLOSURE

The President of the University, or in her absence, the Executive Vice President for Business and Finance, Treasurer and the Executive Vice President for Academic Affairs and Provost jointly, will make a decision to declare class suspension or campus closure. Additional information will be forwarded to the campus community by the Marketing and Media Office.

### TO REPORT SEXUAL HARASSMENT, DISCRIMINATION AND UNFAIR TREATMENT

The Graduate School wants to make sure that all graduate students are aware of ways to report concerns related to sexual harassment. Purdue's Office of Institutional Equity, located in Young Hall (10<sup>th</sup> Floor) is best positioned to receive and explore allegations regarding sexual harassment as well as other forms of harassment, discrimination, and unfair treatment. The Office of Institutional Equity suggests two electronic ways for you to share your concerns:

First, the *Sexual Assault Report Form*, which may also be used to share concerns of sexual harassment, may be accessed at

<u>https://publicdocs.maxient.com/reportingform.php?PurdueUniv&layout\_id=15</u>. Information on the form also provides contact information for the Purdue University Police Department should a student be in need of emergency assistance. When submitted, this report is received by the Office of Institutional Equity and the Office of Student Rights and Responsibilities.

Second, the *Incident Reporting Form*, a way to report a wider range of conduct concerns, may be accessed at <u>https://publicdocs.maxient.com/incidentreport.php?PurdueUniv</u>. When submitted, this report is received by the Office of the Dean of Students. When appropriate or needed, the report is shared with the Office of Institutional Equity.

Likewise, staff in the Office of Institutional Equity are available to meet with graduate students and others in the campus community to discuss concerns connected to harassment or discrimination. You may make an appointment via email at <u>equity@purdue.edu</u> or by calling 494-7253. Finally, the University's complete policies and procedures relating to harassment are available online through the <u>Office of Institutional Equity</u>.

### POLICIES RELATED TO GRADUATE EMPLOYMENT

### Workloads of Students with Graduate Staff Appointments

Most graduate students are supported by half-time assistantships at Purdue. Purdue, like many other major research universities, assumes that a half-time appointment constitutes a contract for 20 hours of service per week. If an assistant's duties are independent of the student's course work and research, the definition of the half-time work load is relatively straight forward: not more than 20 hours per week. Disputes between graduate assistants and major advisors should be discussed between the parties involved and moderated by the Department Head if necessary. The graduate assistant assigned to 20 hours of service per week should realize that any research relating to their degree is not included in the 20 hours. Your research must be done in addition to the 20 hours the half-time involves. A half-time appointment is 20 hours a week and includes fee remission and medical insurance. A quarter-time appointment is 10 hours a week and only includes the fee remission.

To be eligible to hold a graduate staff appointment during any session, an individual must be enrolled as a degree objective graduate student and be registered for the appropriate number of courses and research credit hours during the entire appointment period. Appointments can be 1/4, 1/2, or 3/4 full time equivalent. Combination appointments (teaching and research) are permissible. The Agronomy department establishes minimum graduate staff salaries within the limits established by Purdue University. Salaries however may vary between graduate students depending on the source(s) of funds, differences in responsibilities, and/or merit raises. Salaries of continuing appointees will be reviewed annually by the Graduate School or Department Head. Adjustments for merit or increased responsibilities may be made based on the recommendation of the major advisor. Raises are effective July 1<sup>st</sup> of each year.

### Pay

All graduate students will be paid biweekly with 26 equal payments for those on fiscal year contracts and 19.5 equal payments for those on academic year contracts.

### Vacation, Holiday and Sick Leave Policy

Graduate student staff employed on a fiscal-year basis may be granted a maximum of twenty-two (22) working days of vacation per fiscal year. Vacation will be granted at the student's normal rate of pay. Vacation credits accrue on a monthly basis up to a maximum of twenty-two (22) working days. Vacation credits accrued in excess of 22 working days are forfeited. Vacation allowance is accrued from the date of employment, but <u>may not be taken before the completion of three months of service</u>.

As employees of the Department, all graduate students must receive approval of time off from their major advisor. You request time off at least <u>one week prior</u> to the time they plan to be on vacation or absent from the Department. Submission for vacation or sick leave is through the "Time Off" tile in 'Employee Launchpad- SAP SuccessFactors' website reachable through the OnePurdue website (<u>https://one.purdue.edu/</u>). You will see available balances for vacation

(when applicable) and sick leave. A drop-down list of "other" leaves contains less common requests such as bereavement, jury duty and business-oriented leaves. Time Off training resources are located on the **Employee Information, Timekeeping and Time Off** website https://www.purdue.edu/hr/successfactors/training/navTimeKOff/index.php tile located

Graduate student staff terminating their employment with the University will not be paid for any unused vacation allowance, nor may their appointment be extended to cover any unused vacation.

Official holidays are announced annually by Purdue's president and provide for 10 additional leave days. The holiday schedule is posted online <a href="https://www.purdue.edu/hr/Benefits/currentExployees/leaves/holidays.html">https://www.purdue.edu/hr/Benefits/currentExployees/leaves/holidays.html</a>

Up to two weeks per year sick leave and 15 days per year military leave (with pay) may also be granted. The Department Head may approve requests for emergency leave because of death in the immediate family. All graduate students must complete a sick leave form upon returning to work for time missed due to illness.

### ACADEMICS

### DEPARTMENTAL DEGREE PROGRAMS

Four degree programs are offered in the Department of Agronomy:

- Combined Degree (Bachelor of Science/ Master of Science, thesis)
- Master of Science, thesis
- Master of Science, non-thesis
- Doctor of Philosophy

### ANNUAL REPORT OF ACTIVITIES

In January of each year you need to fill out the Annual Progress Form describing your activities in the past year. <u>These forms are used to determine nominees for departmental and college</u> <u>awards and scholarships and are required for all nominations.</u> The electronic version of the form is available in the Shared Drive under directory S:\Shared\Forms.

AGRONOMY Annual Student Progress Form

Name: Evaluation Year:
Degree Program: PhD / MS Date of Committee Meeting: ////
<b>PUBLICATIONS</b> (List all published or in press articles in research, teaching, outreach, or
popular outlets)
<b>PRESENTATIONS</b> (List all oral and poster presentations to research, teaching, outreach, or
popular audiences)
<b>INVITED PRESENTATIONS</b> (List all invited presentations to research, teaching, outreach, or
popular audiences)
TEACHING (List and indicate role in any courses in which you taught, served as a TA, or
provided a guest lecture)
<b>FUNDING</b> (List any funding you received for research, teaching, outreach, or service activities)
AWARDS (List any awards you received for research, teaching, outreach, or service activities)
WORKSHOPS (List any professional workshops you organized, or served as a presenter, or
attended)
SERVICE (List participation in professional societies, on committees, or as a reviewer for a
journal or granting agency)
OTHER (List any service as an officer for professional or campus groups, establishment of
patents, etc.)
EXAMPLE Annual Progress Review of Graduate Staff – Student Data

### ACADEMIC REGISTRATION AND INFORMATION

**Registration is the responsibility of the student.** Primary source of your academic information is *myPurdue*. All Purdue graduate students at the West Lafayette campus use the *my*Purdue web portal as the source for academic account information.

### **Registration procedure:**

- All incoming students are expected to take the 1 credit course 'Introduction to Graduate Research' (AGRY 601/ AGRY 598-042) during their first semester. For information contact Holly McIntire.
- Select your courses for each semester in collaboration with your advisor and in accordance with your 'Plan of Study'
- If needed, select your courses to fulfill your 'Supplement to Ph.D. Plan of Study' (if Ph.D. student)
- When registering for your second semester you will need to bring the completion documentation for the webcert training for 'Equal Access/Equal Opportunity Harassment and Discrimination: Prevention and Response' and the CITI training for 'Responsible Conduct of Research'
- All students must sign up for at least one credit hour of Research (AGRY 69800 or AGRY 69900) with expected outcomes of the Research credit hour documented on a *'Research Registration Form'* that Patti sends you by email. This form requires both your and your advisor's signatures.
  - Bring the completed '*Research Registration Form*' form to Patti in the Graduate Program Office and she will add the requisite research credit hours to your registration and provide the registration PIN.
- You are responsible for registration any classes (not research credit hours) through *my*Purdue using the PIN.
- If you are late registering, you will need to fill out a Form 23 (printed on-line or received from Patti) and take it to the Registrar's office.
- To register for regular graduation candidacy as well as courses, Patti submits the Candidacy registration as well as research credit hours.
- To register for only graduation candidacy (no coursework), you must fill out a form 23 to register for CAND 99200 (Degree Only) or CAND 99300 and take the form to the Graduate School (YONG 178, not the Registrar). For more details see section on 'Declaring Candidacy' below.

### *my*Purdue

You will use *my*Purdue to add and drop classes, check all grades, access your academic history and more. Before Using *my*Purdue, read

<u>http://www.purdue.edu/onepurdue/ESA/studentinfo.shtml</u>. It includes important information that both returning and new students need to know. Links to video demonstrations of *my*Purdue also are on this page. (You will need to enter a valid Purdue Career Account username and password to access the demos. If you do not know your username, instructions on how to find it are on this page: <u>http://help.itap.purdue.edu/2550</u>.)

### Accessing *my*Purdue—

- 1. Go to the *my*Purdue login page: <u>https://mypurdue.purdue.edu</u>
- 2. Enter your Career Account username and password.

You will then be able to take advantage of these *my*Purdue features:

- Viewing your class schedule
- Dropping and adding classes

### Tips for Dropping and Adding Classes through myPurdue

- Dropping courses may impact your curriculum plan. Be aware that dropping classes could affect assessed fees, awards, health insurance requirements, athletic eligibility and international student visa requirements. If you are unsure of the ramifications of dropping a course, please contact your major professor first. For guidance regarding course adjustment timelines go to <a href="http://www.purdue.edu/registrar/InteralOps/Calendars/index.htm">http://www.purdue.edu/registrar/InteralOps/Calendars/index.htm</a>.
- To <u>add</u> a class, click on the "Student" tab, and then the "Registration" link. Click the "Add or Drop Classes" link. Select the proper registration term from the drop-down box and click "Submit". If you are currently registered for classes, those classes will appear. Scroll to the bottom of the page and either enter the CRN (Course Reference Number) and click "Submit Changes" or click "Class Search" to find the appropriate open section of the class.
- To <u>search</u> for a class, enter at least one subject code. Multiple subjects can be entered by holding down the Ctrl key while clicking on various subjects. Once the appropriate search criteria has been entered, click the "Class Search" button at the bottom of the page. Your search results will be returned. Review the available courses.
- To <u>register</u> for one or more classes, click the checkbox to the left of the course name and either select "Register" to add the class or "Add to Worksheet" if you need to search for other subparts of the course (such as a lab).

If you have problems accessing *my*Purdue, read this page: <u>https://help.itap.purdue.edu/3447</u>. If you need help using *my*Purdue, contact the ITaP Customer Service Center at:

E-mail: itap@purdue.edu; Phone: (765) 494-4000; Online: www.itap.purdue.edu/help

### Academic load guidelines

Students must be engaged in the type of activity for which their position is funded (e.g., students paid from instructional funds must be doing instruction, and students paid from research funds must be doing research, etc.).

<u>Guidelines for Credit Hour registration each semester (Courses plus Research)</u> Graduate students with Administrative/Professional classification can have a maximum of 7 Credit Hrs. per semester. All other graduate students must register according to their fractional Full Time Equivalent (FTE) appointment as:

Credit hours/ Funding	No appointment		.50 FTE	.75 FTE	1.00 FTE
Maximum	18 hrs.	15 hrs.	12 hrs.	9 hrs.	6 hrs.
Minimum	0 hrs.	3 hrs.	6 hrs.	9 hrs.	12 hrs.

Exceptions to maximum and minimum credit hours must be approved by the dean of the Graduate School.

Some specific cases:

• To be eligible to hold a graduate staff appointment during any session, an individual must be enrolled as a graduate student in a degree program and be registered for at least 3 credit hours of course and/or research work during the entire appointment period.

• A graduate member of the residence hall counseling staff may register for a maximum academic load of 16 credit hours including both research and coursework per semester (subject to further restriction at the discretion of the department).

Normal academic load:

- fall or spring session is 9 credit hours of course and/or research work.
- summer session is 6 credit hours of course and/or research work.

### Declaring Candidacy

Students must be actively registered, and declare their intent to graduate, by the Candidacy Deadline in the session of anticipated graduation. Types of Candidate Registrations include:

- CAND 99100 (General Candidacy) must be accompanied by at least one credit hour of research for Ph.D. and master's thesis students.
- CAND 99200 (Degree Only) all degree requirements met, except for depositing the thesis. Must meet early mid-semester deposit deadline for registration to remain valid.
- CAND 99300 (Exam Only) all degree requirements met, except for defending and depositing the thesis. Must meet early mid-semester deposit deadline for registration to remain valid.

### Readmission after gap in enrollment

An applicant who, after being granted admission by the Graduate School, does not enroll for three or more consecutive academic sessions (four or more if change of date has been approved) must submit a new application. Updated or additional admission information may be required. Conditions may be placed on admission. Students who have interrupted their graduate study must submit a new application if more than three consecutive academic sessions have elapsed since their last registration. Course credit hours earned by a student whose graduate study and/or professional activity has been inactive for <u>five years or more</u> cannot be used on a plan of study for an advanced degree. A plan of study approved prior to such a period of inactivity is invalid.

### Grades

In general, a student can remain in good standing by maintaining a GPA of 3.0/4.0 or better. Those students on assistantships or fellowships must maintain an index of at least 3.0/4.0 ("B" average). All courses that are taken, including those not listed on the Plan of Study are included in your GPA. The student also is expected to earn S grades for research registration. Two consecutive sessions of U grades for research registration mandate that the department take formal action and inform the student, in writing, and the Graduate School with regard to discontinuation or conditions for continuation of the student's graduate study. Courses taken as pass/not pass or satisfactory are unacceptable on plans of study.

### ADVISORY COMMITTEES

The student and the major professor are responsible for the selection of an advisory committee. The duties of that committee are to assist the student in the preparation of the plan of study and to offer advice during the period of graduate work, including research and thesis preparation when these are required components of the student's degree program.

The committee consists of the major professor and at least two other members of the graduate faculty for the M.S. (Thesis) degree. Ph.D. committees must have the major professor and three other members of the graduate faculty. M.S. (Non-thesis) have only a single advisor. Committees must be approved by the head of the graduate program, the college dean (if requested by the college), and the dean of the Graduate School.

Because it is crucial for advisory committee members to bring independent thought and decisionmaking to their advisory committee roles, the Graduate School strongly recommends that major professors, graduate students, and other individuals involved in the advisory committee selection process strive to <u>avoid appointments where there may be potential conflicts of interest</u>.

• Advisory committee appointments of spouses/partners, partners in business, or those with financial conflicts of interest connected to the graduate student, for example, should be carefully reviewed and alternatives considered.

Members of the committee need not be faculty with whom the student has taken coursework. However, at least 51% of the committee members must have regular graduate faculty certification at Purdue University. To request a faculty identifier number for someone outside the University, a current resume must be submitted to the Agronomy Graduate Coordinator prior to submitting the plan of study. A statement of why this individual is needed on the committee and what expertise will be offered must also be provided.

### Changes in the Advisory Committee

Changes to the advisory committee must be submitted electronically via *myPurdue*. Each request for a change must be accompanied by a rationale and be signed by the student and each committee member whose status is affected by the request. The request must be approved by the major professor, the head of the graduate program, and the college dean. It is important to notify the Graduate School immediately of any change in the major professor to ensure that appropriate signatures are on forms.

### Advisory Committee Meetings

The graduate student will arrange the time and place of their meetings based on the availability of the advisory committee. <u>Committees need to meet at least yearly and preferably once per semester.</u>

### GENERAL EXAMINATION PROCEDURES

Scheduling of exams (Preliminary and Final Exams for PhD and Final Exams for MS) is done online through *myPurdue*. Submit your request at least 3 weeks before the examination because electronic signatures must be obtained from committee members, Department Head, and the Graduate School. Look for details under each degree option.

To submit a request for a prelim or final exam:

- 1. Login to *my*Purdue using Purdue Career Account.
- 2. Select the "Graduate School Plan of Study" link under the "Graduate Students" section on the "Academic" tab.
- 3. Select the "Request for Appointment of Examining Committee" link to open the Exam Form Generator.
- 4. Click on the "Request for Appointment of Examining Committee" link to initiate the form.

Final examinations must be held prior to the last week of classes of the academic session in which graduation is expected.

Ph.D. Final Exam – at least two academic sessions devoted to research and writing must elapse between the preliminary and final examinations.

- An electronic Report of the Final Examination (G.S. Form 11) will be released to the department for the examining committee to use in recording the results of the examination.
- A cover letter for the Graduate School Exit Questionnaire/Survey of Earned Doctorates will be emailed to the student.

Thesis Master's Final Exam

- An electronic Report of the Final Examination (G.S. Form 7) will be released to the department for the examining committee to use in recording the results of the examination.
- A cover letter for the Graduate School Exit Questionnaire will be emailed to the student.

### Committee requirements during exams

- 2 committee members are required to be physically present at the MS thesis defense
- 3 committee members are required to be physically present at the PhD dissertation defense
- For 3 person committees, the decision must be unanimous.
- For committees of 4 or more, one member may approve/dissent without affecting the results of the examination.
- Regular committee members will be able to access the database from any desktop or laptop computer with internet access.
- Non-University faculty on the committee must sign a signature authorization form

(available from the Agronomy Graduate Coordinator) allowing the Graduate Coordinator to sign exam and thesis forms on their behalf.

• If a committee member refuses to sign the Form 9 (Thesis/Dissertation Acceptance), he/she still needs to sign the final Examination Report Form.

### Proxy Signatures

Every effort should be made to obtain signatures from all your committee members. If you cannot obtain a signature, your major professor or department head is permitted to sign as a committee member's proxy. A Proxy Signature Authorization form from that committee member must be submitted. The Graduate School will allow this for up to 2 committee members. The form is located in the appendices.

### PLAN OF STUDY (ePOS)

This is a list of courses that meet the needs of each student as determined by the advisory/graduate committee and approved by the Department's Graduate Chair, the Dean of the College of Agriculture, and the Dean of the Graduate School.

The Plan of Study should be filled out by the student and reviewed by the committee before the end of the second semester. Furthermore, it must be completed and received by the Graduate School, with all advisory committee, department/school, and college signatures, prior to the first day of the academic session of graduation. Students not meeting this deadline will be assessed a **Late Graduation Deadline Fee** if they want to remain on the candidate roster for the current term.

General rules about the ePOS (Look for details under each degree option.):

- Neither 100- nor 200-level courses may appear on a plan of study.
- Graduate courses taken while registered as a graduate student at Purdue University may be considered for fulfilling the plan of study requirements only if the student has received grades of C- or better. These course grades must meet departmental requirements, such as limits on the number of C-, C, or C+ grades permitted, grades of A, A-, B, or B- in certain courses, and/or minimum GPA for courses on the plan of study. For courses at the 30000- or 40000- level taken as a graduate student or courses that represent either undergraduate excess credit hour or transfer credit hour, grades of B- or better are required for fulfilling plan of study requirements.
- No more than six 300- or 400-level course credit hours may appear on a plan of study.
- Courses taken as pass/not pass or satisfactory/unsatisfactory are unacceptable on ePOS.
- Research credit hours (69800 and 69900) cannot be included on a plan of study.
- Courses listed as "Special Problems" should be no more than 3 research hours, taught/supervised by someone other than the major professor (except for the Non-thesis M.S.), and the problem should be on something other than the student's thesis research. Prior approval is required for variances to these rules.
- Courses will be listed on the Plan of Study under the category heading "Primary Area" or "Related Area". Note: Courses taken that are NOT on the plan of study can be taken as PASS/FAIL.
- Except in cases of a staff error, grade option changes will not be approved by the

Graduate School. It is expected that staff errors will be detected early and corrections requested within the normal drop/add period.

Changes in the Plan of Study: Course changes to the plan of study must be submitted electronically via *my*Purdue. The Graduate School regards the plan of study as an individualized curriculum designed by the advisory committee to assist the student in achieving his or her educational objectives. Although changes in the plan of study may be necessary, each change requested must be accompanied by a brief rationale in the space provided. Poor performance in a course is not an appropriate reason for removing a course from the plan of study. A request for changes in a plan of study must be signed by the student and approved by the major professor, the head of the graduate program, and the college dean.

Processing the Plan of Study: You can access the electronic plan of study (ePOS) form via *my*Purdue. To begin your plan of study, click on the Plan of Study Generator (POSG) link, then click on "Create new plan of study" link. Once in the POSG, refer to the Help buttons located on each page to assist you in using the electronic POSG. You do not need to complete the entire form in one sitting; you may save your plan of study and return to it later. You may not bookmark any pages within the Graduate School link. To return to the POSG you must login to *my*Purdue.

When you have completed your plan of study and feel it is ready for review by your advisory committee, submit your plan as a *Draft*. All plans of study must first be submitted as *Draft* before you can submit your plan as a *Final*. While your plan is in *Draft* status, review the information with your advisory committee and with the Agronomy Graduate Coordinator to ensure that it satisfies department and Graduate School policies. Use your draft as a basis to discuss your academic and research goals with your advisory committee members.

The ePOS is submitted to the Agronomy Graduate Chair for review and approval along with other forms (committee meeting forms, basic science requirements, and transcripts). If the Agronomy Graduate Chair does not approve a student's plan of study then the student must meet with his/her advisory committee and discuss the recommended changes. If there is justification for not following the recommendations of the Agronomy Graduate Chair, a written and signed statement can be submitted by the advisory committee/advisor.

Once the Advisory Committee and Agronomy Graduate Chair has verbally accepted your plan of study, return to the ePOS and submit your plan as "*Final*." Only you can submit your plan as *Final*; this indicates your signature. The plan of study form will be electronically routed, reviewed and, if approved, signed by the Agronomy Graduate Coordinator, your advisory committee, the department head/Graduate Program Chair, and the graduate school. You may check the status of your plan at any time by returning to the ePOS and clicking on the Display Submitted Plan of Study link. After the form has been completed and approved (processed by the Graduate School) it can be viewed, but not altered.

While the ePOS has been approved and designated *Final*, the ePOS can be changed up to the beginning of the last semester of your program. Any changes to the plan require the electronic

Change to Plan of Study Form 13 to be submitted electronically through SSINFO..

### PhD DEGREE REQUIREMENTS

- 1. English proficiency requirements must be met before foreign students can submit their plan of study. English proficiency of domestic students will be left to the discretion of the advisor and advisory committee. Students who wish help with their writing can obtain more information from the Purdue Online Writing Lab (OWL) at <a href="http://owl.english.purdue.edu/">http://owl.english.purdue.edu/</a>.
- 2. The selection of an advisory committee and the filing of the plan of study must be completed before the end of the student's second semester.
  - All committee members must have a Purdue identifier
  - Non-Purdue individuals serving as committee members must submit a resume to the Agronomy Graduate Coordinator that identifies the individual, provides contact information, educational degrees, current position, area of research, and why this individual is needed on the committee. An identification number will be requested from the Graduate School.
- 3. A Plan of study (ePOS) outlining the courses to be taken (or already taken) as part of your degree needs to be submitted online (see 'Processing your Plan of Study' below) by the end of your first year.
  - Research credit hours are not documented on your ePOS
  - Before the plan is submitted online the student should meet with his/her advisory committee with a rough draft of the plan of study. Plans of study will be typed by the student on the web and sent to the Agronomy Graduate Coordinator to check for errors.
  - The ePOS is then approved by the Agronomy Graduate Chair. You will be notified after approval.
  - The ePOS is then approved by your Committee by their electronic signature
  - Once all approvals are made, the ePOS is *final*. Changes to the plan of study are possible prior to the beginning of the last semester.
- 4. Be sure to keep copies of all paperwork and make sure that these deadlines are met. You must assume the responsibility and ownership of your graduate program.
- 5. <u>Core Science Requirements for the Ph.D. Degree:</u> A background in all major sciences and mathematics is necessary for your PhD. *These courses are not part of your ePOS*. For this background you are required to have minimum of 1 semester course (3 credit hours) in each of the 4 areas of biology, chemistry, physics and math; plus, an additional 3 courses (3 credit hours each in any area) for a total of 21 credit hour are required of all Ph.D. students prior to becoming candidates. These courses are usually taken during the B.S. degree. Students deficient in these courses will be required to take them during their degree program. These courses may be taken for a letter grade (A, B, C) or Pass/No Pass.
  - Subject Area 1: CHEMISTRY with Laboratory (3-9 credit hours). Topics including

Organic, Inorganic, Analytical, Physical.

Purdue courses fulfilling this requirement include CHM 11100/ CHM11200 or equivalent laboratory course.

- Subject Area 2: PHYSICS with Laboratory (3-6 credit hours). Topics should include: Newtonian mechanics; energy quantization, entropy; the kinetic theory of gases, conservation of mass, energy, momentum; fluid statics and dynamics; heat, electricity and magnetism; Light and optics. Purdue courses fulfilling this requirement include PHYS 22000/22100 or equivalent laboratory course.
- Subject Area 3: MATHEMATICS (3-6 credit hours). Topics should include: Derivatives, anti-derivatives, definite integrals, indefinite integrals, limit theorem, optimization/maxima and minima of functions, differentiation, numerical integration, symbolic integration, alternating series, complex numbers. Purdue courses fulfilling this requirement include MA 22300/22400 or equivalent course.
- Subject Area 4: BIOLOGY with Laboratory (3-6 credit hours). Topics should include: diversity, principles governing the development of multi-cellular animals and plants; evolution in producing biological complexity and variability; chemistry of basic macromolecules important in cells and their roles in cellular processes; and the structure and function of either animals or plants.

Purdue courses fulfilling this requirement include BIOL 11000/BIOL 11100/BTNY 11000 or equivalent laboratory course.

The fulfilment of these requirements is documented on the 'Supplement to Ph.D. Plan of Study' Form available on departmental shared S drive (S:/Shared/Graduate Program Forms/) with the completed document maintained in the Graduate Office. Appeals by the student for inclusion of courses designated to fulfill these requirements should be directed to the Graduate Chair.

6. <u>36 course credit hours required for the Ph.D.</u> [A total of 90 credit hours (course and research) are required for the Ph.D. degree].

- Departmental Core of 9 course credit hours include:
  - 1<sup>st</sup> Statistics course (3 credit hours) involving graduate level probability and statistics emphasizing the scientific methods of data collection, particularly randomized experiments, random samples, analysis of variance, and theory of statistical inference. Example Purdue courses fulfilling this requirement include: STAT 50100, 50300, 51100. Submit a request for another course to fulfill this requirement to the Agronomy Graduate Chair.
  - 2<sup>nd</sup> Statistics course (3 credit hours) containing at least 50% of theoretical/applied statistical reasoning and thinking. Course should emphasize topics such as designing investigations, formulating research questions, sampling, describing and comparing data sets, proposing and justifying conclusions and predictions based on data. Examples include Non-Gaussian probability distributions, data cleaning, Hypothesis testing, Simulation, Randomization, and spatial, time series and or Bootstrapping

techniques. Example Purdue courses that fulfill this requirement include: STAT 51200, 51400, 52000, 52400, AGEC 65500, BIOL 58200, ENTM 64200, CE 64100. Submit a request for another course to fulfill this requirement to the Agronomy Graduate Chair.

- Professional Development experiences
  - Introduction to Graduate Research (AGRY 60100) provided it was not taken in a previous Purdue MS program of study (1 credit hour in first semester).
  - Two Professional Development Seminars (2 credit hours or 3 if AGRY 60100 was taken in a previous Purdue MS program of study). Example Purdue courses that fulfill this requirement include: AGRY 69600, 59600, 59700
  - Documented attendance at 14 departmental seminars (at least 9 AGRY seminars, at most 5 regular seminars in other departments or Distinguished Professor seminars) over time period from matriculation to time of scheduling of Preliminary exam.
- 6 course credit hours may be independent study, but not with the student's major professor. Students must have prior approval by Agronomy Graduate Chair for independent study credit hours—approval will require documentation of course objectives, syllabus and deliverables.
- No more than six 30000- or 40000- level courses are allowed on the ePOS
- At least one-third of the total credit hours used to satisfy degree requirements must be earned (while registered for doctoral study) in continuous residence on the Purdue campus where the degree is to be granted.
- A maximum of 18 credit hours will be allowed from any one semester (maximum hours proportional to length of summer session).
- If a student completes all the academic requirements but has insufficient residence credits, a letter of explanation justifying the deficiency should be forwarded to the dean of the Graduate School. If justification is sufficient, the dean of the Graduate School may waive part of the residence requirement.
- Graduate course credit hours earned while an undergraduate at Purdue University or other accredited institutions of higher learning may be applied toward an advanced degree if these credit hours are in excess of any requirements for the baccalaureate degree. Such credit hours must be certified as available for graduate credit hour by the institution from which the student received his/her baccalaureate degree, but will be accepted only if:
  - 1. The student had junior or senior standing when taking the course,
  - 2. The student received a grade of B or better (work taken under the pass/not-pass option is not acceptable),
  - 3. The course was designated as a graduate course.

At Purdue University only, if the work is completed satisfactorily on this basis, the academic advisor (or candidate coordinator or other designee) shall then complete the *Academic Record Change* (Registrar Form 350), which indicates that the course may be used for graduate credit hour, and submit the form to the registrar, along with the grade reported, at the close of the student's final term. The academic advisor's (or candidate coordinator's or designee's) signature will attest to the fact that the credit hours is in excess of that required for the baccalaureate degree so that the registrar can then enter the notation "available for graduate credit hour" on the student's record. The sum of credit hours earned as undergraduate excess and the credit hours earned in graduate non-degree,

teacher license, or graduate certificate status that can be used on a plan of study is limited to 12 credit hours.

- 24 graduate course credit hours and 6 research credit hours from a Master's degree can be applied toward the Ph.D. plan of study if approved by the student's Graduate Committee.
- Additional requirements may be required by any 'umbrella' interdisciplinary program with which a student might be aligned (eg. ESE, PULSe).
- 7. <u>Preparation of a Thesis Proposal</u>. Ph.D. students are expected to prepare a thesis proposal of at least 10 pages. It should be developed in consultation with the advisor and should include the following: brief review of pertinent literature, clear statement of hypothesis and objectives, general experimental approach, and timeline for completion. The proposal must be approved by the advisor and the advisory committee by the beginning of your second year.
  - The proposal must be presented (20-30 min) to the committee and general public
  - The formative proposal assessment by your Committee must be filed in the Graduate Program Office
  - A copy of the assessment tool 'Rubric for Evaluating PhD Dissertation Research Proposal' follows and can be found on departmental shared S drive (S:/Shared/Graduate Program Forms/).
- 8. Preliminary Examination

After the student has completed almost all of the formal course requirements, has presented and has received committee approval of their research proposal, he/she becomes eligible to take the preliminary examination. The preliminary exam will be taken <u>at the end of the 4<sup>th</sup> semester</u> for those holding an MS degree and <u>at the end of the 6<sup>th</sup> semester</u> for those not holding a MS degree.

- Documentation of completed seminar attendance requirement must be provided to Holly McIntire (Graduate Coordinator) prior to scheduling your Preliminary Examination- scheduling of the Preliminary Exam will not occur until the seminar requirement is fulfilled.
- The preliminary examination is a comprehensive review of the student's knowledge in the area in which he/she is seeking a Ph.D. degree.
  - The purpose of the preliminary examination is to determine if the student possesses the requisite knowledge to be admitted to candidacy for the Ph.D. degree, if the student should enroll in additional course work, or if the student should be dropped from graduate study.
  - The material covered on the preliminary examination will not be oriented to that already tested in formal course work, but rather will involve an evaluation of the student's *ability to reason and perform a synthesis of numerous facts to arrive at a logical conclusion or answer*.
    - Successfully completing the preliminary examination indicates that the student is adequately trained to make a contribution to the state of knowledge in his/her area of specialty.
- The Examination shall consist of at least three written examinations and an oral examination.

- Written Examination: Professors serving on advisory committees of agronomy students will give written exams and will give instructions as to any reference material the student may use during the exam. Each written examination will be open-book, require between 3 and 12 hours of effort over a period of up to oneweek. All written examinations are to be taken within a period of six weeks.
- Oral Examination: Questions may cover the material in the written examination as well as any other topic that indicates *ability to reason and perform a synthesis of numerous facts to arrive at a logical conclusion or answer*. The chair of the committee will meet with the student after the examination to express any written comments provided the committee members.
- A copy of the Rubrics for evaluating Written and Oral Preliminary Examinations for Ph.D. Candidacy follows. and can be found on departmental shared S drive (S:/Shared/Graduate Program Forms/). Completed rubrics from all committee members must be received in the Graduate office prior to final Graduate Program approval of the successful completion of the examination.
- The preliminary examination can be <u>repeated once</u> if necessary at the discretion of the examining committee.

### 9. <u>Thesis</u>

A Ph.D. dissertation (hereafter referred to in this section as "thesis") is a document authored by an individual, describing results of original research undertaken by that individual, and asserting a position that individual is willing to defend. Joint or collaborative research endeavors are not prohibited; however, in such situations, unique aspects of the broad problem are to be explored by each individual, and the thesis written and presented to the final examining committee is to be a document describing the student's creative effort and contribution. It is expected that students will revise and publish a portion of their thesis in reputable scientific journals before or after their final examination. Refer to the THESIS?DISSERTATION section for additional guidance.

### 10. Final Examination

A final oral examination of Ph.D. candidates is required regardless of whether or not your written dissertation contains classified or proprietary information. Before establishing a thesis defense, all students must have a committee meeting to determine if research is sufficient and all courses on plan of study have been taken. The timeline and thesis requirements are given below:

- A first draft of the thesis should be in the hands of the major professor at least six weeks before the end of the session in which conferral of the degree is expected.
- An original copy of the thesis and three duplicate copies must be submitted to the major professor at least three weeks before the final oral examination date. <u>The thesis must bear the written approval of the professor who has directed the research before it is submitted to the final examining committee</u>.
- Each member of the examining committee must receive a copy of the thesis at least <u>two</u> <u>weeks</u> before the date of the final oral examination.
- The final examination must be scheduled <u>three weeks</u> before the intended date and held before the last week of classes. The request for exam is done through *my*Purdue.
- The final examination has both oral and written components

- The first part of the oral examination is open to faculty and students. The candidate should prepare a synopsis of the thesis research for this oral part of the examination. An email will be distributed 2-3 days prior to the examination. Seminar credit hour <u>may not</u> be given for this examination presentation.
- The second part of the oral examination in open only to the committee and is to last no more than 2 hours. This examination largely addresses the thesis document itself. Rubrics for assessing the final exam (both oral presentation and thesis) follows and can be found on departmental shared S drive (S:/Shared/Graduate Program Forms/).
- Completed departmental rubrics from all examining committee members must be received in the Graduate office prior to final Graduate Program approval of the successful completion of the examination.
- Your advisor reports the outcome of your examination electronically (Report of Final Examination) that then needs approval by the departmental graduate program and the Graduate School.

### 11. Ph.D. Thesis Completion and Depositing

Typically your committee will request some changes to the thesis regardless of the outcome of your examination. The procedures for depositing your thesis are described under '**Thesis Approval and Processing**" below. The processing of your thesis will take several days from the day you submit it online so plan ahead. Verify the deadlines for you to complete the process at <u>https://www.purdue.edu/gradschool/about/calendar/deadlines.html</u>. If you have registered your candidacy as CAND 991 during your last semester, the last date for completing the depositing process the thesis is the last day of the semester of graduation.

### Typical Program Timeline

### First Semester

- Initial registration. Include AGRY 60100 'Introduction to Graduate Research' (1 Credit Hour)
- Draft Plan of Study filed with the Graduate Program Office.
- Supplement to Ph.D. Plan of Study filed with the Graduate Program Office.
- First year Individual Development Plan completed and filed with the Graduate Program Office.
- Official transcripts of all previous course work (submitted as part of your application) must be on file by the end of the semester.

### **Second Semester**

- Advisory committee selected. The Advisory Committee will consist of four members with one member from outside the Agronomy Department. Major professors are expected to convene a meeting with each student's advisory committee to discuss the student's plan of study and proposed research.
- Final Plan of study electronically submitted before the end of the second semester. Courses NOT on the plan of study can be taken as Pass/Fail and the Plan can be updated throughout your degree program until the first day of the academic session of

graduation.

### **Third Semester**

- Second Year Individual Development Plan completed and filed with the Graduate Program Office
- Research Proposal completed
- Present proposal to advisory committee and receive feedback

### Fourth (prior MS) or Sixth (no prior MS) Semester

- Meet with advisory committee for Preliminary Examination
  - Prelims scheduled after majority of course work on plan of study has been completed.
  - Scheduling of exam must be done <u>three weeks</u> before date of exam. This applies for all oral examinations.
  - You **MUST** have a minimum of <u>two semesters</u> between prelim and final examination.

### All subsequent Semesters or at Least Annually

- Meet with advisory committee
- Years 3-5 Individual Development Plan completed and filed with the Graduate Program Office

### Prior to Start of Last Semester/Session

- Plan of Study must be completed and is final on the first day of the semester/session
- Indicate intent to graduate to Graduate Program Office during last semester registration

### Start of Last Semester/Session

- Committee meeting to determine course and research objectives have been met.
- All course work completed and incomplete grades cleared.
- First draft of thesis submitted to major professor at <u>least six weeks before intended</u> <u>examination date.</u>
- <u>Three weeks before intended examination</u> and <u>after</u> thesis approval by advisory committee, request an appointment for examining committee. At this time student must submit an abstract for their seminar notice to the Agronomy Graduate Coordinator. This will be circulated one week before your seminar.
- Final examination is a public seminar followed by an oral exam in which the student defends the thesis.
- The final thesis and three duplicates should be in the hands of the major professor <u>three</u> weeks before the end of the session in which degree is expected.
- Submit thesis via Electronic Thesis Deposit (ETD) as indicated in section on 'Depositing Thesis'.

### PhD Program Evaluation Rubrics

### **Rubric for Evaluating PhD Dissertation Research Proposal (Formative)**

After evaluating the dissertation research proposal, **each committee member will fill out the rubric below**.

	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Arguments	Incorrect, incoherent, or flawed	Coherent and clear	Superior
2.Hypotheses	Flawed	Clear	Well defined
3.Objectives	Poor	Clear	Well defined
Evidence of critical thinking	Rudimentary	Adequate	Mature
1. Understanding of pertinent literature	Poor	Adequate	Outstanding
Scientific Creativity 4.Methodology	Limited	Adequate	Exceptional
	Not appropriate	Appropriate	Exceptional
Potential for success in timeframe indicated	Little	Good	Excellent
Potential for discovery	Limited	Some	Exceptional
Extending knowledge	Limited	Builds upon previous research	Greatly extends
Application potential	Limited	Reasonable	Exceptional
Publication potential	Limited	Reasonable	Exceptional
Clarity of writing	Poor	Adequate	Publication quality
Quality of English	Numerous errors	Some errors	No errors
Organization	Poor	Logical	Excellent
Source attribution	Insufficient	Sufficient	Extraordinary
	Does not meet expectations	Meets Expectations	Exceeds Expectations

- A summary of **written comments** from committee members as well as any edited copies of the research proposal submitted by committee members **WILL** be provided to the student by the chair of the examining committee (or advisor) and;
- A verbal summarization of the overall evaluation of the research proposal by the committee **WILL** be provided to the student by the chair of the examining committee (or advisor) or during a prescheduled meeting of the advisory committee.

Written Preliminary Examination Rubric - Completed by:

Form AGRY\_GC-4

Date:

Examination Iteration: 1 2 (circle correct number)

(To be completed by each committee member. Please check boxes for all evaluation criteria that you feel are appropriate within each attribute category)

Attribute		1 2	3 4	5
Communications	Scientific Clarity	Poor	Adequate	Excellent
Score	Organization	Poor	Logical	Excellent
Advance Knowledge and Scholarshin	Subject matter	Poor	Good	Exhibits mastery
Score	Theoretical concepts	Poor	Good	Demonstrates mastery
Critical Thinking and Problem solving	Arguments	Most incorrect, incoherent, or flawed	Coherent and clear	Superior
Score	Mental Acuity Insight	Limited Limited	Average Average	Mature Exceptional

Confidential Written Thesis Comments:

Oral Preliminary Examination Rubric – Completed by:

Date:

Examination Iteration: 1 2 (circle correct number)

(To be completed by each committee member. Please check boxes for all evaluation criteria that you feel are appropriate within each attribute category)

Attribute		1 2	3	4 5
Communications	Organization	Poor	Clear	Exceptional
Score	Clarity of presentation	Poor	Good	Exceptional
Advance Knowledge and	Completeness of answers	Incomplete	complete	Eloquent
Scholarship	Justification of arguments	Poor	well organized	Skillfully presented
Score	Breadth of knowledge	Inadequate	Adequate	Superior
Critical Thinking and	Depth of knowledge	Weak	Some	Exceptional
problem solving	Mental acuity	Poor	Average	Well developed
Score	Breadth of understanding	Limited	Adequate	Exceptional

		expectations	
Exceeds Expectations	Meets Expectations	Does not meet	Written and Oral Overall Assessment

Confidential Oral Defense Comments:

Form AGRY\_GC-4

Form AGRY\_GC-7

PhD Oral D	PhD Oral Defense Rubric	Completed by:			Date:	
Attribute	Descriptors			Rating		
2		1	2	ω	4	5
Oral	Organization:	Poor		Clear		Excellent
Communication	Verbal communication:	Poor		Good		Excellent
	Presentation of visuals:	Difficult to read		Clear		Outstanding
	Outral Accomment	Does not meet		Meets		Europede aumontations
		expectations		expectations		בערכבתא בעליברושתהווא
A		1	2	3	4	5
Advance	Responses to questions:	Incomplete		Complete		Eloquent
Coholowskin	Arguments:	poorly present	_	Well-organized		Skillfully presented
JUIDIALSIIID	Knowledge in subject area:	Lacking		Adequate		Superior
	Overall Assessment	Does not meet		Meets		Exceeds expectations
		expectations		evherrannis		1
		Si F	~	υ	4	U
Critical thinking	Depth of knowledge:	Critical weaknesses		Some depth		Exceptional
and problem	Critical thinking skills:	Not well-developed		Average		Well-developed
solving	Ability to draw knowledge from					
	across disciplines:	Too narrow		Some ability		Well-developed
	Overall Accessment	Does not meet		Meets		Evreeds expertations
		expectations		expectations		
		1	2	з	4	ъ
Ethical conduct	Limitations in data interpretation &	Not stated	S	Some discussion		Well-stated
	analysis					
	Attribution of sources & colleagues	Improper		Some		Full
	Overall Assessment	Does not meet expectations		Meets expectations		Exceeds expectations
Professional Deve	Professional Development (Exercising objectivity,	1	2	3	4	5
respecting oppos	respecting opposing scientific views)					
	Overall Assessment	Does not meet		Meets		Exceeds expectations
		expectations		expectations		

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### Form AGRY\_GC-7

## PhD Dissertation Rubric

Attribute	Descriptors		Rating	04
Wilthan		1	2 3	4
Written	Writing quality:	Inadequate	Adequate	
Communication	Grammatical & spelling errors:	Numerous	Some	
	Organization:	Poor	Adequate	
	Oursell Assessment	Does not meet	Meets	
		expectations	expectations	
		1	2 3	4
	Subject matter & literature:	Incomplete	Adequate	
Advance	Theoretical concepts:	Poor	Adequate	
Knowledge and	Evidence of discovery:	Limited	Some	
Scholarship	Linkage to previous research:	Limited	Builds	
	Theoretical or applied significance:	Limited	Reasonable	
	Publication potential:	Limited	Reasonable	
	Overall Assessment	Does not meet expectations	Meets expectations	
		1	2 3	4
Critical thinking	Formulation of argumente	Incorrect or	Coherent and clear	
and problem	Objectives	incoherent	Clear	
and propress	Critical thinking chiller	Poorly defined	Average	
South	Creativity and insight:	Limited	Average	
	) =	Does not meet	Meets	
		expectations	expectations	
		1	2 3	4
Ethical conduct	Regulatory compliance Express limitations in interpretation	Not considered	Considered	
	& analysis	Not stated	Some discussion	
	Attribution of sources & colleagues	Improper	Some	
	Overall Assessment	Does not meet expectations	Meets	

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Form AGRY\_GC-7

# PhD Dissertation Rubric (continued) completed by:

\_ Date:\_\_\_\_\_

Attribute (Descriptors)			Rating	B	
Professional Development (exercising objectivity,	L	2	3	4	5
respecting opposing scientific views)					
Overall Assessment	Does not meet		Meets		Exceeds expectations
	expectations		expectations		

### MS DEGREE (THESIS OPTION) REQUIREMENTS

- 1. English proficiency requirements must be met before foreign students can submit their plan of study. English proficiency of domestic students will be left to the discretion of the advisor and advisory committee. Students who wish help with their writing can obtain more information from the Purdue Online Writing Lab (OWL) at <a href="http://owl.english.purdue.edu/">http://owl.english.purdue.edu/</a>.
- 2. The selection of an advisory committee and the filing of the plan of study must be completed before the end of the student's second semester.
  - All committee members must have a Purdue identifier
  - Non-Purdue individuals serving as committee members must submit a resume to the Agronomy Graduate Coordinator that identifies the individual, provides contact information, educational degrees, current position, area of research, and why this individual is needed on the committee. An identification number will be requested from the Graduate School.
- 1. A Plan of study (ePOS) outlining the courses to be taken (or already taken) as part of your degree needs to be submitted online (see 'Processing your Plan of Study') by the end of your first year.
  - Total of 30 credit hours of research and coursework
  - Research credit hours not documented on ePOS
  - A maximum of nine Purdue credit hours of coursework at the 50000- and 60000- level used to satisfy the requirements of one (and only one) Purdue master's degree may be used on the plan of study for a second Purdue master's degree. Coursework used to satisfy the requirements of a master's degree from an institution other than Purdue may not be used on a Purdue master's plan of study.
  - No more than six credit hours of 30000- or 40000- level courses at Purdue are allowed on the ePOS
  - Before the plan is submitted online the student should meet with his/her advisory committee with a rough draft of the plan of study. Plans of study will be typed by the student on the web and sent to the Agronomy Graduate Coordinator to check for errors.
  - The ePOS is then approved by the Agronomy Graduate Chair. You will be notified after approval.
  - The ePOS is then approved by your Committee by their electronic signature
  - Once all approvals are made, the ePOS is *final*. Changes to the plan of study are possible prior to the beginning of the last semester.
- 4. Be sure to keep copies of all paperwork and make sure that these deadlines are met. You must assume the responsibility and ownership of your graduate program.
- 5. Coursework
  - 24 course credit hours including:
    - One Interactive Seminar (1 credit hours) Example Purdue courses that fulfill this

requirement include: AGRY 69600, 59600, 59700

- No more than six credit hours of 30000- or 40000- level courses at Purdue are allowed on the ePOS
- A maximum of nine Purdue credit hours of coursework at the 50000- and 60000level used to satisfy the requirements of one (and only one) Purdue master's degree may be used on the plan of study for a second Purdue master's degree.
- Professional Development experiences
  - Introduction to Graduate Research (AGRY 60100), 1 credit hour in first semester
  - One Professional Development Seminars (1 credit hour). Example Purdue courses that fulfill this requirement include: AGRY 69600, 59600, 59700
  - Document attendance at 5 AGRY (only AGRY) seminars over time period from matriculation to time of scheduling of the Thesis Defense.
- At least one-half of the total credit hours used to satisfy degree requirements must be earned in residence on the Purdue campus where the degree is to be granted. Course credit hour obtained via televised instruction from a campus shall be considered to have been obtained in residence on that campus.
- A maximum of 18 credit hours will be allowed from any one semester (maximum hours proportional to length of summer session).
- If a student completes all the academic requirements but has insufficient residence credit hours, a letter of explanation justifying the deficiency should be forwarded to the dean of the Graduate School. If justification is sufficient, the dean of the Graduate School may waive part of the residence requirement.
- Additional requirements may be required by any 'umbrella' interdisciplinary program with which a student might be aligned (eg. ESE).
- 6. <u>Preparation of a Thesis Proposal</u>. Thesis option master's students are expected to prepare a thesis proposal. It should be developed in consultation with the advisor and should include the following: brief review of pertinent literature, clear statement of hypothesis and objectives, general experimental approach, and timeline for completion. The proposal must be approved by the advisor and the advisory committee prior to undertaking the major part of your research.
  - The rubric to be used to evaluate your Thesis Proposal (Evaluating MS Thesis Research) follows.
  - The formative proposal assessment by your Committee must be filed in the Graduate Program Office
- 7. <u>Thesis</u>

A master's thesis (hereafter referred to in this section as thesis) is a document authored by an individual, describing results of original research undertaken by that individual, and asserting a position that individual is willing to defend. Joint or collaborative research endeavors are not prohibited; however, in such situations, unique aspects of the broad problem are to be explored by each individual, and the thesis written and presented to the final examining committee is to be a document describing the student's creative effort and contribution.

It is expected that students will revise and publish a portion of their thesis in reputable

scientific journals before or after their final examination. Refer to the THESIS/DISSERTATION section below for additional guidance.

### 8. Final Examination

A final oral examination of Masters candidates is required is required regardless of whether or not your written thesis contains classified or proprietary information. Completed documentation of seminar attendance must be provided to Holly McIntire (Graduate Coordinator) prior to Defense of Thesis scheduling- approval of your Defense of Thesis examination will not occur until the seminar requirement is fulfilled. Written examinations of Masters candidates planning to continue work toward the Ph.D. are recommended. The timeline and thesis requirements are given below.

All students planning to defend their thesis will have a committee meeting to determine if research is sufficient and all courses on plan of study have been taken.

- A first draft of the thesis should be in the hands of the major professor at least <u>six weeks</u> before the end of the session in which conferral of the degree is expected.
- An original copy of the thesis and three duplicate copies must be submitted to the major professor at least three weeks before the final oral examination date. The thesis must bear the written approval of the professor who has directed the research before it is submitted to the final examining committee. Each member of the examining committee must receive a copy of the thesis at least two weeks before the date of the final oral examination.
- The final examination must be scheduled <u>three weeks</u> before the intended date. The request for exam is done through *myPurdue*.
- The final oral M.S. thesis examination is open to faculty and students. The candidate should prepare a synopsis of the thesis research for the first part of the examination. An email will be distributed 2-3 days prior to the examination. Seminar credit hour <u>may not</u> be given for this examination presentation.
- The rubric to be used to evaluate the oral examination follows and can be found on departmental shared S drive (S:/Shared/Graduate Program Forms/)
- Completed rubrics from all committee members must be received in the Graduate office prior to final Graduate Program approval of the successful completion of the examination.
- Your advisor reports the outcome of your examination electronically (Report of Final Examination) that then needs approval by the departmental graduate program and the Graduate School.

### 9. MS Thesis Completion and Depositing

Typically your committee will request some changes to the thesis regardless of the outcome of your examination. The procedures for depositing your thesis are described under '**Thesis Approval and Processing**" below. The processing of your thesis will take several days from the day you submit it online so plan ahead. Verify the deadlines for you to complete the process at <u>https://www.purdue.edu/gradschool/about/calendar/deadlines.html</u>. If you have registered your candidacy as CAND 991 during your last semester, the last date for

completing the depositing process the thesis is the last day of the semester of graduation.

### Typical Program Timeline

### **First Semester**

- Initial registration. Include AGRY 60100 'Introduction to Graduate Research' (1 Credit Hour)
- Draft Plan of Study electronically filed.
- First year Individual Development Plan completed and filed with the Graduate Program Office.
- Official transcripts of all previous course work (submitted as part of your application) must be on file by the end of the semester.

### **Second Semester**

- Advisory committee selected. The Advisory Committee will consist of at least three members. If the student intends to continue his work toward a Ph.D., it is recommended that one member of the Masters' Committee be from outside the Agronomy Department. Major professors are expected to convene a meeting with each student's advisory committee to discuss the student's plan of study and proposed research.
- Final Plan of study electronically filed before the end of the second semester. Courses taken that are NOT on the plan of study can be taken as Pass/Fail. The Plan can be updated throughout your degree program until the first day of the academic session of graduation.

### **Third Semester**

- Second year Individual Development Plan completed and filed with the Graduate Program Office at beginning of semester.
- Thesis proposal completed. The Advisory Committee will evaluate the proposal.

### Prior to Start of Last Semester/Session

- Indicate intent to graduate to Graduate Program Office during last semester registration
- Plan of Study must be completed and is final the first day of the last semester/session

### Start of Last Semester/Session

- Committee meeting to determine course and research objectives have been met.
- Indicate intent to graduate on Form 23.
- All course work completed and incomplete grades cleared.
- First draft of thesis must be submitted to major professor at least <u>six weeks before intended</u> <u>examination date</u>.
- <u>Three weeks before intended examination</u> and <u>after</u> thesis approval by advisory committee, request an appointment for an examining committee.
- Schedule Thesis defense. At this time students must document attendance at 5 Departmental Seminars and submit an abstract for their seminar notice to the Agronomy Graduate Coordinator. This will be circulated one week before your seminar.
- Final examination is a public seminar followed by an oral exam in which the student defends the thesis.
- The final thesis with all corrections and three duplicates should be in the hands of the major professor three weeks before the end of the session in which degree is expected.

• Submit thesis via Electronic Thesis Deposit (ETD) as indicated in section on 'Depositing Thesis'.

### MS Program Evaluation Rubrics

### Rubric for evaluating the MS Thesis Research Proposal (Formative)

After evaluating the dissertation research proposal, **each committee member will fill out the rubric below**.

	Does Not Meet	Meets Expectations	Exceeds Expectations
	Expectations		
Arguments	Incorrect, incoherent, or flawed	Coherent and clear	Superior
2.Hypotheses	Flawed	Clear	Well defined
3.Objectives	Poor	Clear	Well defined
Evidence of critical thinking	Rudimentary	Adequate	Mature
1. Understanding of pertinent literature	Poor	Adequate	Outstanding
Scientific Creativity	Limited	Adequate	Exceptional
4.Methodology	Not appropriate	Appropriate	Exceptional
Potential for success in timeframe indicated	Little	Good	Excellent
Potential for discovery	Limited	Some	Exceptional
Extending knowledge	Limited	Builds upon previous research	Greatly extends
Application potential	Limited	Reasonable	Exceptional
Publication potential	Limited	Reasonable	Exceptional
Clarity of writing	Poor	Adequate	Publication quality
Quality of English	Numerous errors	Some errors	No errors
Organization	Poor	Logical	Excellent
Source attribution	Insufficient	Sufficient	Extraordinary
	Does not meet expectations	Meets Expectations	Exceeds Expectations

- A summary of **written comments** from committee members as well as any edited copies of the research proposal submitted by committee members **WILL** be provided to the student by the chair of the examining committee (or advisor) and;
- A verbal summarization of the overall evaluation of the research proposal by the committee **WILL** be provided to the student by the chair of the examining committee (or advisor) or during a prescheduled meeting of the advisory committee.

### Form AGRY\_GC-7b

## MS Oral Defense Rubric - Completed by

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Attribute	Descriptors		Rating		
-		1	2 3	4	5
Ural	Organization:	Poor	Clear		Excellent
Communication	Verbal communication:	Poor	Good		Excellent
	Presentation of visuals:	Difficult to read	Clear		Outstanding
		Does not meet	Meets		
		expectations	expectations		בערבבתא בעלובררפרוסווא
		1	2 3		5
Advance	Responses to questions:	Incomplete	Complete	4	Eloquent
Knowledge and	Arguments:	poorly present	Well-organized		Skillfully presented
SCHOLALSHIP	NIOWIeuge III subject allea.	Lacking	Adequate		Superior
	Overall Assessment	Does not meet	Meets		Exceeds expectations
		expectations	expectations		
	Donth of knowledge	1	2 3	4	5
<b>Critical thinking</b>		Critical weaknesses	Some depth		Exceptional
and problem	Ability to draw knowledge from	Not well-developed	Average		Well-developed
solving		Too narrow			
			Some ability		Well-developed
	Overall Accessment	Does not meet	Meets		Exceeds expectations
		expectations	expectations		
		ц	2 3	4	ъ
	Limitations in data	Not stated	Some discussion		Well-stated
Ethical conduct	interpretation & analysis				
	Attribution of sources &	Improper	Some		Full
	colleagues				
	Overall Accessment	Does not meet	Meets		Exceeds expectations
		expectations	expectations		
<b>Professional Deve</b>	Professional Development (exercising objectivity,	ц	2 3	4	ъ
respecting opposing scientific views)	ing scientific views)				

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Form AGRY\_GC-7b

	Overall Assessment
expectations	Does not meet
expectations	Meets
	Exceeds expectations

## **MS Thesis Rubric**

Communication Ethical conduct **Critical thinking** Knowledge and and problem Scholarship Advance Attribute solving Written **Overall Assessment Overall Assessment Overall Assessment** Grammatical & spelling errors: Linkage to previous research: Subject matter & literature: Formulation of arguments: Regulatory compliance: Evidence of discovery: Theoretical or applied Creativity and insight: Descriptors Critical thinking skills: Publication potential: Theoretical concepts: Writing quality: Organization: significance: Completed by: Objectives: Not considered Does not meet Does not meet Poorly defined Does not meet expectations expectations expectations Incorrect or Incomplete incoherent Inadequate Numerous Limited Limited Limited Limited Limited Limited Poor Poor Р F Ν Ν Ν N Coherent and expectations expectations expectations Reasonable Reasonable Considered Adequate Adequate Adequate Adequate Meets Average Average clear Meets Builds Some Some Clear Meets ω ω ω ω Rating Date: 4 4 4 4 Exceeds expectations Exceeds expectations Exceeds expectations Requirements met Well-developed Greatly extends Well-defined Exceptional Exceptional Exceptional Superior Exceptional Excellent Mastery Excellent Mastery None С J ъ S

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### COMBINED MS DEGREE REQUIREMENTS

The Agronomy department offers an integrated degree program that enables outstanding undergraduates to obtain a BS and an MS (thesis) after the successful completion of both degree requirements. The program is designed for outstanding students who wish to expedite their education in agriculture beyond the undergraduate level. It is designed to meet the educational and professional needs of highly capable and very motivated students. Only Purdue University undergraduate students qualify for the Combined BS/MS Program. Typically, students enter the program in their first semester Junior year.

- MS Research should begin in earnest the summer after their first semester in the program (typically between the junior and senior years).
- 1. The selection of an advisory committee and the filing of the plan of study (ePOS) must be completed before the end of the student's first semester (typically spring Junior year).
  - All committee members must have a Purdue identifier
  - Non-Purdue individuals serving as committee members must submit a resume to the Agronomy Graduate Coordinator that identifies the individual, provides contact information, educational degrees, current position, area of research, and why this individual is needed on the committee. An identification number will be requested from the Graduate School.
- 2. With the committee assistance, designate coursework from the BS degree Plan of Study and for the MS degree ePOS to be completed after completion of the BS.
  - Total of 30 credit hours of research and coursework.
  - Research credits hours not documented on the ePOS
  - Students can earn up to 9 credit hours in graduate-level (50000- or 60000-level) courses during their senior year of their BS degree program <u>after</u> being admitted to graduate school. Courses which are *required* within the plan of study for the BS degree program cannot be used towards the MS degree.
  - The MS ePOS outlining the courses to be taken (or already taken) as part of your MS degree needs to be submitted online (see 'Processing your Plan of Study' below) by the end of your first year.
  - Before the MS ePOS is submitted online the student should meet with his/her advisory committee with a rough draft of the plan of study. Plans of study will be typed by the student on the web and sent to the Agronomy Graduate Coordinator to check for errors.
  - The ePOS is then approved by the Agronomy Graduate Chair. You will be notified after approval.
  - The ePOS is then approved by your Committee by their electronic signature
  - Once all approvals are made, the ePOS is *final*.
  - File for approval the College of Agriculture "OAP Integrated BS/MS Approval Form" Changes to the plan of study are possible prior to the beginning of the last semester.
- 4. Be sure to keep copies of all paperwork and make sure that these deadlines are met. You

must assume the responsibility and ownership of your graduate program.

- 5. Coursework
  - 24 course credit hours including:
  - No more than six credit hours of 30000- or 40000- level courses at Purdue are allowed on the ePOS
  - At least one-half of the total credit hours used to satisfy degree requirements must be earned in residence on the Purdue campus where the degree is to be granted. Course credit hour obtained via televised instruction from a campus shall be considered to have been obtained in residence on that campus.
  - A maximum of 18 credit hours will be allowed from any one semester (maximum hours proportional to length of summer session).
  - Professional Development experiences
    - Introduction to Graduate Research (AGRY 60100), 1 credit hour in first semester
    - One Professional Development Seminars (1 credit hour). Example Purdue courses that fulfill this requirement include: AGRY 69600, 59600, 59700
    - Document attendance at 5 AGRY (only AGRY) seminars over time period from matriculation to time of scheduling of the Thesis Defense.
  - If a student completes all the academic requirements but has insufficient residence credit hours, a letter of explanation justifying the deficiency should be forwarded to the dean of the Graduate School. If justification is sufficient, the dean of the Graduate School may waive part of the residence requirement.
  - Additional requirements may be required by any 'umbrella' interdisciplinary program with which a student might be aligned (eg. ESE).
- 6. <u>Preparation of a Thesis Proposal</u>. Thesis option master's students are expected to prepare a thesis proposal. It should be developed in consultation with the advisor and should include the following: brief review of pertinent literature, clear statement of hypothesis and objectives, general experimental approach, and timeline for completion. The proposal must be approved by the advisor and the advisory committee prior to undertaking the major part of your research.
  - The rubric to be used to evaluate your Thesis Proposal (Evaluating MS Thesis Research) is under 'MS Degree Thesis Option' above and can be found on departmental shared S drive (S:/Shared/Graduate Program Forms/)
  - The formative proposal assessment by your Committee must be filed in the Graduate Program Office
- 7. <u>Thesis</u>

A master's thesis (hereafter referred to in this section as thesis) is a document authored by an individual, describing results of original research undertaken by that individual, and asserting a position that individual is willing to defend. Joint or collaborative research endeavors are not prohibited; however, in such situations, unique aspects of the broad problem are to be explored by each individual, and the thesis written and presented to the final examining committee is to be a document describing the student's creative effort and contribution.

It is expected that students will revise and publish a portion of their thesis in reputable

scientific journals before or after their final examination. Refer to the THESIS/DISSERTATION section below for additional guidance. The MS thesis rubric is used by you committee to evaluate the Thesis and can be found on departmental shared S drive (S:/Shared/Graduate Program Forms/).

8. Final Examination

A final oral examination of Masters candidates is required. Written examinations of Masters candidates planning to continue work toward the Ph.D. are recommended. All students planning to defend their thesis will have a committee meeting to determine if research is sufficient and all courses on the ePOS have been completed. Completed documentation of seminar attendance must be provided to Holly McIntire (Graduate Coordinator) prior to Defense of Thesis scheduling. Scheduling of the Defense of Thesis will not occur until the seminar requirement is fulfilled. The timeline and thesis requirements are given below.

- A first draft of the thesis should be in the hands of the major professor at least <u>six weeks</u> before the end of the session in which conferral of the degree is expected.
- An original copy of the thesis and three duplicate copies must be submitted to the major professor at least three weeks before the final oral examination date. <u>The thesis must bear the written approval of the professor who has directed the research before it is submitted to the final examining committee</u>. Each member of the examining committee must receive a copy of the thesis at least <u>two weeks</u> before the date of the final oral examination.
- The final examination must be scheduled <u>three weeks</u> before the intended date. The request for exam is done through *myPurdue*.
- The final M.S. thesis examinations are open to faculty and students. The candidate should prepare a synopsis of the thesis research for the first part of the examination. An email will be distributed 2-3 days prior to the examination. Seminar credit hour <u>may not</u> be given for this examination presentation.
- The rubric to be used to evaluate the oral and written examination is under MS DEGREE THESIS OPTION above and can be found on departmental shared S drive (S:/Shared/Graduate Program Forms/)..
- Completed rubrics from all committee members must be received in the Graduate office prior to final Graduate Program approval of the successful completion of the examination.

# 9. MS Thesis Completion and Depositing

Typically your committee will request some changes to the thesis regardless of the outcome of your examination. The procedures for depositing your thesis are described under '**Thesis Approval and Processing**" below. The processing of your thesis will take several days from the day you submit it online so plan ahead. Verify the deadlines for you to complete the process at <u>https://www.purdue.edu/gradschool/about/calendar/deadlines.html</u>. If you have registered your candidacy as CAND 991 during your last semester, the last date for completing the depositing process the thesis is the last day of the semester of graduation.

# Typical Program Timeline

#### First Semester (typically Fall Junior year)

- Express interest, identify Major Professor, and complete graduate application
- Initial registration.
- Draft Plan of Study electronically filed
- First year Individual development Plan completed and filed with the Graduate Program Office

#### By end of First semester

- Advisory committee selected. The Advisory Committee will consist of at least three members. If the student intends to continue his work toward a Ph.D., it is recommended that one member of the Masters' Committee be from outside the Agronomy Department. Major professors are expected to convene a meeting with each student's advisory committee to discuss the student's plan of study and proposed research. This must be done before the Agronomy Graduate Chair will approve the Plan Of Study.
- With the committee assistance, designate coursework from the BS degree and for the MS degree after completion of the BS
- MS Graduate Plan of Study electronically filed.
- File for approval the College of Agriculture "OAP Integrated BS/MS Approval Form"
- Transcripts on file for all previous course work.

#### Senior year of BS degree

• After completing the BS degree, students will continue their research and take the remaining coursework on their MS ePOS necessary to meet the 30 credit hour minimum required by the Graduate School for the MS degree. Courses taken that are NOT on the ePOS can be taken as Pass/Fail.

#### **Third Semester**

- Second year Individual Development Plan completed and filed with the Graduate Program Office at beginning of semester.
- Thesis proposal completed. The Advisory Committee will evaluate the proposal and provide feedback.

#### Prior to Start of Last Semester/Session

• Indicate intent to graduate to Graduate Program Office during last semester registration

#### Start of Last Semester/Session

- Committee meeting to determine course and research objectives have been met.
- Indicate intent to graduate on Form 23.
- All course work completed and incomplete grades cleared.
- First draft of thesis must be submitted to major professor at least <u>six weeks before intended</u> <u>examination date</u>.
- <u>Three weeks before intended examination</u> and <u>after</u> thesis approval by advisory committee, request an appointment for an examining committee.
- At this time students must submit an abstract for their seminar notice to the Agronomy

Graduate Coordinator. This will be circulated one week before your seminar.

- Final examination is a public seminar followed by an oral exam in which the student defends the thesis.
- The final thesis with all corrections and three duplicates should be in the hands of the major professor <u>three weeks before the end of the session in which degree is expected</u>.
- Submit thesis via Electronic Thesis Deposit (ETD) as indicated in section on 'Depositing Thesis'.

# MS DEGREE (NON-THESIS OPTION) REQUIREMENTS

- 1. English proficiency requirements must be met before foreign students can submit their plan of study. English proficiency of domestic students will be left to the discretion of the advisor and advisory committee.
- 2. Only one advisor is required. The filing of the plan of study must be completed before the end of the student's second semester.
- 3. A Plan of study (ePOS) outlining the courses to be taken (or already taken) as part of your degree needs to be submitted online (see 'Processing your Plan of Study') by the end of your first year.
  - Total of 33 course credit hours of coursework
  - A maximum of nine Purdue credit hours of coursework at the 50000- and 60000- level used to satisfy the requirements of one (and only one) Purdue master's degree may be used on the plan of study for a second Purdue master's degree. Coursework used to satisfy the requirements of a master's degree from an institution other than Purdue may not be used on a Purdue master's plan of study.
  - Before the plan is submitted online the student should meet with his/her advisory committee with a rough draft of the plan of study. Plans of study will be typed by the student on the web and sent to the Agronomy Graduate Coordinator to check for errors.
  - The ePOS is then approved by the Agronomy Graduate Chair. You will be notified after approval.
  - The ePOS is then approved by your Committee by their electronic signature
  - Once all approvals are made, the ePOS is *final*. Changes to the plan of study are possible prior to the beginning of the last semester.
- 4. Be sure to keep copies of all paperwork and make sure that these deadlines are met. You must assume the responsibility and ownership of your graduate program.
- 5. Coursework
  - 33 course credit hours including:
    - One Special Problem Course (3 credit hours) involving a research experience
    - Professional Development experiences
      - Introduction to Graduate Research (AGRY 60100), 1 credit hour in first semester
      - One Professional Development Seminars (1 credit hour). Example Purdue courses that fulfill this requirement include: AGRY 69600, 59600, 59700
      - Document attendance at 5 AGRY (only AGRY) seminars over time period from matriculation to time of scheduling of the Thesis Defense.
    - $\circ~$  No more than six credit hours of 30000- or 40000- level courses at Purdue are allowed on the ePOS
    - A maximum of nine Purdue credit hours of coursework at the 50000- and 60000level used to satisfy the requirements of one (and only one) Purdue master's

degree may be used on the plan of study for a second Purdue master's degree.

- A maximum of 18 credit hours will be allowed from any one semester (maximum hours proportional to length of summer session).
- At least one-half of the total credit hours used to satisfy degree requirements must be earned in residence on the Purdue campus where the degree is to be granted. Course credit hour obtained via televised instruction from a campus shall be considered to have been obtained in residence on that campus.
  - If a student completes all the academic requirements but has insufficient residence credit hours, a letter of explanation justifying the deficiency should be forwarded to the dean of the Graduate School. If justification is sufficient, the dean of the Graduate School may waive part of the residence requirement.
- Graduate course credit hours earned while an undergraduate at Purdue University or other accredited institutions of higher learning may be applied toward an advanced degree if these credit hours are in excess of any requirements for the baccalaureate degree. Such credit hours must be certified as available for graduate credit hour by the institution from which the student received his/her baccalaureate degree, but will be accepted only if:
  - 1. The student had junior or senior standing when taking the course,
  - 2. The student received a grade of B or better (work taken under the pass/not-pass option is not acceptable),
  - 3. The course was designated as a graduate course.

At Purdue University only, if the work is completed satisfactorily on this basis, the academic advisor (or candidate coordinator or other designee) shall then complete the *Academic Record Change* (Registrar Form 350), which indicates that the course may be used for graduate credit hour, and submit the form to the registrar, along with the grade reported, at the close of the student's final term. The academic advisor's (or candidate coordinator's or designee's) signature will attest to the fact that the credit hour is in excess of that required for the baccalaureate degree so that the registrar can then enter the notation "available for graduate credit" on the student's record. The sum of credit hours earned as undergraduate excess and the credit hours earned in graduate non-degree, teacher license, or graduate certificate status that can be used on a plan of study is limited to 12 credit hours.

- 4. Final examination: There is no final examination.
- 5. Completed documentation of seminar attendance must be provided to Holly McIntire (Graduate Coordinator) prior to approval to graduate.

# Typical Program Timeline

#### **First Semester**

- Initial registration, including 'Introduction to Graduate Research' (AGRY 60100), 1 credit hour in first semester
- Advisor selected
- Official Transcripts on file for all previous course work reported in Application.

#### **Second Semester**

• Plan of study electronically filed before the end of the second semester. Courses taken that are NOT on the plan of study can be taken as Pass/Fail.

# **Prior to Start of Last Semester/Session**

• Indicate intent to graduate to Graduate Program Office during last semester registration

# Start of Last Semester/Session

- Meeting with advisor to determine course objectives have been met.
- Indicate intent to graduate on Form 23.
- All course work completed and incomplete grades cleared.

# THESIS/ DISSERTATION

All thesis-option graduate students at Purdue must deposit the final products of their research with the Graduate School Thesis/Dissertation Office.

The Thesis/Dissertation Office will help you ensure that all pre-requisites for deposit have been fulfilled and that your thesis or dissertation meets the quality standards established by the Graduate Council Standing Committee on Theses and Dissertations.

Thesis/Dissertation Office: B-80 Ernest C. Young Hall, 155 S. Grant Street Hours: Monday-Friday 8:00 AM-12:00 PM (noon), 1:00 PM-5:00 PM Contact Information: (765) 494-3231, <u>thesishelp@purdue.edu</u> Manager: Ashlee Messersmith, amiley@purdue.edu Thesis/Dissertation Assistant – Angie Fields, fields40@purdue.edu

#### Publishing and Avoiding Plagiarism

The successful student will publish his or her research in professional journals. There are some very important factors to consider as you seek to publish your research. Purdue's Copyright Lawyer states: "If they have transferred their copyright to the publisher then they must get the publisher's permission to include the article as a chapter in their dissertation. They must notify the publisher that their dissertation will be posted in an open access repository which is now being handled by the Graduate School. They cannot include the entire article as a chapter without the written permission of the publisher unless they retained copyright.

Until they transfer copyright, then the copyright remains with them. However, should the paper be accepted, they should notify the publisher that it is in essence already published since it will be in their dissertation and posted as open access. This might negate the acceptance since most author contracts require that the author attest that the work has not been previously published."

If you do not know what your rights to reproduce your publication or submitted manuscript in your thesis/dissertation, there is a useful database of journal copyright statements that has gathered together many journal copyright statements at

http://www.sherpa.ac.uk/romeo/search.php. At this website, the characteristics of many publisher/journal copyrights are classified as:

Green	Can archive (distribute) pre-print (ie pre-refereeing) <i>and</i> post-print (ie final draft post-refereeing or as-to-be-published) or publisher's version/PDF
Blue	Can archive post-print (ie final draft post-refereeing) or publisher's version/PDF
Yellow	Can archive pre-print (ie pre-refereeing)
<u>White</u>	Archiving not formally supported

Clicking on the journal title will take you to that journal's website addressing the journal's copyright policies. This website can also give you guidance as to which journal you want to publish in if some in your field are more restrictive than others. 'Archiving' here would refer to open-access of your thesis/dissertation in the Purdue HammerRR repository (discussed under THESIS DEPOSITING below).

There are several ways to incorporate material that you have or intend to publish in your thesis/dissertation:

- Pay for the open-access of your article (for instance under license CC BY 4.0 or CC BY 3.0) and publish before your thesis/dissertation is deposited and document in your thesis/dissertation that the chapter has been published (with citation), or
- (2) Get the publishers permission to include the as-to-be-published paper as a chapter of your thesis/dissertation that will be posted in an open access repository and document in your thesis/dissertation that the chapter has been published (with citation), or
- (3) Get the publishers permission to include the as-originally-submitted paper as a chapter in your thesis/dissertation (avoiding self-plagiarism) and submit/publish after depositing (see below).

Approach (1): The costs of open-access for your article are substantially higher than giving the copyright to the journal. Purdue University Libraries has established an <u>Open Access Publishing</u> <u>Fund</u> to help pay article processing fees associated with publishing peer-reviewed articles in fully Open Access journals. Funding is available to faculty, staff, graduate students, researchers, and post-docs. Questions can be directed to Nina Collins, <u>nkcollin@purdue.edu</u>. To apply for funding, or to review full details, visit <u>https://www.lib.purdue.edu/openaccess/fund</u>.

Approach (2): If your manuscript to be used in your thesis/dissertation is not open-access (GREEN in the website database above), and you have not indicated you are withholding copyrights to the editor, then the publication copyright is with the publisher. <u>The ability to use this post-refereed ('post-print' in previously identified website) manuscript</u> as your thesis/dissertation chapter comes down to whether the journal allows inclusion in your thesis/dissertation of the post-refereed article reproduced as text (not their journal pdf format). You can find the limitations at the above database website or at the specific journal website if not included in the database.

From Purdue Graduate School perspective, the Graduate School grants students permission to use their previously published works in their thesis or dissertation using an article-based thesis structure (see <u>Thesis & Dissertation Structures and Formatting</u>). All reused publications will need to be formatted to conform to University requirements (you cannot use the pdf of the publication).

• As required by the Graduate School Thesis Office, you must get <u>written permission</u> from the publisher for that post-refereed (post-print) manuscript to be included in your thesis. This includes journals where the written policy allows it (such as those indicated with BLUE in website database above). If you have signed a contract in which you have transferred your copyright to the journal, you need to be sure that the journal will allow the re-use. This document could be just a pdf of the Website-written permission. You the author are

responsible for securing all permissions and pay any fees associated with obtaining these permissions to reuse your work. If you would like the Purdue Thesis Office to collect the permission, they will do so and index it to your record; it is not required at the time of deposit.

- Keep all permissions/communications for your records
- Although each journal may have specific statement requirements, the acknowledgment should be single spaced and appear 3 single spaces under the chapter title. Consult your publisher regarding required information that should appear in this acknowledgment.

Approach (3): It is very common for a journal to not restrict use of the <u>originally-submitted</u> <u>manuscript</u> (defined as pre-print below). Purdue's Copyright Lawyer stated above, you have copyright of whatever you have written prior to review by the journal editors/reviewers. <u>The</u> <u>ability to use a pre-refereed ('pre-print' in previously identified website) manuscript</u> as your thesis/dissertation chapter (contents of the desired chapter have already been submitted for publication but not yet accepted or not submitted yet and you have included the <u>original</u> submission manuscript). This includes journals indicated with YELLOW in website database above. With this approach:

- The thesis or dissertation needs to be an article-based thesis structure (see <u>Thesis &</u> <u>Dissertation Structures and Formatting</u>).
- A specific written statement by the editor doesn't need to be obtained if the journal allows the re-use for academic purposes, however make a pdf of the Website-written permission and keep all permissions/communications for your records. If it does not state this permission, verify that this is approved by your journal publisher. It does not need to be uploaded into HammerRR with your thesis/dissertation.
- Make a notation in the thesis/dissertation chapter if the manuscript has been submitted for review on the first page of the chapter or 3 single spaces under the chapter title. The notation could be a variation of "A version of this chapter has been submitted for review to XXXX Journal" or "A version of this chapter will be submitted for review to XXXX Journal". This will protect you against claims of *'self plagiarism'* (defined below).

ALSO: Be aware also that when you deposit your thesis/dissertation (discussed under THESIS DEPOSITING below), you can <u>embargo (prevent open-access publication) the thesis for the</u> requisite months if required by a publisher if they hold the copyright and require a delay of open access.

Any reuse of copyrighted materials (from published journal papers) within your thesis or dissertation must be accompanied by written permission by the copyright holder (<u>https://www.purdue.edu/gradschool/research/thesis/copyright.html</u>). Links to sample permission letters and emails can be found on the Templates and Guidance page of the Thesis/Dissertation Office site. <u>https://copyright.columbia.edu/basics/permissions-and-licensing.html</u>

The Graduate School grants students permission to use their previously published works in their thesis or dissertation using an article-based thesis structure.

Avoiding Self Plagiarism (Extracted from 'Avoiding plagiarism, self-plagiarism, and other questionable writing practices: A guide to ethical writing' by Miguel Roig, Ph.D (St. Johns

University; Available from the US Office of Research Integrity at <u>https://ori.hhs.gov/sites/default/files/plagiarism.pdf</u>)

"From dissertation to journal article/book and vice versa. It is common for authors of theses and dissertations to subsequently publish their thesis or dissertation work in journal articles or books. This practice has been traditionally acceptable even when the thesis or dissertation has already been submitted to an electronic repository such as ProQuest's UMI® (Ramirez, Dalton, McMillan, Read, and Seamans, 2013). Nevertheless it is important for authors to check with the publisher to whom they intend to submit their work. If acceptable, authors must nevertheless include a note in the journal article or book indicating that the work is based on the author's thesis or dissertation work. In cases where the dissertation work leads to two or more articles, authors must ensure that each article also mentions that the work described in the paper is part of a larger work published elsewhere. Authors must also have a legitimate rationale for publishing the papers separately, lest there be a charge of salami publishing. A related question is whether authors may reuse smaller portions of their thesis or dissertation work in an article or book. Again, this is perfectly acceptable as long as the author provides a full citation and uses quotation marks. Should there be an objection to the use of quotation marks an author can always alert the reader by prefacing the material with a statement such as, "As I described in my doctoral thesis, which I reproduce here verbatim....". In some academic programs, the tradition has been for the doctoral student to first publish an article or two and then to reformat the published work and submit it as a dissertation. In some cases, research that has already been published outside of the immediate academic department where work for the degree is being carried out may be an acceptable fulfillment of the requirements of the dissertation. Such cases may be somewhat complicated if the outside work was carried out in collaboration with others, which may make it difficult to estimate the exact contribution of the student working for the degree. Obviously, the doctoral student must disclose in full the extent of his/her contribution to the published work."

#### Thesis formatting

Theses must be prepared according to University format requirements, as described at <u>https://www.purdue.edu/gradschool/research/thesis/policies.html</u>. Format requirements include: 1) font style and size; 2) spacing; 3) margins; 4) pagination; 5) title page; 6) abstract; and 7) electronic submission guidelines (master's thesis and Ph.D. dissertation candidates). Formatting is simplified by the use of a template. Templates for your thesis are available at <u>https://www.purdue.edu/gradschool/research/thesis/templates.html</u>. Helpful MS Word, MS PowerPoint, and Adobe pdf Tips for Thesis/Dissertation Preparation can be found at: <u>https://www.chem.purdue.edu/thesisformat/Helpful\_MS\_Word\_Tips[1].pdf</u>

In addition to stating the University thesis format requirements, established by the Graduate School, this manual delineates regulations concerning the use of copyrighted material in a thesis. In addition, copyrighted computer software programs may not be used without permission, and their use must be acknowledged.

For matters concerning format of references, SI units, etc., refer to the Publications Handbook

and Style Manual published by the American Society of Agronomy, Madison, WI.

<u>Using Copyrighted Material</u>: If you include previously copyrighted information, the copyrightholder must give you tangible permission (email, letter, or contract). You will need authorization to use your own material if you signed over your copyright to a journal –see discussion above. Upload permission letter/emails as supplemental PDF files when you submit your thesis to HammerRR.

Documenting Thesis/Dissertation Collaborative Efforts: While it is expected that the primary contributions including experimental designs and data interpretation were performed by the graduate student and has the lead responsibility in writing for each chapter, the nature of collaborative research may result in material contributions from others. It is also understood that regardless of origin of material in the thesis, students are responsible for all data utilized and their presentation of results and conclusions in their thesis, whether or not they were the primary data gatherer. As a result, students may also want to carefully consider whether or not to include in their thesis publications to which they made relatively minor contributions.

Collaborative efforts within any chapter of your thesis/dissertation must be documented with a 'Declaration of Collaborative Contributions' prior to the *References* section. This declaration should clearly indicate the contributions of others to the chapter (e.g. generation of data, experimental design, tables and figures contributed, analysis conducted, writing and editing).

#### For chapters reporting unpublished work:

- If data in any figures or tables in a chapter are not a result of the student's sole effort, he/she must acknowledge the other researchers that contributed to the generation of the data or findings in the figure caption or table footnote.
- In cases where significant data or findings from collaborators are described in the thesis or dissertation but not acknowledged in figure captions or table footnotes, the student must clearly acknowledge the contribution of the collaborator(s) in a 'Declaration of Collaborative Contributions' section.

#### For chapters reporting published work:

• If the published work has multiple authors that contributed to the text, the details of the contributions need to be stated in the 'Declaration of Collaborative Contribution'.

Example Thesis/Dissertation Collaborative Efforts declaration statement: "Declaration of Collaborative Contribution (Prior to *References* section)

This chapter is the outcome of joint efforts with \_A\_, \_B\_, and C. A\_ contributed \_\_\_\_\_. B\_ contributed \_\_\_\_\_.

All West Lafayette candidates who wish additional help formatting their thesis/dissertation must schedule a thesis deposit appointment. Appointment times near the deadlines can fill up months in advance. Thesis formatting appointments are made by candidates using the self-scheduling

link on the home page of the Thesis/Dissertation Office website. To schedule your appointment, go to the Appointment Booking/Cancellation page of the Thesis/Dissertation Office site: <a href="https://www.purdue.edu/gradschool/thesistemplate/AppointmentForms/CalV3/index.html">https://www.purdue.edu/gradschool/thesistemplate/AppointmentForms/CalV3/index.html</a>

# Thesis approval and processing

The following information is current as of the Fall 2019 semester. Some of the procedures and requirements may change by the time you are ready to deposit. Visit the Thesis/Dissertation Office website <u>www.purdue.edu/gradschool/research/thesis/index.html</u> for up-to-date deposit procedures.

#### Review and Thesis Deposit

Following their successful final defense examination, and after approval of all post-defense revisions by their department, candidates will submit their finalized theses or dissertations as PDF documents via the Purdue ETD (Electronic Thesis Deposit) website. The following steps need to be taken:

# 1) Process your thesis through the *iThenticate* software and address any issues identified by the software addressed prior to deposit of the final thesis.

- Information about iThenticate and how to access the site can be found at the following website: <u>https://www.purdue.edu/gradschool/research/thesis/ithenticate.html</u>
- Direct all iThenticate questions to James L. Mohler (Ph.D.) at <u>jlmohler@purdue.edu</u>, Purdue's Research Integrity Officer.

Satisfaction of the thesis review using requirement will be <u>certified by the committee chair</u> <u>and degree candidate</u> by certifying the following statement on the Electronic Thesis Acceptance Form [ETAF]:

"Further, I certify that to the best of my knowledge this document is the original work of the author and **all content from other authors appearing in the thesis/dissertation has been properly quoted and attributed**. The author's manuscript was diagnostically reviewed by *iThenticate* on the date indicated as determining factor in this assessment..."

# 2) Complete Electronic Thesis Acceptance Form [ETAF] and Required Survey(s)

- The ETAF should be initiated after your final defense and will be available through your Plan of Study portal. You will not be able to make any edits to a submitted ETAF. If your selections need editing, contact us. Please allow AT LEAST 2 business days the ETAF to be signed by all committee members and to receive departmental approval.
- The Processor of the ETAF will process your form once you've completed step 2 below and complete the required survey(s).
- All surveys will become available to complete on the candidate's Plan of Study portal during the semester in which they register as a candidate for graduation.
  - **Master's candidates** need to complete the Graduate School Exit Questionnaire before their defense. Students are assured that their answers are maintained confidentially in the Graduate School. Print the Certificate of Completion as soon as you finish you won't be able to log in again. This certificate is a required

part of your thesis/dissertation deposit. Master's and Ph.D. candidates must submit proof of completion, either in the form of an online certificate of completion or notification e-mail, to the Thesis/Dissertation Office prior to receipt of their Thesis/Dissertation Receipt (G.S. Form 16).

 Doctoral candidates need to complete the Graduate School Exit Questionnaire and the Survey of Earned Doctorates before their defense. Candidates will find the survey linked on the Thesis/Dissertation Office website (sed/norc.org/survey). Responses to the SED provide important data for statistical studies by federal agencies conducting studies of national trends in doctoral education and of human capital supply and demand. Such studies may influence the funding of research and doctoral fellowships. Print the Certificate of Completion as soon as you finish – you won't be able to log in again. This certificate is a required part of your dissertation deposit. The SED certificate of completion, or email notification of completion, will be presented to the Thesis/Dissertation Office at the time of final deposit and must be received before doctoral candidates can be issued their Thesis/Dissertation Receipt (G.S. Form 16).

#### 3) Submit your ETD to Hammer Research Repository (HammerRR)

- Once your ETAF has been approved through the 'Thesis Form Head', you will receive an email containing a notification that you may proceed with the deposit process. At this point, you will be able to log-in to your Plan of Study portal and find the link to submit your thesis to HammerRR.
- After you've created a profile and have uploaded your ETD, a staff member of the Thesis & Dissertation Office will review your submission for any formatting errors and will contact you regarding necessary changes. This process will continue until you have met a satisfactory formatting condition, after which, you will receive an email regarding the acceptance of your ETD to the Graduate School.
- You must upload your thesis to HammerRR at least 24 hours in advance of the Deposit Deadline to allow our staff adequate time to review your submission. ETAF must be approved by the 5pm deposit deadline.

All master's and doctoral degree thesis-option candidates will be issued a Thesis/Dissertation Receipt (G.S. Form 16) by the Thesis/Dissertation Office at the time of their successful deposit. This form confirms Graduate School acceptance of candidate materials. The Thesis/Dissertation Receipt (G.S. Form 16) will be delivered to the student and also to the student's department, via PDF attachment, no later than the close of business (5 p.m., Eastern time) on the deposit deadline date. A PDF of this form will also be provided to the Office of Graduate Records for uploading into Banner.

#### 4) Pay the deposit fee

A thesis deposit fee is charged to masters and doctoral thesis-option students after their successful deposit. There are no other mandatory fees connected with the thesis deposit process. Student submission of their electronic thesis deposit and posting of their document into HammerRR are free of charge.

- Master's Thesis Fee \$90.00
- Ph.D. Dissertation Fee \$125.00

Candidates pay the deposit fee through their myPurdue accounts. The thesis fee will appear in a candidate's student account 2-3 days after their successful deposit. The thesis deposit fee must be paid in a timely manner to avoid a Bursar encumbrance on the student's academic record and transmission delay of the student's thesis to HammerRR for publication.

#### Certifying and Depositing Confidential Theses

If a thesis contains proprietary information or other information that should be withheld temporarily from the public domain, a Request for Confidentiality of Thesis (G.S. Form 15) must be completed and submitted to the Thesis/Dissertation Office during the final deposit appointment. The form must be signed by the student, the major professor, and the head of the graduate program. In addition to their ETD submissions, Master's and Ph.D. candidates must deliver an approved Request for Confidentiality of Thesis (G.S. Form 15) as indicated in the online final deposit checklist to the Thesis/Dissertation Office, Room B-80, Young Hall.

Under the federal government DFARS Clause 252.204-7012, storage, processing and/or transmission of technical information that is controlled under the International Traffic In Arms Regulations ("ITAR") or the Export Administration Regulations ("EAR") requires data security controls by December 31, 2017 and comply with other data security requirements. Students who are working with data that is subject to *EAR*, *ITAR*, *DFARS Clause 252.204-7012*, or other controlled data need to follow a specific process to submit their thesis or dissertation. This process is outlined at <u>https://www.purdue.edu/research/regulatory-affairs/export-controls-and-research-information-assurance/guidance-documents/graduate-theses.php</u>. If any students, faculty, or staff have questions, do not hesitate to contact <u>Ashlee Messersmith</u> or <u>Mary Millsaps</u>.

As with any other thesis or dissertation, degree candidates and their departments will be provided a Thesis/Dissertation Receipt (G.S. Form 16) via PDF attachment, after their successful deposit. A copy of the receipt will also be provided to the Office of Graduate Records for uploading into Banner. The initial period of confidentiality normally granted is for one year. Extensions for up to an additional year may be requested but require the approval of the Thesis/Dissertation Office. In cases where the sponsoring organization has a contractual arrangement, which expressly stipulates a longer time period of confidentiality with Purdue University and/or the Purdue Research Foundation, a two-year initial period of confidentiality may be requested with the endorsement of Sponsored Program Services. The Thesis/Dissertation Office will retain the ETD copy of the thesis in its secure electronic holding queue during the period of confidentiality. Access to this copy prior to release will not be permitted without authorization in writing by the author, the major professor, or the head of the graduate program, and the endorsement of the dean of the Graduate School. At the end of the approved period of confidentiality, the thesis will be automatically removed from such status unless a request for extension is approved by the Thesis/Dissertation Office. Earlier removal from confidentiality may be authorized in the same manner as access during confidentiality. After release, the hard copy will be forwarded to the

department, updated information about the work will be entered by the libraries into its online catalog and also into ePubs, and the author's ETD will be removed from the "holding queue" and released in HammerRR for publication.

Candidates desiring to make post-deposit edits to their theses and dissertations must complete a fully justified Request for Post-Facto Edit (G.S. Form 37) and provide it to the Thesis/ Dissertation Office as soon as possible after the discrepancy is noted. This form must be approved by appropriate faculty in the student's department and also approved by a dean of the Graduate School. Candidates requesting edits will also be subject to the Late Graduation Deadline Fee (LGDF) of \$200.

# SPECIFIC DEADLINES

For a full calendar of graduation deadlines for a specific academic year, refer to the Graduation Deadlines Calendar <u>https://www.purdue.edu/gradschool/about/calendar/deadlines.html</u>

# Late Graduation Deadline Fees

You will be assessed a Late Graduation Deadline Fee (LGDF) OF \$200 if you:

- 1. Miss the Plan of Study Deadline, or
- 2. Miss the Deadline to Declare Candidacy, or
- 3. Miss the Thesis Deposit Deadline, or
- 4. Are making updates or corrections to the deposited thesis or dissertation after the Thesis Deposit Deadline, or
- 5. Have been listing on the Graduate School's candidate roster for the same degree more than two consecutive sessions.

Students may request a waiver of their fees with appeals, subject to approval by the Graduate School LGDF waiver committee. Candidates are only permitted one approved post-facto request for each document they wish to edit.

Appeals relative to the Late Graduation Deadline Fee must be made using GS-38 (which may be found at <u>http://www.gradschool.purdue.edu/faculty/forms.cfm</u>) if they want to appeal. The appeal should not be sent to the Graduate School until after the charge has appeared on the graduate student's Purdue account. Use the most up-to-date form.

If the appeal is turned down by the Graduate School, further review by a committee near the end of each session is available to students. The voting members of this committee are not from the Graduate School. Requests for second reviews of the appeals should be received in the Graduate School.