#### Academic Year 2019 - 2020

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This manual is intended for Graduate Students and Faculty in the Biotechnology Graduate Program at West Virginia State University. It is an un-official guide to procedures and policies; it is not a contract, nor does it replace or supersede WVSU regulations.

## 1. Program introduction and overview

The West Virginia State University Biotechnology Graduate Program offers two degrees: a Master of Science in Biotechnology (with student research culminating in a thesis) and a Master of Arts in Biotechnology (coursework only). At this time, we offer no doctoral program.

In Fall 2003, the Department of Biology at West Virginia State College launched a graduate program in Biotechnology. The Biotechnology Graduate Program at WVSU is a unique program in the life sciences that emphasizes skills that a 21st century biologist will need. The goal of the Master's Degree Program in Biotechnology is to provide instruction in the broad field of biotechnology, as well as specialized training in the current concepts and technological advances of sub-disciplines of biotechnology. Students learn state-of-the-art biotechnology and use acquired techniques to conduct research that addresses environmental, agricultural and biomedical issues. In addition, our affiliation with the Research Scientists of the Gus R. Douglass Institute for Land Grant Research provides opportunities to choose from a surprisingly diverse variety of research projects.

The Biotechnology Graduate Program is physically and administratively housed within the WVSU Department of Biology.

#### Curriculum for Master of Biotechnology degrees (MS and MA)

Successful completion of the Biotechnology Graduate program leads to either a Master's of Science in Biotechnology or a Master of Arts in Biotechnology. The MS component of the program prepares students for continued graduate education in an area of the life sciences or diverse careers in the Biotechnology, Pharmaceutical, and Environmental Sciences; and Health Care industries. The MS track requires the development and completion of an independent research project. Secondary Education professionals can also take advantage of the program by pursuing an MA (non-thesis) in Biotechnology. The MA track allows students to choose from a variety of elective courses to meet program requirements.

We base our Biotechnology education on five core courses: Current Concepts in Biotechnology (lecture), two semesters of Techniques in Biotechnology (lab), Biostatistics, and Biotechnology Seminar. All students teach two sections of an undergraduate course(s).

The MS Degree continues with four electives, plus research, writing, defense, and public presentation of your own Master's Degree thesis work.

The MA degree continues with six electives, plus a comprehensive exam covering your Master's coursework. A graduate student who is unable to enter a lab (and therefore cannot earn a MS degree) may opt to pursue an MA degree instead.

#### **Graduate Certificate in Biotechnology**

The WVSU Biotechnology Graduate Program offers a Graduate Certificate in Biotechnology. This 12-credit, coursework-based (i.e., no research or thesis requirements) certification is especially intended for public school teachers who wish to update their knowledge of current Biotechnology and get their certification renewed. The Certificate consists of the core courses of the Program. Details are given in Appendix I. Contact Biotechnology Program Coordinator Dr. Richard Ford if you would like to discuss details such as when classes will be offered. And if you would like to speak with the faculty who teach these courses, or if you would like to sit in on a class, etc., let's talk.

#### **Program contact information**

Administrative Secretary	Ms. Glenna Curry 304-766-3102 gcurry4@wvstateu.edu
Academic Program Associate	TBA as of this writing In the meantime, call 304-766-3102 or email fordri@wvstateu.edu .
Biotech Program Coordinator	Dr. Richard Ford 304-766-5742 fordri@wvstateu.edu
Dean, College of Natural Sciences and Mathematics	Dr. Naveed Zaman 304-766-4248 zamanna@wvstateu.edu
Program web site	http://www.wvstateu.edu/biotechnology
Program mailing address	101 Hamblin Hall West Virginia State University PO Box 1000 Institute, WV 25112-1000
Program fax	304-766-5244

#### **Biotechnology Graduate Faculty and their research programs**

#### **Dr. Mark Chatfield**

Plant Physiology, Microbiology, Molecular Biology **chatfield@wvstateu.edu** Dr. Chatfield's lab is interested in the interaction between microflora of the soil and trees, particularly with respect to reclamation of strip mines.

#### **Dr. Sean Collins**

Social Insect Biology, Insect Population Biology, Ecology **scollin5@wvstateu.edu** Dr. Collins' lab uses molecular approaches to define population distributions of social wasps.

#### Dr. Jonathan Eya

Fish Biology and Nutrition, Aquaculture, Nutrigenomics, Nutritional Immunology **eyajc@wvstateu.edu** Dr. Eya's lab is interested in applied aquaculture, and is currently exploring mitochondrial gene expression relative to nutrition.

#### **Dr. Richard Ford**

Coordinator, Biotechnology Graduate Program. Principles of Biology, Fundamentals Biology, Microbiology, Virology **fordri@wvstateu.edu** *Dr. Ford does not have a lab.* 

#### **Dr. Gerald Hankins**

Tumor Biology, Gene Therapy **ghankins@wvstateu.edu** *Dr. Hankins' lab studies aspects of meningioma biology, including gene therapy and the effects of exogenous chemicals (ex. progesterone) on gene expression.* 

#### **Dr. Katherine Harper**

Chair, Department of Biology. Genetics, Cell Biology, Virology *Dr. Harper does not have a lab.* harperkl@wvstateu.edu

#### Dr. Rob Harris

Muscle Physiology **harrisro@wvstateu.edu** Dr. Harris studies the response of smooth muscle cytoskeletal response to stimuli such as mechanical stress and nutritional chemicals (ex. resveratrol).

#### **Dr. Amir Hass**

Environmental Soil Chemist amirhass@wvstateu.edu; Dr. Hass research focus on fate and chemical behavior of nutrients and pollutants in soil and water, on beneficial use of agronomic, municipal, and industrial waste-streams, and on development of reclamation and mitigation practices to offset anthropogenic impacts on ecosystem services.

#### Dr. David Huber

Environmental Microbiology, Environmental Microbial Genomics, Microbial Diversity, Biofilms, Anaerobic Digestion **huberdh@wvstateu.edu** *Dr. Huber's lab uses molecular approaches to characterize the identity and function of microbial communities in poultry waste treated in a thermophilic anaerobic digester.* 

#### Dr. Barbara Liedl

Plant Breeding and Genetics, Horticulture, Plant Reproductive Barriers, Sustainable Agriculture **liedlbe@wvstateu.edu** Dr. Liedl's lab is developing insect and disease resistant tomato varieties for greenhouse and high tunnel production using marker assisted selection. Her lab also works on reproductive barriers between cultivated tomato and their wild species to assist in transfer of resistance traits.

#### Dr. Padma Nimmakayala

Research Scientist and Assistant Professor: Quantitative Genetics, DNA marker-assisted plant breeding **padma@wvstateu.edu** Dr. Nimmakayala's research focuses on molecular marker development, genetic and physical mapping, marker assisted selection in vegetable crops (pepper, watermelon, sweetpotato and other cucurbits).

#### Dr. Umesh Reddy

Plant Genomics, Biotechnology **ureddy@wvstateu.**edu Dr. Reddy teaches Biotechniques, Genetics, Crop Diversity and Evolution, Graduate Seminar and Eukaryotic Molecular Genetics. *Dr. Reddy's lab specializes in genomics of significant traits in commercially important plants, including cotton, peppers, melons.* 

#### Dr. Tim Ruhnke

Systematics and Evolution of Parasitic Platyhelminths, Environmental Parasitology **ruhnketr@wvstateu.edu** *Dr. Ruhnke studies the phylogeny and evolution of tapeworms in sharks and rays, using both traditional phenotypic characterization as well as molecular (rDNA) approaches.* 

#### Dr. Sanjaya

mechanisms.

Plant Biotechnology, Molecular biology, Synthetic Biology, Biofuels and Phytoremediation. **sanjaya@wvstateu.edu** http://www.wvstateu.edu/energy.aspx *Dr. Sanjaya's lab is leading an active research program to design plants and microalgae with enhanced bioenergy, nutritional value, industrial compounds and phytoremediation for higher production, profitability and sustainability. His lab uses bioinformatics, biochemical, molecular and cell biology, genetics and genetic engineering approaches to understand plant lipid metabolism* 

## Affiliate members of the WVSU Biotechnology Graduate Program

Dr. Krishna Reddy Challa	WVSU
Dr. Sridihar Malkaram	WVSU
Dr. Sharon Molnar	WVSU Department of Chemistry
Dr. Purushothaman Natarajan	WVSU
Dr. Thangasamy Saminathan	WVSU
Dr. Nalini Santanam	Marshall University, Joan C. Edwards School of Medicine
Dr. Cristian Sirbu	Charleston Area Medical Center

### 2. How to apply to the Program

The WVSU Biotech Program accepts applicants twice a year: at the start of the Fall semester (typically in mid-August) and at the start of the Spring semester (typically in mid-January). See the WVSU Biotech web site for upcoming deadline dates. We accept all qualified applicants. However, we can fund only a limited number of assistantships.

#### What's the process?

- Look at the Application Checklist (Appendix A.1). Other application forms are provided in Appendices A.2, A.3. Follow the instructions. Note that the WVSU Admissions Office does not handle <u>graduate</u> admissions. Send application materials to the correct addresses.
- Send us your completed application portfolio. Do this by the due date. Although the <u>graduate program</u> does not have an online application process, you may send application documents via email. See the Application Checklist (Appendix A.1) for details.
- Soon after the application due date, the WVSU Biotech Faculty meet and review all applications. We determine how many GTAs and GRAs will be available for incoming students. Then we make our best decisions from among the applicants.
- We will contact you, regardless of the decision. We will inform you (both via email and on official WVSU stationary) if you have been accepted into the Program and if you have been offered an assistantship. Details such as the amount of the stipend, starting dates for classes, necessary paperwork, etc. will be provided in the notification letter.
- Be aware that there is a deadline to apply for admission <u>with</u> a Graduate Assistantship (October 15 for Spring admission or March 15 for Fall admission), and a deadline for applying to the program <u>without</u> a Graduate Assistantship (November 8 for Spring admission or June 8 for Fall admission).

#### What can an applicant do to be most competitive?

- Begin the application process early. Allow plenty of time for lost documents, slow references, complicated visa arrangements, etc. Be proactive in ensuring that your application is complete (see Application Checklist, Appendix A.1). An incomplete application may not disqualify you, but it significantly hurts your chances. We get good applicants to choose from.
- Contact research faculty members. Find out if there is a faculty member you want to work with, and if that faculty member will accept you into his/her laboratory. All things being equal, a candidate who has already been accepted into a research lab will beat one who has not. Remember: acceptance into the Program <u>does not</u> guarantee acceptance into a research lab, nor vice versa.
- Although we will consider any applicant with a "strong background in biological sciences and physical sciences", we are especially interested in applicants who already possess basic lab skills, and who have an up-to-date knowledge of genetics, molecular biology, biochemistry and physiology.
- Good English is a must! You must be able to communicate, both verbally and orally, in reasonably-correct, understandable English. All classroom instruction is in English, your thesis will be in English, and all Biotech Graduate students must teach at least two class sections. So you must demonstrate to us that your English is solid. Begin by using correct English in all correspondence with WVSU.

## 3. Graduate Teaching Assistantships and Graduate Research Assistantships

#### Policies

Almost all WVSU Biotech graduate students are supported by either a Graduate Teaching Assistantship (GTA) or a Graduate Research Assistantship (GRA). In Fall 2019, we have seven GTA positions and six GRA positions. Our GTAs teach half-time, which means three sections of teaching labs (six teaching hours, plus 14 hours of preparatory time) per week. Our GRAs are also half-time (20 hours per week), and the nature of each GRA varies with the particular lab in which the GRA works.

Graduate Assistantships include full tuition coverage and stipends of \$12,000 per academic year. Currently, there are about \$500 per year of fees that are not covered by WVSU. The fees cover such items as lab and library fees.

The Biotech faculty expect that most graduate students will complete their degree in two years. Although we do not guarantee support for two years, we make every effort to do so, provided the student is making acceptable progress through the Program.

Graduate Assistantships are awarded to students without regard to financial status, race, sex, age, color, religion, disability, national origin or ethnic origin. In order to be eligible for assistantships, you must be enrolled full-time (9 credit hours). As part-time employees, Graduate Assistants may work no more than 20 hours per week, including (totaling) all jobs at WVSU and the Douglass Institute.

Graduate Students who are not up-to-date with Program deadlines (ex., Thesis Proposals due in the third semester) jeopardize their eligibility for renewal of their Graduate Assistantships. Students delinquent with Program deadlines may not enroll for coursework. Although it is the responsibility of the student to know and meet all deadlines, the Thesis Advisor and Coordinator will help this happen. See Section 6 of this Manual for these deadlines.

The following was approved at the Biotechnology Program Faculty at the meeting of February 15, 2019. After five (5) semesters of support in the Biotechnology Program (ex., Graduate Teaching Assistantships or Evans Allen Graduate Research Assistantships, tuition support, or any support that is not the individual Faculty member's to administer), further support will be approved by the Biotechnology Faculty only after discussion with the student and his/her advisor. After six (6) semesters of support, the Biotechnology Program will not support the student.

New foreign students, be advised that you cannot be employed or paid until you have a Social Security number. You cannot apply for one until you have been in the US for ten days, and you should allow time for the application to be processed. Contact the WVSU Office of International Affairs for assistance: international@wvstateu.edu 304-766-3084 306 Ferrell Hall. See Appendix B for more details.

Office assignments are made at the discretion of the Coordinator, in space made available by the Dean. Graduate students should not need to be told that, in all locations in Hamblin Hall, they are expected to behave as professional academics and scientists. As office space in Hamblin Hall is limited, priority for offices will be given to GTAs over GRAs. Mailboxes are provided in the main Biology office, Hamblin Hall room 101. Be sure to check them regularly, even daily.

**Graduate Teaching Assistantship** (GTA) awardees are chosen by the Biotechnology Graduate Faculty, based on such factors as the number of assistantships available and the academic preparedness of the candidates. Once a graduate student has been awarded a GTA, the Faculty make every effort to continue supporting the student for four (4) contiguous semesters, not counting summers.

The teaching performance of GTAs is to be evaluated each semester by the faculty member with whom the GTA has taught. In addition, the Coordinator will observe teaching by new GTAs, as well as any other GTAs who bear further observation. Graduate Teaching Assistantships are awarded on a single-semester basis, but are renewable.

Graduate Teaching Assistantships will not be awarded to students who are delinquent in meeting their deadlines toward graduation (ex. in the second semester in the program, MS students must form a Thesis Committee, complete with committee members' signatures). Renewal of the GTA is contingent upon acceptable performance (see Appendix E, Renewal / Continuation of Graduate Teaching Assistantships).

**Graduate Research Assistantships** (GRA) are available through various funding sources. Some Biotechnology Graduate Faculty are able to employ GRAs through their individual grants monies. For details, contact the faculty member who sponsors the assistantship.

Several GRAs are available to support researchers who work with WVSU's Land Grant entity, the Gus. R. Douglass Institute (GRDI). Recipients of these "Evans Allen / GRDI" GRAs are recommended by the individual researcher, nominated by the Biotechnology Graduate Faculty, and selected by the Douglass Institute. The Douglass Institute first notifies the Biotechnology Faculty of the number of funded GRA positions. The Faculty subsequently provide the Douglass Institute administrators with a ranked list of candidates. This ranking is based on such factors as the academic preparedness of the candidates and a fair distribution of GRA positions among eligible labs. The Douglass Institute notifies the Coordinator of the awardees.

At the meeting of November 10, 2017, Faculty agreed that, in selecting students to receive Evans Allen Research Assistantships, our practice will be to ask

- 1. Would the student be doing work applicable to the USDA mission? This is a must.
- 2. Has the student completed the Core coursework (excluding BT 511)? Going forward, we will require this.
- Are all laboratories getting a fair share of Evans Allen Research Assistantships? To this end, Faculty
  agreed that a student would receive no more than two semesters of Evans Allen Research
  Assistantship support.
- 3. Which student has the most seniority in the Biotech Program? All else being equal, priority will be given to the more senior student.

Faculty did not prioritize the two #3s.

At the meeting of November 17, 2017, the Faculty further decided that "a student may receive more than two semesters of Evans Allen Graduate Research Assistantship support contingent upon acceptable progress, as determined by the Biotechnology Graduate Faculty. A written request for additional support and a progress report is to be submitted by the due date for applications for Graduate Teaching Assistantships, which must be approved by the major professor."

Graduate Research Assistantships are awarded on a single-semester basis, but are renewable.

#### Procedures for getting a Graduate Teaching Assistantship

The Graduate Teaching Assistant (GTA) should see the Academic Program Associate to complete this process. A new application must be completed each semester. The Academic Program Associate will help you prepare a "Letter of Intent" each semester. She/he will guide you through all necessary paperwork.

New foreign students, be advised that you cannot be employed or paid until you have a Social Security number. You cannot apply for one until you have been in the US for ten days, and you should allow time for the application to be processed. See Appendix B.

Note that some GTAs receive actual tuition waivers, while others have their tuition paid by other mechanisms / funding sources (ex. Academic Affairs). Although we tend to refer to all of these as "tuition waivers", the term is not accurate for most GTAs.

#### Procedures for getting a Graduate Research Assistantship

The Graduate Research Assistant (GRA) should see the Academic Program Associate to complete this process. A new application must be completed each semester. The Academic Program Associate will help you prepare a "Letter of Intent" each semester. She/he will guide you through all necessary paperwork.

New foreign students, be advised that you cannot be employed or paid until you have a Social Security number. You cannot apply for one until you have been in the US for ten days, and you should allow time for the application to be processed.

Note that some GRAs receive actual tuition waivers, while others have their tuition paid by other mechanisms / funding sources (ex. Academic Affairs). Although we tend to refer to all of these as "tuition waivers", the term is not accurate for most GRAs.

#### Employment regulations for international students

See Appendix B.

International students who have attended WVSU for less than one full-time year are not allowed to work offcampus, only on-campus positions. After their first full-time year (two full-time semesters), they are permitted to work no more than 20 hours per week outside of the University.

In order for international students to work, they need to have a Social Security Number. Appendix B details what international students need in order to get a SSN. They will require a job offer letter from the Office of International Affairs.

International Students are not able to utilize "work study" funding housed in Career Services. The only positions available are non-work study positions. If you have any open positions and have interest in filling this position, please contact the Office of International Affairs.

The best source for information about employment for international students is the Office of International Affairs.

Mr. Richard Hiles, Assistant Director for International Affairs 306 Ferrell Hall, West Virginia State University, Institute WV 25112 phone 304-766-3084 email: international@wvstateu.edu

## 4. Program requirements

#### Biotechnology Program Core classes

12 credits of Core classes:

- BT 511 Biotechnology Seminar
- 2 credits total (1 credit for each of two semesters) 3 credits
- BT 567 Current Concepts in Biotechnology 3 credits
- BT 571 Techniques in Biotechnology I 2 credits 2 credits
- BT 572 Techniques in Biotechnology II

#### MS degree requirements

BT 555 Statistics

30 total credit hours 12 credit hours of biotechnology program core courses 12 credits elective classes 6 credit hours of graduate research BT 695 Master's Thesis Research

Research Advisor must be a member of WVSU Biotechnology Graduate Faculty.

Thesis Committee is composed of the Research Advisor plus at least two other program faculty. (one may be an Affiliate Graduate Faculty member)

The Research Adviser and the student's Thesis Committee will assist the student in developing the plan of study (if required) for the MS degree and thesis proposal. The student's Thesis Committee must accept both.

a minimum of two sections of graduate teaching experience (even if you're not a GTA)

oral defense of thesis, public presentation of thesis research, two hard-copies of thesis accepted by the WVSU Library

#### MA degree requirements

36 total credit hours 12 credit hours of biotechnology program core courses 24 credits elective classes

no thesis required

a minimum of two sections of graduate teaching experience (even if you're not a GTA)

written and/or oral comprehensive examination over the course work

Because all Graduate Students are required to teach at least two sections, and because many Graduate Students will be employed as Graduate Teaching Assistants, we strongly encourage all Graduate Students to enroll in the elective "Seminar for Teaching Assistants" (BT 501, 1 credit) as early in the Program as possible. One credit of BT 501 counts as a Biotechnology elective.

### 5. Performance standards

A normal course load is nine (9) credit hours for full time graduate students. General requirements for graduation vary depending up on the option being sought. All students must complete coursework with a cumulative GPA of 3.0 on a 4-point scale. Students must complete all requirements within a period of five years following the date of admission to the Program. The Dean of the College of Natural Sciences and Mathematics ("the Dean") may extend these limits upon recommendation of appropriate Program faculty member and approval of the Biotechnology Graduate Faculty.

#### Grading

The following grades are issued for graduate programs with the following GPA value:

- A 4.0 B 3.0 C 2.0
- F 0.0
- I incomplete

In courses applicable to graduate degrees, only the grades A, B, and S represent satisfactory scholarship.

#### Grade point average and academic disqualification

If a student in the Biotechnology Graduate Program receives a final grade of C in a course in the Program (either Biotechnology courses or other courses required in his/her Plan of Study), that student will receive a Letter of Warning. If a student receives a second C in such courses, he/she will be subject to dismissal from the Program. A final grade of F in a course is grounds for dismissal from the Program.

#### Academic warning, probation, dismissal

Students may appeal final grades as described (for undergraduate students) in the WVSU Catalog.

The Biotechnology Program will tolerate no academic / professional misconduct. Un-acceptable behavior includes, but is not limited to: plagiarism, cheating, vandalism, fighting. Should anyone be found to have engaged in such behavior, we will immediately remove him / her from the Program, and the infraction will remain on file as part of that student's permanent academic record.

Dismissal from the Program is subject to review by the Biotechnology Faculty.

#### Incomplete grades

The grade of I (Incomplete) is awarded at the discretion of the instructor upon the request of the student for work not completed because of a serious interruption not caused by the student's own negligence. Faculty members reserve the right not to award an Incomplete. An incomplete grade is not to be assigned to thesis credits to indicate that the work is in progress. Conditions for completing the course work and having a grade assigned are set by the instructor. The work must be completed by the date decided by the instructor, but no later than the end of two semesters immediately following the semester in which the Incomplete was awarded. A student with two or more grades of I is not permitted to register until the work has been completed and the grade assigned.

#### Audit grade

A student wishing an "Audit" grade in a course must officially register for the course. The student must also submit a written request to the instructor by the fourth week of class. The instructor's decision will be final and will be transmitted to the student in writing. A student may re-register for the course at a later date and receive a grade and academic credit.

#### **Master's Thesis Committee**

The Committee consists of the student's Advisor as chair and at least two other members of the Graduate Faculty, one of who may be from outside the department. The Advisor will nominate the members of the Committee after consultation with the student. The Coordinator appoints the Committee members upon the request of the Advisor and sends written notification to the student, Committee members, and Dean. That said, the way it has been done in the Biotechnology Graduate Program is that the student and Advisor choose the Committee, and membership of the Committee is made official by getting signatures on the Graduate Student Checklist.

#### **Thesis Proposal**

By the end of the third semester in the Program (including Summer semester), the Advisor and Committee must approve a thesis proposal. The purposes of this are to define the scope and objectives of the student's thesis work. A proper proposal is also the core of the thesis itself. For more details, see the **Biotechnology Thesis Handbook**, found on the WVSU Biotech web site.

#### Thesis work

"In progress" (IP), "satisfactory" (S) or "unsatisfactory" (U) or letter grades may be assigned each semester for thesis work, since these grades do not imply approval of the thesis itself.

In progress "IP" grades may be assigned to signify adequate progress on theses and projects in which continuous registration is required. All "IP" grades will automatically be changed to "S" grades by the Registrar upon final acceptance of the thesis and completion of all degree requirements.

Only MS candidates are required to write a thesis. The content and format will, for the most part, be determined by your Advisor and Master's Thesis Committee (the "Committee"). Be advised that writing your thesis will be time-consuming and difficult. Understand that your Advisor and Committee will not sign your thesis until they are satisfied with it.

Be aware that WVSU has set standards for theses, and specifies such particulars as the format of the thesis, how copies are to be prepared for binding, and deadlines for submission. If the Library finds that your thesis does not meet editorial guidelines and rejects your thesis, there is nothing we can do about it. Do not wait until the last minute to submit your thesis to the Library. See timelines for graduation, Section 6.

See the **Biotechnology Thesis Handbook** online for further information about writing and submitting both the proposal and the thesis.

#### **Repeat courses**

Graduate students may repeat no more than two courses, with no course being repeated more than once. The original grade will remain posted on the student's permanent record and both grades will be used to determine the student's GPA.

#### Active status

Active status entitles students to utilize the University resources. Master's programs require a minimum of one credit hour per semester to maintain active status in the program.

Lapses in enrollment for three or more consecutive semesters require that the student apply for readmission subject to the admission procedures, criteria and policies in effect at the time the reapplication is made.

#### Leave of absence

A student who finds it necessary to be excused from registration in a graduate degree program for three or more consecutive semesters must formally request a leave of absence from the graduate program. Leave time must be approved by the appropriate academic Dean. Leave will be granted only under exceptional circumstances. Recipients of student loans should note that leave of absence constitutes a break in their program of study, resulting in loss of their loan repayment grace period and/or eligibility for student deferment. International students on F1 and J1 visas normally fall out-of-status during the period of a leave and must return to their home country during the leave.

When a student returns from a leave of absence, decisions concerning previous or current program of studies will be mutually agreed upon by the student's Master's Thesis Committee (for MS students) or the Coordinator (for MA students) and the student.

#### **Comprehensive examination**

Master of Arts (MA) in Biotechnology candidates are required to take and pass a comprehensive examination. This must be completed no later than Week 9 of the final semester. Comprehensive exams will include all graduate coursework taken by the student while in the Program. The Faculty member who taught each course (or if he/she is not available, faculty members possessing expertise in that area) will write and grade questions for that topic.

#### Graduation

The student is responsible for making certain that all requirements have been met and that every deadline is observed. Consult the Graduation Checklist, Appendix C.

Each student who plans to graduate is required to submit to the Registrar's Office an Application for Graduation form. This form, supplied by the Registrar's Office, must be submitted before the end of the third week of classes of the academic semester in which graduation is expected (see Section 6 of this Manual). A student turning in the Application for Graduation after the deadline will graduate the following semester. A graduation fee (\$168 in AY 2019-2020) must be paid at the time of application. The Application for Graduation must be signed by the academic advisor prior to being submitted to the Registrar's office.

A student denied graduation must complete the requirements for graduation and reapply for graduation. A student must be registered for the semester in which the degree is received.

The University will confer the Master's degree when the following minimum conditions have been met:

submission of the required application for graduation form

certification by the Dean that all requirements of the degree being sought have been completed

- achievement of the grade requirements as defined in the University Catalog and by the Program
- satisfactory completion of a thesis, including its acceptance by the WVSU Library (MS degree only)
- successful completion of the comprehensive exam (MA degree only)

No student shall be approved for graduation before the Dean has certified to the Registrar that all academic requirements have been met. The Registrar must promptly notify the candidate and the Dean (or Coordinator) if graduation is not approved for any reason.

#### **Time limitations**

Biotechnology students must complete their degrees within five years from the date of matriculation. Transfer credit must be based on graduate work completed within the five-year period immediately preceding matriculation. Students may apply to revalidate credit taken more than five years prior to matriculation, if course work is relevant to the degree and if approved by the Coordinator and Dean.

Applicants for readmission whose last enrollment in the Program was five or more years prior must have their transcripts re-evaluated by the Coordinator and the Advisor (MS degree). Some courses may need to be repeated or some additional course work required.

#### Transfer credit

Students may apply for transfer of a maximum of six (6) graduate credits to be used toward the requirements of the degree. Ordinarily, these transfer credits will satisfy elective requirements only. Transfer credit must be based on graduate work completed within the five-year period immediately preceding matriculation. A petition for Transfer Credit Form should be filled out by the student and, with an official transcript attached, should be submitted to the Coordinator. Be sure to meet with your advisor to discuss transfer credits and assure that the required courses fit your program of study.

Students requesting a transfer of credit are obligated to make the case for the courses in question. If the requested transfer is for a graduate level course equivalent to one of our own courses, this is usually not an issue and the transfer petition can be handled routinely. If the requested transfer is for a graduate level course not equivalent to one of our own or from a field other than Biotechnology, the student should provide the Coordinator with two things. First is a written rationale for how the course makes an essential contribution to their program of study. Second is a copy of the syllabus of the course in question. Other information may be requested as needed.

## 6. Timeline and Deadlines for Progress in the Program

Note that summer(s) counts as a semester, whether you take classes in the summer or not.

Items denoted with an asterisk (\*) require a signature on the Graduate Student Checklist. (H101D).

Students must be up-to-date on these items in order to register for classes or receive Graduate Assistantships.

## **MS degree:**

#### In your first semester in the program:

- \* Attend the Orientation and Safety Seminar, held the Friday before classes. This is required every semester, but is especially important in your first semester.
- \* With the consent of the faculty member, commit to a lab in which to do your MS research (i.e., choose a Master's Thesis Advisor) and get the Advisor's signature on your Graduate Student Checklist.

If you are teaching, take the course "Seminar for Teaching Assistants" (BT 501).

#### In your second semester:

\* With the help and approval of your advisor, form a Master's Thesis Committee and get their signatures on your Graduate Student Checklist.

#### In your third semester:

\* With the help of your Advisor, write your Master's Thesis Proposal. Consult the Thesis Handbook on the Biotech web site. Submit your completed Proposal to your Committee at least two weeks prior to meeting with them. Get their approval signatures on the Graduate Student Checklist.

#### In the semester before you intend to graduate:

With your advisor, determine when you will graduate. Make sure that you have

- completed all required coursework (with appropriate GPA), or are currently enrolled. This includes core Biotechnology courses, research credits, and electives.
- gotten all transfer credits and other anomalies on-record with WVSU. Remember, if it's not on your WVSU transcripts, it doesn't exist.

completed (or are currently competing) two sections of teaching.

#### In the semester in which you intend to graduate:

Friday of Week 4	Deadline to apply for graduation.Note that this is a University deadline, and the date may change each semester.This is the student's responsibility.\$168 in AY 2019-2020.
Friday of Week 9	<b>Deadline for Thesis Committee to agree that the student may be able to graduate.</b> The Committee may choose to set up a thesis writing plan. The Committee should choose tentative dates for the defense and public presentation.

Friday of Week 13	<b>Deadline to submit a completed thesis draft to Thesis Committee.</b> Reserve rooms with the NSM Secretary for the public presentation and thesis defense. Email the date, time, location and presentation title to the Program Coordinator. It is the student's responsibility to reserve the room and advertise the public presentation.
Tuesday of Week 15	* Deadline for successful thesis defense.
Friday of Week 15	* <b>Deadline for public presentation.</b> The public presentation is part of the Biotechnology Program assessment. Biotechnology Faculty and Staff are encouraged to assess PLO 2: Oral Communication.
Thursday of Finals	<ul> <li>Deadline to submit two ready-to-bind copies of the thesis to the Library is 4:00 pm.</li> <li>Note that the Library must approve the format of the thesis.</li> <li>Do not assume that the Library Staff responsible for signing the thesis will be there.</li> <li>Do not wait until the last minute.</li> <li>Deliver Thesis Deposit Receipt and letter from the Advisor to the Program Coordinator.</li> <li>If these deadlines are not met, the Program Coordinator will not sign the thesis nor write the letter to recommend graduation.</li> </ul>

The Biotechnology Program sets no formal deadlines for August graduation, but the University does. It is the responsibility of the student to know and meet these deadlines. Starting in 2019, the Program Coordinator will not sign theses nor write letters to recommend graduation after July 19.

## MA degree:

#### In your first semester in the program:

- \* Attend the Orientation and Safety Seminar, held the Friday before classes. This is required every semester, but is especially important in your first semester.
- If you are teaching, take the course "Seminar for Teaching Assistants" (BT 501).

#### In the semester before you intend to graduate:

Meet with the Coordinator to verify that you are ready to graduate. Be sure that

- you have completed all required coursework (with appropriate GPA), or are currently enrolled. This includes core Biotechnology courses and electives.
- you have gotten all transfer credits and other anomalies on-record with WVSU.
- you have completed all course deficiencies or other un-fulfilled requirements
- you have completed (or are currently competing) two sections of teaching.

#### During the semester in which you intend to graduate:

You must apply for graduation as announced in the WVSU Academic Calendar. \$168 fee in AY 2019-2020

You must pass a **Comprehensive Exam**, based on information from, and administered by faculty who teach Biotechnology Core courses. Deadline is by the **end of Week 9**.

The Coordinator and Dean will notify the Registrar that all requirements for your graduation are completed. Deadline is the 5:00 pm, the Wednesday of Week 16.

## 7. Safety + Health

### Safety

At the start of each academic semester, the Biotechnology Graduate Faculty hold an Orientation and Safety Meeting for all Biotechnology Faculty and Graduate Students (old and new). Purposes of the meeting include introduction of Program personnel, orientation as to matters of registration and scheduling, and other administrative topics. However, an important topic covered in these meetings is safety, especially in the laboratories. Attendance is mandatory, and roll is taken. Please understand that safety is paramount in the WVSU Biotechnology Graduate Program.

#### WVSU system for notifying students, staff and faculty of emergencies

..... from V.P Kimberly Osborne, January 21, 2016

West Virginia State University's emergency notification system, WVSU Alerts, is used to easily and quickly inform students, faculty and staff during situations such as a campus wide power outage, shelterin-place order, state of emergency, cancellation or delay of classes, etc. This multi-platform notification system communicates important safety messages through voice as well as written notifications. To receive these important notifications directly to a personal e-mail address, a mobile phone number or standard telephone number, you must enter this information in MyState by following the steps provided below.

When the University sends a message using this system, voice notifications will be sent to any mobile device or standard telephone number that has been entered in MyState. Written notifications will be sent to:

all active University e-mail accounts, one additional e-mail address, and a text/SMS message to any mobile device that you've authorized.

By including a mobile device telephone number, you authorize the University to text and/or call this mobile device. Please note: depending on your personal mobile device plan, there may be a nominal fee from your carrier to receive text messages, but WVSU does not charge for this service.

#### Here's what you need to know:

- Every University email account receives emergency messages from WVSU Alerts.
- WVSU Alerts are posted on the University's website, Facebook and Twitter accounts. You may follow West Virginia State University on Facebook and Twitter @WVStateU for the latest announcements.
- The emergency notification system is updated every morning. Therefore, if you add or modify your information today, it will be updated the next morning.
- You must enter your mobile telephone number in MyState and provide the necessary authorization in order to receive a text or voice message.

#### Accessing and modifying your information:

Sign into MyState and click on the Personal Information tab located at the top left corner on the MyState home page.

- Once on this page, please click on Update Immediate Contact Information including addresses and phone numbers.
- Once on this page, please click on Update Immediate Notification Information to modify your information. Here you can add or update any of your previously provided mobile telephone number, standard phone number, outside email, etc.
- If you would like your parent(s), guardian, spouse, etc. to receive University alerts, you can add their standard phone number and/or mobile device number to your account on the Update Immediate Notification Information page. Again, by doing so you authorize the University to text and/or call each phone line.
- Should you have questions or have any issues, please contact the University's Information Technology Department by calling (304) 766-3261 or by e-mailing helpdesk@wvstateu.edu.
- Your safety is of the utmost importance to the University. West Virginia State University encourages you to be mindful of your personal safety. Please take a moment to update your emergency notification information in MyState today.

#### For police, call

Call Public Safety at 304-766-3353 during normal business hours. After hours, Public Safety Officers can be reached at 304-766-3181. **If it's an emergency call 911.** 

#### Health

The WVSU Family Care / Health Center is located in Wilson Hall (Student Union) room 004.

Phone is 304-766-3323.

The web address is http://www.wvstateu.edu/Current-Students/FamilyCare-Health-Center.aspx

Hours are Mondays through Fridays 9:00 am - 4:00 pm, except it is closed 12:00 noon - 12:45 each day, and the first Wednesday each month after 1:00 pm.

Our most recent information is this letter from the previous Assistant Director for International Affairs.

From: Megan Norman <mnorman@wvstateu.edu> Date: 15 August 2017 at 13:44 Subject: Health Insurance for Fall 2017 To:

Welcome new and returning students!!

This year the process for health insurance is different than we have done in the past. International students must provide proof of insurance coverage to the Office of International Affairs. Proof of coverage can be emailed to international@wvstateu.edu. This insurance must be purchased on your own. It will not be automatically added to your account as it was in previous semesters.

A couple options for you to consider are either <u>www.isoa.org</u> or <u>www.internationalstudentinsurance.com</u>. If you find another option that has appropriate coverage, please feel free to purchase from that provider. If you do not provide proof of health insurance coverage to the Office of International Affairs by Monday, August 28, 2017 a hold will be placed on your account.

Please let the International Affairs know if you have any questions. If I am not available, one of the student workers will be able to assist you.

Megan Norman Assistant Director International Affairs West Virginia State University 306B Ferrell Hall Institute, WV 25112-1000

## 8. Graduate and Professional Student Association

In AY 2007 - 2008, the students of the Biotechnology Graduate Program formed the Graduate Student Association. Through this fully-recognized academic organization, Graduate Students can speak with a stronger voice to address the entire range of issues that affect them. A representative of GPSA may be invited to participate at faculty meetings of the Program. The GPSA actively participates in recruitment, informational and public relations activities. An GPSA web site is in the offing.

The President or GPSA in AY 2019-2020 is Mr. Mosope Abanikannda, mabanikannda@wvstateu.edu.

### 9. Frequently asked questions and up-dates to the Manual

Students, Faculty and Staff are encouraged to continually update the Graduate Student Manual, root out errors, add new and relevant info, etc.

### Must graduate students be full-time to get a GTA or GRA?

yes

#### May a grad be full-time with a combination of grad and undergrad courses?

Yes. Any course will count if it is part of the student's approved Plan of Study.

#### May MCATs substitute for GREs ?

No

#### May research credits count as MA electives?

A maximum of four (4) credits of Master's Thesis Research (BT 695) may be credited toward the MA degree. The decision to permit this is given by the student's advisor.

## For MS students, may Master's Thesis Research credits may be counted as electives? No

#### May BT 511 credits count as electives?

Up to two BT 511 courses may count toward graduation, but you may take more BT 511s as free electives.

## In order to be eligible for an Evans-Allen Graduate Research Assistantship during the summer, must a student be enrolled in the summer 3 or 6-week session? Must he/she be full-time? Answer is pending

#### Are summer Evans-Allen RAs full or part-time?

Part-time if they're also taking classes, full-time if they're not

#### Do grads get a tuition waiver for summer classes?

On May 10, 2017, Registrar Donna Hunter said that, if the course has a BT course designation, tuition is waived.

#### Will the Program have mandatory lab rotations for new students?

There will be no formal lab rotations. Students in their first semester will be strongly encouraged to shop around for labs, such that they can make a decision (in writing, signed on the Graduate Student Checklist) by the end of the first semester.

#### What if an MS student wants to change labs?

An MS student may leave his/her lab (i.e., discontinue his/her association with the Master's Thesis Research Advisor). However, if a student leaves his/her Master's Thesis lab, his/her continued support is his/her own concern; the Program is under no obligation to find alternative support. Although the Biotechnology Faculty "make every effort to continue supporting the student for four (4) contiguous semesters", the clock does not start again when a student enters a new lab.

#### Must students take BT 501?

At the faculty meeting of August 15, 2012, it was agreed by consensus that, although BT 501 will not be officially required, all new students will be strongly prevailed upon to take the course in their first semester, and thereafter as deemed necessary by their teaching performance.

#### Can grad students who don't get a degree get a Certificate in Biotechnology?

At meeting of April 5, 2013, faculty say "yes", assuming that all requirements of the certificate are met. Students may not receive both a Certificate and a degree.

#### Do grads get their lab fees covered by their tuition support?

On September 23, 2013, the cashier says "no", they have to pay their own lab fees.

#### Must GTAs hold office hours?

GTAs must hold one office hour per class they teach. minutes of Aug 17, 2011

#### Apart from assistantships, are there other grants or scholarships available to Biotech Grad Students?

Yes. For example, the Dr. Ida F. Kramer Endowed Scholarship may be awarded to Biotech Grad Students who are preparing to teach in higher education. Your advisor will be glad to help you find and apply for a host of grants, which will both support your work and theirs. Looks great on your *CV*, too. Watch Hamblin Hall bulletin boards for opportunities.

#### Is tuition waived / covered for undergraduate courses?

In Spring 2010, Bryce Casto ruled that graduate students may not get tuition waived for undergraduate courses.

# What if you want to take a course that's not in the Biotechnology Program as a graduate elective and count it toward your degree?

OK, if your committee approves it as part of your Plan of Study.

## May a student who has already taken (for credit) a 3XX course later take the same course at the 500 level (5XX) for credit?

At the March 21, 2014 Biotech Faculty meeting, the answer was "no".

#### Must an MS student write and follow a "Thesis Writing Plan"?

Before March 21, 2014, the answer was "yes". But at that meeting, this requirement was changed to one that the student's advisor and/or committee may require, if they so choose.

#### Are Skype interviews required only for international applicants?

No. At the meeting of April 4, Biotech Faculty agreed that all applicants who are unknown to us should do a Skype (or in-person) interview.

#### Is Advanced Organic Chemistry (Chem 525) an approved graduate elective?

Yes

#### What is the timeline for part-time MS graduate students?

At the faculty meeting of September 19, 2014, it was decided that a part-time MS student must choose a thesis advisor in the first semester, and choose a committee and Plan of Study in the second semester. Thereafter, the advisor and committee are responsible for setting the timeline for progression through the program.

#### Must there be an outside member of Master's Thesis Committees

At the BT Faculty meeting of February 20, 2015, the consensus of the Faculty was that there is value in having an "outside" set of eyes. Further action was tabled.

## Do students get reimbursed by the Biotech Program for the cost of binding the thesis that they must leave with the Program?

Yes. Save your receipt for binding that you got from the Cashier, and present it to the Program Associate. In AY 2019-2020, the fee is \$198. Surely that's the fee for two copies!.

# May students be supported (tuition and/or Graduate Teaching Assistantship) for more than four semesters?

Yes. But if a student seeks support beyond four semesters, he/she must appear at a meeting of the Biotechnology Graduate Faculty and explain/defend the request. (BT meeting of September 18, 2015)

# The Biotechnology Graduate Program will no longer be the enforcement point for immunizations for international applicants.

The consensus of Biotech Faculty at a meeting of November 20, 2015. The requirement is unenforceable by our academic program, and a duplication of US visa requirements.

#### **Office of International Affairs**

This office was established in Spring 2016. It is in Ferrell Hall rooms 304 and 306. Phone 304 - 766 - 3063. Fax 304 - 766 - 4127. Email **international@wvstateu.edu** In Fall 2019, hours are Mondays through Friday, 8:30 am to 5:00 pm. The leader at this writing is Mr. Richard Hiles, Assistant Director of International Affairs and Academic Educational Outreach.

#### How many credits per semester are covered by a Graduate Assistantship?

12 credits. beyond that, a student must get permission from the Dean and Provost. (GSC meeting of August 30, 2016)

#### How many printed copies of the thesis does WVSU require?

Two. One for the Library and one for the Biotech Program. Confirmed with Janis Young and Scott Woodard, May 17, 2017.

#### Must a graduate student be enrolled in at least one credit in the semester he/she graduates? As per verbal assurance by Registrar Ms. Donna Hunter on May 22, 2017, no.

#### Must Biotech Faculty approve all applicants to the Program (MS or MA, part or full-time?) At the Biotech meeting of August 10, 2017, the answer is yes.

#### Is the Plan of Study required?

At its meeting of August 8, 2018, Biotech Faculty voted to discontinue the formal requirement for a Plan of Study.

## Does the Program Coordinator have the authority to make decisions about TA assignments or limit TA support to four semesters, without consent of the Biotech Faculty?

At its meeting of October 18, 2018, the Biotech Faculty voted "no".

## 10. Appendices

- A. documents required to apply to the Biotechnology Graduate Program
  - 1. Application Checklist for the Biotech Program (page 25)
  - 2. Application form for Admission to West Virginia State University (pages 26-28)
  - 3. Letter of Recommendation form (pages 29-30)
- B. Social Security information for International Graduate Assistants (pages 31-32)
- C. Graduate Student Checklist (pages 33-34)
- D. Evaluation of Graduate Teaching Assistant form (pages 35-36)
- E. Renewal / Continuation of Graduate Teaching Assistants policy and form (page 37)
- F. Graduate Assistant absence policy (page 38)
- G. Graduate Certificate in Biotechnology information (page 39)

August 26, 2019

To check on th	ne status of your applic	ation, contact the	e Biotechnology P	rogram Coordinator.	
				npanying authentication of i	
10	official IELTS score at le	east 7			
9	official TOEFL score at or	least 80 V	VVSU university co	de is <b>5903</b>	
8	official evaluation of pos www.wes.org or www.				
Documents 8 ·	• 10 are additional admi	ssion requiremer	nts for internation	al applicants.	
7	official GRE scores: ve	rbal at least 140, q	juantitative at least	150 University code is 59	903.
Documents 7 ·	• 10 should be sent to		101, West Virginia		
6	International applicants:	send a copy of y	our passport. A sc	an or photocopy is sufficien	ıt.
5				J Cashier's Office is 304-76 ay this fee until you arrive a	
4	thre	e official letters of	professional recon	nmendation. There is a form	n.
	statement of purpose (				
2	application form for adm		•	ity	
1				s. We require a minimum G all GPA). This is required f	
	o should be sent to		, West Virginia Sta		u.edu
Documents 1.	· 6 should be sent to	Coordinator Biot	echnology Graduat	e Program	

Deadlines to apply for admission <u>with</u> a Graduate Assistantship are October 15 (Spring admission) or March 15 (Fall admission). Deadlines to apply for admission <u>without</u> a Graduate Assistantship are November 8 (Spring admission) or June 8 (Fall admission).

## Appendix A.2 ...... Application for Admission to WVSU Graduate School

## personal data:

Date of Application			Social Sec	urity N	lumber						
Last Name				First Name					MI:		
Preferred First Name		Γ	Date of Birtl	h							
Current Address: S Box:	0.										
City:			State:		Zip:			County	•		
Home Phone Number:			Business Number:	/Othe	r Phone						
Email: Pager:											
Permanent Address	(if differen	t):									
Have you ever beer name(s)?	enrolled ir	n scho	ol unde	r any other		Yes		No			
If so, please provide name(s):	full										
Are You a U.S. Citizen?	Yes		No		lf no	t, please	e indic	ate imm	gratio	n status:	
VISA:											
(Include a copy of b Card)	(Include a copy of both sides of your I-551 Card)										

### name of parent, guardian or spouse: (May be used in case of emergency-optional):

(Last, Firs	st, Middle):					Relati	onship:		
Street or I	P. O.								
Box:									
City		State	Zip		Сс	ounty		Country	
Home Pho	one:		Busir	ness/Other P	hon	ne:			
Email:					F	Pager:			

**additional personal data:** (Disclosure of additional personal data is optional and will in no way affect a decision concerning your application.)

Date of Birth:		Birthplace (State):		Μ	ale:		Fer	nale:	
Ethnic Status:	H: Fo	d in the U	IS Arme	d	Yes		No		
Will you be applying for veteran's benefits?			Yes		No				

#### enrollment data:

Degree in which you pla enroll:	MA		MS					
Year you plan to enroll:		Term	Term/Semester you plan to enroll:					
State of Residency:			If resident of WV, how long have you (and /or you parent					
or guardian) lived in WV?	Years				Mont	hs		

#### student category:

1.Post-Baccalaureate Graduate2.	Transient Graduate
---------------------------------	--------------------

academic history: post-secondary:

name of college / university	loca	tion g	degree	e major		

	I plan to ta	ake	Took the	e GRE in	Mo.		Yea	ar	
My GRE s are:	cores	V	Q			Written Assessment:			

Have you been suspended or expelled for academic or disciplinary reasons? Yes 🗌 No 🗌.

If you have, are you currently eligible to return to that institution? Yes  $\Box$  No  $\Box$ .

List the three (3) people you are asking to write letters of recommendation. They should be familiar with your educational and/or professional work and be able to evaluate your potential success as a graduate student.

name	position	address	email
1.			
2.			
3.			

I certify that all statements in this application are complete and true and I give the aforementioned Institutions permission to use this information for statistical and reporting purposes. I further understand that any willful misrepresentation of information given in this application may be grounds for denial of my admission or dismissal.

signature		date	
-----------	--	------	--

Note: West Virginia State University adheres to the principles of equal opportunity without regard to race, color, gender, age, creed, national origin or disability. This policy extends to all programs and activities supported by the college.

send to: Richard Ford Coordinator, WVSU Hamblin Hall West Virginia State University Box 1000 Institute WV 25112-1000

## Appendix A.3 ..... Letter of Recommendation form

February 10, 2014

West Virginia State University Biotechnology Graduate Program

name of applicant

#### to the student applicant:

The Family Privacy Act allows applicants to inspect and review all materials in their files, except for letters of recommendation written prior to January 1, 1975.

Upon its completion and submission, college faculty will utilize this document to evaluate your qualifications to be admitted into the Biotechnology Graduate Program. It may also be used to assist in the selection of Graduate Assistants. Before submitting this form to the person who will be writing your recommendation, be sure to check one of the following statements relative to the confidentiality of your files.

\_\_\_\_\_ I **DO** wish to waive my right to see this document

\_\_\_\_\_ I **DO NOT** wish to waive my right to see this document

signature of applicant, date \_\_\_\_\_\_

#### to the person making this recommendation

The above-named applicant for admission to the Biotechnology Graduate Program has given your name as a reference. The Program would appreciate your cooperation in providing the following information regarding the applicant's qualifications. References should be acquainted with the applicant's academic ability. Please print or type.

What is your name and title/position?	
What is your institution (name and address) ?	
How long have you known this applicant, and in what capacity?	

Using the scale **high**, **average**, **low**, or **cannot judge**, rate the applicant's characteristics with respect to the following criteria. Use your own student body and recent graduates as a reference group. If the applicant is an employee, use other employees with similar backgrounds as a reference group.

characteristic	<u>high</u>	average	low	<u>cannot judge</u>
general intelligence				
knowledge of the field				
maturity				
dependability				
work ethic				
research potential				
teaching potential				

What is your over-all recommendation for this applicant?

very strong	strong	average	below average
-------------	--------	---------	---------------

\_\_\_\_\_ recommend with reservations (please explain below)

On letterhead, please provide additional comments concerning this applicant's strengths and weaknesses. Comments should pertain to the applicant's ability to undertake graduate studies. Be as specific as possible.

#### 

When you have completed this form, <u>either</u> enclose it in a sealed envelope with your signature across the seal, then give it to the student. The student will then include your recommendation with the completed application portfolio <u>or</u> send this recommendation directly to

Richard Ford Coordinator, WVSU Biotechnology Graduate Program 101D Hamblin Hall West Virginia State University Box 1000 Institute WV 25112-1000

fordri@wvstateu.edu

If you have any questions or comments, please feel free to contact Dr. Richard Ford. We appreciate your time and effort.

## Appendix B ..... International Students and Social Security Numbers

#### Social Security Administration publication No. 05-10181 July 2015

Are you temporarily in the United States to attend a college, language, vocational or non-academic school with a non-migrant **F-!, M-1** or **J-1** student classification? Your school may ask you for your Social Security number. Some colleges and schools use Social Security numbers as student identification numbers (*note: WVSU does not.*) If you don't have a Social Security number, the college or school should be able to give you another identification number (*WVSU uses "A numbers" instead.*).

Social Security numbers generally are assigned to people who are authorized to work in the United States. Social Security numbers are used to report your wages to the government and to determine your eligibility for Social Security benefits. Social Security will not assign a number to you just to enroll in a college or school.

#### What do I have to do to work in the United States?

If you want to get a job on campus, you should contact your designated school official for international students (*At WVSU, that's the Assistant Director of the Office of International Affairs.*). This official can tell you if you're eligible to work on campus and can give you information about available jobs. Also, your school may approve certain off-campus employment, as permitted under Department of Homeland Security (DHS) regulations. If your school has authorized you to work either on or off campus, and you meet Social Security's eligibility requirements described in the next section, you can get a Social Security number.

#### How do I apply for a Social Security number?

In general, only non-citizens who have permission to work from the DHS can apply for a Social Security number. We suggest you wait 48 hours after reporting to your school before you apply for a Social Security number. Waiting will help ensure we can verify your immigration status with the DHS.

To apply for a Social Security number at your local Social Security office:

complete an application for a Social Security card, and show us documents proving your work-authorization status, age, and identity.

#### **Immigration status**

To prove your immigration status, you must show us a current admission stamp in your unexpired foreign passport and *Arrival / Departure Record* (form I-94), if available. If you're an F-1 or M-1 student, you must show us your *Certificate of Eligibility for Non-immigrant Student Status* (form I-20). If you're a J-1 exchange visitor, you must show us your *Certificate of Eligibility for Exchange Visitor Status* (form DS-2019).

#### Work eligibility

If you're an F-1 student and eligible to work on campus, you must provide a letter from your designated school official that

identifies you confirms your current school status identifies your employer and the type of work you are, or will be, doing. We also need to see evidence of that employment, such as a recent pay slip or a letter from your employer. Your supervisor must sign and date the employment letter. This letter must describe

your job your employment start date the number of hours you are, or will be, working, and your supervisor's name and telephone number.

If you're an F-1 student authorized to work in curricular practical training (CPT), you must provide us your Form I-20 with the employment page completed and signed by your school's designated official.

If you're an F-1 or M-1 student and have a work permit (form I-766) from the DHS, you must present it.

If you're a J-1 student, student intern, or international visitor, you must provide a letter from your sponsor. The letter should be on sponsor letterhead with an original signature that authorizes your employment. We cannot process your application if

your on-campus or CPT work begins more than 30 days from your application date, or the employment start date on your work permit from the DHS (for, I-766) is a future date.

#### Age

You must present your foreign birth certificate if you have it or can get it within 10 business days. If you can't present your foreign birth certificate, we can consider other documents, such as your passport or a document issued by the DHS, as evidence of your age.

#### Identity

We can only accept certain documents as proof of identity. An acceptable document must be current (not expired) and show your name, identifying information, and preferably a recent photograph. Social Security will ask to see your current U.S. immigration documents, such as a current admission stamp on your unexpired foreign passport and *Arrival / Departure Record* (form I-94), if available.

All documents must be either originals or copies certified by the issuing agency. We cannot accept photocopies or notarized copies of documents. We also cannot accept a receipt showing that you applied for a document. We may use one document for two purposes. For example, we may use your admission stamp in the unexpired foreign passport as proof of both work eligibility and identity.

#### Do I need a Social Security number before I start working?

We don't require you to have a Social Security number before you start work. However, the Internal Revenue Service requires employers to report wages using a Social Security number. While you wait for your Social Security number, your employer can use a letter from us stating that you applied for a number. Your employer may use your immigration documents as proof of your authorization to work in the United States. Employers can find more information on the internet at <a href="http://www.socialsecurity.gov/employer/hiring.htm">www.socialsecurity.gov/employer/hiring.htm</a>

#### **Contacting Social Security**

Visit <u>www.socialsecurity.gov</u> anytime to apply for benefits, open a *my Social Security* account, find publications, and get answers to frequently asked questions. Or call us toll-free at **1-800-772-1213** (for deaf or hard of hearing, call our TTY number, **1-800-325-0778**). We can answer case-specific questions from 7:00 am to 7:00 pm, Monday through Friday. Generally, you'll have a shorter waiting time if you call after Tuesday. We treat all calls confidentially. We also make sure you receive accurate and courteous service, so a second Social Security representative monitors some telephone calls. We can provide general information by automated phone service 24 hours a day. And remember, our web site <u>www.socialsecurity.gov</u>, is available to you anytime and anywhere.

Appendix C Grad	uate Student	Checklist	form Spring 2019
name		MS o	r MA track
application materials cons	ult Application Che	cklist semester started _	
Orientation and Safety Seminar (	date)		
What remediation must the stude	nt do, in addition to	normal Biotech coursework?	
signatures (and date) of Thesis (		eeds 36 credits	
core courses MS and		electives MS needs 1	
BT 511 Seminar		BT 501 Teach Seminar	1 cr
BT 511 Seminar BT 555 Statistics	1 cr		
	3 cr		
BT 567 Current Concept			
BT 571 Biotechniques I BT 572 Biotechniques II			
BI 572 Biotechniques in	2 cr		
research MS needs 6	credits		
BT 695 Master's Thesis	Res		
BT 695 Master's Thesis	Res		
BT 695 Master's Thesis	Res		

teaching (MS and MA) All students must have taught at least two sections.

Committee signatures (and date) of <b>approval of thesis proposal</b> (MS)
Committee signatures (and date) of <b>approval of Thesis Writing Plan</b> (MS) optional
Committee signatures (and date) for <b>public presentation of thesis research</b> (MS) PLO 2 oral is assessed at this time.
Committee signatures (and date) for <b>oral defense of thesis research</b> (MS) Do assessment PLO 2 oral rubric.
Coordinator's signature for comprehensive examination (MA)
signatures of Advisor, Committee, Coordinator and Dean signature page on completed thesis (MS)
Pay Cashier (Ferrell Hall) for binding costs of two (2) copies of the thesis. The Biotech Program will reimburse you for one copy; see the Academic Program Associate.
thesis delivered to Library (MS) Library issues a Master's Thesis Deposit Receipt. Keep a copy in the file.
Advisor's letter recommending student for graduation (MS and MA) Keep a copy in the file.
Coordinator and Dean letter recommending student for graduation (MS and MA) Keep a copy in the file. Do assessment PLO 1 test.
Biology Lab Manager signature says all Biology Department keys have been returned. (MS and MA)
Please leave <b>contact info</b> with Program Coordinator so we can keep in touch after you leave WVSU.

## Appendix D ...... Evaluation of Graduate Teaching Assistants

The faculty member in charge of the course should, throughout the semester, observe the Graduate Teaching Assistant's work in both the classroom as well as in preparation for their teaching. The faculty member should provide guidance to the GTA as needed during the semester. The faculty member should complete and sign this form during the final two weeks of the semester. The GTA should sign to acknowledge his/her receipt of the form, and may attach a written response to the evaluation. Signed copies will be given to the GTA and the faculty member, and the original will be kept in the GTA's file.

GTA being evaluated	faculty member doing the evaluation						
course, section(s), semester, year							
date(s) of classroom observation(s)							
How often did the GTA teach the lab?							
	e rarely never NA / ?						
On a scale of 1 (worst) to 5 (best), or ? if unl							
punctuality in starting and ending labs							
knowledge of the theory underlying the	labs						
knowledge of the lab activities							
conveying to students the purpose of t	conveying to students the purpose of the lab vis-à-vis the theory						
teaching effectiveness	teaching effectiveness						
interactions with the students in class	interactions with the students in class						
interactions with students outside of cla	ass						
effectiveness in testing							
test preparation (appropriate, fair)	test preparation (appropriate, fair)						
grading (appropriate, fair)	grading (appropriate, fair)						
promptness in returning materials to st	udents						
keeping appointments made with the s	tudents and faculty						
maintaining a professional demeanor a	and attitude						
growth / development during the seme	ster						
average score (excluding NA / ?)							

Specifically or generally, what are the GTA's best qualities with respect to his/her job?

Specifically or generally, in what areas should the GTA work to improve?

other remarks, observations, suggestions:

In sum, was the GTA's performance unsatisfactory, satisfactory, or superior?

signature of faculty member in charge of course \_\_\_\_\_ date \_\_\_\_\_

signature of GTA \_\_\_\_\_ date \_\_\_\_\_

Signature of the GTA does not denote agreement with the comments, only that the GTA has had the opportunity to review this evaluation. The GTA may, if desired, attach a written response to the evaluation which will accompany this evaluation in the GTA's permanent file.

## Appendix E ...... Renewal / Continuation of Graduate Teaching Assistantship

#### From the Graduate Student Manual:

October 5, 2015

"Recipients of Graduate Teaching Assistantships (GTA) are chosen by the Biotechnology Graduate Faculty, based on such factors as the number of assistantships available and the academic preparedness of the candidates. Once a graduate student has been awarded a GTA, the Faculty make every effort to continue supporting the student for four (4) contiguous semesters. ...

The teaching performance of GTAs is to be evaluated each semester by the faculty member with whom the GTA has taught. ...

At its meeting of August 19, 2009, the Biotechnology Graduate Faculty decided that Graduate Teaching Assistantships will not be awarded to students who are delinquent in meeting their deadlines toward graduation (ex. in the second semester in the program, MS students must form a Thesis Committee, complete with committee members' signatures). .... Graduate Students who are not up-to-date with Program deadlines jeopardize their eligibility for renewal of their Graduate Assistantships. Although it is the responsibility of the student to know and meet all deadlines, the Thesis Advisor and Coordinator will help this happen."

Using appropriate criteria, the Biotechnology Graduate Faculty decide to whom to award GTAs. Normally, GTAs extend for two semesters, and are normally renewed for a total of four consecutive semesters. However, it is the responsibility and prerogative of the Faculty to monitor GTAs in all aspects of their academic performance, and with due process, to terminate any GTA who fails to fulfill the requirements of the GTA.

1. student name and A number \_\_\_\_\_

2. year and semester for which the student seeks renewal of his / her GTA \_\_\_\_\_\_

- 3. In the semester for which the student seeks renewal of his / her GTA, will he / she be a full-time student?
- 4. Has the student met all requirements and deadlines, this semester and for previous semesters, for progression through the Biotechnology Graduate Program?
- 5. How well is the GTA performing, so far? Is there any reason why the assistantship should not be renewed? If there is a problem, has the GTA been duly advised of the problem (in writing), and given assistance in correcting the problem? If there's anything negative to report, please attach a detailed written statement.
  - A. **reports from the GTA's supervising Faculty in the current semester** Include a formal Evaluation of GTA form (Appendix D) or a WVSU Classroom Observation Report.
  - B. report from the Thesis Advisor (MS students) or Program Coordinator (MA students)
  - C. report from Biotechnology Graduate Program Coordinator
  - D. report from Academic Laboratory Manager
  - E. other reports (ex. Dean of the College of NSM, other Graduate Faculty)

## Appendix F ...... absence policy for graduate assistantships February 17, 2017

In all cases, Graduate Assistants (GAs) must earn their assistantship money. In all cases, GAs should be forthcoming with their advisors / supervisors about any issues that may affect their job performance. The Program Coordinator should be kept in the loop.

#### **Research Assistants**

In the research setting, the individual supervisor determines absence policy in his/her lab. Infrequent, brief absences are unlikely to cause concern, so long as the GA's over-all performance is satisfactory. For absences longer than two weeks, the supervisor should notify the coordinator of the absence. The supervisor's letter should address three questions: "How much work has been / will be lost?", "How will the missed work be made up?", and "Should the GA's pay be docked?". There would be a presumption that the supervisor's judgement on the matter would be followed.

#### **Teaching Assistantships**

The GTAs' immediate supervisors are the instructors of record of the courses in which they teach. As the GTAs' job requires their attendance at set, scheduled times, there can be no flexibility in their responsibility to be present. Policy on short-term, un-expected absences was emailed to the Program in January 2016 (email attached, below).

Policy about absences of longer than two weeks is the same as that for GRAs. However, there is less flexibility for making up lost work. Also, the absent GA's responsibilities must be covered by someone else, which creates a burden on the substitute. Program Faculty may seek a fair solution that both covers the GRA's responsibilities and minimizes possible financial impact on the GTA. But if such a solution isn't found quickly, the Coordinator will notify the WVSU R+D Corporation.

Hi TAs –

January 20, 2017

Because our schedules have been disrupted by these snow days, it seems a good time to remind you that you are responsible for teaching your labs, so long as WVSU is open. If you cannot be there, then it's your responsibility to find a substitute to teach the lab.

- Plan A: Be there yourself. If you can't, then
- Plan B: <u>Get confirmation</u> from your supervising instructor that he/she will either cover the lab or find a substitute for you. The sooner the better. But if time is getting short and you can't reach your supervising instructor, then
- Plan C: Get another TA or a faculty member to cover the lab. Get confirmation. If that doesn't work, then
- **Plan D**: Call the main office (304-766-3102) and <u>get confirmation</u> from Glenna that she will contact faculty to cover the lab.

But don't just leave a message and assume! Of course, sudden, un-expectable emergencies can happen, and then we just deal with it as best we can. But please consider my point, and have a plan (complete with phone numbers) in case you can't be there to teach.

## Appendix G ...... Graduate Certificate in Biotechnology

#### Graduate Certificate in Biotechnology West Virginia State University Biology Department / Biotechnology Graduate Program

March 18, 2011

A "Graduate Certificate in Biotechnology" from the West Virginia State University Biotechnology Graduate Program is earned by completing and passing the following courses:

- 1. Biotechnology Seminar (BT 511) ... taken twice
- 2. Biostatistics (BT 555)
- 3. Current Concepts in Biotechnology (BT 567)
- 4. Techniques in Biotechnology I (BT 571)
- 5. Techniques in Biotechnology II (BT 572)
- 3 credits

1 credit each

2 credits

3 credits

2 credits ..... 12 credits total

A student may count no more than two (2) final grades of "C" toward the certificate, and must have a GPA of 2.5 or better in these 12 credits.

Entrance requirements are: an undergraduate degree in a related field, an undergraduate GPA of at least 3.0 (on a four-point scale), TOEFL scores where appropriate of at least 550 (or at least 79 on the computer test), and approval of the Biotechnology Graduate Faculty. The Biotechnology Graduate Faculty may, under special circumstances, waive any of the other entrance requirements, including course prerequisites.. It is understood that students entering the Graduate Certificate in Biotechnology program have a current knowledge of the fields of Cell Biology / Physiology, Genetics (Classical and Molecular), and Chemistry (at least three semesters of college-level Chemistry).

Course transfers and course substitutions are to be decided by the Biotechnology Graduate Faculty, with the certificate candidate being responsible for providing any supporting documentation. No more than four (4) credits may be transferred from another institution.

This Certificate program will take effect in the Fall 2011 semester. However, students may apply these courses (with acceptable final grades) taken in previous semesters to certificates to be awarded in Fall 2011 or later semesters. All courses to be applied to the Graduate Certificate in Biotechnology must be completed within five (5) years of the semester in which the student starts the program.

The University will charge no fee for awarding a Graduate Certificate in Biotechnology.

For more information, contact the Coordinator of the Biotechnology Graduate Program

Dr. Richard Ford 101D Hamblin Hall, WVSU Box 1000, Institute WV 25112-1000 304-766-5742 fordri@wvstateu.edu

To apply, contact the Director of Registration and Admissions

Mr. Ryan Kendrick 127 Ferrell Hall, WVSU Box 1000, Institute WV 25112-1000 304-766-4146 registration@wvstateu.edu