Department of Forest Biomaterials

Guidelines and Policies (rev 8 3 10)

M. S. Students

Check In and Welcome

- Upon arrival on campus, the student should report to the FB Director of Graduate Programs (DGP) to complete formalities; the FB DGP is currently Dr. Richard Venditti, Biltmore Hall, Room 1204, Tel: 919-515-6185, richard_venditti@ncsu.edu.

- Arriving students should immediately report to the FB Graduate Secretary (GS) to complete identification, registration, residency, patent and payroll documentation; the FB GS is Melissa Rabil in Biltmore Hall, Room 1022, Tel: 919-515-3181, melissa_rabil@ncsu.edu.

- If a student currently enrolled in the Department’s program wishes to continue for a Ph.D. degree after completion of the M.S., the student must apply in a timely manner as any new student. International students must have their visa verified for the new program.

Selection of Adviser

- If the student has accepted a research assistantship from a specific faculty member, the FB Graduate Administrator will direct the student to that faculty member who will serve as his/her official Adviser.

- If the student has not received a research assistantship or has received a departmental assistantship, the FB Graduate Administrator will either:
  1. Assist the student in choosing the initial semester’s courses and provide information on TRACS and how to obtain a PIN number or,
  2. Temporarily assign the student to a faculty member having similar research interests, who will assist the student with these matters.

- The FB DGP or temporary Adviser will direct the student to visit all faculty to discuss research interests and funding pending assignment of a permanent Adviser.
Office Assignment and Keys

- The Advisor and FB DGP will be responsible for locating an office for the student. Building and office keys are issued by the FB Departmental Administrative Assistant, currently Ms. Jane Howe, Biltmore Hall, Room 2105.

Laboratory Assignments

- Students who will be working in laboratories must complete Hazardous Communications Training (training sessions will be scheduled by Ms. Barbara White – 919-513-0298 or Dr Tony LaPasha – 919-5152850) and also be trained according to the Safety Plan for each Laboratory in which they will be working. Safety training MUST be completed before any laboratory keys will be issued. Signed copies of all training forms must be filed with the FB Departmental Administrative Assistant before laboratory keys will be issued.

Orientation Sessions

- The FB Department Head and FB DGP will hold an initial meeting with all new graduate students during the first two weeks of the semester. The purpose of the meeting is to welcome the students and discuss responsibilities, duties, and general departmental policies. The FB Graduate Secretary will discuss pay procedures, visa policies (the OISSS Handbook will be issued to international students), etc, and a representative from the computer center will discuss matters related to computer usage. Other departmental information as it arises is delivered during departmental seminar or via email.

- The FB Safety Coordinator, presently Barbara White, will schedule an initial Safety Orientation for all new graduate students during the first two weeks of the semester in which the graduate student enters.

Graduate School Requirements for the M.S. Degree


- **Committee**: As soon as practical, but in no case later than one semester after beginning graduate studies, the student should work with the Chair to form a Graduate Advisory Committee. The Advisory Committee must be composed of at least three Graduate Faculty. If a minor is declared the committee must include a representative from the minor field.

- **Plan of Study**: The student and the Committee will complete a Plan of Study. Assistance with completing the Plan of Study can be obtained from the FB Graduate Secretary.
• **Credit Hour Requirement:** A total of 30 credit hours is required for the M.S. degree. For continuous registration a student must take 9 hours per semester. There is no course requirement for the summer. Only 6 of the credit hours may be for research (WPS 695). Students should consult the Graduate Administrative Handbook for additional regulations on courses, [http://www.ncsu.edu/grad/handbook/index.php](http://www.ncsu.edu/grad/handbook/index.php).

• **Required Courses:** There is no Graduate School minimum requirement for course work (but see Departmental Requirement).

• **Residency Requirement:** Two residence credits (equivalent of one full academic year) must be secured in continuous registration as a graduate student (see Graduate Catalog).

• **Continuous Registration:** Continuous registration is required by the Graduate School until completion of the degree (see Graduate Catalog); however, leaves of absence may be granted.

• **Thesis:** The thesis must be written in a format acceptable to the Graduate School. For guidelines see the thesis preparation website at [http://www2.acs.ncsu.edu/grad/students/current/thesis.htm](http://www2.acs.ncsu.edu/grad/students/current/thesis.htm). According to the Graduate School, the student has the option of preparing one comprehensive thesis or preparing a series of papers for journal publication. The student should consult with the Committee for guidance and approval as to which option is most appropriate in a particular circumstance. After successful completion of the Final Oral Examination, the student must complete formalities with the Graduate School and schedule a meeting with the Thesis Editor to determine if the thesis format is acceptable to the Graduate School. It is a common courtesy for the student to make bound copies of the thesis for committee members who request a copy.

**Departmental Requirements for the M.S. Degree**

The Department of Forest Biomaterials has a number of faculty with diverse interests including traditional paper science and engineering and wood products, and new research areas such as biomaterials, innovative manufacturing and marketing, bioenergy, process and supply chain modeling, nanoscience, and lean manufacturing. The following requirements apply to all of these research areas.

• **Safety Training:** All graduate students must have basic safety training (first semester, see Barbara White) and additional safety training depending on the laboratories in which their research will be conducted.

• **Advisory Committee:** See the university requirements.

• **Course Requirements:** Students must take one of the two following sets of core courses:
<table>
<thead>
<tr>
<th>Core Course Set Option 1:</th>
<th>Core Course Set Option 2:</th>
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<tbody>
<tr>
<td>Research Methods</td>
<td>Research Methods</td>
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<tr>
<td>WPS 516  Forest Products Colloids and Surfaces</td>
<td>WPS 504  Physical and Mechanical Properties of Wood</td>
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<tr>
<td>WPS 565  Forest Biomaterials Physics</td>
<td>WPS 702  Wood Anatomy and Chemistry</td>
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<tr>
<td>WPS 723  Forest Biomaterials Chemistry</td>
<td>WPS 746  Wood Products Manufacturing and Business Processes</td>
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<td>WPS 760  Engineering Unit Operations for Biomass Conversion</td>
<td>WPS 591 Seminar (once)</td>
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- **Minor requirement**: The department does not require a minor field of study. If the student and committee choose to declare a minor, 9 credit hours of course work will be required in the minor field. For a formally declared minor the graduate school requires that one member of the Thesis Committee must be a representative of the minor field. If the student does not declare a formal minor the requirement is still to take 9 credit hours of course work outside of the department, but no minor representative is required. Exceptions to the 9 credit hour requirement can only be made by the student's Advisory Committee, with a letter to this effect sent to the FB Director of Graduate Programs.

- **Faculty Interview**: The student is required to interview all of the FB faculty, fill out a form summarizing the conversations, and submit it to the FB DGP during their first semester.

- **Resume**: The student is required to submit an updated resume every April to the FB GS. An example resume is available from the FB GS.

- **Qualifying Examinations**: Qualifying examinations are administered as part of the Research Methods course. A course grade of B- will be considered as passing the qualifying examination.

- **Graduate Seminar**: Two hours of graduate departmental seminar, FB 591, must be passed prior to scheduling the Final Oral Exam. Further, graduate students are expected to attend all graduate seminars even when not registered for the course. A minimum of three months must have elapsed between the semester in which the second credit of FB 591 is earned and the Final Oral Examination. This is to prevent duplication of the final seminar and final oral exam presentation.

- **Final Oral Examination**: Prior to the Final Oral Examination, the student should report to the FB DGP to ensure that all requirements have been met. The Graduate School requires at least two weeks notice to schedule a final examination. The FB DGP will then seek permission from the Graduate School to hold the Final Examination. At the Final Oral Examination the student will present a short (30 minute) seminar on the research. At the end of the presentation the Committee will examine the student on the research, coursework, and topics related to the field.

- **Checkout Procedures**: Before the final oral examination is scheduled, the student will have scheduled an exit interview with the department head, currently Dr. Steve Kelley. Before the FB DGP will forward the results of the Final Examination to the Graduate School, the student must have copies of the Masters Thesis and the
Department's checkout form signed by the Thesis Advisor and on file with the FB Graduate Secretary. The student must also complete a separation action checklist with the FB Graduate Secretary.

- **Departmental Activities:** All MS students will work as instructed by the FB DGP or Department Head, as needed, in support of Departmental activities for no additional compensation. This typically includes a semester of assisting a faculty member in teaching a class or laboratory. The FB DGP will make these assignments and coordinate with the student’s research advisor.

- **Other Requirements:** The student's advisory committee may determine other requirements judged to be in the best interest of the student and which are consistent with the spirit of the Department's graduate education and training programs.