



## Welcome and Introduction

The Genomic Sciences Graduate Student Handbook is designed to introduce new graduate students to our degree programs, and to provide a reference for programmatic and University procedures and regulations throughout a student's graduate program. In addition, we address some of the unique challenges and opportunities that a university-wide graduate program can offer to both students and mentors.

This handbook is formatted as a chronological guide through a graduate program and covers all aspects of the Genomic Sciences Graduate Programs. We hope that you will consult sections of this handbook as needed throughout your time here, but many resources can also be found on our website (<http://brc.ncsu.edu/genomics/>) or on the Graduate School's website (<http://www.ncsu.edu/grad>).

With great gratitude we thank those who made this handbook possible. It is with the aid and material from other departments at NC State and the valued suggestions from previous students that have helped make this handbook a trusted guide. The handbook is always a work in progress. We hope that you will provide feedback and suggestions to ensure that this resource continues to offer current and helpful information for future graduate students.

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I. ADMINISTRATIVE PERSONNEL

*Co-Director of Graduate Program (Bioinformatics)*

**Spencer Muse, Ph.D.**

Professor, Department of Statistics

College of Sciences

Campus Box 7566

[muse@stat.ncsu.edu](mailto:muse@stat.ncsu.edu), 919-515-1948

*Graduate Program Coordinator, Genomic Sciences Graduate Program*

Tyler DeAtley

[tdeatle@ncsu.edu](mailto:tdeatle@ncsu.edu)

3510 Thomas Hall

Campus Box 7614

[tdeatle@ncsu.edu](mailto:tdeatle@ncsu.edu), 919-515-2291

Ricks Hall Office:

308 Ricks Hall

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## II. ABOUT THE PROGRAM

### 1. HISTORY

The Genomic Sciences graduate program at North Carolina State University was initiated in fall 1999. The program offers degrees in Bioinformatics and includes a university-wide group of diverse faculty, staff and students, spanning over twenty-five departments in six different colleges. The interdisciplinary nature of this program introduces several unique features that set our program apart from traditional department-based programs.

### 2. GENOMIC SCIENCES

Genomic Sciences students pursue a degree in a university-wide program, not a “department.” Genomic Sciences students initially interact with either the Director for Bioinformatics. These faculty help choose first-semester courses and guide the student until they has chosen a Major Advisor. At that time, the Major Advisor’s department becomes the student’s home department. The student, however, is still subject only to the academic requirements of the Genomic Sciences degree program, *not* the academic requirements of the home department’s degree program.

Genomic Sciences students choose their Major Advisor from a group of more than 100 faculty spanning twenty-five departments (<https://brc.ncsu.edu/people/faculty>). It is the responsibility of each student to learn about the research interests of the faculty, as a first step in choosing a Major Advisor. As detailed later in this handbook, students should make appointments with faculty to discuss their research programs, and identify a subset that interests them.

Regardless of the degree goal, all Genomic Sciences students take a common core of classes. This provides a foundation for later classes, but also serves to encourage interactions between Bioinformatics and students in the Genetics and Genomics Graduate programs. Your graduate student community is more diverse than most on campus because it includes two different disciplines. Use this to your advantage!

### 3. GRADUATE PROGRAMS

- Bioinformatics students will have extensive discussions with faculty (although laboratory rotations are certainly welcome).
- All Ph.D. students should select a Major Advisor by the end of the second semester.
- The Director of the Genomic Sciences Graduate Program and Graduate Services Coordinator will serve as a general resource throughout the student’s graduate program.

**Please check our Genomic Sciences graduate program homepage for resources, events, and other relevant changing information: <http://brc.ncsu.edu/genomics/>. Finally, the Graduate School has provided an OUTSTANDING web site for new graduate student survival at NC State University and in Raleigh. Please explore: <http://www.ncsu.edu/grad/current-students/survival-guide.html>**

### III. BEFORE YOU START

#### 1. ESTABLISHING NORTH CAROLINA RESIDENCY FOR US CITIZENS

Establishment of North Carolina Residency for US Citizens

You are a resident of the state once you arrive in the state with the intention to live here. This is distinctly different from establishing NC Residency for Tuition Purposes. For tuition purposes, all students who are US citizens are expected to establish North Carolina residency within the first year of residence in the state. Please see the information regarding establishing [Residency for Tuition Purposes](#) that is located on the Graduate School website (<https://grad.ncsu.edu>). *Failure to establish North Carolina residency within the first year will lead to hefty out-of-state tuition charges in the second year for which the student is responsible.*

#### 2. GETTING PAID

The procedure for getting paid depends on the source of your support. You must see the appropriate personnel (see below) as soon as you arrive to sign the appropriate appointment and tax forms, if applicable. Your first check may not arrive until the end of your first full month at NCSU, so plan accordingly!

If you are receiving state funds through the University as a Genomic Sciences Fellow, your paperwork will be handled by Mr. Todd Marcks, Fellowship & Grants Administrator, in the Graduate School (919-515-1481). All graduate students are paid monthly via mandatory direct deposit.

For all other support, please see Tyler DeAtley (3510 Thomas Hall *or* 308 Ricks Hall; 919-515-2291) to sign the appropriate paperwork as needed. Graduate students are paid either bi-weekly or monthly via mandatory direct deposit. You can view your paycheck online via MyPack Portal under the “For Faculty and Staff” tab: click on “Payroll & Compensation” and then “View Paycheck.”

#### 3. TAXES

Although taxes may not be deducted from your fellowship/traineeship check each pay period, all or part of your award may be taxable. It is your responsibility to make arrangements to pay your taxes. You will not receive a W-2 form for your Fellowship stipend; however, the IRS is apprised of your award. Since Graduate School personnel and other University personnel are not tax experts, please call the IRS for tax questions. <http://www.IRS.gov>

#### 4. INTERNATIONAL TAXATION

Every incoming international student must check in with Michelle Anderson (919-515-4370, [michelle\\_anderson@ncsu.edu](mailto:michelle_anderson@ncsu.edu)). Please make an appointment with her during your first week here. Also, look out for days that the Social Security Office will be on campus to distribute numbers for international students. *Failure to obtain a SSN or meet with Michelle Anderson may mean you paychecks will be held.*

#### 5. TUITION

You can learn more about tuition information and due dates at <http://www.fis.ncsu.edu/cashier/students/gradstudents.asp>. Tuition is due before the beginning of each semester; the date is always posted on the website. Also, students must send payment for their fees and any previous outstanding balance to the address indicated. Failure to do this will result in the student's schedule being canceled. You may view your bill electronically through MyPack Portal

\*See page 31 for information on GSSP\*

## 6. TUITION REMISSION

If you are an out-of-state student, you may be eligible for tuition remission. Tuition remission is the difference between in-state and out-of-state tuition per semester. The program or student is only charged in-state tuition, and the department/university pays the difference out of special funds. If you are a U.S. citizen and are awarded tuition remission, it will be in effect for the first year ONLY (fall and spring semesters). *For U.S. citizens obtaining North Carolina residency this is important since you will not be eligible to receive tuition remission after the first year.* [Guidelines for establishing residency are available on the Graduate School website.](#) Guidelines for establishing residency are in Appendix A as well. International students cannot attain residency, and continue to be eligible for tuition remission after the first year.

## 7. MYPACK PORTAL

MyPack Portal is a great resource to keep up with your academic career. Here you will be able to edit privacy settings, register for class, register for graduation, create a plan or work, view student financial accounts, view transcripts, and more.

The Student Center found in MyPack Portal (Main Menu >> Student Self Services >> Student Center) shows a breakdown of your academic career here at NC State. Here you will be able to see your schedule, what requirements you have left to fulfill you degree, any holds you may have on your account, list of your adviser committee, transcripts, and anything else you may want to know about your academic status. The department also uses this page to keep up with students viewing the same information as the students.

## 8. REGISTRATION FOR CLASSES

In order to register for courses, you must access MyPack Portal on the web. Detailed instructions on how to enroll can be found at:

<https://studentservices.ncsu.edu/your-classes/registration/enrollment-wizard/>. You can access the NCSU course catalog through MyPack Portal or at:

<https://webappprd.acs.ncsu.edu/php/coursecat/directory.php>

The Director for Bioinformatics and Graduate Services Coordinator will advise you on appropriate course registration for your first and second semesters in the Genomic Sciences program. Your Committee Chair/Major Advisor, Advisory Committee and research project will determine subsequent coursework.

Registration advising occurs twice a year: once for summer sessions and fall semester registration, and once again for spring semester registration. The Graduate Program Coordinator will lift your Registration Advising Hold only **after you have been**.

Once your hold has been lifted, you may then register for classes. Prior to this, you may only add classes to your "Wish List." *Please keep in mind that the Genomic Sciences Graduate Program does not pay late registration fees; therefore, it is important that you register before the late registration deadline for each semester.* If you are not sure if you have an advising hold on your account visit, MyPack Portal >> Main Menu >> Student Self Service >> Student Center. Any holds will be listed on the right side of the page.

Please see pages 24-25 for information on Genomic Sciences course requirements and page 27-28 for information on University registration requirements.

## 9. **NCSU COMPUTER (UNITY) ACCOUNT**

Each person affiliated with NC State University is assigned a Unity account, along with a Unity ID and password. Using your Unity ID together with your password, you can access your campus-based email, access the MyPack Portal system, manage files in your personal AFS file space, use campus wireless internet and much more. Your Unity ID is established using the first letter of your first and middle names and the first six letters of your last name. Your initial (default) 8-digit password is the last four digits of your Campus ID number (this is found following the letters "NCSU" on your All Campus Card) plus the four digits of your birth month and day. If you need help accessing your Unity account, please contact the NC State Help Desk (919-515-HELP or 919-515-4357).

For more detailed information regarding your Unity ID and account, please see <https://oit.ncsu.edu/my-it/unity-credentials/>.

## 10. **WOLFPACK ONE CARD**

Permanent photo identification cards are required for all personnel on campus. These "One Cards" entitle students to the following: use of the library, intercollegiate athletic events, membership in the University Student Center, use of Student Health Services (infirmary), use of NCSU Bookstores and other University facilities, services and programs supported by required fees. The All-Campus Network Office is located in the Talley Student Center. The hours of operation are Monday-Friday from 8:00am to 5:00pm. There are additional evening and weekend hours at the beginning of each academic period. Additional information can be found at: <http://onecard.ncsu.edu>.

## 11. **NCSU GOOGLE**

NC State uses Google email, Gmail, and applications. You may access these at <http://google.ncsu.edu>. To access your email, select the Gmail button on the left side of the screen and use your Unity ID and password to login. Through your email and from the NCSU Google page, you have access to a personal Google Calendar, which allows you to keep up with appointments and schedules. You may make multiple calendars and share it with peers and co-workers that you approve. Google Docs also allows you have personal documents that you alone can see and edit or share documents between those whom you have approved. Any questions about this or the other applications offered by NCSU Google, please see the website or contact the NC State Help Desk (919-515-HELP or 919-515-4357).

## 12. **PARKING**

University parking areas are zoned, reserved or restricted. All vehicles parked in zone areas on campus must have an appropriate permit displayed and must be parked in a space marked for parking. Students who desire parking permits can purchase them from the Transportation Department's website, <https://transportation.ncsu.edu/student-parking-spring/>. Permits are issued on a first come first served basis. Permits go on sale during the summer.

## 13. **PUBLIC TRANSPORTATION**

The Wolfline is a University run bus system that is free for anyone to use. Buses and hours vary depending on University schedule. You may check schedules on the Transportation Website: <http://ncsu.transloc.com>. The CAT bus (<https://goraleigh.org/>) and Triangle Transit (<http://www.triangletransit.org>) are two city buses available for use as well. Students may get a GoPass for riding the city busses through the Transportation office, <https://transportation.ncsu.edu/wolfline/>

#### 14. **MAIL**

Initially, your mail and any University correspondence will be delivered to the Genomic Sciences Graduate Program (Bioinformatics Research Center), Campus Box 7566. After you have chosen your Committee Chair/Major Advisor, you will receive your mail and University correspondence through your new department. Please remember to notify the Administrative Assistant of your new mailbox number so that your mail can be forwarded to the correct address.

<b>Correspondences for the BRC can be addressed to:</b>	
<b><u>U.S. Mail</u></b>	<b><u>Campus Mail</u></b>
Name NC State University Genomic Sciences Graduate Program Campus Box 7566 Raleigh, NC 27695-7566	Name Genomic Sciences Graduate Program Campus Box 7566

#### 15. **SAFETY**

Each graduate student is expected to complete the Manager's Safety Orientation Checklist at: <https://ehs.ncsu.edu/training/managers-checklist/>

Wolf Alert is how the University communicates emergencies to students via text message, email, campus wide loud systems, and the University website. Please look over the Wolf Alert Website for more information about how you can learn about activities on campus, <https://emergency.ncsu.edu/wolfalert/>

#### 16. **TRANSCRIPTS FROM PREVIOUS INSTITUTIONS**

The Graduate School must have an official copy of each student's final transcript from previous institutions stating the degree earned and the date the degree was conferred if it was not included with your original application materials. The Graduate School also needs official transcripts of any and all coursework completed *after* the degree was conferred but before acceptance into Graduate School (if applicable) in addition to any coursework mentioned on the application.

**\*\*\*If you have just finished a degree program or have finished any coursework that would not have been sent with your original application materials, please order your official transcripts and have them sent directly to the Graduate Program Coordinator (NC State University, Campus Box 7566, Raleigh, NC, 27695-7566). Please indicate that these are your "final" transcripts. A copy will be kept in your program file, and the original will be sent to the Graduate School. *If the Graduate School does not have an official copy of these final transcripts, they will not process any paperwork for your graduate degree program.* \*\*\***

#### 17. **UNIVERSITY GRADUATE STUDENT ASSOCIATION**

The University Graduate Student Association (GSA) is a campus-wide organization of graduate students that deals with matters pertaining to graduate life. The GSA also administers travel funds that will reimburse students who have presented their work at a meeting for a portion of their travel expenses (depending on the availability of funds). Departments that have GSA Chapters also get a nominal rebate of funds each semester to use as the Chapter sees fit. The GSA sponsors several social events ("breathers") throughout the year to promote the interaction of graduate students from the various departments and programs. <https://orgs.ncsu.edu/gsa/>

## **18. GENOMIC SCIENCES GRADUATE STUDENT ASSOCIATIONS**

The Bioinformatics chapter and Genetics and Genomics chapters of the University Graduate Student Association are up and running due to the hard work of your graduate student colleagues. These chapters disseminate information of interest and importance to members, provide a forum for discussion and decision, and represent the graduate students of this program to the faculty in matters that may affect the welfare of the graduate students. The chapters annually elect Genomic Sciences graduate students to represent them at the monthly campus-wide GSA meetings.

## **19. GENOMIC SCIENCES FACULTY MEMBERS**

Please see our website (<https://brc.ncsu.edu/people/faculty>) and the Graduate School website (<http://catalog.ncsu.edu/graduate/interdisciplinary/bioinformatics/#facultytext>) for a full list of faculty members and their information.

IV. STEPS TO GRADUATION

STEP	TASK	COMPLETED
Step 1	All students are to contact the Director for Bioinformatics to select courses for the first semester.	<input type="checkbox"/>
Step 2	Make sure that everything is completed from the beginning of the handbook, pages 6-11.	<input type="checkbox"/>
Step 3	Identify advisors. All students should have determined an advisor by the end of their second semester.	<input type="checkbox"/>
Step 4	Create a committee.	<input type="checkbox"/>
Step 5	Create and submit a Plan of Work through the department and then in MyPack Portal.	<input type="checkbox"/>
Step 6	Schedule exams.	<input type="checkbox"/>
Step 7	(Thesis Students Only) Complete defense and turn in Electronic Thesis.	<input type="checkbox"/>
Step 8	Apply for graduation	<input type="checkbox"/>

The Genomic Sciences graduate program offers two different degrees: MR or Ph.D. in Bioinformatics. Please make sure that you refer to the appropriate section!

V. DEGREE PROGRESSION

Below are the simplified, chart versions for what needs to be done each semester during all degree programs. For more detailed instructions, broken down by Degree and Program, please see pages 16-23.

**FIRST SEMESTER**

<b>WHEN</b>	<b>WHAT</b>	<b>PROGRAM</b>
Before choosing a Major Advisor	Discussion with Potential Advisors	Ph.D. Bioinformatics

**SECOND SEMESTER**

<b>WHEN</b>	<b>WHAT</b>	<b>PROGRAM</b>
Before the end of the 2 <sup>nd</sup> semester	Selection of a Major Advisor	Ph.D. Bioinformatics
After Major Advisor is selected	Initiation of the Research Program	Ph.D. Bioinformatics
After Major Advisor is selected and Research Program is Initiated	Selection of a Graduate Advisory Committee	MR Bioinformatics Ph.D. Bioinformatics
Before the end of the 2 <sup>nd</sup> semester	Completing Online 'Plan of Work'	MR Bioinformatics

### THIRD SEMESTER

WHEN	WHAT	PROGRAM
Before the end of the 3 <sup>rd</sup> semester	Initial Meeting with Graduate Advisory Committee	Ph.D. Bioinformatics
Before the end of the 3 <sup>rd</sup> semester	Completing Online 'Plan of Work'	Ph.D. Bioinformatics

### SECOND AND THIRD YEARS

WHEN	WHAT	PROGRAM
Once per academic year	Graduate Advisory Committee Meetings	Ph.D. Bioinformatics
After first year	Teaching <i>(there is no specific requirement, but all students are encouraged to take advantage of this opportunity)</i>	Ph.D. Bioinformatics
Before the end of the 3 <sup>rd</sup> year	Preliminary Written Examination <b>*MUST BE COMPLETED BEFORE ORAL EXAMS CAN BE SCHEDULED*</b>	Ph.D. Bioinformatics
Before the end of the 3 <sup>rd</sup> year	Preliminary Oral Examination	Ph.D. Bioinformatics

### LAST YEAR OF STUDY

WHEN	WHAT	PROGRAM
Last year of study	Final Advisory Committee Meeting	Ph.D. Bioinformatics
Last year of study	Preparation of Thesis or Dissertation	Ph.D. Bioinformatics
Last year of study	Thesis/Dissertation Seminar	MR Bioinformatics Ph.D. Bioinformatics

Last year of study	Final Oral Examination	MR Bioinformatics Ph.D. Bioinformatics
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## **BIOINFORMATICS**

### **MASTER'S (MR) - BIOINFORMATICS**

The Masters of Bioinformatics degree is non-thesis, and require only coursework and a final oral exam.

#### **1. SELECTION OF AN ADVISORY COMMITTEE**

#### **SECOND SEMESTER**

Soon after selecting a Committee Chair/Major Graduate Advisor, the student, in conjunction with the Chair, will select a Graduate Advisory Committee. The functions of this committee are to direct the student's coursework, provide advice and expertise with regard to their research program, give the preliminary and defense examinations and evaluate and critique the thesis or dissertation. Students should seek committee members who will actively participate in the student's training and who provide balance in terms of expertise.

MR candidates, the committee must be comprised of at least **three** NC State University Graduate faculty:

- One Bioinformatics faculty member
- Two other faculty members (who do not necessarily need to be a member of the Genomic Sciences faculty).

Once the student and advisor have settled on a list of potential committee members, the student asks the faculty member if they are willing to serve on their Advisory Committee and gives a general outline of the research program. Most faculty members who are asked will willingly serve on student committees. In some cases, a faculty member may decline if they feel they are over-committed or do not really have the expertise to benefit the student.

Once the appropriate number of committee members has agreed to serve, the committee members are submitted by the student for approval by the Director of Graduate Programs. ***The Advisory Committee must be formed and approved by the relevant Director of Graduate Programs no later than the third semester of study.***

#### **2. COMPLETING A PLAN OF WORK<sup>1</sup>**

#### **BEFORE END OF SECOND SEMESTER**

All graduate students are required to submit an **online** Graduate Plan of Work (POW). Students must meet with their advisor and create their POW. The student must then enter their Plan of Work and Advisory Committee online via Student Self Service in MyPack Portal. The plan of work and advisory committee are designed as advising tools. You may begin working on your plan of work and advisory committee as soon as you matriculate and become active in the graduate career. You may also save in-progress work and submit it at a later date. You may make changes at any time up until submission. For detailed instructions, refer to the SIS Training and Operations Manual,

<https://grad.ncsu.edu/wp-content/uploads/2015/12/GRAD-SIS-training-manual-gradschool.pdf>

**For Bioinformatics MR candidates, the Plan of Work must be submitted and approved by the Director of Graduate Programs before the end of the second semester of study.**

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<sup>1</sup> The Plan of Work is being phased out in Spring 2025 to the Graduate Degree Audit. More info to come in the next few months

Changes in Advisory Committee or Plan of Work: If one or more of your committee members retires or leaves the University, you may request a change in your committee. If one or more committee members are on sabbatical, you may request a substitute for the missing members for a particular examination, but this should be done in a timely manner. In other words, monitor your committee and Plan of Work and as soon as you detect a problem, make arrangements to correct it immediately.

If there are any discrepancies or information changes in your program, such as dropping or substituting courses or committee members, please be aware that this will cause a delay in scheduling examinations. The previous information must be changed and/or corrected and then *resubmitted* to the Graduate School for approval, which takes time. Keep ahead of the program by requesting any changes in writing (see the Graduate Program Coordinator for the proper forms) as soon as you are aware of them! Also, please keep in mind that you cannot make any changes to your Plan of Work during your final semester of study.

### 3. **FINAL ORAL EXAMINATION**

### **LAST YEAR OF STUDY**

The student must pass an oral examination administered by the Graduate Advisory Committee at the end of the degree program. The emphasis of the examination will be a synthesis of course work rather than research. *This exam must be passed before a deadline specific to each semester in order to graduate that semester.* Check the NCSU Graduate School web page (<https://grad.ncsu.edu/students/etd/>) to determine the actual deadline. There will be no exceptions, and tuition must be paid the following semester if graduation is postponed to that semester.

The MR student's Request to Schedule the Final Oral Examination form must be received by the Graduate Program Coordinator *three weeks* prior to the proposed examination date. The Graduate Program Coordinator will then forward the request to the appropriate Director for approval. After the Director approves the request, the Graduate Program Coordinator will then forward the completed, signed form to the Graduate School for final approval. The student is responsible for arranging the date and time with his/her committee and reserving the examination room.

## Ph.D. - BIOINFORMATICS

### 1. DISCUSSIONS WITH POTENTIAL ADVISORS **FIRST SEMESTER**

All new Bioinformatics Ph.D. graduate students must have extensive discussions with Bioinformatics faculty before choosing a Committee Chair/Major Advisor. The discussions allow the students to gain first-hand information on specific programs in which they are interested and allow the faculty and students to assess compatibility. These discussions will likely involve several successive meetings with the same faculty member, in order for the student to read suggested material and continue more in-depth discussions. These meetings should take place over the course of the first two semesters in order to select a Committee Chair/Major Advisor by the end of the second semester.

Although the Director for Bioinformatics can make suggestions for possible faculty visits, new students are responsible for setting up these discussions. The first step is to narrow down potential research programs based on faculty research descriptions and faculty interest in new students. Students should meet with as many Bioinformatics faculty as possible, in order to have a wide selection of possible advisors.

### 2. SELECTION OF A MAJOR ADVISOR **SECOND SEMESTER**

All students in graduate programs must have a Committee Chair/Major Graduate Advisor who is a member of the Genomic Science Graduate Faculty (see the Genomic Sciences website for a complete list of this). ***This MUST be completed no later than the end of the second semester.***

Once discussions with faculty are completed, the student selects a Committee Chair/Major Graduate Advisor. This important decision should be made with considerable thought and information, ***and must be discussed with the Director for Bioinformatics before a final decision is made.*** A number of tips for selecting advisors has been compiled by previous graduate students and is listed in Appendix C. Following discussions, students often have a clear idea of which faculty member they would like to have as an advisor, while in other cases, students are enthusiastic about more than one possible advisor. In the latter situation, it is advisable to revisit the faculty to discuss potential graduate programs in more detail.

Once a student settles on an advisor, the student should set up a meeting with the faculty member and indicate an interest in working with that person. At that time the faculty member will accept or decline the student as an advisee. Although it is rare, a faculty member may decline to accept a student because they are concerned about funding, have accepted other new students or feel that the student does not fit into their program.

### 3. INITIATION OF THE RESEARCH PROGRAM **SECOND SEMESTER**

All candidates for degrees are required to conduct a program of original research. Once the advisor is selected, the student and advisor select the research topic. The research program should initiate in the second semester and continue throughout the degree program. It is expected that this work should make an original contribution to scientific knowledge and it is expected that student thesis research will be accepted for publication in high caliber professional journals. The research constitutes a vital aspect of graduate student training, and successful completion of the graduate program will be measured largely by the quality of this research.

#### 4. SELECTION OF AN ADVISORY COMMITTEE

#### SECOND SEMESTER

Soon after selecting a Committee Chair/Major Graduate Advisor, the student, in conjunction with the Chair, will select a Graduate Advisory Committee. The functions of this committee are to direct the student's coursework, provide advice and expertise with regard to their research program, give the preliminary and defense examinations and evaluate and critique the thesis or dissertation. Students should seek committee members who will actively participate in the student's training and who provide balance in terms of expertise.

For Ph.D. candidates, the committee must be comprised of at least **four** NC State University Graduate faculty:

- One Bioinformatics faculty member
- Three other faculty members (who do not necessarily need to be members of the Genomic Sciences faculty).

*If the student has elected to minor in a discipline, one of the Graduate Advisory Committee members must represent that Minor.*

Once the student and advisor have settled on a list of potential committee members, the student asks the faculty member if they are willing to serve on their Advisory Committee and gives a general outline of the research program. Most faculty members who are asked will willingly serve on student committees. In some cases, a faculty member may decline if they feel they are over-committed or do not really have the expertise to benefit the student.

Once the appropriate number of committee members has agreed to serve, the committee members are submitted by the student for approval by the Director of Graduate Programs. ***The Advisory Committee must be formed and approved by the relevant Director of Graduate Programs no later than the third semester of study.***

Graduate School and Outside Committee Representatives: A Graduate School Representative (GSR) or Outside Representative is required on all PhD committees. This person can be anyone on your committee who is not a chair or part of your degree program. If no one on your committee agrees to this roll, an extra committee member will be assigned to your committee. This person's job is to ensure that your exams are given fairly and without bias.

Members of the Graduate Faculty from non NCSU campuses: Graduate faculty from UNC-Chapel Hill, UNC-Charlotte, UNC-Greensboro, and Duke University may serve as one of the required *members* (they cannot serve as Chair) of the Graduate Advisory Committee when appropriate by submitting a Graduate Advisory Committee Appointment Form for Inter-Institutional Member. The professor must be a member of the Graduate Faculty of the University in question.

A faculty member from another university (who is not an Inter-institutional Graduate Faculty member), or a professional from industry or government with credentials comparable to those required for membership on the Graduate Faculty, may serve as an External Member *in addition* to the number of committee members normally required. External Members will have full voting privileges and are expected to participate in the student's preliminary and final examinations. They will also be consulted in the development of the student's Plan of Work and will sign the thesis or dissertation. Please see our Graduate Program Coordinator for the required form to appoint someone as an External Member.

If there must be a change in the committee, the change must be requested in writing and be approved by the relevant Director of Graduate Programs and the Graduate School. Please see our Graduate Program Coordinator for the required form to change a member of the Graduate Advisory Committee.

**5. INITIAL MEETING WITH ADVISORY COMMITTEE **THIRD SEMESTER****

The first meeting between the Advisory Committee and student should occur by the end of the third semester of study. Students are required to submit a short research plan to their committee before this meeting. The plan should cover background information, rationale for the project and a brief outline of the initial experiments. The plan should then be presented orally at the first meeting and forms the basis of discussion on the research plan as well as guide decisions on courses for the Plan of Work.

**6. COMPLETING A PLAN OF WORK<sup>2</sup> **BEFORE END OF SECOND SEMESTER****

All graduate students are required to submit an **online** Graduate Plan of Work (POW). Students must meet with their advisor and create their POW. The student must then enter their Plan of Work and Advisory Committee online via Student Self Service in MyPack Portal. The plan of work and advisory committee are designed as advising tools. You may begin working on your plan of work and advisory committee as soon as you matriculate and become active in the graduate career. You may also save in-progress work and submit it at a later date. You may make changes at any time up until submission. For detailed instructions, refer to the SIS Training and Operations Manual,

<https://grad.ncsu.edu/wp-content/uploads/2015/12/GRAD-SIS-training-manual-gradschool.pdf>

**For Bioinformatics Ph.D. candidates, the Plan of Work must be submitted and approved by the Director of Graduate Programs before the end of the third semester of study.**

Note for Ph.D. students with M.S. degrees: For a student who has a Master's degree, a maximum of 18 hours of relevant graduate credit may be applied toward the credit hour requirements upon recommendation of the Graduate Advisory Committee. If a student completes a Master's degree at NCSU and continues for a doctoral degree *without a break in registration*, up to 36 credit hours taken while in master's status may be used to meet minimum requirements for the doctoral degree.

Changes in Advisory Committee or Plan of Work: If one or more of your committee members retires or leaves the university, you may request a change in your committee. If one or more committee members are on sabbatical, you may request a substitute for the missing members for a particular examination, but this should be done in a timely manner. In other words, monitor your committee and Plan of Work and as soon as you detect a problem, make arrangements to correct it immediately.

If there are any discrepancies or information changes in your program, such as dropping or substituting courses or committee members, please be aware that this will cause a delay in scheduling examinations. The previous information must be changed and/or corrected and then *resubmitted* to the Graduate School for approval, which takes time. Keep ahead of the program by requesting any changes in writing (see the Graduate Program Coordinator for the proper forms) as soon as you are aware of them! Also, please keep in mind that you cannot make any changes to your Plan of Work during your final semester of study.

**7. ADVISORY COMMITTEE MEETINGS **ONCE PER YEAR****

The Graduate Advisory Committee must meet a minimum of once per academic year to evaluate student progress. Progress reports after each meeting should be filed with the relevant Director of Graduate

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<sup>2</sup> The Plan of Work is being phased out in Spring 2025 to the Graduate Degree Audit. More info to come in the next few months

Program.

**TEACHING OPPORTUNITIES**

**AFTER FIRST YEAR**

There is no specific teaching requirement for the Genomic Sciences degree programs. Genomic Sciences graduate students are encouraged, however, to take advantage of teaching opportunities in their home department or as part of the Preparing Future Leaders program (<http://www.ncsu.edu/grad/preparing-future-leaders/index.php>).

## 8. **PRELIMINARY EXAMINATIONS** **BEFORE END OF THIRD YEAR**

Ph.D. students are required to take both written and oral preliminary examinations. Both written and oral examinations must be completed by the end of the third year of the student's doctoral program. The student, together with the Advisory Committee, chooses the format and details for the examinations. Two possible formats are indicated below, but other formats followed by NC State University departments are acceptable as well. *Forms must be filled out and submitted to the Graduate School at least two (10 business days) weeks prior to scheduling the preliminary oral examination.*

Examination Format 1:

- The written examination consists of a grant proposal written on a topic that is not directly on the students' dissertation research. The proposal should be in a widely used format relevant to the topic (e.g., NIH, NSF, DOE, USDA), excluding sections on budget and personnel. The Advisory Committee must approve the proposal topic before the student begins writing to assure that the topic is acceptable and sufficiently different from the dissertation research. The student then submits a one-page pre-proposed document to the committee for approval. Once the Specific Aims are approved, the student is given a finite time (usually two to three weeks) to complete the proposal.
- The oral examination for Format 1 consists of an oral defense of the research proposal. The examination focuses on the proposal, but all facets of Bioinformatics may be examined.

Examination Format 2:

- The written examination consists of questions from members of the Advisory Committee. The format may vary among committee members and may take the form of closed or open book questions or short papers on a topic. Students receive one question at a time and are given a finite time to complete the assignment (usually one to several days).
- The oral examination for Format 2 consists of questions from the Advisory Committee. These usually begin with topics from the written examination, but all facets of Bioinformatics may be examined.

For both formats, a unanimous favorable vote from the committee is necessary to pass the written examination. Approval may be conditional upon the student taking additional work in a specific area. The committee must make clear how any conditions will be met by the student.

After the satisfactory completion of the written comprehensive examination (including the completion of any conditions set for approval) the student may then request to schedule the Preliminary Oral Examination. This is scheduled through the Graduate School after notification from the Advisory Committee that the student has passed the written exam. The Genomic Sciences Graduate Program requires that the completed form entitled "Request for Approval to Schedule Doctoral Oral Examination" be submitted to the Graduate Program Coordinator *three weeks* prior to the date of the proposed exam so the Plan of Work can be approved in a timely fashion. The Graduate Program Coordinator will then forward the request to the appropriate Director of Graduate Program for approval. After the Director

approves the request, the Graduate Program Coordinator will

then forward the completed signed form to the Graduate School for final approval. These details and time lines are important and must be adhered to.

The purpose of the oral examination is to demonstrate a thorough working knowledge of Bioinformatics, the ability to apply this knowledge, and the ability to use the scientific method in solving problems. As in the case of the written examination, a unanimous favorable vote from the Advisory Committee is required to pass this examination, and approval may be conditional upon additional work in a specific area. If the student does not pass the oral examination, the Advisory Committee may recommend a re-examination. At least one semester must elapse before re-examination, and only one re-examination is allowed.

Students with co-majors or taking minors in other disciplines will need to meet the preliminary exam requirements for those programs as well.

**9. FINAL ADVISORY COMMITTEE MEETING **LAST YEAR OF STUDY****

The student must meet with the Advisory Committee six to nine months before the expected graduation date to allow the committee to evaluate the research and to approve the final research plan and tentative graduation date.

**10. PREPARATION OF THESIS OR DISSERTATION **LAST YEAR OF STUDY****

Upon completion of the research program, the results of this research are presented to the student's Committee Chair/Major Graduate Advisor and Advisory Committee in the form of a thesis (M.S.) or dissertation (Ph.D.). Students should consult the following website (<https://grad.ncsu.edu/students/etd>) for important information regarding the preparation of theses and dissertations. Students are also required to attend an Electronic Theses and Dissertations (ETD) Workshop; these are held by the Graduate School throughout the year.

The Committee Chair/Major Graduate Advisor must approve the thesis or dissertation before it is submitted to the Advisory Committee for review. It is the responsibility of both the student and Committee Chair/Major Graduate Advisor to ensure that the material is in final form and of high quality before review by the committee. *The Advisory Committee is responsible for reviewing the scientific merit of the work and should be given at least two weeks (preferably more) before the final oral examination date to accomplish this.*

**11. THESIS/DISSERTATION SEMINAR **LAST YEAR OF STUDY****

All students are required to present a formal departmental seminar describing their graduate research project (rationale, methods, data, and conclusions). This seminar is generally presented during the final semester of candidacy, frequently immediately prior to the Final Oral Examination

**12. FINAL ORAL EXAMINATION **LAST YEAR OF STUDY****

The oral defense of the dissertation is the third and final examination for Ph.D. students. This occurs in the final semester of graduate study after completion of the dissertation. In this examination, the student will be required to defend the scientific methodology, merit and conclusions of the dissertation research. The unanimous approval of the Advisory Committee is required to pass the examination. After any revisions in the dissertation specified by the committee have been made, the dissertation is submitted to the Graduate School.

The Ph.D. student's Request to Schedule the Doctoral Oral Examination form must be received by the Graduate Program Coordinator at least *three weeks* prior to the requested exam date. The Graduate Program Coordinator will then forward the request to the appropriate Director for approval. After the Director approves it, the form will be sent to the Graduate School for approval. The request may be made no

earlier than four months after successful completion of the Preliminary Examination. Once again, it is the student's responsibility to set the date and time of the examination with the committee members *and* the Graduate School representative (if applicable). It is also the student's responsibility to reserve the examination room. At this time, students usually make arrangements to hold their seminar. The student is also responsible for reserving the seminar room, and must submit a title for his/her seminar to the Graduate Program Coordinator in time for the notices to be distributed

VI. PREPARING FOR GRADUATION

WHEN	WHAT	PROGRAM
After Final Oral Exams are passed	Applying for Graduation	MR Bioinformatics Ph.D. Bioinformatics
Final Semester	ETD Draft	Ph.D. Bioinformatics
Final semester	Exit Interview	MR Bioinformatics Ph.D. Bioinformatics
End of Spring and Fall semesters	Graduation	MR Bioinformatics Ph.D. Bioinformatics
Any time	Departure from NCSU before completion of degree requirements	MR Bioinformatics Ph.D. Bioinformatics

1. **APPLYING FOR GRADUATION** **AFTER FINAL ORAL EXAMS ARE PASSED**

*All students:* After you have passed your Final Oral Exam, you must apply for graduation online via Student Self Service in MYPACK Portal. Instructions for applying to graduate can be found in the SIS Training and Operations Manual,

<https://grad.ncsu.edu/wp-content/uploads/2015/12/GRAD-SIS-training-manual-gradschool.pdf>

2. **COMPLETION OF ETD DRAFT** **FINAL FEW SEMESTERS**

Students are required to submit a final draft of their thesis or dissertation to the Graduate School for approval and storing. Please refer to the Electronic Thesis and Dissertation Guide (<https://grad.ncsu.edu/students/etd/>) for *detailed information and instructions* from the Graduate School for proper editing and formatting requirements. In general, the ETD reviewer will check the thesis to make sure there are no gross formatting errors and to be sure it conforms to the guidelines for thesis preparation. If any changes are necessary, the Thesis Editor will contact you. You will have a specified length of time to make corrections and return the thesis. If you do not return the thesis on time, you will not have met the graduation deadline date and will not be allowed to graduate. Therefore, you will need to register the next

semester to fulfill the continuous registration policy. If you return the thesis on time, you will be cleared for graduation.

All thesis writing students should attend an Electronic Thesis and Dissertation (ETD) workshop during their final semesters. This workshop will explain the ETD guidelines, deadlines, and expectations. The ETD website is filled with valuable information such as deadlines, templates, and workshop registrations, <http://www.ncsu.edu/grad/etd>.

**3. EXIT INTERVIEW FINAL SEMESTER**

All graduate students are required to have an exit interview with the Director of Graduate Programs before leaving the program. The main purpose of the interview is for the Director to obtain information directly from the student regarding the graduate training program.

**4. GRADUATION END OF SPRING AND FALL SEMESTERS**

Formal University commencement exercises are held at the end of the spring and fall semesters, but any student who graduated the preceding second summer session is eligible to participate in the December commencement if they notify the Graduate School in writing of such intent at least four weeks in advance of the actual commencement date. Conversely, any student scheduled to graduate in the spring or fall semesters but not planning to attend University commencement exercises should notify the Graduate School in writing of the desire to have the degree conferred in absentia.

**5. DEPARTURE FROM NCSU BEFORE COMPLETION OF DEGREE ANY TIME**

Graduate students are expected to complete all requirements for the degree before leaving the University, and it is also in their best interest to see that manuscripts are submitted for publication before they depart. In rare cases, students leave the University before their final oral examination, or before the thesis or dissertation is corrected and approved by the Graduate School. Students who leave the University before completion of the degree must agree upon a time limit to finish their degree with the appropriate Director of Graduate Programs. The Graduate School must approve the thesis or dissertation by the graduation deadline of the second semester after leaving the University.

## VII. PROGRAMMATIC REGULATIONS AND REQUIREMENTS

### 1. WAIVERS FOR CORE COURSES

All students who have previously taken graduate level courses may request a waiver for similar core requirements in our graduate programs. The process for a waiver is as follows:

- The student should contact the NC State University course instructor and discuss the content of the previous course with the instructor, using the course syllabus to show the course topics and requirements.
- If the instructor is satisfied that the previous course is sufficiently similar to the core requirement, the instructor should indicate to the appropriate Director of Graduate Programs (via email or letter) that the required course should be waived.
- Students who obtain a waiver must *still fulfill the entire credit-hour requirement for their degree program*, by substituting additional classes or research credit for the waived classes.
- The choice of classes or research credit should be made by the Major Advisor and the Graduate Advisory Committee in consultation with the student.

### 2. CREDIT-HOUR REQUIREMENTS

Doctoral degrees at NC State require a minimum of 72 graduate credit hours beyond the Bachelor's degree. For a Ph.D. student who has a Master's degree from a university other than NC State, a maximum of 18 hours of relevant graduate credit from the Master's degree may be applied toward this minimum, upon the recommendation of the student's Graduate Advisory Committee. Therefore, the minimum credit-hour requirement in this case is 54 credit hours. If a student completes a Master's degree at NC State and continues for a doctoral degree *without a break in time*, up to 36 credit-hours taken while in Master's status may be used to meet minimum requirements for the doctoral degree.

### 3. OVERLAP WITH MINOR REQUIREMENTS

Students who elect to pursue a Minor in another discipline may use appropriate Genomic Sciences elective courses for both the Minor and Genomic Sciences requirements. For example, students who minor in Biotechnology may count BIT 810 for both Major and Minor requirements. A Minor is declared on a student's POW. For a Master's degree, at least 9 hours on the POW must represent the minor. For a PhD, at least 12 hours on the POW must represent the minor

## VIII. GENOMIC SCIENCES COURSE REQUIREMENTS

### 1. BIOINFORMATICS

#### a. Master (MR), Bioinformatics (32 credits)

- i. Genomic Sciences core (see description below) - 12 cr.
- ii. Bioinformatics core (see description below) - 20 cr.

#### b. Ph.D., Bioinformatics (72 credits)

- i. Genomic Sciences core (see description below) - 12 cr.
- ii. Bioinformatics core (see description below) - 20 cr.
- iii. Bioinformatics Ph.D. courses and research (see description below) - 40 cr.

<b>GENOMIC SCIENCES CORE (12 CREDITS)</b>			
<b><u>Course Number</u></b>	<b><u>Course Title</u></b>	<b><u>Credits</u></b>	<b><u>Offered</u></b>
BIO 562	Bioinformatics I	3	Fall
GN 735	Functional Genomics	3	Spring
GN 610 or GN 810 (to be taken twice)	Genetics Journal Club	1	Fall, Spring
GN 701 or BCH 703	Molecular Genetics <i>or</i> Macromolecular Synthesis & Regulation	3	Fall
XXX	Professionalism and Ethics	1-3	Fall

<b>BIOINFORMATICS CORE (18-20 CREDITS)</b>			
<b><u>Course Number</u></b>	<b><u>Course Title</u></b>	<b><u>Credits</u></b>	<b><u>Offered</u></b>
BIO 592	Algorithmic Aspects of Bioinformatics	3	Spring
ST 512	Experimental Statistics for Biological Sciences II	3	Fall, Spring, Summer
ST 610 or ST 810	Bioinformatics Consulting	3	Spring
Elective	Electives (three)	9	-

*\*ALL DEGREE CANDIDATES MUST TAKE THE GENOMIC SCIENCES CORE COURSES\**

<b>BIOINFORMATICS PH.D. COURSES (40 CREDITS)</b>			
<b><u>Course Number</u></b>	<b><u>Course Title</u></b>	<b><u>Credits</u></b>	<b><u>Offered</u></b>
ST 501*	Fundamentals of Statistical Inference I	3	Fall, Spring
ST 502*	Fundamentals of Statistical Inference II	3	Fall, Spring
Research/Electives	Dissertational Research/Electives	34	-
<i>*ST 501 &amp; ST 502 may be replaced by appropriate CSC courses with the approval of DGP and/or the Graduate Advisory Committee.</i>			

*\*ALL DEGREE CANDIDATES MUST TAKE THE GENOMIC SCIENCES CORE COURSE*

## IX. OTHER RECOMMENDATIONS

### **1. ATTENDANCE AT SEMINARS AND DISSERTATION/THESIS DEFENSE**

Seminars provide a unique opportunity to hear the latest developments in areas of interest, and therefore students must attend seminars regularly. You will receive email announcing seminars that relate to Genomic Sciences. Please plan on attending all of those that interest you, but certainly at least four to six per year.

Likewise, we strongly encourage all students to attend every PhD defense of your fellow program students. It is a showing of program comradery, support, and an excellent opportunity to expand your knowledge.

### **2. TRAVEL TO PROFESSIONAL MEETINGS**

Student attendance and presentations at professional meetings is an important part of career development. Travel Authorizations forms must be completed before travel to a meeting. Funds for travel may be provided by the student's major professor, grants, fellowships or other sources. In addition, the Graduate Student Association (GSA) travel fund provides money to subsidize students who are presenting papers at professional meetings. GSA funds are available for one meeting per degree. Contact your GSA representative or the GSA travel fund committee chairman for an application and guidelines. The travel fund committee must receive all the application materials before the date of the meeting, and you must save your receipts.

For students whose graduate fellowship pays for travel to professional meetings, travel authorizations are initiated through the home department and must be completed prior to travel. All information on the Travel Authorization form should be completed, except the account information. The Graduate School will complete the account information. Backup information that shows where and when the conference or event is being held and the expenses included in the registration should be attached to the Travel Authorization form. After the Director of Graduate Program signs the Travel Authorization form, it should be forwarded to the Graduate School. If the Fellow would like to receive a travel advance, they must complete a travel advance Co-Signer Form and submit it along with the Travel Authorization form, at least three weeks in advance of travel. Do not submit the completed original of these forms to the Graduate School until *after* completion of travel.

The Travel Reimbursement Form should be completed upon return from travel. Be sure to include itemized, original receipts (hotel, airline, parking, taxi, etc.). The above can be completed in the Travel Center in MyPack portal.

It is important to note that students who are on fellowships are not employees under NCSU HR guidelines and therefore do not have access to the travel center in MyPack portal. You should touch base with the Graduate Services Coordinator to work the process.

## **X. UNIVERSITY REGULATIONS AND REQUIREMENTS**

The Graduate School maintains a web site that includes information on many aspects of graduate studies at NCSU. For current information, consult the site at <http://www.ncsu.edu/grad/>.

### **1. RESPONSIBLE CONDUCT OF GRADUATE STUDENTS**

Student and research integrity are taken very seriously in both the Genomic Sciences Graduate program and at NC State University. As a student in Genomic Sciences, you will be expected to uphold these standards. Plagiarism, research misconduct, presenting false information will not be tolerated and will be prosecuted based on their severity. For specific information on research integrity guidelines, what is considered a violation and consequences please visit the following Websites:

- Research at NC State:  
<https://research.ncsu.edu/administration/compliance/research-compliance/>
- Graduate School RCR:  
<https://research.ncsu.edu/administration/compliance/research-compliance/research-integrity/rcr-training/>

### **Requirement of Continuous Enrollment**

After a student is admitted to the Graduate School and enrolls for the first time, they are required to maintain continuous registration. Continuous registration refers to a student's enrollment each semester, excluding summer sessions, until they have either graduated or their graduate program has been terminated. All students attending classes must be registered for either credit or audit.

#### **1. Exceptions**

##### **a. Leave of absence**

A student in good academic standing who must interrupt their graduate program for good reasons may request a leave of absence from graduate study for a definite period of time, not to exceed one year within a given graduate degree program. The student should initiate the request with the chair of their advisory committee and have it approved by their Director of Graduate Programs (DGP) before the DGP submits it to the Graduate School. The Graduate School should receive the request at least one month prior to the first day of the term involved. The time that the student spends on an approved leave of absence will be included in the time allowed to complete the degree, i.e., six (6) years for the master's and ten (10) for the doctoral. Time limits are not extended.

##### **b. Withdrawal**

- i. Withdrawal during the registration period.** Any student enrolled in a graduate program who is registered for a given semester and withdraws during the official registration period (typically the first 10 working days of a semester) must obtain a leave of absence to meet the requirement for continuous registration.
- ii. Withdrawing after the registration period ends.** Any student withdrawing after the official registration period ends DOES NOT need to obtain a leave of absence and will be considered by the Graduate School as having met their continuous registration requirements.

##### **c. Registration in a summer session - submission of thesis/dissertation and oral examinations**

All students who take their final oral examination or submit their thesis/dissertation to the Graduate School during either summer session must be registered for either the first or second summer session. Those who wish to submit their thesis/dissertation or have their final oral examination after the last day of a semester or summer session, but before the next semester or summer session, must have been registered in the semester or summer session that immediately preceded the date of submission or the

date when the exam was held.

**d. Graduation**

Students who complete all requirements for the degree prior to the first day of the fall or spring semester or the first summer session may graduate during the next semester or summer session without being registered provided that they were registered in the immediately preceding semester or summer session and that they applied to graduate during that preceding term. Students may not graduate, or apply to graduate, during any term in which they are on a Leave of Absence.

**e. Incomplete Grades**

Students whose only remaining requirement for graduation is removal of an "IN" (Incomplete) grade are not required to be registered in the following semester or term in order to complete the work and graduate; however, only one registration free semester or term is allowed.

Students who anticipate not being able to remove a fall "IN" grade by the end of the spring semester should register for that spring, and any subsequent semesters needed to complete the work, to stay in compliance with the continuous registration policy. Students who fail to remove a spring "IN" grade by the end of the summer will not be terminated (because summer registration is not required for continuous registration), but they will have to register for the following fall and any subsequent semesters until the "IN" has been removed.

If a person needs to be classified as a student during the time the "IN" is being removed, registration for XXX 688 or XXX 689 is appropriate. If a student needs to be full time, registration must conform to the [full-time rules found in 3.14 B.](#)

**2. Failure to maintain continuous registration**

Students must reapply if they are terminated at NC State because of non-compliance with the continuous registration policy and wish to resume study in their original graduate program. The student must submit a new application and pay the application fee, submitting all materials as if applying for the first time. However, letters of recommendation and GRE scores less than five years old that are on file in the Graduate School or department may be transferred to the second application, upon request.

**3. Requirements for Full-Time/Part-Time Registration  
Fall and Spring Semesters**

**Thesis master's or doctoral students**

- Full-Time: To be full-time, students must be enrolled in at least 9 hours per semester. If they have accumulated or will accumulate sufficient hours to meet the degree requirements (a minimum of 30 and 72 for master's and doctoral degrees, respectively), they will be considered full-time until they complete their thesis or dissertation provided they enroll for at least 3 credit hours.
- Half-Time: To be half-time, students must enroll in a minimum of 4.5 but not more than 8.5 hours a semester unless they have fulfilled the hours required for program (see details above).

**Master's students enrolled in a program not requiring a thesis**

Master's students enrolled in plans allowing both a thesis and a non-thesis option will be classified as "non-thesis" students and subject to these rules until such time as a graduate Plan of Work designating the thesis-option is approved by the Graduate School.

- Full Time: To be full-time, students must be enrolled in at least 9 hours per semester.

- Half Time: To be half-time, students must enroll in a minimum of 4.5 but not more than 8.5 hours a semester.

### **International Students**

The [U.S. Citizenship and Immigration Services \(USCIS\)](#) requires international students on F-1 or J-1 visas to carry a full-time course of study to remain in status. Students in their final semester who have completed the minimum hours required for a degree can use the Reduced Course Load form to enroll in fewer hours.

### **Co-op Students**

Co-op students registered for COP 500 will be considered full-time. Students registered for only COP 501 will be considered half-time.

### **Waiver of Hours**

Graduate students who meet certain prescribed special conditions, may be certified as either a full-time or half-time in cases where they do not meet the requirements for such as outlined above. A waiver of the uniform academic load rules requires attestation on behalf of the student by their committee chair, academic advisor, or their Director of Graduate Program and approval by the University.

#### **Summer Terms**

- Graduate students are not required to register during the summer.
- Students not enrolled in the Summer maintain their access to the library, but other facilities that are funded by students fees, such as the gym and Student Health Services, cannot be accessed without paying for a summer membership.
- Students who are employed as Graduate Research Assistants, but who are not enrolled in the University during a period of at least five weeks, are subject to Social Security tax withholding. Specifically, given Federal tax law as it relates to employment outside of student status, Social Security taxes will be withheld in June for RAs who are not registered in Summer Session I and in July for RAs who are not registered in Summer Session II. The source of funds that pays the stipend must pay the same amount of Social Security tax as is withheld from the student's paycheck during these months.
- Two special registration categories are available for Graduate Research Assistants who would not otherwise take courses in the summer: XXX 696 (Summer Thesis Research) and XXX 896 (Summer Dissertation Research), where XXX represents the course prefix of a specific department/program. Each of these courses is for 1 hour of credit, which is considered full-time enrollment for tax purposes, for the Summer and which run for 10 weeks, beginning the first day of Summer Session I and extend into Session II. Social Security taxes will not be withheld from the June or July paychecks of RAs who register for either 696 or 896.
- Please note that students who are not registered at least half time during the Summer are ineligible for Financial Aid during that period.

### Minimum Course Load for International Students

#### **1. Enrollment**

International students in F-1 or J-1 status are required to maintain full-time enrollment throughout their program, uphold good academic standing and make normal academic progress toward their degree objective. Full-time enrollment at NC State University is normally defined as a minimum of 9 hours per semester (fall and spring) for graduate students. For F-1 students, one (3 credit) online or distance education course may be used each semester to help satisfy full-time enrollment requirements. J-1 students cannot use online credits to satisfy the enrollment requirements. Students who have authorization to take a reduced course load and will take only one course in a semester are not permitted to take that course through on-line or distance education. Requirements for full-time enrollment may vary each semester based on remaining program requirements, pending completion of the academic program, and/or thesis research. Upon arrival to campus, international students should contact the

Office of International Services, 111 Lampe Hall, Suite 320, 919-515-2961, for more information and/or policies concerning their entire course of study in the United States.

## **2. Enrollment and Distance Education**

International Students will not be granted F-1 and J-1 visa documentation (the I-20 and DS-2019 respectively) based on admission to a Distance Education (DE) or Online program. Additionally, it is a violation of status for an F-1 or J-1 student to change curriculum or major from a traditional course of study to a DE or Online program after arrival to NC State University.

J-1 students (and sponsored F-1 students) are prohibited from enrolling in DE courses at NC State alternate sites of instruction, including but not limited to sites related to programs with the College of Education and the MBA program at Research Triangle Park. Any questions about international students and enrollment at alternate sites of instruction should be directed to the Office of International Services. F-1 students may use one (3 credit) online or distance education course each semester to help satisfy full-time enrollment requirements. Students who have authorization to take a reduced course load and will take only one course in a semester are not permitted to take that course through on-line or distance education.

## **3. Audit Courses**

Audit courses do not carry any credit and therefore do not count towards full-time enrollment. Any students who audit courses should not include such courses when calculating full-time enrollment. Courses taken as "Pass/Fail" do carry credit and therefore do count towards full-time enrollment for immigration purposes. Students should always consult with their academic advisors concerning enrollment and changes to enrollment prior to taking any action. Students may also refer to the NC State University Policies, Regulations and Rules Handbook for further information.

## **4. Summer Enrollment**

Students are not required by immigration regulations to enroll in the summer session if they were full-time students in the spring and will continue their enrollment in the fall. Students may choose to study, return home, or work on campus (or off-campus if eligible and if authorized in advance) in the summer. Students authorized for full-time CPT may also be exempted from enrolling in classes without jeopardizing their nonimmigrant status, but should check with their DGP or advisor first.

\*In order to be exempt from Social Security and Medicare (FICA) tax withholding during the summer sessions, IRS regulations require that students be enrolled at least half time in each session. For students with North Carolina residency, the amount of FICA withholding is more than the cost of tuition. The courses, GN 696 and GN 896, Summer Research, will cover both summer sessions. In addition, **unregistered students covered by health insurance must pay a fee per summer session to Student Health Services in order to use the Student Health Services Center.** Students who are registered for classes in summer are automatically eligible to use the Center.

## **5. Exceptions to Full Time Enrollment**

International students who complete all academic program requirements and/or meet Graduate School no-registration deadlines are considered to have completed their program for visa purposes and are neither required, nor permitted, to enroll for an additional semester.

## **2. GRADUATE STUDENT SUPPORT PLAN (Teaching/Research Assistants & Fellows)**

NCSU instituted a support plan for graduate students in Fall 1997 that includes requirements for new and continuing students. The plan applies only to students receiving a minimum stipend of \$10,000 annualized for masters students and \$15,000 for PhD students. GSSP offers health insurance and coverage of tuition for standard hours of course work for a defined period of semesters (typically 8 or 10). [For more information on the GSSP, please visit the GSSP website here.](#)

		Graduate Student Support Plan (1) Membership Requirements At-A-Glance										
		Number of Semesters from Initial Graduate Enrollment to Current Semester (2)										
		1	2	3	4	5	6	7	8	9	10	>=11
Current Graduate Level		Hours of Registration Required										
Masters (MR)		F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*
Doctors (DR)	DR Students who had an MR in the same or related field upon initial enrollment to the Graduate School at NC State	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*
	DR Students who did NOT have an MR in the same or related field upon initial enrollment to the Graduate School at NC State	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*	F*
(1) For Graduate Students currently receiving a minimum stipend (from RA, EA, TA or Fellowship) of \$8,000 annualized.		Benefits-Health Insurance, In & Out of State Tuition										
(2) Fall and Spring term only. Initial enrollment refers to initial enrollment in Graduate School at N. C. State and includes those who go from a Master's degree to a Ph.D. Only semesters actively enrolled are counted. Leaves of Absence are excluded.		Benefits-Health Insurance ONLY										
F* = Full-time at all times												

### 3. ACADEMIC DIFFICULTY

Graduate students may be terminated from a program at any time if, in the judgment of the degree-granting Department and the Graduate School, a student fails to make satisfactory progress toward completion of the degree (regardless of grades). The definition of satisfactory progress toward completion of the degree program may differ among degree offering units. Examples of unsatisfactory progress may include, but are not limited to, inadequate grade point average (GPA), inadequate research and/or research skills, failure to obtain satisfactory grades in required courses for the program, or failing the candidacy, comprehensive, or final oral examination. A GPA of at least 3.00 for all graduate course work at NC State is required for graduation. For more information: <http://catalog.ncsu.edu/graduate/graduate-handbook/academic-difficulty/>

**a. Academic Warning**

Graduate students are given a notice of academic warning if they have accumulated 18 or fewer hours at the 400-level or above and have less than a 3.0 GPA. Students on academic warning may continue to hold an assistantship or fellowship and receive financial aid.

**b. Academic Probation**

Graduate students will be placed on academic probation if they have accumulated more than 19 hours at the 400-level or above and have a GPA in the range of 2.67 to 2.99. Students placed on academic probation will be ineligible for financial aid or appointment or reappointment to an assistantship or fellowship.

**c. Termination**

Graduate students will be terminated from their program of study if they have accumulated more than 18 hours at the 400-level or above and have a GPA below 2.67, or if they have accumulated 30 or more hours and have less than a 3.00 GPA. A student may also be terminated for violation of the NC State Student Code of Conduct or upon recommendation by the Department if the student is not making satisfactory progress toward the degree as determined by departmental guidelines.

**d. Reinstatement**

Under extenuating circumstances, the Director of Graduate Programs may recommend and provide justification to the Dean of the Graduate School to reinstate a student's graduate classification. This recommendation must be in writing and must be signed and approved by the advisory committee and the Director of Graduate Programs or the Department Head before the Graduate Dean will consider it. It should include a reasonable schedule for achieving the 3.0 average.

***Students must have a cumulative GPA and a Plan of Work GPA of at least a 3.0 to graduate.***

XI. APPENDIX

## *Appendix A*

### ***Residency***

#### **Residency for Tuition Purposes**

Residency Determination has been centralized for the state of North Carolina. Applicants and currently enrolled students who are claiming NC Residency or wish to apply for in-state residency for tuition purposes, are required to go through the [North Carolina Residency Determination Service \(RDS\)](#). NOTE: A determination of out-of-state will be given to anyone who has not yet lived in North Carolina for 365 days.

**If you are applying to a Graduate Program and claim to be an NC resident,** follow the instructions on the application and complete your residency determination at [ncresidency.org](#). Once you have received a validated residency decision from RDS, enter the Residency Determination Number (RCN) into your application. If you are ready to submit your application prior to completing your RDS determination or receiving your RCN number, you will have the opportunity to enter it later through your applicant portal. Entering your RCN after submission will not effect your application, but until it is provided, you will be considered an out-of-state applicant.

**Updating your RDS determination with NC State:** If your RDS decision or expiration date has changed since you originally provided NC State with your Residency Determination Number (RCN) number, you will need to complete the residency form in your [applicant portal](#), or update it through NC State's self-service residency page by:

- logging into [MyPack Portal](#)
- navigating to your Student Homepage
- clicking on the Personal Information tile
- selecting 'Residency Information' from the left-hand navigation
- entering your RCN in the corresponding text box, selecting "Save RCN" and then "Request Residency Data"

If we've already received your RDS determination and it's displayed on this page, you will not see the button to "Save RCN" or "Request Residency Data" and no further action is needed.

NOTE: You must have a unity ID to login to access this page.

**Current graduate students applying for residency next year:** Begin completing your residency acts (outlined below in the Basic Requirements of Residency) about a year before you will be applying for residency. You will need to wait until you have lived in North Carolina for 365 days before applying through the RDS system or you will automatically receive a determination of out-of-state. If you do apply too early, you can log back into your RDS account and Request a Reconsideration once you have met the 365 day requirement.

Any questions and concerns can be directed to: [rdsinfo@ncresidency.org](mailto:rdsinfo@ncresidency.org), 919-835-2290, or 844-319-3640.

The tuition classification laws described here apply to all constituent institutions of the University of North Carolina – Public System and are taken from [NC G.S. 116-143](#) and the [North Carolina State Residence Manual](#).

#### **RDS Troubleshooting**

**Reasons why you may be seeing Out-of-State on your bill or admission letter, even after receiving a decision of In-State from RDS:**

- Residency classifications from RDS are only valid for 15 months. Therefore, if you have applied to a graduate program and completed your RDS determination over 15 months prior to the start of your admit term, your tuition classification at the time of admission will show as Out-of-state. This is the case even if you initially received a decision of In-state from RDS. You will need to go back to RDS to request a "reconsideration" that should extend the expiration date of your In-state determination. Ideally, you would do this about a year, or less

than 15 months before the start of date of your first semester of enrollment. You will then need to update your record by following the steps described above in the “Updating your RDS with NC State” section.

- Expiration dates of documents are factor in RDS determinations. If you are an international student holding a visa or green card with an expiration date prior to the start date of your intended or next semester of enrollment, your residency determination will have an expiration date matching your visa or green card document.
- RDS is strict with all dates, including students who fall under the Active Duty Military Exception (outlined below). The report date on the active duty member’s military orders or affidavit determines the day the student’s eligibility for in-state tuition begins. Until it is exactly that date, the student’s residency determination will show as out-of-state.

### **Basic Requirements of Legal Residency**

1. Have 12 months of physical presence in North Carolina.
  - Have held legal residency for at least 12 months prior to the start of the requested term.
  - Demonstrate that you are a legal resident of North Carolina and not just temporarily residing in the state as a student.
  - Have not had any significantly long breaks in physical presence in North Carolina for the past 12 months.
2. Have the financial and legal ability to establish a domicile.
  - Be (mostly) financially independent from non-North Carolina parents or guardians.
  - Not be a tax dependent of non-North Carolina parents or guardians.
  - Be able to show that you can financially support yourself independent of any out of state sources.
  - Have an independent financial aid status, if using financial aid.
3. Demonstrate the intent to make North Carolina your home aside from attending school.
  - Complete a cluster of residency acts a year prior to the start of the requested term.
  - Not hold ties to another state that would indicate you are a resident of that state.
  - Explain why some residency acts may not have been able to be completed, if that is the case.

### **Special Exceptions**

1. [Active-Duty Military](#) Stationed in North Carolina, their spouses and their dependents (legal residency is not required to use this benefit).
2. Full-Time UNC System Employees, their spouses and their dependents (you must be a legal resident of any duration to use this benefit).

## **MEMBERSHIP IN THE GRADUATE FACULTY**

Committee Chairs/Major Graduate Advisors and Graduate Advisory Committee members must be members of the NCSU Graduate Faculty. A professor may be approved as an Associate Graduate Faculty member or as a Full Status Graduate Faculty member. Associate members may chair master's advisory committees and serve on master's and doctoral advisory committees. Associate members may co-chair doctoral committees as long as the chairman holds Full Status. Graduate Faculty members can also represent several departments. When filling out the Advisory Committee form, please remember to designate the department/program the professor is representing.

A Professor can be a University Faculty member and still not be a member of the Graduate Faculty. It is the student's responsibility to be sure each member of his committee is a Graduate Faculty member.

## *Appendix C*

### Tips for selecting a Committee Chair/Major Advisor

The selection of a Committee Chair/Major Graduate Advisor is one of the most important decisions that will be made in your graduate program. Each advisor and student is unique and has their own particular strengths and weaknesses as well as style of operation and interaction. The goal of the laboratory rotations is to identify advisors who will provide the training environment that the student desires and needs to reach their degree goals. These rotations are an excellent opportunity to gain first-hand information on specific programs. Some tips for gaining the information you need to make your decision are listed below:

- Ask questions of current technicians, postdoctoral researchers and senior graduate students in the laboratory. They are extremely valuable sources of information and often are instrumental in getting a project started. However, do not choose a laboratory based solely on these individuals, since most will move on before you finish your degree.
- Ask to see copies of recent publications and current grant proposals and read them.
- Ask for specific information on current projects in the laboratory and possible projects for new students.
- Find out about the advisor's management style. Some faculty members like to have weekly progress reports and planning sessions, while some meet much less frequently with their students. You should be aware of how much direct contact you can expect.
- Find out about graduate students that have been in the laboratory before you, and what types of positions they are in now. Inquire about current students, when they expect to graduate and how many new students may enter the laboratory.
- Ask about long planned absences such as sabbatical leaves. This should not affect your decision to join the laboratory, but be aware that it will affect the planning of projects and committee meetings.

If you are not satisfied with your three rotations, inquire about doing more. A few extra months spent in the beginning are much better than ending up somewhere where you are not happy.

*We strongly encourage you to discuss your lab rotation plans with the Director of Graduate Programs. Your choice of advisor is the most important decision you will make in your graduate training program!*

## *Appendix D*

### **Graduate Student Responsibilities**

By accepting admission to NC State University, graduate students indicate that they are ultimately responsible for adhering to the policies and procedures that govern their education at the university. That responsibility requires that all graduate students know where to find the rules and regulations of the Graduate School and any additional requirements of their specific programs.

Students are expected to adhere to either the requirements in place at the time they matriculate at NC State or any subsequent versions of the requirements approved during their continuous enrollment. Students must use an entire set of requirements; they may not piece together a set of requirements from various versions. If a student is readmitted, they must use the requirements in place at that time or any subsequent versions, but they cannot choose requirements from their previous enrolled status.

The Graduate Handbook defines the **minimum** requirements of the Graduate School and describes procedures that must be followed. Individual program requirements may be found in the [Graduate Catalog](#) and should be available through the department office or its website.

All students must also abide by standards of conduct established by NC State. The Graduate Handbook section on Codes of Conduct provides web links to [Policies, Procedures, and Rules](#)



