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Tennessee State University
College of Agriculture

DEPARTMENT OF
ENVIRONMENTAL SCIENCES

GRADUATE STUDENT Handbook

Department of
Environmental Sciences
College of Agriculture
Tennessee State University

3500 John A. Merritt Blvd., Nashville TN 37209

615-963-6054 www.tnstate.edu/EnvironmentalSciences

Dear graduate students,

Welcome to Tennessee State University (TSU)! Thank you for choosing to pursue your graduate studies in the Department of Environmental Sciences within the College of Agriculture. We have tailored our graduate programs to prepare our students for careers in agricultural and environmental sciences to meet the growing demand for such professionals in the private industries, academia, and government sectors. As a graduate student in our program, you will have ample opportunities to enhance your professional development and engage in research activities that provide learning experiences that contribute to the University's research mission. We encourage you to develop the necessary skills and competency, and expand your knowledge, creativity, and scholastic activities through classroom, experiential hands-on learning, and networking opportunities that prepare you for an ever-demanding job market.

Please take the time to read this handbook and let it serve as a key reference and guide as you advance through your graduate studies. If you have any questions, please feel free to contact us. Graduate students are the strength of the program; therefore, your contributions to the research, extension and teaching mission are important milestones, and are always appreciated and valued. It is our aim that graduates will have a memorable life-long learning experience within the College of Agriculture. We wish you all the best in your graduate studies here at TSU!

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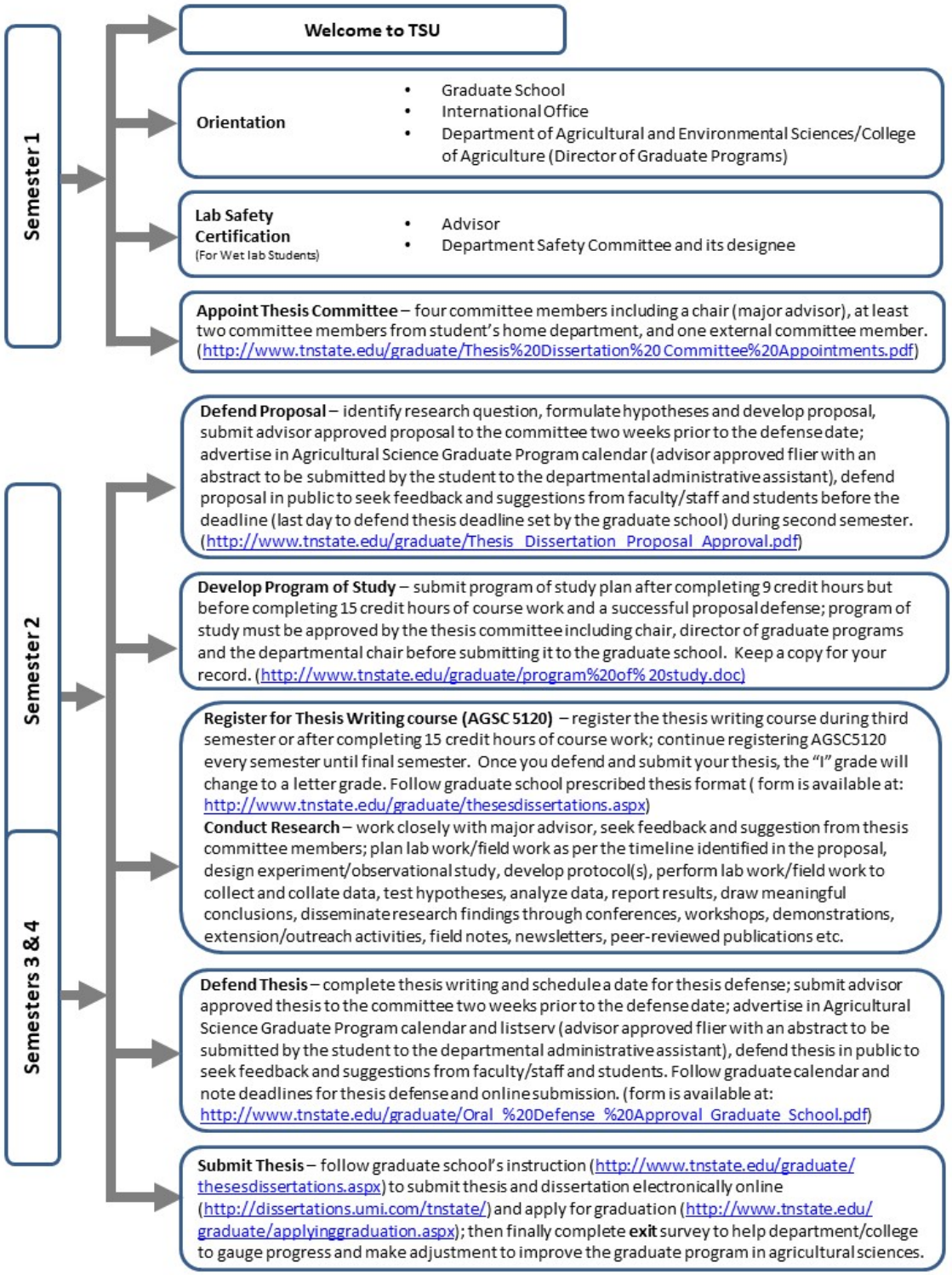

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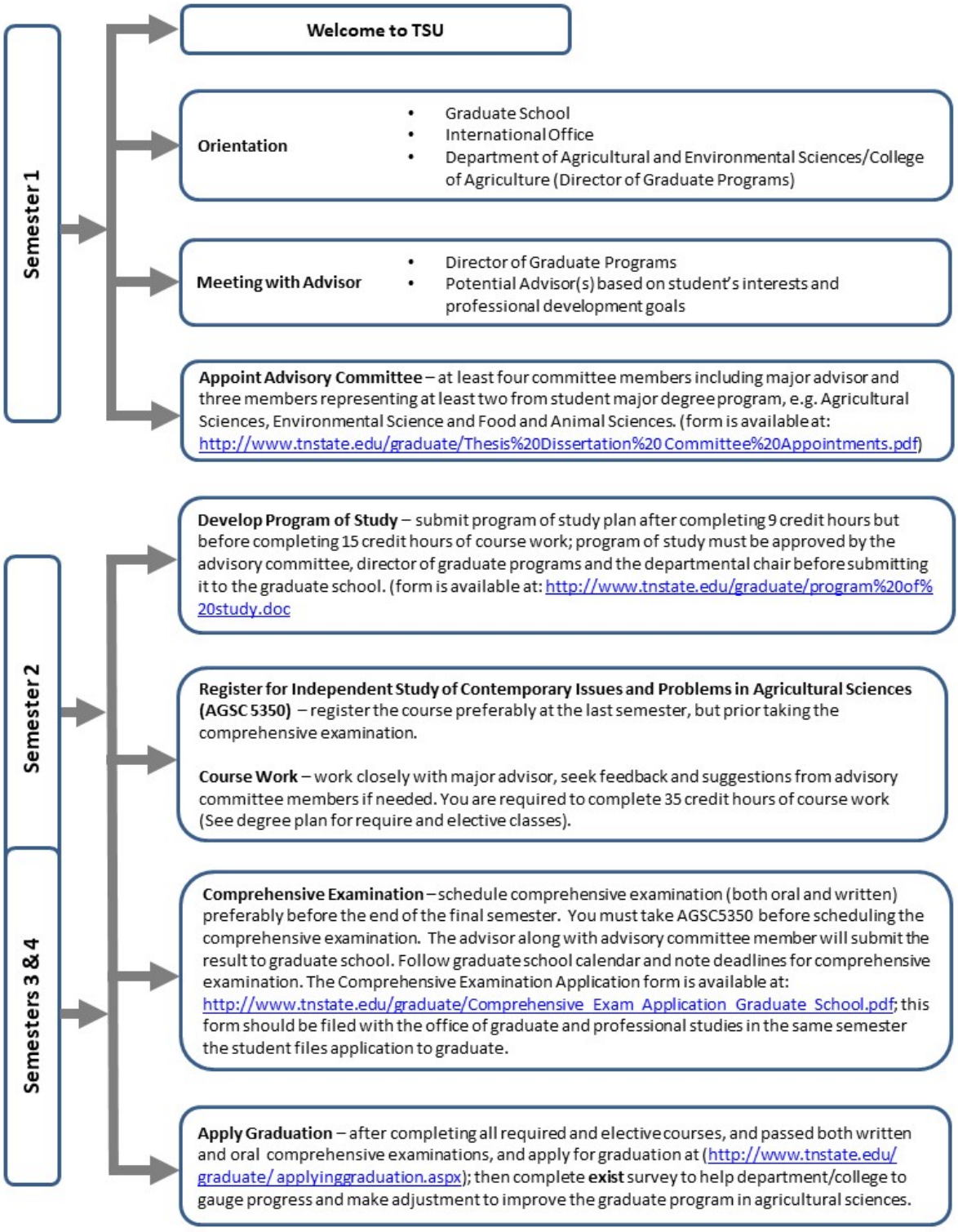

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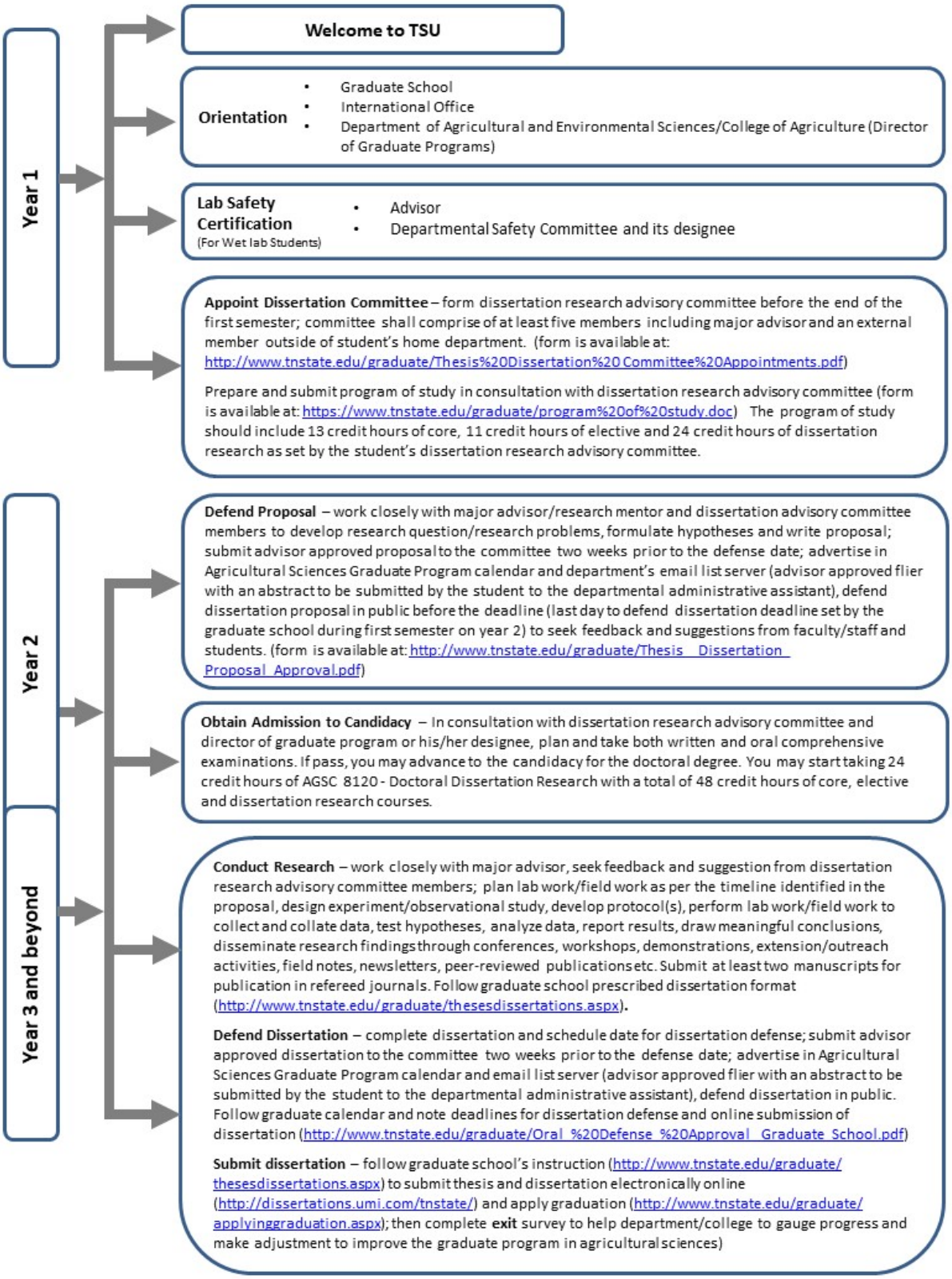

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1 Introduction

This handbook has been prepared to provide information for new and continuing students enrolled in graduate programs in the Department of Environmental Sciences (DES) and the Department of Agricultural Sciences and Engineering (DASE) at Tennessee State University. The handbook outlines the graduate programs and their requirements, regulations, and guidelines. Information included is supplementary to the university policy as explained in detail in the latest issue of the Graduate Catalog and is subject to change with changes in policy made by the Graduate Council and our departments within the College of Agriculture. The handbook may also be used as a guide for placement of graduate students.

This handbook is intended as a departmental supplement to the published information in the Graduate Catalogue. It is required that graduate students familiarize themselves with the policies of both the Graduate School and the DES and DASE. In consultation with their advisors and the Director of Graduate Programs, students should take the initiative to ensure that their academic requirements are met in a timely manner.

2 The University and its Setting

Tennessee State University (TSU), an 1890 land-grant institution, is a public, urban comprehensive university governed by the Board of Trustees comprising of ten (10) members, of which nine (9) are voting members and one (1) none-voting member (student appointed by the Board of Trustees). This unique combination of characteristics – land-grant, urban and comprehensive – differentiates the university from all others in the state and distinctively shapes its instructional, research, and public service programs. In carrying out its diverse mission, the university serves the city of Nashville and Middle Tennessee, the state of Tennessee, the nation, and the international community.

As an 1890 land-grant institution, Tennessee State University provides instructional programs, statewide cooperative extension programs, and research in the environmental sciences of an international dimension. The academic programs in the DES and DASE fulfill the 1890 land-grant mission of the University through instruction, research, and extension activities. Thus, the programs are consistent with and further the mission of the University. They also satisfy the academic program criteria established by the commission of the Southern Association of Colleges and Schools. The programs meet a clearly defined niche in that TSU has the only agricultural and environmental sciences programs in the state that produces a large number of African-American graduates. There is a college Strategic Plan that was developed in conjunction with the University`s Academic Master Plan and five-year Strategic Plan. These may be accessed in http://www.tnstate.edu/academic_affairs/documents/AcademicMasterPlan.pdf and http://www.tnstate.edu/Communications/Strategic%20Plan%202020.aspx respectively. The university offers advanced studies/degrees in many fields including Agricultural and Consumer Sciences, Business, Education, Engineering, Physical and Biological Sciences, Health Sciences, Nursing, Social Sciences and Humanities. As a result, there are strong course offerings and well-qualified faculty in a variety of other disciplines that are complementary to the environmental sciences.

The DES and DASE are part of the College of Agriculture, at Tennessee State University. The DES and DASE were established in 2023 as two of five departments in the College of Agriculture. The department offers academic programs at both undergraduate and graduate levels. Scholarly research and extension/outreach activities are also important components of the department. There are 35 research

laboratories on the main campus housed in Lawson Hall Annex, Farrell-Westbrook Agricultural Research Complex, and the Agricultural Biotechnology Building. These laboratories provide state-of-the-art equipment essential for advanced microbiological, biotechnology, environmental sciences, food science, and animal science research using the latest cutting-edge instruments and technologies. Details of various instruments currently available for research can be found here: http://www.tnstate.edu/agriculture/documents/equipment.pdf. To facilitate field research, there are three field research stations – the main campus Agricultural Research and Education Center; the Cheatham County Agricultural Demonstration and Research Center; and the Otis L. Floyd Nursery Research Center at McMinnville, which also houses numerous research labs.

3 Graduate Programs Relevant to the Department of Environmental Sciences

Graduate programs in the DES and DASE are designed to provide students with a solid background in environmental science and related areas through a relevant up-to-date curriculum that blends 21st Century leadership skills and state-of-the-art science knowledge. The graduate program is administered at the Graduate Certificate, Master of Science (M.S.), and the Doctor of Philosophy (Ph.D.) levels. Graduate education in the DES and DASE stresses development of superior professional competence suited to the demand of the public research, education, and business environments. The desirable prerequisites to pursue graduate study in environmental science and agricultural science are:

1. Motivated and eager to learn and solve the complex and changing biological, environmental, and economic problems faced by agriculture, agribusiness and rural society.
2. Demonstrate desire and ability to learn methods of rigorous logical analysis.

The graduate program in the DES is administered at certificate and masters, whereas the graduate program in the DASE is administered at the doctoral level. The main objectives of these programs are to:

1. Recruit high quality students, follow their progress through the Environmental Sciences graduate program, and ensure that they graduate in a timely manner with high levels of achievement,
2. Prepare professionals and research scholars who have in-depth knowledge, experience and expertise in the increasing complex field of environmental sciences,
3. Prepare scholars who can evaluate and define a diverse set of problems, evaluate and develop feasibility studies, analyze and interpret data, and develop, implement, and evaluate acceptable solutions to real-world problems encountered by government, academia, industry, and society,
4. Prepare scholars for rewarding careers in higher education, government, agricultural industry, and international organizations that are involved in environmental science,
5. Prepare scholars for further training in doctoral and/or post-doctoral programs, and
6. Train scholars to take leadership roles in environmental sciences careers.

The graduate programs of the DES and DASE are designed to prepare students for careers in the private, academic and government sectors. Experience and training are provided through (1) courses within traditional subject matter areas as well as on the frontiers of knowledge in the field, (2) seminars and discussions designed to sharpen the student's ability to express ideas on subjects in their area of interest, and (3) research experiences designed to develop competency in applications of theory and the use of appropriate quantitative methods.

4 Graduate Degree Programs

The graduate programs in the DES include one M.S. degree in Environmental Science and a graduate certificate in Applied GIS, whereas the graduate program in the DASE includes a Ph.D. degree in Agricultural Sciences.

4.1 Master of Science (M.S.) Degree Program

The Master's degree program in Environmental Science offers three concentrations, including Natural Resources, Plant Sciences, and Geospatial Sciences.

Currently, there are two options available for the master's degree programs. They include:

4.1.1 Thesis option

In the thesis option, students conduct research and write a thesis designed primarily for students interested in research to pursue a Ph.D. degree or that are seeking research positions (research and development) following the completion of their MS degree. The option develops the students' theoretical and research foundation for further graduate studies in addition to enhancing knowledge and skills in agricultural and environmental sciences. Students that enroll under the thesis option are expected to complete a thesis (four credit hours) plus a minimum of **26-29 credit hours of course work of which 18 hours must be core courses.** The thesis is a report of novel and transformative, scholarly research conducted by the student. The thesis research will be conducted under supervision of the student`s major professor and advisory committee.

Upon completion of the thesis, the student's final oral examination can be scheduled. Details of the oral examination are provided in the section below under "Graduate Examinations". In addition to the oral examination, students are encouraged to present seminars based on their research. Students are also required to present at professional meetings and to prepare papers for submission to peer-reviewed journals.

4.1.2 Non-thesis option

Under this option, the degree program requires 35 approved semester credit hours of course work. Upon completion of the course work, each student that chooses the non-thesis option must take a comprehensive written and oral examination administered by the student's advisory committee and other faculty members representing appropriate subject matter areas.

Students that choose the non-thesis option are required to take a minimum of 35 credit hours of course work including the AGSC5350 – Independent Study of Contemporary Issues and Problems. The AGSC5350 course includes a study of current literature applicable to the practice of contemporary issues, problem(s) and their solution(s) in student's area of research focus. Students should select a topic of interest and complete work on the selected topic under the guidance of his or her advisor. If the completed work is approved by the advisor, then the student will make an oral presentation of his or her work to the advisory committee and major advisor.

For more details on course requirements –M.S. in Environmental Science, refer to section 4.2 – sub-section 4.2.1, 4.2.2, and 4.2.3

4.2 Curriculum/Program of Study for M.S. Degree in Environmental Science

4.2.1 Program of Study for M.S. in Environmental Science with a concentration in Geospatial Sciences

Core Courses: Thesis option 18 credit hours (crs) or non-thesis option 17 credit hours (crs)

AGSC 5060 – Statistics for Research	3 crs
AGSC 5110 – Research Methods	3 crs
AGSC 5120 – Thesis Writing	4 crs
OR	
AGSC 5350 – Independent Study of Contemporary Issues & Problems (non-thesis option)	3 crs
AGSC 5260 – Environmental Analysis	3 crs
AGSC 5500 – Environmental Issues and Sustainability	
OR	
AGSC 5510 – Ecosystem Science and Management	3 crs
AGSC 5610, 5620 – Graduate Seminar in Agricultural Sciences I, II	1, 1 cr

Concentration Electives: 12 credit hrs minimum with thesis or 18 credit hrs minimum for non-thesis option

AGSC 5350 – Independent Study of Contemporary Issues & Problems (For non-thesis option)	3 crs
AGSC 6510 – Advanced Geospatial Information Systems	3 crs
AGSC 6520 – Advanced Spatial Analysis	3 crs
AGSC 6525 – Remote Sensing Image Analysis	3 crs
AGSC 6530 – Advanced Geospatial Metadata	3 crs
AGSC 6540 – Advanced Spatial Database Design and Management	3 crs
AGSC 6550 – Advanced Geospatial Information Systems Application and Design	3 crs
AGSC 6560 – Global Positioning Systems	3 crs
AGSC 7590 – Applied Multivariate Analysis	3 crs
DATA 5100 – Programming for Data Science	3 crs
Guided elective	3 crs

4.2.2 Program of Study for M.S. in Environmental Science with a concentration in Natural Resources

Core Courses: Thesis option 18 credit hours (crs) or non-thesis option 17 credit hours (crs)

AGSC 5060 – Statistics for Research	3 crs
AGSC 5110 – Research Methods	3 crs
AGSC 5120 – Thesis Writing	4 crs
OR	
AGSC 5350 – Independent Study of Contemporary Issues & Problems (non-thesis option)	3 crs
AGSC 5260 – Environmental Analysis	3 crs
AGSC 5500 – Environmental Issues and Sustainability	
OR	
AGSC 5510 – Ecosystem Science and Management	3 crs
AGSC 5610, 5620 – Graduate Seminar in Agricultural Sciences I, II	1, 1 cr

Concentration Electives: 12 credit hrs minimum with thesis or 18 credit hrs minimum for non-thesis option

AGSC 5320 – Wetlands Ecology & Management	3 crs
AGSC 5350 – Independent Study of Contemporary Issues & Problems (For thesis option)	3 crs
AGSC 5530 – Forest Ecology and Management	3 crs
AGSC 5570 – Climate Change	3 crs
AGSC 5900 – Applied Entomology	3 crs
AGSC 6510 – Advanced Geospatial Information Systems	3 crs
AGSC 6520 – Advanced Spatial Analysis	3 crs
AGSC 6525 – Remote Sensing Image Analysis	3 crs
AGSC 7590 – Applied Multivariate Analysis	3 crs
BIOL 5190 – Ecology	3 crs
DATA 5100 – Programming for Data Science	3 crs
Guided elective	3 crs

4.2.3 Program of Study for M.S. in Environmental Science with a concentration in Plant Sciences

Core Courses: Thesis option 18 credit hours (crs) or non-thesis option 17 credit hours (crs)

AGSC 5060 – Statistics for Research	3 crs
AGSC 5110 – Research Methods	3 crs
AGSC 5120 – Thesis Writing	4 crs
OR	
AGSC 5350 – Independent Study of Contemporary Issues & Problems (non-thesis option)	3 crs
AGSC 5260 – Environmental Analysis	3 crs
AGSC 5500 – Environmental Issues and Sustainability	
OR	
AGSC 5510 – Ecosystem Science and Management	3 crs
AGSC 5610, 5620 – Graduate Seminar in Agricultural Sciences I, II	1, 1 cr

Concentration Electives: 12 credit hrs minimum with thesis or 18 credit hrs minimum for non-thesis option

AGSC 5015 – Principles of Organic Agriculture	3 crs
AGSC 5180 – Soil Classification	3 crs
AGSC 5190 – Plant Breeding	3 crs
AGSC 5220 – Plant Growth Substances	3 crs
AGSC 5230 – Advanced Propagation of Horticultural Plants	3 crs
AGSC 5350 – Independent Study of Contemporary Issues & Problems (For non-thesis option)	3 crs
AGSC 5530 – Forest Ecology and Management	3 crs
AGSC 5570 – Climate Change	3 crs
AGSC 5900 – Applied Entomology	3 crs
AGSC 6510 – Advanced Geographic Information Systems	3 crs
AGSC 6520 – Advanced Spatial Analysis	3 crs
AGSC 6525 – Remote Sensing Image Analysis	3 crs
AGSC 7590 – Applied Multivariate Analysis	3 crs
DATA 5100 – Programming for Data Science	3 crs
Guided elective	3 crs

4.3 Certificate Program in Applied Geospatial Information Science (GIS)

The Graduate Certificate in Applied GIS is a one year, 18 credit hours program offered at the graduate level in Applied Geospatial Information Science (GIS). This is a non-degree program. The Graduate Certificate in applied GIS is suited for all those who want to enhance scientific education in geospatial science with practical training on using geospatial programs and analyses. The program is suited for both recent science graduates and aspiring professionals employed in private or public sectors. Some of the professionals who may find this certificate program beneficial include – Natural Resource Managers, Public Health Professionals, Environmental Scientists and Specialists, Disaster and Security Specialists, Environmental Engineers, Landscape Architects, Geologists, Architects, Urban and Regional Planners, Geographers and Hydrologists. The Certificate is awarded upon the successful completion of six courses (18 credit hours). Applicants for the certificate in applied GIS must hold a baccalaureate degree from an accredited institution of higher education and meet the Graduate School requirements for non-degree admission and retention as published in the University catalog.

For more details on course requirements – non-degree program, refer to sub-sections 4.3.1

4.3.1 Program of Study for the Graduate Certificate in Applied Geospatial Information Systems (GIS)

The Certificate in Applied GIS is awarded upon successful completion of six courses listed below (18 semester credit hours):

AGSC 6510	Advanced Geospatial Information Systems	3 crs
AGSC 6520	Advanced Spatial Analysis	3 crs
AGSC 6530	Advanced Geospatial Metadata	3 crs
AGSC 6540	Advanced Spatial Database Design and Management	3 crs
AGSC 6550	Advanced Geospatial Information Systems Application and Design	3 crs
AGSC 6560	Advanced Global Positioning Systems/	3 crs
	Or	
AGSC 6525	Remote Sensing and Image Analysis	3 crs
Total		**18 crs**

For more information, please contact the Department of Environmental Sciences (Tel: 615-963-6054) or Dr. Bharat Pokharel, Department Chair (Tel: 615-963-6054) or Dr. Reginald Archer, GIS Program Coordinator (Tel: 615-963-1495).

4.4 Ph.D. in the Agricultural Sciences Degree Program

The Ph.D. in Agricultural Sciences degree program is designed to prepare students for careers in food, agricultural, and environmental sciences to meet the growing demand for research professionals in private industries, academia, and government agencies. The research-based terminal degree is offered for those candidates who have already completed a research-based M.S. degree program in a related field of study. It requires at least 24 credit hours of dissertation research, 13 credit hours of core courses, and 11 credit hours of elective courses as recommended by student's dissertation research advisory committee. The Ph.D. in Agricultural Sciences degree program is designed to prepare students for careers in food, agricultural, and environmental sciences to meet the growing demand for research professionals in private industries, academia, and government agencies. The research-based terminal degree is offered for those candidates who have already completed a research-based M.S. degree program in agricultural or related sciences. It requires at least 24 credit hours of dissertation research, 13 credit hours of core courses, and 11 credit hours of elective courses as recommended by student's dissertation research advisory committee.

For more details on course requirements – Ph.D. in Agricultural Sciences, refer to refer to subsection 4.4.1

4.4.1 Program of Study for a Ph.D. in Agricultural Sciences

Courses	***Credit hours***
Core Required Courses	***13 credit hours***
AGSC 5110 – Research Methods	3 crs
AGSC 6350 – Topics in Agricultural Sciences	3 crs
AGSC 6620 – Research Ethics in Agricultural Sciences	1 crs
AGSC 7200 – Experiential AgriScience Teaching in Higher Education	1 crs
AGSC 7590 – Applied Multivariate Analysis	3 crs
AGSC 7610, 7620 – Doctoral Seminar in Agricultural Sciences I, II	2 crs
Dissertation Research	***24 credit hours***
AGSC 8120 – Doctoral Dissertation Research	24 crs
Electives	***11 credit hours***
AGSC 5015 Principles of Organic Agriculture	3 crs
AGSC 5050 Methods of Teaching Agricultural and Environmental STEM	3 crs
AGSC 5060 Statistics for Research	3 crs
AGSC 5170/6170 Advanced Poultry Production and Management	3 crs
AGSC 5180 Soil Classification	3 crs
AGSC 5190 Plant Breeding	3 crs
BIOL 5190 Ecology	3 crs
AGSC 5220 Plant Growth Substances	3 crs
AGSC 5230 Advanced Propagation of Horticultural Plants	3 crs
AGSC 5260 Environmental Analysis	3 crs
AGSC 4270/5270 Biosecurity and Bioforensics	3 crs
AGSC5280 Advanced Poultry Nutrition and Biotechnology	3 crs
AGSC 5290 Omics	3 crs
AGSC 5320 Wetlands Ecology & Management	3 crs
AGSC 5340 Cell and Tissue Culture	4 crs
AGSC 5350 Independent Study of Contemporary Issues and Problems	3 crs
AGSC 5470 Immunochemistry in Biotechnology	3 crs
AGSC 5500/7500 Environmental Issues and Sustainability	3 crs
AGSC 5510/7510 Ecosystem Science and Management	3 crs
AGSC 5520 Advanced Food Processing and Engineering	3 crs
AGSC 5530 Forest Ecology and Management	3 crs
AGSC 5550 Food Safety and Sanitation	3 crs
AGSC 5560 Food Product Development and Sensory Science	3 crs
AGSC 5570 Climate Change	3 crs
AGSC 5590 Advanced Technologies in Detection and Food Analysis	3 crs
AGSC 5630 Introduction to Genome Editing with CRISPR-Cas9	3 crs
AGSC 5900/7900 Applied Entomology	3 crs
AGSC 6010 Gene Structure & Function	3 crs
AGSC 6270 Advanced Agricultural Biosecurity	3 crs
AGSC 6510 Advanced Geospatial Information Systems	3 crs
AGSC 6520 Advanced Spatial Analysis	3 crs
AGSC 6525 Remote Sensing and Image Analysis	3 crs
AGSC 6530 Advanced Geospatial Metadata	3 crs
AGSC 6540 Advanced Spatial Database Design and Management	3 crs
AGSC 6550 Advanced Geospatial Information Systems Application and Design	3 crs
AGSC 6560 Advanced Global Positioning Systems	3 crs
AGSC 7010 Advancement in Agricultural Biotechnology	3 crs
AGSC 7040 Plant Tissue Culture Methods and Application	3 crs
AGSC 7050 Biotechnology in Animal Reproduction	3 crs
AGSC 7260 Advanced Environmental Analysis	3 crs
AGSC xxxx Climate Smart Agriculture	2 crs
Total	**48 credit hours**

5 Admission Standards and Procedure

5.1 Admission Requirements for the M.S. Degree program in Environmental Science

Candidates must have the equivalent of the bachelor's degree with a major in environmental science, general biology, or a closely related field and a minimum quality grade point average of 2.50/4.00 point scale and a minimum score of 290 on the GRE (verbal & quantitative, or verbal, quantitative & subject) for unconditional admission. An applicant with the bachelor's degree in areas other than those identified above be recommended to the graduate school for conditional admission and be required to take up to eighteen (18) credit hours of undergraduate prerequisite courses in agricultural disciplines, as recommended by the Department of Environmental Sciences Graduate Admission Committee in consultation with candidate's major advisor. If the applicant has a pending GRE or MAT score, but meets the GPA requirement for admission, he/she may be recommended for a conditional admission. Students admitted unconditionally are only eligible for a graduate research assistantship (GRA).

5.2 Admission Requirements for the Graduate Certificate Program in Applied Geospatial Information Systems

Applicants for the graduate certificate program must hold a baccalaureate degree from an accredited institution of higher education and meet the Graduate School requirements for non-degree admission and retention as published in the University catalog. Application forms and materials should be directly submitted via online portal, i.e., GradCAS to be reviewed by the School of Graduate and Professional Studies.

5.3 Admission Requirements for the Ph.D. Degree in Agricultural Sciences

Candidates must have a thesis-based M.S. degree in agricultural sciences, environmental sciences, or related sciences from accredited university with a minimum quality grade point average of 3.0 on a 4.0 point scale and a minimum GRE score of 290 (verbal & quantitative, or verbal, quantitative & subject). Faculty advisor(s) must be identified by the applicants prior to their admission into the Ph.D. program.

5.4 Admission Steps

Applicants should complete the following steps to initiate their application for admission:

(1) Visit the college website http://www.tnstate.edu/agriculturalprograms/ and become familiar with the research interests of our graduate faculty https://www.tnstate.edu/agriculturalprograms/focus_groups.aspx.

(2) Identify faculty member(s) whose research aligns with your interest, academic background, and past work experience and contact them directly. Indicate the proposed concentration and potential faculty advisor in your personal statement when submitting the application.

(3) Submit your application online by visiting www.tnstate.edu/applynow It will prompt a website, where you are required to fill your personal details. Please select the college of agriculture using the dropdown option in your area of interest. Then select a program including a concentration that matches your interests on the application (you can select the concentration). If you are not certain about a program and concentration, then just select Environmental Science (M.S.), Phd in Agricultural Sciences, or the Certificate in GIS. If you want to learn more about TSU, Nashville,

and other related information, please browse some of the tabs located at the top of the website. Once you are ready, please click the **Apply Now** tab, which will take you to the application portal – **GradCAS**, where you are about to begin your journey in Graduate School at TSU. For first time users, please create a unique username and password. Please note that you will be using the login credentials to complete the application and re-login to check the status of your application after it is successfully submitted.

There are four sections where you are required to upload Personal Information, Academic History, Supporting Information and Program Materials. Below is a brief description on how to successfully complete these sections.

a) Personal information – please fill in all the necessary personal information.

b) Academic history – please provide information on previously attended colleges or universities, standardized tests, transcripts and GPA etc. All transcripts must be submitted to GradCAS directly by the agency (please download "transcript request form" and submit it to your previous attended college or university.

Applicants with foreign university degree(s) need to evaluate their official transcripts or authorized school records with a listing of courses and grades by a foreign educational credential agency (such as World Education Service https://www.wes.org/) at applicant's own expense. Evaluation reports of transcripts (course-by-course evaluation) must be sent directly to the GradCAS by the agency (do not mail to graduate school or College of Agriculture). There is an option for requesting it directly from the agency to GradCAS (please download "evaluation request form" if you have not started the evaluation process; if you have already completed the evaluation, please click "order WES evaluation" on college attended tab within the academic history section). Non-English-speaking applicants must submit TOEFL or IELTS test score as part of their application.

All official or translated transcript(s) and test scores must be sent directly to GradCAS. https://help.liaisonedu.com/GradCAS_Applicant_Help_Center/Sending_Your_Official_Transcripts_and_Test_Scores_to_GradCAS (instruction how to send them directly to GradCAS).

c) Supporting information – please upload any supporting documents such as CV/Resume, published papers, project report, writing samples, peer-reviewed manuscripts, recognitions/awards or any other documents or activities that show your scholarly activities or accomplishments in a single pdf file.

d) Program Materials – please click the program materials and then College of Agriculture. Once the program material tab opens, check the home page (please note the application requirements for the Environmental Science or Agricultural Sciences program), then click the next tab "Documents". You may upload your personal statement of purpose here. In your personal statement of purpose, briefly describe how your academic background and past work experiences have shaped the research interest and motivation to earn a M.S. or Ph.D. degree in agricultural sciences. The personal statement should also include the research problems or questions or issues that interest you the most for your research work here at Tennessee State University. You may upload your copy of standardized test scores and unofficial copy of transcripts. Please note that standardized test scores and transcripts must be sent directly by the agency to GradCAS.

Click next tab "Reference Letters": Here you need to submit the contact detail of three professional or academic referees who can speak about you, your professional growth, accomplishments and future career goals. Once you enter his/her name and email address (official email address, no personal email please), and click save this evaluation request, an automated email goes to the referee with a link to fill up and submit a reference letter on your behalf. You may add a personalized note to the referee. **Please note that all letters must be on academic or company's letterhead with signatures and academic credentials or official title in the signature line**. Letters that do not meet these requirements are unacceptable and will not be reviewed.

Once you complete uploading all documents and enter the necessary information, click the "Submit Application" tab and pay a non-refundable application fee of $35. This fee is payable by credit card or check/money order payable to "Tennessee State University".

(4) A complete application should have the following documentation.

a) Official GRE (V/Q/S) scores using institutional code 1803 to: GradCAS, PO Box 9217, Watertown, MA 02471 or official copy of Miller Analogies Test (MAT) score directly submitted to: Graduate School at: 330 10th Ave. North, Suite B400, Nashville, TN 37203.

Test scores must not be more than five (5) years old. Official scores on admissions tests must be sent directly from the testing service.

b) Unofficial copy of Transcripts (remember you must submit the official ones)

c) Three letters of recommendation (attesting to your professional work)

d) Personal Statement of Purpose (one page describing your career goals)

e) CV/Resume

f) Publications if there are any (optional)

g) Applicants with degrees from U.S. institutions, request official transcripts from all previously attended colleges (including TSU) to be sent to: GradCAS Transcript Processing Center, PO Box 9217, Watertown, MA 02471

OR electronically, **Please follow the official transcript sending instructions in the Help Center**

Applicants with foreign university degree(s), need to evaluate their official transcripts or authorized school records with a listing of courses and grades by a foreign educational credential agency (such as World Education Service https://www.wes.org/) at the applicant's own expense. Evaluation reports of transcripts (Course-by-course evaluation) **must be sent directly to GradCAS by the agency**.

(5) A non-refundable fee of $35.00 must be submitted with the admission application. This fee is payable by credit card online or check/money order payable to "Tennessee State University". Applicants for readmission are not required to pay the fee unless seeking a higher degree.

Applicants who previously attended TSU may be eligible for application fee waiver (contact graduate school for more details).

(6) Please visit the School of Graduate and Professional Studies' website at http://www.tnstate.edu/graduate/ for further details of our graduate programs and other information related to admission and graduate studies here at TSU.

Submit your application to the **School of Graduate and Professional Studies** online (no hard copy). Applicants may only mail Millers Analogy Test (MAT) score to the following address:

5.5 General Admission Guidelines

Students are admitted during fall and spring semesters only. Application forms and instructions are available from School of Graduate and Professional Studies. Application requests and correspondence on admissions may also be sent via e-mail (gradschool@tnstate.edu). **All applications for admission are made directly to the School of Graduate and Professional Studies.** After determining that the applicant meets the minimum standards for admission to the School of Graduate and Professional Studies (see the School of Graduate and Professional Studies catalog or website- www.tnstate.edu for these requirements), the application is sent to the department level for the recommendation for admission. These applications are reviewed by the department's Graduate Admission Committee. The applicant must complete and submit all the required documents in the graduate application package before the Admission Committee will decide on the student's admission.

Standardized Test Scores: Applicants are expected to include Graduate Record Examination (GRE) as a part of their online application. International applicants from non-English speaking countries must submit their TOEFL or IELTS scores when applying for admission. Applicants taking the GRE, IELTS, and TOEFL should use the Tennessee State University's institutional code 1803 to send the scores directly to the application processing center – GradCAS, PO Box 9217, Watertown, MA 02471. All standardized test scores MUST be sent directly by the testing agency to GradCAS at Tennessee State University.

Students may be admitted without GRE scores only under special circumstances and will be required to take the examination and furnish scores during their first semester in residence (as part- time or full-time students). Such applicants will receive **conditional admission** into the program.

University/College Transcripts: All applicants including international students, whether degree-seeking or not, must submit official transcripts of all post-secondary work including TSU with the application. These transcripts must be submitted directly to the application processing center – GradCAS (no hard copies of such transcripts are accepted).

International applicants must translate their foreign university transcripts or authorized school records into the US System (refer to section 5.4 for details)

Letter of Recommendations: All applicants should have three letters of recommendations submitted directly to the GradCAS application portal by the referees using the unique email link they received (refer to section 5.4 for details on how to request references online).

5.6 Application Deadlines

Admission decisions are made throughout the year. Applicants may be admitted to begin study during the fall or spring semester. We will give full consideration for graduate research assistantship (GRA) to all applications that are received and completed by the priority deadlines. We will still review applications received before the regular (final) deadline; however, the GRA will be awarded on a space-available basis. We encourage submission of a complete Application Package as early as possible.

To ensure consideration for admission to the School of Graduate and Professional Studies, the application and other required documents must be postmarked by the regular deadlines (Table 2).

Table 2. Application deadline for the M.S., and Ph.D. degree programs.

Fall Admission	Spring Admission	Summer Admission
M.S. degree Program in Environmental Science and Ph.D. in Agricultural Sciences Program		
Priority deadline: April 1	Priority deadline: October 1	No admission
Final (regular) deadline: July 1	Final (regular) deadline: December 1	
Non-degree (Certificate Program – Applied GIS or Biotechnology)		
Before the first day of the semester (fall and spring semester only)		

Note: a) The priority deadline is the final deadline for international applicants currently residing outside of the United States, whereas international applicants currently living in the United States will have the same deadlines as other applicants.

b) Non-degree or certificate seeking students can apply before the first day of the semester

5.7 Admission Decision

The graduate admission committee in the Department of Environmental Sciences reviews graduate applications on a periodic basis. Admission referrals to the Environmental Science graduate program are made by considering a combination of following performance indicators:

1. Relevant academic background, past work experiences, accomplishments, scholarly activities and applicant's motivation to earn a graduate degree in agricultural sciences
2. Undergraduate GPA of 2.50 or higher based on a 4.0 scale (for M.S. degree) and thesis-based M.S. degree GPA of 3.0 or higher based on a 4.0 scale (for Ph.D. degree);
3. Satisfactory test scores on the Graduate Record Examination (GRE);
4. Reference letters and
5. An acceptable TOEFL or IELTS score for international students only.

The graduate admission committee of the DES reviews and scores each application and makes recommendation to the school of graduate and professional studies that a candidate be granted "conditional" or "unconditional" standing in the department or be denied for admission.

5.8 International Applicants

In addition to the above-mentioned requirements, international students whose first language is not English must submit evidence of English proficiency. They must take the Test of English as a Foreign Language (TOEFL) and request The Educational Testing Service (ETS) to send the results of the TOEFL to the Graduate Studies and Research.

A minimum TOEFL score of 71 (iBT – Internet-based Test), 197 (CBT – Computer-based Test) and 530 (PBT – Paper-based Test), or International English Language Testing System (IELTS) score of 6.0 band or above is required.

International students must also provide evidence of financial resources sufficient to provide tuition and fees for the academic year and the $35.00 non-refundable application fee.

All international students applying for admission who have a student visa shall submit a certificate from a licensed physician or the qualified medical authority verifying freedom from tuberculosis within thirty (30) days from the first day of classes. Failure to submit such a certificate shall result in denial of further enrollment or admission. If the student has tuberculosis or has potential tuberculosis requiring medical treatment, continued enrollment will be contingent upon the determination by a licensed physician that enrollment does not present a risk to others and upon the student`s compliance with any prescribed medical treatment program.

Note:

- *It is mandatory that all F-1 students have health insurance upon enrollment for the duration of their studies. The policy must include a clause of Medical Evacuation and Repatriation of $10,000 each.*
- *After admission, copies of Visa or Alien Registration card must be submitted before student may enroll.*
- *International students transferring from another university/college must submit to their current school's the "Immigration Information" forms for a release date, before processing an I-20.*

5.9 Unconditional Admission

Applicants that are granted full admission status are eligible to begin taking graduate level courses. To be eligible for unconditional admission to the M.S. degree program in Environmental Science or the Ph.D. degree program in Agricultural Sciences, a candidate must have been accepted into the School of Graduate and Professional Studies, meet the basic departmental requirements as described above, and have preparation in formal undergraduate courses or equivalent experience. These students will be considered for a graduate research assistantship, which includes a monthly stipend or monthly stipend and tuition waiver.

5.10 Conditional Admission

A conditional admission to the master`s degree program in Environmental Science is given to prospective students satisfying all requirements for full admission but have do not have adequate courses in Environmental Science or a related field. The prerequisites may be satisfied by any of the

following methods: by taking the undergraduate courses or their equivalent in residences. All conditions must be met as specified, and courses taken in this status must be earned with a grade of "B" or higher and must be completed within two academic semesters from time of enrollment in School of Graduate and Professional Studies, unless otherwise specified by the department chairperson in writing. The prerequisite courses can be taken simultaneously with regular M.S. degree courses **with prior discussion with the advisor** and the approval of the department chairperson. If the conditional admission was based on pending GRE or MAT scores, then the conditions will be removed when such scores are met. **Once the student meets all requirements and attains unconditional status, they can then be considered for a graduate research assistantship.**

Application forms for Graduate Research Assistantships can be obtained from the DES office and should be submitted as early as possible, but no later than July 1 for the fall and November 1 for spring semesters. Graduate Assistantship applications **are made directly to the department, not to the Graduate School**. The Graduate Admission Committee, which is appointed by the DES will review applications for Graduate Research Assistantships and forward them to faculty seeking graduate students who have funds to support Graduate Research Assistants. If suitable, respective faculty will make recommendations to the Director of Graduate Programs and to the Department Chair for consideration.

5.11 Transfer Credit Policy

A student may be allowed to transfer a maximum of twelve (12) semester credit hours of master level courses and/or maximum of 6 (six) semester credit hours of doctoral level courses from another accredited college or university. The student should submit a program of study, which includes the proposed transfer courses towards the Ph.D. degree. The transfer of credit form may be obtained online at (http://www.tnstate.edu/graduate/Transfer_Credit_Graduate_School.pdf) or from the School of Graduate and Professional Studies. The course work being considered for transfer must be evaluated by the Director of Graduate Programs/department Chair, Dean of College of Agriculture and the Dean of School of Graduate and Professional Studies. Only courses in which the student earned grades of "B" or better, and which are taken within the degree program time limit, will be considered for transfer. Credits earned in partial fulfillment of a previously completed degree program at Tennessee State University or any other institution may not be transferred or used for credit in another degree program (*2009-2011 Graduate Catalog).*

5.12 Class Loads Policy

Full-time status is attained when the graduate student enrolls in at least nine (9) credit hours in one semester. When a student enrolls in any course for credit, the maximum class load for either the fall or spring semester shall be twelve (12) hours. Students may take up to fifteen (15) hours with an overload approval. The maximum load for either summer session I or summer session II shall be six credit hours. Students desiring to carry an over-load must have the endorsement of the Major Advisor, Director of Graduate Programs, Department Chair, Dean of the College of Agriculture, and the Dean of the School of Graduate and Professional Studies *(2009-2011 Graduate Catalog).*

5.13 Second Master's Degree

Students may not be simultaneously enrolled in two Master's degree programs. Credits earned to fulfill requirements for the first Master's degree may not be used to satisfy any of the requirements for the

second Master's degree, or reduce the number of hours for the second Master's degree *(2009-2011 Graduate Catalog).*

5.14 Immunization Requirements

The state of Tennessee requires all students attending college, university and technical institutes to provide proof of two (2) doses of Measles, Mumps, and Rubella (MMR) vaccine on or after the first birthday or proof of immunity to measles. TSU would like to maintain healthy and safe campus environment for its students and employee; therefore, the university requires all students born after 1957 to furnish documented proof of having immunity to measles or having been immunized with two doses of MMR vaccine on or after the first birthday unless contraindicated because of pregnancy, allergy to a vaccine component, or other valid medical reason(s). More details can be found here: http://www.tnstate.edu/campus_life/healthservices.aspx and certificate of immunization form can be accessed at: http://www.tnstate.edu/campus_life/Certification%20of%20Immunization%20121613.pdf

6 Program of Study and Advancement of Candidacy

Each new graduate student is required to submit a formal Program of Study and Advancement to Candidacy form for approval. This form must be completed with the advice and concurrence of his/her academic advisor and graduate committee and must be submitted after completing nine (9), but before completing fifteen (15) credit hours of graduate course work. The program of study must be submitted for approval using the Program of Study and Advancement to Candidacy form (http://www.tnstate.edu/graduate/program%20of%20study.doc). Only courses appearing on the approved program will be counted toward fulfilling degree requirements. Changes in the program may be made using the Change in Program or Personnel form with the approval of Student's Graduate Committee and the School of Graduate and Professional Studies.

The new graduate student is advised to arrive a few days before the start of the semester to become acquainted with the faculty and to meet with the Director of Graduate Programs to prepare a course schedule for the student's first semester. If the student has not already selected a thesis advisor, he/she is encouraged to select a permanent advisor within four to six weeks and secure the faculty members' approval. The student is encouraged to complete his/her program in minimum time. It is recognized that this minimum will vary depending on the courses taken, the thesis problem, and the student's ability. Normally, the student should take the maximum course workload (Graduate School Regulations) in the early stages of his/ her program and reduced loads during later stages.

The graduate program of all students in the department will be evaluated periodically by the Director of Graduate Programs and the Department Head with deficiencies and strengths brought to the attention of those concerned.

7 Thesis/Special Problems

A thesis is required of students enrolled in the M.S. program with the thesis option. A course (AGSC 5120 – Thesis Writing) of four credit hours is required for the student to complete research and writing for the completion of the M.S. thesis.

7.1 Thesis Project Proposal

During the first semester, the student selects his/her major research professor (thesis advisor) and discusses possible topics with the major research professor. Students are also required to establish a Thesis Committee (Guidance/advising Committee) consisting of a Chairperson, at least two committee members from student's home department, and one external committee member. These committee members must be members of the Graduate Faculty. Complete Form (Thesis/Dissertation Committee Appointments http://www.tnstate.edu/graduate/Thesis%20Dissertation%20Committee%20Appointments.pdf), obtain required signatures on appropriate forms, and submit to the Department Head and the College Dean for recommendation and final approval by the Dean of the School of Graduate and Professional Studies.

Students, after deciding a tentative thesis topic must begin work on developing the research project proposal in consultation with the major professor. Although the research is the student's responsibility, he/she should expect guidance from his or her advisor in selecting a topic. Minimum items that must be included on this are: Tentative Thesis/Project Title, Purpose and Objective(s), Significance of the Problem, Method(s) of Investigation, Expected Results, and Anticipated Date for Completing the Investigation. A suggested format for thesis/dissertation research proposal is provided in Appendix C. During the second semester (or summer if the student began in spring), the student is expected to finalize the project proposal and defend it orally in a public along with his/her thesis/dissertation advising committee members, other faculty members and students. Once the student has successfully defended the thesis/dissertation proposal, made required revisions, and obtained signatures from the committee members and the Department head on the form – Report on Thesis/Dissertation Proposal Presentation http://www.tnstate.edu/graduate/Thesis_Dissertation_Proposal_Approval.pdf, the advisor shall submit the signed copy of the form to the School of Graduate and Professional Studies.

Formulating of objectives/research hypothesis, designing experiments, developing methods/protocols, collecting and collating data, analyzing data, interpreting results and writing proposal or thesis or dissertation are the required part of graduate student training. Master's degree students with thesis option must register in the course AGSC 5120 (Thesis Writing) whereas Ph.D. students must register BIOL8110 (Dissertation Research) course. These courses orient the student toward the research process, including the drafting of his/her thesis/dissertation or special project report as well as disseminating the research finding to wider audiences through peer-reviewed publications, newsletter, technical notes, extension bulletins, conferences and workshops.

Thus, each student will contribute to the department by planning a research project. Once the project is approved, the student is expected to devote an increasing amount of time to the research. In the later phase of the program (after course work is completed), 100% of the student's time is devoted to research.

All students must indicate in their research proposal whether their research will involve human subjects, animal (vertebrate) care, radiation safety, hazardous materials. If any of these are involved, compliance approval must be obtained from the Institutional Review Board- (IRB) or Animal Care Committee by submitting a prescribed form and survey according to procedures on the Office of Sponsored Research (TSU) website before initiating data collection.

Students who have not developed a suitable thesis research proposal (as determined by the thesis committee and Head of Department) and/or done well in presenting the proposal will not be allowed to

continue in their program until this deficiency has been corrected. Assistantships may be terminated for those students not meeting the above deadlines.

7.2 Project Time-Line

Students are expected to complete a timeline with their major advisor that will be used to determine satisfactory progress. Items included on this timeline, should include the date of the project proposal presentation, submission of a first draft of the thesis to the advisor, and submission of the completed thesis to all committee members **at least two weeks before the scheduled final oral examination date.** In addition, students should discuss with the advisor how much time the major advisor may need to correct the first thesis draft and adhere to the timetable agreed upon by the major advisor. The timeline should be submitted to the major advisor for approval before it is turned in with the project proposal.

7.3 Submission of Thesis/Dissertation

The major professor has the responsibility to require the student to have thesis or dissertation proposal or final thesis or dissertation or non-thesis option special problem report in acceptable form and language before it will distributed to the student's advisory committee. Format of the thesis/dissertation should conform to the recommendations set forth in the guidelines for preparing Dissertations/Thesis (http://www.tnstate.edu/graduate/thesesdissertations.aspx), project reports, and course papers are available at no cost in the graduate school's website.

In the event of a conflict between the student and major professor on the acceptance of the thesis/dissertation, proposal, or non-thesis project, the Director of Graduate Programs and the Department Head will assist in resolving the issue.

1. When the candidate and the major advisor feel that the thesis/dissertation or non-thesis report for the special problem is in a form suitable as a final draft, copies shall be circulated to: (1) all members of the candidate's advisory committee; (2) the Director of Graduate Programs. A cover letter from the advisor will designate this copy as the official reader's copy. Students seeking advice from the committee members must submit the draft copy of the thesis or dissertation early so that edits can be made and returned to the student with sufficient time for revision and final submission to the graduate school.

2. Both proposal and final thesis or dissertation defenses or the non-thesis special project presentation shall be held on any day the University is open (not on the weekends, evenings, holidays, or the days between Christmas and New Year's). Students should check graduate school's calendar for important dates and deadlines for thesis/dissertation defense and submission for the semester he/she is planning to graduate.

3. Although it is expected that major suggestions of committee members will be incorporated into the final thesis or dissertation, it is the responsibility of the student and his/her major advisor to see that the reader's copy incorporates committee suggestions and is essentially in the form from which duplications will be made for submission to the School of Graduate and Professional Studies. Proper grammar and consistency of style are essential to the final version.

4. The candidate's advisory committee will decide on the acceptance of the revised thesis/ dissertation or special project report with regards to content and style.

5. After completion of the final thesis or dissertation defense, members of the student's committee, the Director of Graduate Programs, and the Department Head should be given sufficient time to examine the final Theis or Dissertation before final approval. Additionally, the approvals of the Dean of the College of Agriculture and the Dean of the School of Graduate and Professional Studies are required.

8 Graduate Examinations

8.1 Comprehensive Examinations

8.1.1 Comprehensive examination for the M.S. non-thesis option in Environmental Science

Master's degree students with the non-thesis option must register for and pass the AGSC 5350 course (Independent Study of the Contemporary Issues and Problems) near the end of their course work. In this course, the student, under the guidance of a major advisor, will research a problem or issue that will result in a substantial piece of writing (e.g., project report). Upon completion of the course work, the **non-thesis option** student must take a comprehensive written and oral examination administered by the student's advisory committee and a faculty member assigned by the Director of Graduate Programs that represents student's chosen degree master's in Environmental Sciences and concentrations such as Geospatial Sciences, Natural Resources, and Plant Sciences. The student's major advisor will serve as the committee chairperson and will conduct both the oral and written examinations. The student is responsible for obtaining approval from the School of Graduate and Professional Studies for the examination dates and scheduling of the examinations.

The written portion of the comprehensive examination will be based upon the core requirements for the candidate's chosen concentration. At the oral examination, the student will begin by giving a short (20-25 minute) presentation on their study topic. The oral examination will be conducted to determine if the student has been able to apply (synthesize) knowledge gained in various courses via analysis of issues in his/her area of interest. In addition, the student will present and discuss the study he/she conducted for the course AGSC5350. Members of the examining committee will then have time to ask the students questions pertaining to his/her presentation, as well as the program of study. Upon completion of the examination, the student`s major advisor must submit the results to the Director of Graduate Programs, then Head of the Department and the School of Graduate and Professional Studies.

If a student fails the comprehensive examination, one retake will be allowed. Should the student again fail, a third and final comprehensive examination may be taken upon completion of additional course work (minimum of 6 hrs.) to be selected by the student`s advisory committee.

8.1.2 Comprehensive examination for Ph.D. in Agricultural Sciences

The comprehensive examination is an important milestone and requirement of the Ph.D. in Agricultural Science program. The goal is to test students' broad and in-depth knowledge in his/her area of research focus, critical thinking ability, as well as assess his/her problem solving and communication skills. Students are expected to demonstrate that they are ready for the terminal degree and can define a diverse set of problems, analyzing and interpreting data, and developing, implementing, and evaluating acceptable solutions to the real-world problems encountered by the government, academia, industry, and society. Ph.D. students can take the comprehensive exam as soon as they have completed their required core courses and successfully defended their dissertation proposal. The comprehensive exams should be completed no later than last semester of the student's 2nd academic year in the program.

Prior to taking the comprehensive examination, the student should plan a meeting with each individual committee member to discuss format, and depth and breadth of the exam topics. The committee member should help the student prepare a reading list and/or topics to study or review prior to the comprehensive examination. The student should start preparing for the comprehensive examination at least 3 months prior to the examination date.

The comprehensive examination consists of two parts. The first of which is the written portion. For the written portion, each committee member will develop a series of questions that (in the committee members' view) tests the student on topics important for the student's research and/or future success. Requirements for the written comprehensive examination are as follows:

a) One written exam will be developed by each dissertation advisory committee member

b) The exam can either be "open-source" or "closed-source". This decision is completely up to the committee chair and a particular committee member.

c) Each individual written exam should be developed with the idea that the respective student can complete the exam in one 24-hour period.

d) Once the student has completed an exam, the student will turn in the finished exam to the committee chair, and he/she will turn in the exam to the respective committee member.

e) The committee member will review the exam answers and turn in a brief written response to the committee chair. The response should adequately describe the student's performance on a given portin of the exam and should describe portions of the exam that were answered well and portions of the exam that were not answered well.

f) The committee chair will arrange a meeting with the student to discuss the written portion of the exam and provide adequate feedback to prepare for the oral exam. The committee chair and student should plan a tentative date/time for the oral examination. Then the student will communicate with his/her dissertation advisory committee for a potential date the oral portion of the comprehensive exam.

The second portion of the comprehensive examination will consist of an oral examination. During this portion of the comprehensive exam, the student will arrange a meeting (generally 2 – 4 hours) with the collective dissertation advisory committee. Requirements for the oral comprehensive examination are as follows:

a) All dissertation advisory committee members must be present (either on-site or remotely). The oral defense cannot be completed as a fully remote activity and only committee members that have a valid excuse to be off campus can report remotely. The committee chair must be on-site with the defending student.

b) The student should prepare for the oral examination by reviewing the results of the written examination and further exploring topics that he/she did not perform well.

c) The nature of the oral examination shall remain as an open discussion and the student should be prepared to discuss and/or defend topics related to his/her research or discipline in general.

d) The oral examination will continue until the collective committee has completed the question/answer session.

e) The committee will then meet separately from the student to discuss the overall performance on the examination. The committee should discuss both positive and negative results from the student's performance. Once the committee has made a decision of "pass", "pass conditionally", or "fail", the committee will communicate these results to the student. If "passed", the student moves on to full candidacy, if "pass conditionally", this means the student has passed, pending the condition imposed by the committee. The student should fulfill the condition satisfactorily in six months (a failure to satisfy the condition results in a "fail" status to the comprehensive examination). If the student receives a report of "fail" for the comprehensive exam, the committee may at their discretion recommend the student to retake the comprehensive exam a second time (a student cannot take the comprehensive exam more than twice). Students must take the second comprehensive exam within six months. If the committee does not offer a retake option, and the student fails the comprehensive exam, then the chair must discuss and advise the student regarding future pathway options.

a) Upon completion of the oral examination, the appropriate form (Appendix B, form e) must be signed by all committee members and the official signed copy should be submitted to the department head, College Dean, and the School of Graduate and Professional Studies.

8.2 The Final Oral Examination (Thesis/Dissertation Defense)

Oral examinations are the concluding event of each M.S. or Ph.D. degree program. These examinations are conducted by the student`s thesis or dissertation advisory committee. Oral examinations for the M.S. degree with **thesis option (Agricultural Business and Leadership, Agricultural Sciences or Environmental Science or Food and Animal Sciences) program** normally concentrates on the student's thesis, whereas the Ph.D. in Agricultural Sciences program primarily focuses on the student's dissertation research. The student is expected to "defend" his/her thesis/dissertation in public during university's regular hours. This entails being able to answer questions about how and why certain things were done in his/her thesis or dissertation project and to be able to interpret the results, generate discussion, and draw meaningful conclusions with a set of recommendations for future work. The student may also be asked questions to determine if the student has been able to integrate materials learned in courses and to apply them to the issues and problems being studied. The student, in consultation with his/her major advisor, is responsible for scheduling the examination with other thesis/dissertation committee members, Director of Graduate Programs, and Department chair. The request to hold the examination should be made at least two weeks (i.e., 10 working days) prior to the examination date. As part of the examination process, the student shall begin the examination by formally presenting his/ her research to the public including his/her advisory committee (30-45 minutes). Where possible, visual aids should be employed. Other faculty members, graduate students, and the university community or public shall be invited for the presentation as part of the oral examination. The major advisor is responsible for posting examination results to the Dean of Graduate and Professional Studies after obtaining signatures from committee members, department head, and the College Dean on the form -Report of Final Oral Examination (defense) of the Thesis or Dissertation.

9 Administration of Graduate Assistantships and Responsibilities of Graduate Assistants

Incoming graduate research assistants must schedule a meeting with their primary advisor immediately before class registration to ensure understanding of requirements for maintaining their graduate assistantships. Students may also contact Dr. Bharat Pokharel, Chair of Department of Environmental Sciences at 615-963-6054 or Dr. Bill Sutton, Graduate Coordinator at 615-963-7787 regarding graduate research assistantships.

The limited number of Graduate Research Assistantships are available only to the qualified graduate students. The College of Agriculture provides these assistantships with funds from the U.S Department of Agriculture and other sources. Assistantships are awarded on a competitive basis to qualified applicants based on individual qualification and merits. Students not initially provided assistantships may become eligible later during their course work, depending on their performance and available funds. In addition, assistantships are awarded only to the students who are unconditionally admitted into the department's graduate program. No assistantship is available to conditionally admitted students.

Assistantships are awarded for a maximum period of two years (twenty-four months) for students seeking a Master's degree and three years (thirty-six months) for students seeking a Ph.D. degree. However, there is no guarantee that the assistantship will continue for the full period and acceptable performance of the assistantship duties is required. Each assistantship will be reviewed at the end of each semester by the student's major advisor or research mentor, Director of Graduate Programs, the Department head and graduate advisory committee. The student's major advisor is responsible to submit the written evaluation of student's performance at the end of each semester (Appendix D). The continuation of your assistantship is contingent upon the availability of funds, satisfactory performance of Graduate Research Assistant (GRA) duties and responsibilities, and the maintenance of a 3.0 GPA (or higher) every semester. The College reserves the right to solely determine the availability of funds and, if necessary, withdraw or adjust or change terms and conditions of the assistantship when needed. The University has no obligation to provide re-appointment or extension of a student's assistantship beyond the end of two years for M.S. and three years for Ph.D. GRA may be dismissed prior to the end date of his/her assistantship for any valid documented reason, including but not limited to: failure to carry out assigned duties, intellectual dishonesty, and violation of law and/or University rules and regulations or a subsequent determination that admission documents were falsified.

Assistantships are provided for assisting the progress of the school's research/teaching projects and thus, financing students' research associated with graduate study. To be eligible for an assistantship, students are required to be a full-time student seeking a degree in Agricultural Sciences under the direct supervision of graduate faculty members listed in Appendix D. The graduate research assistantship carries with the obligation to allocate at least 20 hours per week on research duties assigned by student's major advisor over the duration of his/her graduate program, and also requires him/her to complete a thesis/dissertation for the partial fulfillment of the degree program requirements.

Students receiving the assistantship accept the responsibility to perform duties that include performing supervised research related to his/her graduate program and to his/her other works as assigned by the major advisor and the Department Head. Acceptable completion of assigned research tasks rather than simply working a specified number of hours per week constitutes a fulfillment of the assistantship obligations. Continuation of assistantships will be based on previous semester accomplishments.

Assistantships are for two years (24 months) for Masters Students and three years (36 months) for Doctoral students depending on availability of funds and student performance.

Compensation rates and work hour requirements for Graduate Research Assistant are presented below in Table 3. The amount is determined by the progress in the degree program. These levels of remuneration will be used for all sources of Graduate Research Assistantship funds.

Table 3. Graduate Research Assistantship in Agricultural Sciences

GRA Levels/ Duration	Workload assignment & expectations	Milestone Completed	Monthly Assistantship ($)	Total ($)
M.S. Level GRA				
Standard – 18 months (three regular semesters and one summer semester)	Student is paid for up to 20 hours per week to work on faculty's research project that funds the assistantship	• Complete course work (both core and elective courses) • Maintain a minimum GPA of 3.0 • Research proposal defended successfully • Must be enrolled in thesis-based M.S. degree program within the College of Agriculture, and complete all degree milestones in a timely manner as illustrated in this graduate student handbook	$2,100	$37,800
Research Mode – 6 months (one regular and one summer semester)	Student will be paid to work up to 20 hours per week on faculty research with a focus on thesis writing	• Complete research work including lab/field work, data analysis & thesis writing • Successfully defend thesis • Prepare manuscripts for publication • Successfully graduated in a timely manner	$2,100	$12,600
Total				**$50,400**
Ph.D. Level GRA				
Standard – 24 months, i.e., five regular semesters and two summer semesters	Student is paid for up to 20 hours per week to work on faculty's research project that funds the assistantship	• Complete course work (both 13 credit hours of core and 11 credit hours of elective courses) • Maintain a minimum GPA of 3.0 • Research proposal defended successfully • Passed both written and oral comprehensive exam for Ph.D. Candidacy • Must be enrolled in Ph.D. in Agricultural Sciences Program within the College of Agriculture, and complete all degree milestones in a timely manner as illustrated in this graduate student handbook	$2,300	$55,200
Research – 12 months (two regular semesters and one summer)	Student will be paid to work up to 20 hours per week on faculty's research project with a focus on thesis writing	• Complete research work including lab/field work, data analysis & dissertation writing • Successfully defend dissertation research • Prepare manuscripts for publication • Successfully graduated	$2,300	$27,600
Total				**$82,800**

Note: a) All graduate students are recommended to enroll for a health insurance plan. For those graduate research assistants who enrolled for a comparable health insurance plan prescribed by the College of Agriculture, the college will

include $100 per month in their GRA contracts to defray the cost of health insurance premium. Graduate research assistants shall submit the proof of health insurance beginning of reach semester at: https://bit.ly/GRAHealth (Failure to submit the proof of health insurance will result $100 less in his/her GRA contract)

b) Those graduate research assistants who are required to pay in-state tuition, may elect to enroll in a monthly payment deferment plan as recommended by the college to the bursar office. All GRA will receive a notification to sign up the deferment plan within third week of the fall or spring semester.

Continuation of assistantship is based on a satisfactory performance and maintenance of a minimum overall GPA of 3.00 on a 4:00 scale. In addition, graduate assistants must be full-time student (i.e., registered for 9 credit hours or more during the fall and spring semesters and in summer for at least one credit hour of seminar or thesis/dissertation writing class). All graduate assistants must choose the thesis option for their Master of Science degree or dissertation for Ph.D. in Agricultural Sciences in the Department of Agricultural and Environmental Sciences. **Continuation of graduate research assistantship will be based on the semi-annual GRA evaluation conducted by student's advisor for each semester.** Each student contributes to the department by conducting research project approved by the student's Thesis or dissertation advisory committee. Once the research project is approved through proposal defense, the student is expected to devote an increasing amount of time to the research project. In the later phase of the program (after course work is completed), 100 percent of the student's time is devoted to research.

Each graduate assistant has a responsibility to the department to perform assigned research work under the direction of his or her major professor to complete the research project. Work responsibilities during initial semesters will contribute to the student's understanding of the research that ultimately will be undertaken in the thesis or dissertation and in all cases will contribute to the student's research skills. Students are strongly recommended to submit contributed papers to professional associations or peer-reviewed journals to publish the results of their research prior to and after completion of their thesis/dissertation.

The primary responsibility of each Graduate Research Assistant is the completion of research project that has been assigned to him/her. However, the student may be expected to undertake other tasks as assigned by his or her major professor, or the department head, or director of graduate programs.

Note: Graduate Research Assistants must stay on campus and pursue their research uninterrupted. On a case by case basis, if a student must take an internship during their course of study, and if the internship is directly related to their research, these students can continue to receive graduate research assistantship when they return to the University after the internship. **If a student decides to break their research training to take internships (Summer or otherwise) that is(are) not related with their research, they will forfeit their assistantship and will also not be eligible for work aid.**

9.1 Minimum qualifications and guidelines for the Award of Graduate Assistantship (Master's and Ph.D. degree) in the Department of Agricultural and Environmental Sciences

1. Must be admitted to the Master of Science degree in Agricultural Business and Leadership or Agricultural Sciences or Environmental Science, and Food and Animal Sciences programs or the Ph.D. degree program in Agricultural Sciences at Tennessee State University,

2. Must submit a statement (750-1,000 words) why you should be awarded assistantship and how it is going to help you in your professional development,

3. A minimum GPA of 2.75 on a 4.00 point scale or better at the undergraduate level (for M.S. students only) and 3.0 on a 4.0 point scale or better at the Masters level, and a minimum score of 290 on the GRE, or 385 on the MAT (only GRE scores are accepted for Ph.D. students), and

4. A recommendation after the Interview in person or by phone with department head and/or Director of Graduate Programs and possible thesis advisor(s).

Application forms for Graduate Research Assistantships are available from the Department of Agricultural and Environmental Sciences, College of Agriculture, Tennessee State University, and Nashville, TN 37209-1561. Assistantship applications should be submitted as early as possible, as but no later than July 1 for the fall, November 1 for spring and April 1 for summer semesters.

Graduate Assistantship applications are made directly to the department, not to the School of Graduate and Professional Studies. The Graduate Admission Committee, which is chaired by the Director of Graduate Programs reviews applications for graduate assistantships and makes recommendations to faculty seeking graduate Research Assistants. Qualifying applications are then submitted to the School of Graduate and Professional Studies upon review and approval by the Department Chair and Dean of the College. Awards for Research Assistantships are based on Departmental or College research needs and availability of funds.

9.2 Job Description for Graduate Research Assistants Pursuing M.S. and Ph.D. Degrees

Graduate Research Assistant Pursuing M.S. Degree

The appointment is associated with research and requires the following responsibilities:

1. To carry out a designed program of research under the supervision of a designated supervisor/major professor,

2. To be able to work on and contribute to collaborative research teams,

3. To complete a thesis proposal with appropriate supervisory assistance,

4. To perform the following major duties that include, but are not limited to:

    - Reading and comprehending reports and other scientific literature,

    - Conducting data analysis and computations,

    - Collecting and processing field and/or laboratory samples,

    - Writing research reports and preparing manuscripts for publication in refereed journals and presenting data at conferences, scientific symposia and professional society meetings,

    - Attending departmental seminars (required),

    - To take oral examination following completion of course work and in consultation with the School of Graduate and Professional Studies, and

- Other duties as assigned by the major professor.

Graduate Research Assistant Pursuing Ph.D. Degree

A graduate research assistantship is generally a part-time formal appointment. It requires completion of specific duties commensurate with the percentage appointment (e.g., 20 hours/week for a 50% [half-time] appointment). The appointment is associated with research and requires the following responsibilities:

1. To undertake research in at least one programmatic area within the department of admission,
2. To be able to work on and contribute to collaborative research items,
3. To complete a dissertation proposal with appropriate supervisory assistance, and
4. To perform the following major duties that include but are not limited to:
    - Reading and comprehending reports and other scientific literature,
    - Conducting data analysis and computations,
    - Harvesting of field and/or laboratory samples,
    - Providing data files and hard copy reports and materials to the major professor in a timely manner,
    - Participating in a meaningful teaching experience for at least one semester as determined by the major professor,
    - Presenting a seminar on dissertation results,
    - Writing research reports and manuscripts for publication in refereed journals,
    - Presenting data at conferences, scientific symposia, and professional society meetings,
    - Attending departmental seminars (required),
    - To take oral examination following completion of course work and in consultation with the School of Graduate and Professional Studies, and
    - Other duties assigned by the major professor.

9.3 Evaluation of Graduate Research Assistants

Each graduate research assistant's progress will be reviewed at the end of each semester. This process reviews progress on research (see section on the project proposal) as well as academic performance and is an integral part of maintaining an effective graduate program.

Students are expected to schedule a minimum of 9 (nine) semester hours each semester until their course load is completed. The review is conducted for the purpose of allocating assistantship funds or continuation of assistantships. Failure by the student to pass, in any one semester, nine hours of coursework on the graduate program with 3.0 or better grade point average will be sufficient grounds for reduction in the rate of stipend or suspension of the assistantship. Unsatisfactory performance includes failure to maintain a "B" average in all courses attempted for graduate credit. Any student not

meeting the requirements for admission for candidacy is likewise not eligible to continue in the program.

Students not meeting the academic standards of the department or milestones towards successful completion of the degree program (Appendix D) will be subject to dismissal. The Graduate Evaluation Committee, appointed by the Department Head, will recommend the dismissal of any student who: (1) earns less than 2.75 quality point average in a semester (on all hours attempted) or (2) earns less than a 3.00 quality point average in two consecutive semesters. Appeals of dismissals may be made to a committee composed of the Department Head, the Director of Graduate Programs, the student's Graduate Advisor, and the Graduate Evaluation committee. The decision of this committee will be final.

9.4 Time Limits on Assistantships

Students on assistantships must complete their Master's degree program within the time period of two years (24 months) and three years for Ph.D. If duties or other matters require his or her absence from the office during regular working hours, the graduate assistant is expected to notify the major advisor and the Director of Graduate Programs of such absence, the nature of absence, and how he or she can be reached if necessary. Failure to receive prior approval for absences may result in termination of the assistantship. **Although graduate research assistants do not earn leave with pay, they are considered junior staff members and are required to observe the research station work schedule.**

10 Work Aid

- Graduate students who qualify to be on graduate research assistantship will not be considered for Work Aid;
- Work aid will be provided to needy and qualified graduate students on a case by case basis and under special consideration by the student's advisor and the departmental graduate committee; and
- Remuneration will be consistent with policy guidelines for work aid and is limited to twenty hours per week for students enrolled as full-time students.

11 Miscellaneous

11.1 Assignment of Office Space

The Director of Graduate Programs, in consultation with the Department Head, will be responsible for assignment of office space to graduate students. Doctoral candidates will receive priority in the assignment of offices. Those with seniority in the graduate program will receive priority in assigning space for Masters Candidates. Students interested in moving from their presently assigned space to a vacancy should contact the Department Head. Furniture is not assigned to the graduate student, but to the office in which it is located.

Requesting More Information

More details, if needed, may be obtained by writing to the Department of Agricultural and Environmental Sciences or by calling (615) 963-5431.

11.2 Commitment to Excellence through Diversity

The College of Agriculture actively shares the University`s *commitment to excellence through diversity.* We are dedicated to increase the ethnic and cultural diversity of our student and faculty community and to activities and actions that will lead to a more just and humane society. We strongly encourage applications from students with nontraditional backgrounds who have high potential and aptitude. We will strive to find the financial resources needed to attract and retain students who will enable us to better demonstrate our commitment to diversity.

11.2.1 Provision of Demographic Data

For TSU and the College of Agriculture to comply with Civil Rights Guidelines of USDA/NIFA, it is important that accurate data regarding race, ethnicity and gender (REG data) be provided by all graduate students and assistantship recipients to the Director of Graduate Programs. Graduate students and assistantship recipients are strongly encouraged to provide REG data to the Director of Graduate Programs when requested.

APPENDICES

Appendix A: Biosafety Manual for Tennessee State University

Appendix B: Forms and Paperwork

Appendix C: Suggested Guideline/Format of Thesis/Dissertation Research Proposal

Appendix D: Graduate Research Assistant Evaluation (Each Semester)

Appendix E: Graduate faculty members affiliated within the Department of Environmental Sciences

Appendix F: Graduate faculty members affiliated within the College of Agriculture, TSU

Appendix A: Biosafety Manual for Tennessee State University

The manual is also available at:
http://www.tnstate.edu/agriculture/documents/BiosafetyManualRevised2006.pdf

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Important Telephone Numbers

Emergency Telephone Numbers:

Campus Police: **615-963-5171**
Fire, Police, Rescue **9-1-1**
Biosafety Committee Chair: Dr. Mohammad Karim – **615-963-5344**
Radiation Safety Officer: **615-963-5344**
University Health center: **615-963-5291**
Facilities Management: **615-963-4898**

Useful Websites:

NIH Guidelines: http://www4.od.nih.gov/oba/rac/guidelines/guidelines.html
BMBL: http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm
NIH Office of Biotechnology Activities: http://www4.od.nih.gov/oba/
CDC Select Agents Program: http://www.cdc.gov/od/sap/index.htm
USDA/APHIS Select Agents Program: http://www.aphis.usda.gov/programs/ag_selectagent/index.html
CDC Permit to Import or Transport Etiologic Agents: http://www.cdc.gov/od/eaipp/
USDA/APHIS Permit to Import or Transport Livestock Pathogens:
http://www.aphis.usda.gov/forms/index.html
USDA/APHIS Permit to Field Test, Import, or Transport Genetically Modified Organisms:
http://www.aphis.usda.gov/biotechnology/permits_main.shtml
University of Maryland Form for Registration of Biological Materials:
http://des.umd.edu/research/login.cfm
Selection, Installation, and Use of Biological Safety Cabinets:
http://www.cdc.gov/od/ohs/biosfty/bsc/bsc.htm

Policy Statement

I. Purpose:

The purpose of the manual is to establish the process for compliance with the following documents:

A. NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines):

B. Biosafety in Microbiological and Biomedical Laboratories (BMBL)

II. Policy:
Tennessee State University is committed to preserving the health and safety of its students, faculty and staff. The University is also committed to protecting the environment and the community. It is recognized that the use of recombinant DNA or other potentially harmful pathogenic microorganisms is necessary in many research and teaching laboratories at the University. The University requires the

compliance with the NIH guidelines and with the recommendations in BMBL to ensure the safe handling of these organisms. Compliance with other applicable Federal, State, and Local regulations is also required.

III. Responsibilities

The Principal Investigator (PI) is directly and primarily responsible for the safe operation of the laboratory. His/her knowledge and judgment are critical in assessing risks and appropriately applying the recommendations in this manual. However, safety is a shared responsibility among all of the laboratory staff. Institutional Biosafety Committee (IBC) is to assist the PI with these responsibilities.

A. The University Biosafety Committee shall:

1. Prepare the Biosafety Manual, with revisions as necessary;
2. Distribute the Manual to each faculty member who works with biological materials;
3. Investigate accidents involving infectious agents;
4. Provide or coordinate biosafety training as requested
5. Assist investigators with risk assessment
6. Administer all elements of the Biosafety Program, assist faculty with submission of registrations to the IBC, and maintain registration files
7. Review rDNA research conducted at or sponsored by the University for Compliance with the NIH Guidelines, and approves those research projects that are found to conform with the NIH Guidelines
8. Review research involving infectious agents conducted at or sponsored by the University for Compliance with the guidelines in Biosafety in Microbiological and Biomedical Laboratories (BMBL), and approves those research projects that are found to conform with the recommendations in BMBL;
9. Notify the PI of the results of the IBC's review and approval;
10. Report any significant problems with or violations of the NIH Guidelines and any significant research-related accidents or illness to the appropriate Institutional official and to the NIH Office of Biotechnology Activities (OBA) within 30 days; and
11. Follow the guidelines for membership defined by NIH, with the additional requirement of one representative from the University of Maryland Animal Care and Use Committee, and a plant pathologist from USDA as appropriate.

B. PIs shall:

1. Assess the risks of their experiments;
2. Ensure the safe operation of their laboratory (all students working in a lab are required to enroll on a lab safety course, PI should ensure that students working in his/her lab should obtain lab safety certificate and display it in their labs for any future lab safety inspection)
3. Train laboratory personnel in safe work practices;
4. Comply with all applicable state and federal regulations and guidelines;
5. Register the following experiments with the IBC, as required:
    a. recombinant DNA activities;
    b. work with infectious agents;
    c. experiments involving the use of human blood or other potentially infectious materials, such as unfixed human tissues, primary human cell lines, and certain body fluids; and
    d. animal and plant pathogens.

C. The University Health Center (UHC) shall:

1. Provide medical surveillance, as required by the OSHA Bloodborne Pathogens Standard (CFR 1910.1030), and as recommended in the *BMBL* and *NIH Guidelines*; and
2. Provide vaccinations, as required.

D. Laboratory personnel shall:

1. Comply with safety recommendations for the work being performed; and
2. Report accidents or injuries to the PI.

Classification of Potentially Infectious Agents

Procedures and facilities involved in protecting laboratory workers, the public, and the environment from laboratory biological hazards are governed by federal and state regulations and guidelines. Many granting agencies require that grant recipients certify that they adhere to both the guidelines and the regulations.

Microorganisms

The National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC) publish guidelines for work with infectious microorganisms. The publication, entitled *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, recommends that work be done using one of four levels of containment: Biosafety Level 1 (BSL1), BSL2, BSL3 and BSL4 (see next chapter). The *NIH Guidelines* (Appendix B) classify pathogenic agents into one of four risk groups according to specific criteria. It is Tennessee State University policy that all laboratories adhere to these NIH/CDC guidelines.

Microorganisms capable of causing infection in humans

Investigators must register any project involving a pathogenic agent with the IBC and receive its approval before work is begun. Following receipt of the completed Registration Document by IBC, the laboratory will be surveyed by the Institutional Biosafety Committee (IBC) to ascertain that it meets the containment requirements listed in *BMBL* for the agent being studied. If the lab meets the requirements, the work will be reviewed and approved or disapproved by the IBC.

Genetically Engineered Microorganisms

Work with all genetically engineered organisms must comply with the *NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines-Recent Report April 2002)*. These guidelines classify recombinant DNA experiments into four levels of containment (BSL1, BSL2, BSL3, and BSL4) based on the hazard of the microorganism and the procedures and quantities being used. Additionally, the United States Department of Agriculture (USDA) requires permits for field testing of genetically engineered plants. It is Tennessee State University policy that all laboratories follow these guidelines.
Registration Each PI is responsible for registering all recombinant DNA experiments with the IBC, including those exempt from the *NIH Guidelines*. The IBC audits all laboratories where BSL2 or BSL3 containment is required. BSL1 laboratories are audited on request of the PI.

Review and Approval of Experiments

The IBC, which oversees recombinant DNA research at Tennessee State University, will review the registration.

a. Experiments covered by the *NIH Guidelines* Many experiments involving rDNA molecules require registration and approval by the IBC before work may be initiated. Experiments that require IBC approval before initiation include those that involve:

- Risk Group 2, 3, 4, or research involving Select Agents.
- Cloning DNA from Risk Group 2, 3, 4, or Select Agents.
- Infectious virus or defective virus in the presence of helper virus in tissue culture systems.
- Whole plants or animals.
- More than 10 liters of culture.

Experiments that must be registered at the time of initiation include those that involve:

- the formation of recombinant DNA molecules containing no more than 2/3 of the genome of any eukaryotic virus propagated in tissue culture.
- recombinant DNA-modified whole plants, and/or recombinant DNA-modified organisms associated with whole plants, except those that fall under Section III-A, III-B, III-C, or III-E of the Guidelines.
- the generation of transgenic rodents that require BSL1 containment.

b. Experiments exempt from the *NIH Guidelines*
Experiments exempt from the *NIH Guidelines*, although requiring registration with the IBC, may be initiated immediately. The Chair of the IBC or the BSO will review the registration and confirm that the work is classified correctly according to the *NIH Guidelines*. Exempt experiments are those that:

- use rDNA molecules that are not in organisms or viruses.
- consist entirely of DNA segments from a single nonchromosomal or viral DNA source, though one or more of the segments may be a synthetic equivalent.
- consist entirely of DNA from a prokaryotic host including its indigenous plasmids or viruses when propagated only in that host (or a closely related strain of the same species), or when transferred to another host by well established physiological means.
- consist entirely of DNA from an eukaryotic host including its chloroplasts, mitochondria, or plasmids (but excluding viruses) when propagated only in that host (or a closely related strain of the same species).
- consist entirely of DNA segments from different species that exchange DNA by known physiological processes, though one or more of the segments may be a synthetic equivalent.
- do not present a significant risk to health or the environment as determined by the NIH Director.
- contain less than one-half of any eukaryotic viral genome propagated in cell culture.
- use *E. coli* K12, *Saccharomyces cerevisiae*, or *Bacillus subtilis* host - vector systems, unless genes from Risk Group 3 or 4 pathogens or restricted animal pathogens are cloned into these hosts.
- involve the purchase or transfer of transgenic rodents for experiments that require **BSL1** containment.

Human Blood, Unfixed Tissue, and Cell Culture
Please refer to the *Bloodborne Pathogens Exposure Control Plan* Appendix *6* for detailed information on handling human clinical material. Work with human material is regulated by the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard, 29 CFR, Part 1910.1030. Human blood, unfixed tissue, cell culture, and certain other body fluids are considered potentially infectious for

bloodborne pathogens such as hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). All human clinical material should be presumed infectious and handled using BSL2 work practices. This concept is called Universal Precautions. Investigators are responsible for notifying IBC of their use of human materials. Training and immunization are required by OSHA.

Plant and Animal Pathogens

The IBC requires investigators to register their campus use of plant pathogens. The registration form for animal pathogens is available at the web site: http://www.tnstate.edu. Registration of plant pathogens may be completed by forwarding a copy to the Biosafety Office.

Select Agents

Select Agents are microorganisms and toxins that have potential for use by terrorists. The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 restricts their possession and use, and requires the University to collect and maintain information on the location and use on campus of any select agents or toxins. Please contact the Biosafety Office immediately if you currently possess or plan to acquire any of the listed agents and have not yet reported that fact. Failure to provide notice may result in civil and criminal liability for individual researchers and/or the University. If you have questions, you may contact the Biosafety Office, or visit CDC's Select Agent Program web site, which provides links to select agent program information.

Biosafety Containment Levels

Four levels of Biosafety are defined in the publication *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, published by the CDC and NIH. The levels, designated in ascending order by degree of protection provided to personnel, the environment, and the community, are combinations of laboratory practices, safety equipment, and laboratory facilities (see Appendices). Most microbiological work Tennessee State University is conducted at BSL1 or BSL2 containment. There are no BSL4 laboratories at the university.

Biosafety Level 1

BSL1 is appropriate for undergraduate and secondary educational training and teaching laboratories, and for other facilities in which work is done with well-characterized agents not known to cause disease in healthy adult humans. The laboratory is not necessarily separated from the general traffic patterns in the building. BSL1 represents a basic level of containment that relies on standard microbiological practices with no special primary or secondary barriers recommended, other than a sink for hand washing. The following Standard Microbiological Practices apply to all Biosafety Levels. Additional practices recommended for BSL2 are in Appendix 2, and for BSL3 in Appendix 3.

Standard Microbiological Practices:

1. Access to the laboratory is limited or restricted at the discretion of the laboratory director when experiments or work with cultures and specimens are in progress.
2. Persons wash their hands after they handle viable materials and animals, after removing gloves, and before leaving the laboratory.
3. Eating, drinking, smoking, handling contact lenses, and applying cosmetics are not permitted in the work areas where there is reasonable likelihood of exposure to potentially infectious materials. Persons who wear contact lenses in laboratories should also wear goggles or a face shield. Food is stored outside the work area in cabinets or refrigerators designated and used for this purpose only.

4. Mouth pipetting is prohibited; mechanical pipetting devices are used.
5. All procedures are performed carefully to minimize the creation of splashes or aerosols.
6. Work surfaces are decontaminated at least once a day and after any spill of viable material.
7. All cultures, stocks, and other regulated wastes are decontaminated before disposal by an approved decontamination method, such as autoclaving. Materials to be decontaminated outside of the immediate laboratory are to be placed in a durable, leak-proof container and closed for transport from the laboratory. Materials to be decontaminated off-site are packaged in accordance with applicable state and federal regulations before removal from the facility.
8. An insect and rodent control program is in effect.

Biosafety Level 2
BSL2 is similar to Level 1 and is suitable for work involving agents of moderate potential hazard to personnel and the environment. It differs in that (1) laboratory personnel have specific training in handling pathogenic agents and are directed by competent scientists, (2) access to the laboratory is limited when work is being conducted, (3) extreme precautions are taken with contaminated sharp items, and (4) certain procedures in which infectious aerosols or splashes may be created are conducted in biological safety cabinets or other physical containment equipment. With good microbiological techniques, work at BSL2 can be conducted safely on the open bench, provided the potential for producing splashes or aerosols is low. Primary hazards to personnel working with BSL2 agents relate to accidental percutaneous or mucous membrane exposures, or ingestion of infectious materials. BSL2 is appropriate when work is done with any human-derived blood, body fluids, or tissues where the presence of an infectious agent may be unknown. See Appendix 2 for a complete list of BSL2 criteria.

Biosafety Level 3
BSL3 is applicable to clinical, diagnostic, teaching, research, or production facilities in which work is done with indigenous or exotic agents which may cause serious or potentially lethal disease as a result of exposure by the inhalation route. Laboratory personnel have specific training in handling pathogenic and potentially lethal agents, and are supervised by competent scientists who are experienced in working with these agents. Primary hazards to personnel working at BSL3 relate to autoinoculation, ingestion, and exposure to infectious aerosols. See Appendix 3 for a complete list of BSL3 criteria.

Biosafety Level 4
BSL4 is required for work with dangerous and exotic agents which pose a high individual risk of aerosol-transmitted laboratory infections and life-threatening disease. Agents with a close or identical antigenic relationship to BSL4 agents are handled at this level until sufficient data are obtained either to confirm continued work at this level, or to work with them at a lower level. Members of the laboratory staff have specific and thorough training in handling extremely hazardous infectious agents; and they understand the primary and secondary containment functions of the standard and special practices, the containment equipment, and the laboratory design characteristics. They are supervised by competent scientists who are trained and experienced in working with these agents. Access to the laboratory is strictly controlled by the laboratory director. The facility is either in a separate building or in a controlled area within a building, which is completely isolated from all other areas of the building. A specific facility operations manual is prepared or adopted.

Within work areas of the facility, all activities are confined to Class III biological safety cabinets, or Class II biological safety cabinets used with one-piece positive pressure personnel suits ventilated by a life support system. The BSL4 laboratory has special engineering and design features to prevent microorganisms from being disseminated into the environment.

Table 4. Biosafety in Microbiological and Biomedical Laboratories

Biosafety Level	**Risk Assessment**	**Practices and Techniques**	**Safety Equipment**	**Examples**
BSL1 Basic Laboratory	Individual risk: Low Community risk: Low	Standard Microbiological Practices.	None: primary containment provided by adherence to standard lab practices during open bench operations.	*E. coli* K12; *S. cerevisiae*; short term, long term culture of most non-primate mammalian cells.
BSL2 Basic Laboratory with biosafety cabinets and other physical containment devices as required	Individual risk: Moderate Community risk: Low	Level 1 practices plus: lab coats; autoclaving all biological waste preferred; limited access; biohazard warning signs on doors and equipment.	Partial containment (i.e., Class I or II biosafety cabinets) for procedures which produce aerosols.	*E. coli* O157; Hepatitis B virus; *Salmonella typhimurium*; human blood; *Neisseria gonorrhoeae*; culture of lymphoid lines carrying inducible EB; many common human pathogens.
BSL3 Containment Laboratory with special engineering and design features	Individual risk: High Community risk: Low	Level 2 practices plus: special protective clothing; controlled access through entrance room; biological waste must be autoclaved, preferably within the	Partial containment equipment used for all manipulations of infectious materials; directional airflow.	Yellow fever virus; *M. tuberculosis*; Industrial scale volumes of HIV.

(Centers for Disease Control and Prevention, and National Institutes of Health, 1993)

Appendix B: Forms and Paperwork

(All forms need to be typed, please download them from the School of Graduate and Professional Studies website listed below, then request your major advisor to submit electronically via DocuSign)

1. **Required** (forms that are required to submit on time in order to maintain good academic standing and a successful graduation)

   a) Thesis/Dissertation Committee Appointment (http://www.tnstate.edu/graduate/Thesis%20Dissertation%20Committee%20Appointments.pdf)

   b) Thesis/Dissertation Proposal Approval (http://www.tnstate.edu/graduate/Thesis_Dissertation_Proposal_Approval.pdf)

   c) Program of Study and Advancement to Candidacy (http://www.tnstate.edu/graduate/program%20of%20study.doc)

      For Ph.D. students, contact Director of Graduate Programs

   d) Comprehensive Examination Application (For Master and Specialist Program only http://www.tnstate.edu/graduate/Comprehensive_Exam_Application_Graduate_School.pdf)

   e) Ph.D. Comprehensive Examination Form, contact Director of Graduate Programs or your advisor

   f) Thesis/Dissertation Final Oral Examination/Defense (http://www.tnstate.edu/graduate/Oral_%20Defense_%20Approval_Graduate_School.pdf)

2. **Optional** (forms that may be needed, but not required)

   g) Change of Program (http://www.tnstate.edu/graduate/Change_of_Program_Graduate_School.pdf)

   h) Transfer of Credit (http://www.tnstate.edu/graduate/Transfer_Credit_Graduate_School.pdf)

   i) Appeal and Petition Form (http://www.tnstate.edu/graduate/2015_APPEAL_PETITION%20FORM%20-%20Updated%20June%202015.pdf)

3. **Other forms or checklists or guidelines** are found here: http://www.tnstate.edu/graduate/forms.aspx

a) Thesis/Dissertation Committee Appointment
(https://www.tnstate.edu/graduate/Thesis%20Dissertation%20Committee%20Appointments.pdf)

Print Form

TENNESSEE STATE UNIVERSITY

School of Graduate & Professional Studies
Thesis/Dissertation Committee Appointments

MUST SUBMIT FORM TYPED

Name: _____ Date: _____
Address: _____ T# _____
City/State _____ Zip: _____
Catalog Yr: _____ Degree: _____
Major _____ Concentration: _____
Topic/Title: _____

_____

COMMITTEE APPOINTMENTS

Committee Chair	Department	Signature	Date
Committee Member	Department	Signature	Date
Committee Member	Department	Signature	Date
Committee Member	Department	Signature	Date
Committee Member	Department	Signature	Date

EXTERNAL MEMBER REQUEST **(Graduate Faculty Member outside of major department)**

External Member	Position/Dept.	Signature	Date

Degrees Held _____

Statement of rationale for appointment: _____

_____

_____

Recommended by:		Approved by:	
Department Head	Date		
Dean of College/School or Director of Institute	Date	Dean of Graduate School	Date

Revised 9/20/17

b) Thesis/Dissertation Proposal Approval
(https://www.tnstate.edu/graduate/ThesisDissertation%20Proposal%20Form.pdf)

TENNESSEE STATE UNIVERSITY

SCHOOL OF GRADUATE STUDIES & RESEARCH
Report on Thesis/Dissertation Proposal Presentation

Check one: ☐ Thesis ☐ Dissertation

To the Dean of the Graduate School:

Student's Name _____ Student's ID _____

Has submitted in partial fulfillment of the requirements for the degree of _____ in the College/School/Institute of _____ a proposal titled: _____

This proposal has been examined by all members of the candidate's supervisory committee and has been:

☐ Approved ☐ Approved with Conditions ☐ Not Approved

Additional Comments:

Note: If proposed research uses Human Subjects, written approval from the TSU Office of Sponsored Research must be obtained prior to initiating data collection.

	Committee Member Names	Committee Members› Signatures
Committee Chair		
Committee Member		
Committee Member		
Committee Member		
External Member		
Guest Examiner*		

*Master›s Thesis Only

Recommended by:

Dept. Head _____ Date _____

Dean of College/School _____ Date _____

Approved by:

Dean of Graduate School _____ Date _____

c) Program of Study and Advancement to Candidacy https://www.tnstate.edu/graduate/program%20of%20study.doc) Also check degree works at mytsu.tnstate.edu/degreeworks

TENNESSEE STATE UNIVERSITY

OFFICE OF GRADUATE STUDIES & RESEARCH
Program of Study and Advancement to Candidacy
For Master and Specialist Degree Programs

Name: _____ Date: _____
Address: _____ T-Number: _____
City, State, Zip: _____ Degree: _____
Phone Number: _____ Major: _____
Email Address: _____ Concentration: _____

1. Complete the Program of Study and Advancement to Candidacy form in **consultation with your advisor**;
2. To be completed when student has **completed between 9 to 15 semester hours**;
3. Seek **unconditional admission** into your degree program of choice, clearing any and all conditions for admission (i.e., test scores, prerequisites courses, etc);
4. Remove any Incomplete ("I") grades from the permanent record;
5. Type or print information on form, and submit to advisor for signatures.
6. Return completed form to the School of Graduate Studies and Research – Suite 200, Holland Hall

Required Courses				
Course ID	Course Title	Semester Hrs.	Grade	Semester Completed
Concentration				
Course ID	Course Title	Semester Hrs.	Grade	Semester Completed
Electives				
Course ID	Course Title	Semester Hrs.	Grade	Semester Completed
Total number of hours required for degree:				

Prereq. Courses Required		
Course ID	Sem. Hrs.	Sem. Completed

Courses Taken in Non-Degree Status		
Course ID	Sem. Hrs.	Sem. Completed

Test Scores		
Date Taken:		
GRE	V:	Q:
GMAT		
MAT		
FE		

Note: Transfer credit must be approved before it can be shown on the program of study - use Transfer of Credit Form.

Recommended By:		Student	
Advisor	Date	Student Signature	Date
Department Head	Date	Approved By:	
Dean of College/School	Date	Dean of Graduate School	Date

Revised: 01-25-12

d) Comprehensive Examination Application (For Master and Specialist Program only https://www.tnstate.edu/graduate/Comprehensive_Exam_Application_Graduate_School.pdf)

TENNESSEE STATE UNIVERSITY

Examinee # _____

OFFICE OF GRADUATE STUDIES & RESEARCH
Comprehensive Examination Application
For Master or Specialist Degree Programs

****

Note: This form should be filed with the Office of Graduate Studies & Research in the same semester the student files application to graduate. Check with major advisor for filing deadlines.

REQUEST TO TAKE COMPREHENSIVE EXAM - *Please Print*

Name _____ Date _____
Address _____ ID # _____
City/State _____ ZIP _____
Catalog Year _____ Degree _____
Major _____ Concentration _____
Date of Examination _____ Intended Graduation Date _____
Phone # _____

_____ _____
Student's Signature Date Email address **required** (Please print clearly)

Recommended by: Approved by:

_____ _____
Advisor Date Dean of Graduate School Date

_____
Dept. Head Date

_____
Dean of College/School Date

****

EXAMINATION RESULTS

HIGH PASS _____ PASS _____ FAIL _____ NO SHOW _____

****

RECOMMENDATION

Student permitted to retake exam **Next Exam Date** _____
Student dismissed from program _____

_____ _____
Department Head Signature Date

Revised 2/11/08

e) Ph.D. comprehensive examination form (available from administrative assistant of graduate program or Graduate Coordinator or faculty advisor)

TENNESSEE STATE UNIVERSITY
College of Agriculture

REPORT ON COMPREHENSIVE EXAM RESULTS
Ph.D. in Agricultural Sciences
(Both Written and Oral Components)
(Internal to College of Agriculture)

All required fields (except check mark, signatures and comments section) must be typed or filled using Adobe Acrobat Reader.

The student must satisfy following eligibility criteria prior to sitting for a comprehensive examination for the Ph.D. degree in Agricultural Sciences. The student: a) has completed all core courses with at least "B" or higher grade; b) is in good academic standing (GPA 3.0 or higher); and c) is unconditionally admitted into the Ph.D. program in Agricultural Sciences.

STUDENT INFORMATION

Last Name: _____ First Name: _____ MI: _____

Student T-Number: _____ E-mail _____

Degree Program: Doctoral Program in Biological Sciences Department: _____

This section will be completed by the Dissertation Advising Committee

The signatures below certify that the student listed above

☐ **has satisfactory passed both written and oral comprehensive examinations**

☐ **has passed conditionally {explain the condition(s) the student must fulfil on the bottom of this form and indicate the date the student must fulfill the condition(s)}**

☐ **has failed the comprehensive examination**.

___/___/_____ Written examination completion date ___/___/_____ Oral examination date

REQUIRED SIGNATURES (DISSERTATION ADVISORY COMMITTEE)

Chair_____ Signature _____ Date:_____

Committee Member:_____ Signature _____ Date:_____

Committee Member:_____ Signature _____ Date:_____

Committee Member:_____ Signature _____ Date:_____

Committee Member:_____ Signature _____ Date:_____

Committee Member (External):_____ Signature _____ Date:_____

COMMENTS:

Department Chair: _____ Date:_____

College Dean: _____ Date:_____

Submit the completed form to the Department of Agricultural and Environmental Sciences Updated 5/08/2022

f) Thesis/Dissertation Final Oral Examination/Defense
(https://www.tnstate.edu/graduate/Updated%20Thesis_Dissertation%20Form%203.pdf)

TENNESSEE STATE UNIVERSITY

SCHOOL OF GRADUATE & PROFESSIONAL STUDIES

School of Graduate & Professional Studies
Report on Final Oral Examination (Defense) of Thesis/Dissertation

Check one: ☐ Thesis ☐ Dissertation

To the Dean of the Graduate School:

Student's Name: T#

A final Thesis/Dissertation oral examination (defense) has been conducted for the above student who is a candidate for the degree of _____ in the Department of _____ GPA _____
in the College/School of _____
Thesis/Dissertation Title: _____
_____

The student has: Date of Examination: _____
☐ passed ☐ failed

Remediation Plan (if failed)

Additional Comments: *(The Committee Chair is responsible for determining the grade with the input from all Committee Members)*

☐ The Committee Chair has reviewed and approved the originality of the thesis/dissertation and checked for plagiarism (Turnitin, etc.)

☐ The Committee Chair has approved that the appropriate Graduate School Writing Format (APA 7th edition, ACS, MLA, IEEE) and recommends the thesis/dissertation for publication through ProQuest

	Committee Member Names (print)	Committee Members' Signatures
Committee Chair		
Committee Member		
Committee Member		
Committee Member		
External Member		
Guest Examiner*		

*Master's Thesis Only

Approved by:

Dean of Graduate School Date

Recommended by:

Dept. Head Date

Dean of College/School Date

NOTE: If research uses Human Subjects approval letter from the TSU Office of Sponsored Research must be submitted with Thesis/Dissertation.

g) Change of Program (http://www.tnstate.edu/graduate/Change_of_Program_Graduate_School.pdf)

TENNESSEE STATE UNIVERSITY

SCHOOL OF GRADUATE & PROFESSIONAL STUDIES
Change of Program or Personnel

Name: _____ **Date:** _____
Address: _____ **ID # :** _____
City/State/Zip _____ **Term:** _____

Directions: Enter in the space below any changes in the approved program or personnel including **change of non-degree status, change of major**, **change in required courses**, and **change of guidance committee personnel**. NOTE: When this petition is used to request a change of major, the petition **must be approved** by the student's current advisor and Head of the department in which the prospective major is located. **Then application materials will be sent to the new department for review**.

I. CHANGE NON-DEGREE STATUS

Non-degree request to degree must be accompanied by acceptable test scores

Graduate Record Examination (GRE):	Date Taken ____	V ____	Q ____	S _____	
Miller Analogies Test (MAT):	Date Taken ____	Score ____			
Graduate Management Admission Test (GMAT):	Date Taken ____	Score ____			
Fundamentals of Engineering Test (FE):	Date Taken ____	Score ____			

II. CHANGE MAJOR

DEGREE SEEKING

PLEASE CHANGE MY MAJOR FROM:

PLEASE CHANGE MY MAJOR TO:

NONE-DEGREE SEEKING

PLEASE CHANGE MY MAJOR FROM:

PLEASE CHANGE MY MAJOR TO:

III. CHANGE COURSES

ADD:	COURSE ID	DESCRIPTION	COURSE ID	DESCRIPTION

DELETE:	COURSE ID	DESCRIPTION	COURSE ID	DESCRIPTION

IV. CHANGE ADVISEMENT/COMMITTEE PERSONNEL

PLEASE CHANGE MY **MAJOR ADVISOR** FROM _____
PLEASE CHANGE MY **MAJOR ADVISOR** TO _____

PLEASE CHANGE MY **CHAIR PERSON** FROM _____
PLEASE CHANGE MY **CHAIR PERSON** TO _____

PLEASE CHANGE MY **COMMITTEE PERSON** FROM _____
PLEASE CHANGE MY **COMMITTEE PERSON** TO _____

_____
Student's Signature Date

Recommended by:

Advisor **Date**

Dept. Head **Date**

Dean of College/School **Date**

Approved by:

Dean of Graduate School **Date**

h) Transfer of Credit (http://www.tnstate.edu/graduate/Transfer_Credit_Graduate_School.pdf)

TENNESSEE STATE UNIVERSITY

OFFICE OF GRADUATE STUDIES & RESEARCH
Transfer of Credit Form

Name: _____ Date: _____
Address: _____ ID #: _____
City/State/Zip _____ Degree: _____
Major _____ Concentration: _____

Official transcripts for credit must be attached or on file with the Office of Graduate Studies & Research before transfer credit can be approved. Credit taken after admission to TSU should be approved by the student's advisor prior to enrollment.

****

At the **master's** level, a student may transfer a maximum of twelve (**12**) semester hours or eighteen (18) quarter hours of graduate credit. At the **specialist's** and **doctoral** level, a maximum of six (**6**) semester hours may be transferred. Only courses in which the student earned grades "B" or better, and which are taken within the degree program time limit, will be considered for transfer.
(*see Graduate Catalog for further details*)

College or University	Course No.	Course Title	Sem. Hrs.	Date Taken	Grade
Comparable TSU					

College or University	Course No.	Course Title	Sem. Hrs.	Date Taken	Grade
Comparable TSU					

College or University	Course No.	Course Title	Sem. Hrs.	Date Taken	Grade
Comparable TSU					

College or University	Course No.	Course Title	Sem. Hrs.	Date Taken	Grade
Comparable TSU					

Student's Signature Date

Recommended by: Approved by:

Advisor Date Dean of Graduate School Date

Dept. Head Date

Dean of College/School Date

Revised 2/11/08

Appendix C: Suggested Guideline/Format of Thesis/Dissertation Research Proposal

Graduate students seeking M.S. degree in agricultural sciences (thesis option) and Ph.D. in Agricultural Sciences in the DAES are required to prepare and defend their thesis/dissertation proposal as a first step of their thesis or dissertation research. Student is advised to consult with his/her major advisor and thesis or dissertation-advising committee while identifying the research topics, conduct literature review, design statistical valid experiment or observational study, develop methods or protocol to collect data, analyze data, interpret results and anticipated outcomes. Students are required to defend their proposal within the second semester (for M.S.) or third semester (for Ph.D. students) into their program.

The following guideline is intended to serve as a guideline for develop research proposal; however, the content and format may vary by concentrations and/or research disciplines.

1. Title: A clear and concise title that reflects the major crux of the research the student intended to conduct
2. Problem/issue identification
    a. Provide sufficient background
    b. State the current knowledge regarding the research problem identified
    c. Significance of the problem
3. Objectives
    a. Write objectives that anticipated to accomplish
    b. Objectives should align with research problem
    c. Objective should be specific (do not be too vague)
4. Literature Review
    a. Review literature and identify gaps
    b. Develop conceptual framework of the problem identify earlier
    c. Generate hypotheses and should be aligned with the research problem/gap
5. Materials and methods
    a. Design experiments or observational study
    b. Develop method/protocol and justification of method/protocol being used
    c. Collect data
6. Outcomes and significance
7. Timeline with measurable milestones and expected outcomes
8. Cost: facilities, equipment, supplies, travel, field visit etc

Appendix D: Graduate Research Assistant Evaluation (Each Semester)

(Form and associated milestones can be downloaded from - http://bit.ly/ag_gra_evaluation_form

TENNESSEE STATE UNIVERSITY

Department of Agricultural and Environmental Sciences
College of Agriculture

GRADUATE RESEARCH ASSISTANT SEMI-ANNUAL PERFORMANCE AND PROGRESS EVALUATION FORM

Directions: First, student will fill up all necessary information, and submit electronically signed and dated copy of this form to his/her major advisor. The advisor will review it and fill up remaining information. Then both advisor and student sit and review it together, and make necessary changes, especially setting up the expectations for the upcoming semester. Then advisor will upload the electronically signed and dated copy of this form no later than April 15th and October 15th at http://bit.ly/gra-evaluation. This document should provide the guideline for student and his/her advisor to set expectations and provide constructive feedback and suggestions for future improvement. Please fill it objectively and be as much as specific.

Objectives

The specific objectives of this semi-annual performance evaluation of graduate research assistant (GRA) are to:

a) Provide opportunity for advisor and graduate research assistant to reflect the performance, progress, outputs, and accomplishments in the past semester.

b) Document student's progress to date and plan for the upcoming semester.

c) Identify any issues, challenges or hindrances that affect student's progress and performance, and correct them on a timely manner.

Student's Information **TNumber:**

Student's Name: _____ Advisor's Name: _____

Degree Program: MS Degree Concentration: _____

Started Semester: Fall Year _____ Expected Graduation Semester: Summer Year _____

Thesis or Dissertation Title:

Thesis/dissertation advising committee (should be formed by the first semester, and must have at least one external member)

1. _____(Chair) 2. _____

3. _____ 4. _____

5. _____ 6. _____

7. External member: _____

Date research proposal presented (should be completed no later than the second semester for the M.S. student and no later than first semester of the second year for the Ph.D. student) (mm/yyyy): _____

Date comprehensive exam completed or proposed date (for PhD students only, should be completed by fourth semester, i.e. before the end of the second year) (mm/yyyy)_____

Date for the most recent thesis/dissertation advising committee meeting (mm/yyyy): _____

Planned date for next thesis/dissertation advising committee meeting (mm/yyyy): _____
(Students are required to meet with their advising committee AT LEAST once a year)

Coursework completed/planned as per the study plan (if you have not submitted one, skip to the next question)

1. _____	Grade	Not-enrolle	2. _____	Grade	Not-enrolle
3 ._____	Grade	Not-enrolle	4. _____	Grade	Not-enrolle
5 ._____	Grade	Not-enrolle	6. _____	Grade	Not-enrolle
7. _____	Grade	Not-enrolle	8. _____	Grade	Not-enrolle
9. _____	Grade	Not-enrolle	10. _____	Grade	Not-enrolle
11. _____	Grade	Not-enrolle	12. _____	Grade	Not-enrolle
13. _____	Grade	Not-enrolle	14. _____	Grade	Not-enrolle
15. _____	Grade	Not-enrolle	16. _____	Grade	Not-enrolle
17. _____	Grade	Not-enrolle	18. _____	Grade	Not-enrolle
19. _____	Grade	Not-enrolle	20. _____	Grade	Not-enrolle
21. _____	Grade	Not-enrolle	22. _____	Grade	Not-enrolle
23. _____	Grade	Not-enrolle	24. _____	Grade	Not-enrolle
25. _____	Grade	Not-enrolle	26. _____	Grade	Not-enrolle
27. _____	Grade	Not-enrolle	28. _____	Grade	Not-enrolle
29. _____	Grade	Not-enrolle	30. _____	Grade	Not-enrolle

GPA: _____

What are your research accomplishments in the past six months (after the prior semi-annual review)?

What do you plan to accomplish in this upcoming semester (next six months)?

Are you on track as per your study plan? Have all the required forms for your degree program been submitted to the graduate secretary (Ms Tamla Thompson) and also to the graduate school?
YES
Please check following

For M.S. Students (please insert date in parenthesis – mm/dd/year)

◯ Committee Appointed (_____)	◯ Proposal Defended (_____)	◯ Program of Study Approved (_____)
◯ Required courses completed	◯ Comp. Exam Scheduled (non-thesis) (_____)	◯ Thesis defense date (if known) (_____)

For Ph.D. Students (please insert date in parenthesis – mm/dd/year)

◯ Committee Appointed (_____)	◯ Proposal Defended (_____)	◯ Program of Study Approved (_____)
◯ Required courses completed	◯ Comprehensive Exam Completed (_____)	◯ Dissertation defense date (if known) (_____)

Are there any barriers or issues that hinder your ability to complete your research tasks on a timely manner? Please describe in details and be specific (attached additional pages if needed)

EVALUATION OF STUDENT PERFORMANCE (First student will complete these performance indicators, then major advisor will review and suggest any changes if there are any). **Rating should be in four categories (O=Outstanding, G=Good, N=Need Improvement, and U=Unsatisfactory)**

Criteria	Our Expectation	Rating	Reasons for rating
1. Professional/Academic Progress			
Manuscript (peer-reviewed) published	In preparation, submitted, published	NA	
Proposal (a fellowship, scholarship, travel award or grant) submitted and funded	In preparation, submitted, funded (please attached supporting documents)	NA	
Presentation – conferences/workshops, attend and present dept. seminars	Abstract submitted, accepted, presented	NA	
Course work completed (how many credit has been completed?)	Completed core courses, completed all degree required courses, maintained GPA higher than 3.0	NA	
2. Professional development			
Dedication to the research work	Enthusiasm, pride, extra effort, full attention etc	NA	
Represent college, department and university	Represent dept/college/TSU, involve in extracurricular activities	NA	
Initiative/creativity	Initiate new ideas, imaginative, creative	NA	
3. Community Services			
Service to department, college and university		NA	
Serve on student club/journal club		NA	
Serve on recruitment or outreach		NA	
Mentoring other students		NA	
4. Time Management			
Dependable	Reliable, depend on tasks	NA	
Punctual	Complete task on time	NA	
Organize	Plan and structure lab/field and other works	NA	
Prioritize important from urgent tasks	Ability to balance time	NA	
5. Status on degree program			
On schedule		NA	
Thesis/dissertation progressing well	First chapter and literature review completed	NA	
Expected graduation date	e.g. Summer of 2019	NA	

If there are issues, how will the student resolve those issues or unsatisfactory progress/performance? (Student's response)

Comments from the major advisor:

Based on the progress and performance of the student, and commitments for the upcoming semester(s), we sat together and agreed (check one)

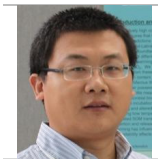
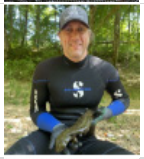
- ○ Continue Graduate Research Assistantship
- ○ Conditional Continue Graduate Research Assistantship (need to monitor progress every other month and document report)
- ○ Discontinue Graduate Research Assistantship

Student Signature _____ Advisor's Signature _____

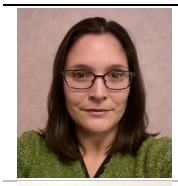
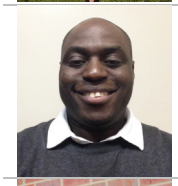
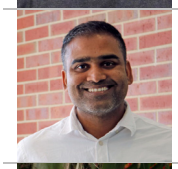
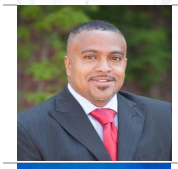
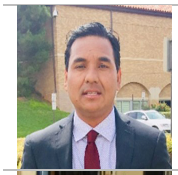
Data (mm/dd/yyyy)_____ Date (mm/dd/yyyy) _____

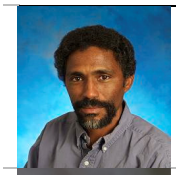
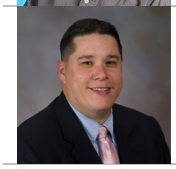
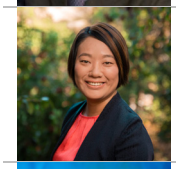
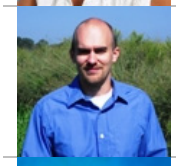
Name (Print) _____ Name (Print) _____

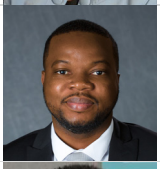
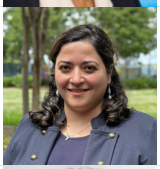
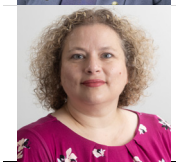
Appendix E: Graduate faculty members affiliated within the Department of Environmental Sciences

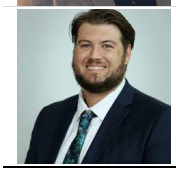
Faculty Member		Contact details	Research Interests
	Dr. Reginald Archer Associate Professor	121C Farrell-Westbrook Complex Tel: 615-963-1495 Email: rarcher@tnstate.edu www.tnstate.edu/agriculture/resumes/reginald_archer.aspx	GIS and Spatial Analysis
	Dr. Thomas Byl Professor	Lower Mississippi-Gulf Water Science Center Tel: 615-837-4750 Email: tdbyl@usgs.gov https://www.usgs.gov/staff-profiles/thomas-d-byl	Water Quality / Geology
	Dr. Yujuan Chen Associate Professor	202E Farrell-Westbrook Complex Tel: 615-963-6653 Email: Yujuan.Chen@tnstate.edu www.tnstate.edu/agriculture/resumes/yujuan_chen.aspx	Urban & Community Forestry
	Dr. Jianwei Li Associate Professor	204G Farrell-Westbrook Complex Tel: 615-963-5527 Email: jli2@tnstate.edu www.tnstate.edu/agriculture/resumes/jianwei_li.aspx	Climate Change
	Dr. Sarah M. Neumann Assistant Professor	204P Farrell-Westbrook Complex Tel: 615-963-7977 Email: sneumann@tnstate.edu www.tnstate.edu/agriculture/resumes/sarah_neumann.aspx	Forest ecology
	Dr. Bharat Pokharel Associate Professor, & Head of Department of Environmental Sciences	112 Farrell-Westbrook Complex Tel: 615-963-6054 Email: bpokhare@tnstate.edu www.tnstate.edu/agriculture/resumes/Bharat_Pokharel.aspx	Biostatistics, Modeling, Forestry & Forest Biometrics
	Dr. Sudipta Rakshit Associate Professor	113 Agricultural Biotechnology Building Tel: 615-963-6058 Email: srakshit@tnstate.edu www.tnstate.edu/agriculture/resumes/sudipta_rakshit.aspx	Soil Chemistry
	Dr. William Sutton Associate Professor & Graduate Coordinator	202G Farrell-Westbrook Complex Tel: 615-963-7787 Email: wsutton@tnstate.edu www.tnstate.edu/agriculture/resumes/bill_sutton.aspx	Wildlife Ecology
	Dr. Huseyin B. Tecimen Assistant Professor	200 Farrell-Westbrook Complex Tel: 615-963-1386 Email: htecimen@tnstate.edu https://www.tnstate.edu/agriculture/resumes/huseyin_tecimen.aspx	Forestry / Small Woodlands
	Dr. De'Etra Young Associate Dean of Academics and Land-Grant Programs, and Associate Professor	202 Agricultural Biotechnology Building Tel: 615-963-5123 Email: dyoung23@tnstate.edu www.tnstate.edu/agriculture/resumes/deetra_young%20.aspx	Urban Forestry

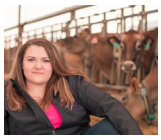
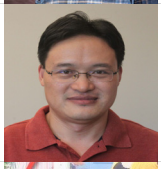
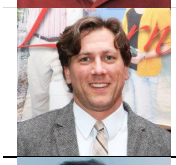
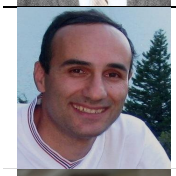
Appendix F: Graduate faculty members affiliated within the College of Agriculture, TSU

Faculty Member	Contact details	Research Interests
 Dr. Karla Addesso Professor	117 Otis L. Floyd Nursery Research Center, McMinnville Tel: 931-815-5155 Email: kaddesso@tnstate.edu www.tnstate.edu/agriculture/resumes/karla_addesso.aspx	Entomology & Chemical Ecology
 Dr. Clement Akumu Associate Professor	113 Farrell-Westbrook Complex Tel: 615-963-1557 Email: aclemen1@tnstate.edu www.tnstate.edu/agriculture/resumes/clement_akumu.aspx	Remote Sensing & Spatial Analysis
 Dr. Gajender Aleti Assistant Professor	204E Farrell-Westbrook Complex Tel: 615-963-2028 Email: galati@tnstate.edu https://www.tnstate.edu/agriculture/resumes/gajender_aleti.aspx	Food and Human Microbiome
 Dr. Kaushalya Amarasekare Associate Professor	202P Farrell-Westbrook Complex Tel: 615-963-5001 Email: kamarase@tnstate.edu www.tnstate.edu/agriculture/resumes/kaushalya_amarasekare.aspx	Entomology
 Dr. Reginald Archer Associate Professor	121C Farrell-Westbrook Complex Tel: 615-963-1495 Email: rarcher@tnstate.edu www.tnstate.edu/agriculture/resumes/reginald_archer.aspx	GIS and Spatial Analysis
 Dr. Ahmad Aziz Professor	202L Farrell-Westbrook Complex Tel: 615-963-1595 Email: aaziz@tnstate.edu www.tnstate.edu/agriculture/resumes/ahmad_aziz.aspx	Plant Molecular Genetics
 Dr. Fulya Baysal-Gurel Associate Dean of Research, and Associate Professor	102 Farrell-Westbrook Complex 155 Otis L. Floyd Nursery Research Center, McMinnville Tel: 931-815-5143 Email: fbaysalg@tnstate.edu www.tnstate.edu/agriculture/resumes/fulya_baysal_gurel.aspx	Plant Pathology
 Dr. Krishna B. Bhandari Assistant Professor	202L Farrell-Westbrook Complex Tel: 615-963-5431 Email: kbhandar@tnstate.edu https://www.tnstate.edu/agriculture/resumes/krishna_b_bhandari.aspx	Forage agronomy,
 Dr. Matthew Blair Professor	112 Agricultural Biotechnology Building Tel: 615-963-7467 Email: mblair@tnstate.edu www.tnstate.edu/agriculture/resumes/matthew_blair.aspx	Plant Breeding, genomics & molecular genetics

	Faculty Member	Contact details	Research Interests
	Dr. Richard Browning Professor	202D Farrell-Westbrook Complex Tel: 615-963-5837 Email: browning@tnstate.edu www.tnstate.edu/agriculture/resumes/richard_browing.aspx	Animal Science
	Dr. Thomas Broyles Associate Professor	213B Farrell-Westbrook Complex Tel: 615-963-7885 Email: tbroyles1@tnstate.edu www.tnstate.edu/agriculture/resumes/thomas_broyles1.aspx	Ag Education; Problem Solving & Decision Making
	Dr. Anjin Chang Associate Professor	106A Lawson Hall Tel: 615-963-5445 Email: achang@tnstate.edu www.tnstate.edu/agriculture/resumes/anjin_chang.aspx	Precision Agriculture, Remote Sensing, Unmanned Aircraft System (UAS) & GIS
	Dr. Fur-Chi Chen Professor	211C Lawson Hall Tel: 615-963-5410 Email: fchen1@tnstate.edu www.tnstate.edu/agriculture/resumes/fur_chi_chen.aspx	Food Science & Food Safety
	Dr. Yujuan Chen Associate Professor	202E Farrell-Westbrook Complex Tel: 615-963-6653 Email: Yujuan.Chen@tnstate.edu www.tnstate.edu/agriculture/resumes/yujuan_chen.aspx	Urban & Community Forestry
	Dr. Arvazena Clardy Associate Professor	200 Farrell-Westbrook Complex Tel: 615-963-4887 Email: aclardy@tnstate.edu www.tnstate.edu/agriculture/resumes/arvazena_clardy.aspx	Ornamental Horticulture, Growth Regulators, Hydroponics & Nutrition
	Dr. Jason de Koff Professor	105 Agricultural Biotechnology Building Tel: 615-963-4929 Email: jdekoff@tnstate.edu www.tnstate.edu/agriculture/resumes/jason_d_koff.aspx	Environmental Science/ Biofuel
	Dr. Korsi Dumenyo Professor & Head of Department of Agricultural Sciences and Engineering	211B Lawson Hall Tel: 615-963-5634 Email: cdumenyo@tnstate.edu www.tnstate.edu/agriculture/resumes/charles_dumenyo.aspx	Plant Pathology/ Host-Microbe Interactions
	Dr. Aliyar Fouladkhah Associate Professor	111 Lawson Hall Tel: 615-963-7471 Email: afouladk@tnstate.edu www.tnstate.edu/agriculture/resumes/aliyar_fouladkhah.aspx	Food Microbiology/Public Health/Applied Epidemiology
	Dr. Prabode Illukpitiya Professor & Head of Department of Agricultural Business and Education	204H Farrell-Westbrook Complex Tel: 615-963-1877 Email: pillukpi@tnstate.edu www.tnstate.edu/agriculture/resumes/prabodh_illukpitiya.aspx	Agricultural & Resource Economics, Bioenergy

Faculty Member	Contact details	Research Interests
 Dr. Aditya Khanal Associate Professor	204D Farrell-Westbrook Complex Tel: 615-963-4986 Email: akhanal1@tnstate.edu www.tnstate.edu/agriculture/resumes/aditya_khanal.aspx	Ag. Economics, Ag. Finance, Production Economics, Development Economics
 Dr. Agnes Kilonzo-Nthenge Professor	202O Farrell-Westbrook Complex Tel: 615-963-5437 Email: akilonzontheng@tnstate.edu www.tnstate.edu/agriculture/resumes/agnes_nthenge.aspx	Food Science/ Microbiology
 Dr. Abdelaziz Lawani Assistant Professor & Graduate Coordinator	202K Farrell-Westbrook Complex Tel: 615-963-1839 Email: alawani@tnstate.edu www.tnstate.edu/agriculture/resumes/abdelaziz_lawani.aspx	Agribusiness and Entrepreneurship
 Dr. Jianwei Li Associate Professor	204G Farrell-Westbrook Complex Tel: 615-963-5527 Email: jli2@tnstate.edu www.tnstate.edu/agriculture/resumes/jianwei_li.aspx	Climate Change
 Dr. Pramir Maharjan Assistant Professor	202F Farrell-Westbrook Complex Tel: (615)963-5823 Email: pmaharja@tnstate.edu www.tnstate.edu/agriculture/resumes/pramir_maharjan.aspx	Poultry Science
 Dr. Margaret Mmbaga Professor	102 Agricultural Biotechnology Building Tel: 615-963-1386 Email: mmbaga@tnstate.edu www.tnstate.edu/agriculture/resumes/margaret_mmbaga.aspx	Plant Pathology
 Dr. Behnaz Molaei Assistant Professor	214F Farrell-Westbrook Complex Tel: (615)963-5441 Email: bmolaei@tnstate.edu www.tnstate.edu/agriculture/resumes/behnaz_molaei.aspx	Irrigation Engineering, Automation and Precision Agriculture
 Dr. Sarah M. Neumann Assistant Professor	204P Farrell-Westbrook Complex Tel: 615-963-7977 Email: sneumann@tnstate.edu www.tnstate.edu/agriculture/resumes/sarah_neumann.aspx	Forest ecology
 Dr. Samuel Nahashon Professor & Head of Department of Food and Animal Sciences	108 Lawson Hall Tel: 615-963-5829 Email: snahashon@tnstate.edu www.tnstate.edu/agriculture/resumes/samuel_nahashon.aspx	Poultry Nutrition & Animal Biotechnology
 Dr. Dilip Nandwani Professor	106B Lawson Hall Tel: 615-963-1897 Email: dnandwan@tnstate.edu www.tnstate.edu/agriculture/resumes/dilip%20nandwani.aspx	Organic Agricultural/Horticulture

	Faculty Member	Contact details	Research Interests
	Dr. Sajid Al Noor Assistant Professor	202M Farrell-Westbrook Complex Tel: 615-963-6642 Email: snoor@tnstate.edu www.tnstate.edu/agriculture/resumes/sajid_noor.aspx	Economic and Community Resource Development
	Dr. Jason Oliver Professor	118 Otis L. Floyd Nursery Research Center, McMinnville Tel: 931-668-3572 Email: joliver@tnstate.edu www.tnstate.edu/agriculture/resumes/jason_oliver.aspx	Entomology
	Dr. Emmanuel C. Omondi Assistant Professor	204A Farrell-Westbrook Complex Tel: 615-963-5830 Email: eomondi@tnstate.edu www.tnstate.edu/agriculture/resumes/emmanuel_omondi.aspx	Agronomy, Industrial Hemp
	Dr. Christine Ondzighi-Assoume Associate Professor	202C Lawson Hall Tel: 615-963-6334 Email: condzigh@tnstate.edu www.tnstate.edu/agriculture/resumes/christine_ondzighi_assoume.aspx	Plant Physiology
	Dr. Ankit Patras Associate Professor	111 Agricultural Biotechnology Building Tel: 615-963-5619 Email: apatras@tnstate.edu www.tnstate.edu/agriculture/resumes/ankit_patras.aspx	Food Chemistry/Food Science
	Dr. Brahmaiah Pendyala Assistant Professor	202N Farrell-Westbrook Complex Tel: 615-963-5824 Email: bpendyal@tnstate.edu www.tnstate.edu/agriculture/resumes/brahmaiah_pendyala.aspx	Phytochemistry; Chemo-bioinformatics
	Dr. Dharma Pitchay Professor	202H Farrell-Westbrook Complex Tel: 615-963-4890 Email: dpitchay@tnstate.edu www.tnstate.edu/agriculture/resumes/dharma_pitchay.aspx	Plant Nutrition, Greenhouse Operations & Horticulture
	Dr. Bharat Pokharel Associate Professor & Head Department of Environmental Sciences	112 Farrell-Westbrook Complex Tel: 615-963-6054 Email: bpokhare@tnstate.edu www.tnstate.edu/agriculture/resumes/Bharat_Pokharel.aspx	Biostatistics, Modeling, Forestry & Forest Biometrics
	Dr. Sean Posey Assistant Professor	202O Farrell-Westbrook Complex Tel: 615-963-1498 Email: sposey2@tnstate.edu www.tnstate.edu/agriculture/resumes/sean_posey.aspx	International Trade

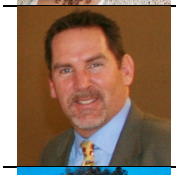
	Faculty Member	Contact details	Research Interests
	Dr. Sudipta Rakshit Associate Professor	113 Agricultural Biotechnology Building Tel: 615-963-6058 Email: srakshit@tnstate.edu www.tnstate.edu/agriculture/resumes/sudipta_rakshit.aspx	Soil Chemistry
	Dr. Kimberly Reuscher Assistant Professor	214D Farrell-Westbrook Complex Tel: 615-963-1828 Email: kreusche@tnstate.edu www.tnstate.edu/agriculture/resumes/kimberly_reuscher.aspx	Dairy Science
	Dr. John C. Ricketts Professor	101 Lawson Hall Tel: 615-963-7620 Email: jricket1@tnstate.edu www.tnstate.edu/agriculture/resumes/john_ricketts.aspx	Ag. Education, Leadership, Communication & Extension
	Dr. Sonali Roy, Assistant Professor	103 Agricultural Biotechnology Building Tel: 615-963-1899 Email: sroy3@tnstate.edu www.tnstate.edu/agriculture/resumes/sonali_roy.aspx	Molecular genetics, Plant Molecular Biology and Biotechnology
	Dr. Yongming (Simon) Sang Professor	205B Lawson Hall Tel: 615-963-5183 Email: ysang@tnstate.edu www.tnstate.edu/agriculture/resumes/simon_sang.aspx	Animal Science
	Dr. Hongwei Si Professor	111E Lawson Hall Tel: 615-963-5443 Email: hsi@tnstate.edu www.tnstate.edu/agriculture/resumes/hongwei_si.aspx	Human nutrition, preventive disease & health
	Dr. William Sutton Associate Professor	202G Farrell-Westbrook Complex Tel: 615-963-1386 Email: wsutton@tnstate.edu www.tnstate.edu/agriculture/resumes/bill_sutton.aspx	Wildlife Ecology
	Dr. Ali Taheri Associate Professor & Graduate Coordiantor	204F Farrell-Westbrook Complex Tel: 615-963-6056 Email: ataheri1@tnstate.edu www.tnstate.edu/agriculture/resumes/ali_taheri.aspx	Plant Molecular Genetics/ Plant Breeding
	Dr. Resham Thapa Assistant Professor	204I Farrell-Westbrook Complex Tel: 615-963-7496 Email: rthapa1@tnstate.edu www.tnstate.edu/agriculture/resumes/resham_thapa.aspx	
	Dr. Doc Lap Tran Assistant Professor	211F-211D CARP Building Tel: 931-815-6520 Email: dtran2@tnstate.edu www.tnstate.edu/agriculture/resumes/doc_lap_tran.aspx	Consumer Economics, Agricultural Economics, Value Chains in Agriculture

	Faculty Member	Contact details	Research Interests
	Dr. Anthony Witcher Associate Professor	165 Otis L. Floyd Nursery Research Center, McMinnville Tel: 931-815-5147 Email: awitcher@tnstate.edu www.tnstate.edu/agriculture/resumes/anthony_witcher.aspx	Sustainable Nursery Crop Production
	Dr. Ying Wu Professor & Graduate Coordinator	114 Agricultural Biotechnology Building Tel: 615-963-6006 Email: ywu@tnstate.edu www.tnstate.edu/agriculture/resumes/ying_wu.aspx	Food Bioscience & Technology
	Dr. De'Etra Young Associate Dean of Academics and Land-Grant Programs, & Associate Professor	202 Agricultural Biotechnology Building Tel: 615-963-5123 Email: dyoung23@tnstate.edu www.tnstate.edu/agriculture/resumes/deetra_young%20.aspx	Urban Forestry
	Dr. Suping Zhou Professor	104 Agricultural Biotechnology Building Tel: 615-963-7469 Email: zsuping@tnstate.edu www.tnstate.edu/agriculture/resumes/suping_zhou.aspx	Plant Science/horticulture Biotechnology

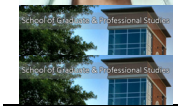
Administrative support

	Name	Contact details	Remarks
	Mr. Jason Foster Administrative Assistant	100A Lawson Hall Tel: 615-963-5431 Email: jfoste44@tnstate.edu	Administrative Assistant for the graduate program: administrative matters such as contract, paycheck, timesheet and all degree required paperwork, etc.

Office of International Affairs

	Name	Contact details	Note
	Dr. Jewell Winn Executive Director for International Programs	Holland Hall - 1st Floor Suites Tel: 615-963-4977 Email: jwinn@tnstate.edu	International student services, immigration related issues for international students
	Mr. Mark Gunter Director	Holland Hall - 1st Floor Suites Tel: 615-963-5639 Email: mgunter@tnstate.edu	International student services, i-20, visa, immigration related issues for international students
	Ms Mabel Dumenyo Coordinator	Holland Hall - 1st Floor Suites Tel: 615-963-7682 Email: mdumenyo@tnstate.edu	International student services, immigration related issues for international students
	Office of International Affairs	Holland Hall - 1st Floor Suites Tel: 615-963-5640 Email: oia@tnstate.edu	International student services and their immigration related issues

School of Graduate and Professional Studies

	Name	Contact details	Note
	Dr. Trinetia Respress Interim Dean of Graduate School & Professional Studies	B400 Avon Williams Campus Tel: 615-963-5448 Email: trespress@tnstate.edu	Paperwork, and graduate school policy and procedure
	Ms Ramona Whitworth Director of Graduate Admissions & Records	B400 Avon Williams Campus Tel: 615-963-7256 Email: rwhitworth@tnstate.edu	Degree works, filing graduation, graduate forms/paperwork
	Ms Audie Black Director of Recruitment	B400 Avon Williams Campus Tel: 615-963-7269 Email: ablack1@tnstate.edu	All graduate school related paperwork, forms and inquires
	School of Graduate and Professional Studies	B400 Avon Williams Campus Tel: 615-963-7371 Email: gradschool@tnstate.edu	All graduate school related paperwork and inquiries

Graduate School calendar: https://www.tnstate.edu/graduate/calendar.aspx
(Check important dates here)

College of Agriculture

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