Master of Science in Biotechnology

Program Handbook

2022-2024

Department of Cell and Regenerative Biology
School of Medicine and Public Health

Reference this handbook to learn about the unique policies, requirements, procedures, resources, and expectations for graduate students in the M.S. in Biotechnology

Last updated: August 2, 2022
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Navigating Policy and Resources at UW-Madison

This handbook is one of many sources to consult as you become familiar with the policies, procedures, requirements, resources, and norms of graduate education at UW-Madison:
How to Use This Handbook (optional)

The Graduate School’s Academic Policies and Procedures provide essential information regarding general University requirements. The M.S. in Biotechnology Program serves to administer the policies and procedures and explain how our degree requirements specifically fit within them. Students are required to follow the policies and procedures listed in the handbook. Information in the handbook, along with individual communications with program staff and faculty, are used to ensure that all degree requirements are met.

Who to Contact for Questions

Many of your questions about how to meet expectations and thrive as a graduate student will be answered by the various sources of policies, procedures, requirements, resources, and norms listed above. Several key positions in this department and on campus are ready to answer your remaining questions:

Program Staff Contacts:
Michele Smith, Graduate Program Manager  michele.smith@wisc.edu
Barbara Bielec, Program Assistant  bielec@wisc.edu
Bryan Husk, Associate Administrative Director  bthusk@wisc.edu
Natalie Betz, Associate Director, Faculty Director, Instructor  nabetz@wisc.edu

Graduate Program Coordinator
Each graduate program will have at least one department staff person typically called a Graduate Program Coordinator who serves as a point person for program policy and procedures. Graduate Program Coordinators are well versed in most elements of graduate education that extend beyond academic instruction in your program and will likely be your first stop for questions related to anything in this handbook.

Michele Smith is the M.S. in Biotechnology Program’s Graduate Program Manager and Bryan Husk the Administrative Associate Director. Both facilitate Graduate Program Coordinator functions for the M.S. in Biotechnology.

Director of Graduate Studies
Each graduate program has one faculty member designated to direct its educational vision and structure.

Names and contact information of your Graduate Program Coordinator and Director of Graduate Studies can be found on your program’s page in the Graduate Guide
(guide.wisc.edu/graduate). Simply navigate to the “Major/Degree” tab, click on your program’s name, and look for the contact information box on the righthand side.

Faculty Advisor
The M.S. in Biotechnology Program has a locked curriculum, so all students take courses in a specific manner. The program staff and faculty advisor serve as advisors for all students in the program.

Each student will be assigned a faculty advisor in each graduate program in which they are enrolled. Your faculty advisor(s) will be a key source of guidance for your academic development. Further definition can be found here: policy.wisc.edu/library/UW-1232. Guidelines for finding, changing, and working with your advisor can be found in the Advising & Mentoring section below.

The name and contact information of your faculty advisor can be found on your Student Center on MyUW (my.wisc.edu) under “Academic Progress” and then “Advisors.”

Your advisor team contacts are:
Natalie Betz, Associate Director, Faculty Director, Instructor  nabetz@wisc.edu
Bryan Husk, Associate Administrative Director  bthusk@wisc.edu
Michele Smith, Graduate Program Manager  michele.smith@wisc.edu

Graduate School Services
For general inquiries and graduate student services from the Graduate School, see the operations and front desk contact information on this contact page: grad.wisc.edu/contacts.

Department & Program Overview
The M.S. in Biotechnology program provides an integrated curriculum in science, policy, law, and business preparing students to LEAD the development and commercialization of new and promising technologies.

To provide a learning environment, rich in academic and industrial collaboration by drawing on the resources and expertise of global leaders in biotechnology, the Master of Science (M.S.) in Biotechnology Program is designed for biotechnology professionals who are ready to broaden their understanding and skills—and advance their careers.

See the following for department and program overview:
Diversity, Equity, and Inclusion

The M.S. in Biotechnology works to create a diverse, inclusive, and excellent learning opportunity for students to expand upon their cross-functional knowledge in their quest to direct their careers toward positions of leadership and responsibility. Students are recruited globally, with most hailing from local and regional locations. The Program’s over 400 students and alumni have an almost equal gender split and includes students from diverse geographical and cultural backgrounds.

The program follows DEI policies and procedures set forth by the University and School of Medicine and Public Health. (https://intranet.med.wisc.edu/faculty-affairs-and-development/faculty-central-resources-2/developing-educators/diversity-equity-and-inclusion/)

The program works closely with students to provide and support effective student accommodations as a partner with the McBurney Disability Resource Center (https://mcburney.wisc.edu/). Students may apply for accommodations through McBurney Connect (https://mcburney.wisc.edu/mcburneyconnect/)

The program is committed to serving as the conduit between students and various departments on campus. Contact Michele Smith, Program Manager, with any questions that you might have regarding diversity, equity, and inclusion and how to navigate within the University. Michele’s direct email is michele.smith@wisc.edu

How to Get Involved

As a graduate student at UW-Madison, you have a multitude of opportunities to become involved on campus and in your academic discipline. This involvement often enhances your academic, professional, and personal growth through developing advanced leadership, communication, and collaboration skills. It also provides opportunity for professional networking.

In Our Discipline

Most students in the M.S. in Biotechnology Program are working full time, as well attending classes full time. The program provides several ways for networking within the
biotechnology industry and staying involved as part of the Biotechnology Badger alumni group. You can find students and aluming on this url with direct LinkedIn Profiles: https://www.ms-biotech.wisc.edu/students.cfm?class=all
Additionally, students and alumni are encouraged to attend the annual Bio Forward Conference. Bioforward’s website is: https://www.bioforward.org/

In Our Program/Department

Students and alumni network events, including sponsored speaker series, are scheduled throughout the year. The alumni group benefits through expanding their networks, finding out who is working where, and discussing how to make the next move up the career ladder.

On Campus & In the Community

The Wisconsin Idea is the principle that education should influence and improve people’s lives beyond the university classroom. For over 100 years, this idea has guided the University’s work. http://wisc.edu/wisconsin-idea/

You will find a list of ways to engage in campus and local community life at:

The Graduate School’s Current Student Page
grad.wisc.edu/current-students

If you are a student actively involved in leadership and service activities, consider nominating yourself for membership in the following honor society:

Edward Alexander Bouchet Graduate Honor Society
grad.wisc.edu/diversity/bouchet

Getting Started as a Graduate Student

Each new cohort must attend the orientation session. This allows the cohort to meet each other and faculty in a several ways before the start of class. For 2022, orientation is an all day in-person event. The program staff will invite all students to this event.

Advising & Mentoring
Advising relationships are a central part of academia, important to both the experience and development of students and faculty members alike.

The Graduate School’s definition of an advisor can be found here: policy.wisc.edu/library/UW-1232. Your advising team has two main roles: 1) To assist you in acquiring the highest possible level of knowledge and competence in the field, and 2) to serve as the committee that will determine whether you have performed at an acceptable level in each of your degree milestones (see “Degree Requirements” section below for further information on building your committee). The advising team may include tracking your progress in completing your degree (note: this may include use of the Graduate Student Tracking System at gsts.grad.wisc.edu), assisting with course difficulties that you might be having, and working with you and your capstone mentors as you complete your final capstone project.

The M.S. in Biotechnology program advising team is different than traditional graduate advising, because of its locked curriculum. The advising team serves in a greater capacity to assist students who are struggling with class expectations, work/life balance, career opportunities, and navigating various university departments including the registrar, bursar, and library.

The locked curriculum means that M.S. in Biotechnology students are not eligible to enroll in other courses available on campus. In addition, students are not eligible to hold tuition-remitting assistantships (research or teaching). Students may work on campus, but they must be considered and paid as hourly employees. The program advisors work with students and other departments to assist in any confusion.

Both the student and advisor are responsible for making their expectations clear to each other. Be sure to discuss this with your advisor.

Finding & Selecting an Advisor

The program advising team include both faculty and staff members in the program. To learn more about the faculty and staff in our program, consider consulting the following sources:

- Our program website (https://www.ms-biotech.wisc.edu/)
- Faculty publications and/or LinkedIn Profiles
- Students will be paired with two faculty mentors (one scientific and one business) for their final capstone project.
Throughout the program staff serve as advisors to all students in terms of coursework, individual and group projects, and career decisions.

Changing Your Advisor

As the advisor-student relationship is one of mutual agreement, it may be changed by either party. The MS in Biotechnology Program staff are here to serve as advisors for both students and faculty. If you decide that you would prefer working with a different advisor, discuss this with your program staff to seek the change.

If you change your advisor, you must notify your Graduate Program Coordinator and follow any related procedures.

We all know that some people work better with others. Students are encouraged to work with program staff when challenges arise. We will work together to find the best advisor(s) and mentor(s) for each student throughout the program. This is true not only for the final capstone project, but also each semester as students will be working with a wide variety of instructors.

Mentoring Networks

In addition to a formal advisor, you are encouraged to develop a broad network of individuals who can provide academic and professional mentorship during and beyond your time as a graduate student.

Your mentoring network while a student includes: program staff, course faculty and guest speakers, and your cohort. This network remains throughout your career. As you rely on them, they will rely on you for advice, mentoring, career growth, and life changes.

Degree Requirements

Master’s Degree

All students in the Master of Science in Biotechnology are responsible for staying aware of the following requirements to complete the degree.

Requirements
For all current requirements to complete your degree (e.g., credits, courses, milestones, learning outcomes/goals, etc.) see your program’s page in the Graduate Guide. Navigate to guide.wisc.edu/graduate, then select “Degrees/Majors,” your program’s name, the “Named Option” of your program (https://guide.wisc.edu/graduate/cell-regenerative-biology/biotechnology-ms/), and then “Requirements” from the navigation bar on the right side.

You will be taken to a subsection of your program’s Guide page that contains all official requirements for your degree (https://guide.wisc.edu/graduate/cell-regenerative-biology/biotechnology-ms/#requirements).

Similarly, see “Policies” from the navigation bar of your program’s page to learn about policies affecting these requirements (e.g., prior coursework, probation, credits per term allowed, time constraints, grievances and appeals, etc.). Note that when you look at the Guide to learn about program requirements, you will be viewing the current year’s version. To find past versions of program requirements, see the Guide Archive and search for your program and the year you would like to reference.

Capstone Information

Committee & Topic

Master’s committees advise and evaluate satisfactory progress, evaluate a capstone, and/or sign a degree warrant. For general guidance from The Graduate School on the role and composition of committees as well as an online tool to determine if your committee meets minimum requirements, see the following policy page: policy.wisc.edu/library/UW-1201.

Your capstone mentor team will be selected by program faculty and will comprise of one scientific or technical mentor, as well as one business mentor. The committee is based on your capstone project topic. The mentoring team, along with advisory team, provides guidance on refining your capstone topic. The actual topic selection is the responsibility of each student.

If you find that your topic and/or mentoring needs no longer align with your advisor, see “Advising & Mentoring” section on how to change advisors. Note that your committee composition may or may not need to change as well in this scenario, depending upon your new advisor’s guidance.
**Capstone Form and Content**

The final research report must be completed using Microsoft Word. All margins (top, bottom, right and left) should be set to one inch, line spacing should be set to 1.15, and the font should be Arial 11 pt (Arial 10 or 9 pt may be used for Tables and Figures).

A **required Table of Contents** for the final paper is presented below. A successful paper will integrate the science, technology, and business topics so that the information flows together and tells a single story with limited redundancy. The headings and subheadings indicated in **red** must be included in the body of the paper for organization and to navigate the reader. The topics in **black** should be covered in the paper, but do not require separate subheadings in the text unless you prefer them to. The **point values for each section and associated course are also indicated in red. The total paper is worth 1000 points.**

Cover Page (Title and author’s name)  
Table of Contents Page

1. **Executive Summary** (1-2 page overview of your entire paper, including a brief summary of key findings, recommendations, and conclusions - do not just state what you will cover but include real findings and recommendations. (50 points each technical and business)

2. **The Problem** (8-10 pages) (180 points technical, 50 points business)  
   - Detailed description of the problem (challenge/issue) you propose to address and why it is an opportunity? What is the unmet customer need? What are the current solutions to the problem?  
   - Who are the target customers and what is the compelling reason for them to buy a new solution?  
   - What is the total **global market** for this problem? Are there regional differences in customer needs? Ideally the problem is a global one or has global components.

3. **The Solution** (10-12 pages) (180 points technical)
   - Detailed review of the basic underlying science of the technology - statement of the technology and its significance as a potential solution. What makes it a good solution?  
   - What is the economic logic for applying this solution to the problem? (include broad calculation of Fermi estimate or 3W estimate supported by a pro forma spreadsheet in an appendix)  
   - Current applications of the technology (how the technology is being used today)  
   - Potential future applications of the technology (besides your proposed use).  
   - Global Intellectual Property summary
     - Patentability – is the solution patentable – what is the strength of the patent(s)?  
     - Do you have Freedom to Operate? Are there enabling or blocking patents?  
     - What are the options and what is your recommended overall IP strategy? (A summary table for this section is highly recommended, highlighting the key patents involved and their status)  
   - Technical analysis of existing or emerging competing technologies
4. Analysis of the Market Opportunity (4-5 pages) (100 points business)
   - Global market size and growth potential (realistic TAM/SAM/SOM). Who are the target customers?
   - Competing companies with current solutions and their capabilities (present this in a table format)
   - Industry attractiveness based on potential for profitability (using Porter’s 5 Forces model)

5. Portfolio Strategy (10-12 pages). Apply the appropriate business tools to identify and analyze: (200 points business)
   - What is the ideal company to develop and likely acquire this technology and why?
     - Apply Value Chain and VRINE to identify
       ▪ Which combination of resources and/or capabilities is likely to generate a “Sustainable Competitive Advantage” for the selected company and your product? What will differentiate the company and product from its current competitors given its portfolio of current holdings?
       ▪ What capabilities and gaps does the selected company have compared to what is needed to develop and commercialize this technology?
       ▪ Based on the above analysis, what resources and capabilities must the selected company develop or acquire to successfully develop and commercialize the proposed product?
   - What alternatives exist for the selected company to develop/acquire needed resources or capabilities, and which do you recommend?
   - How would adding your proposed solution complement the rest of the selected company’s products? How does the combined portfolio create value (improve the competitive position and increase the opportunity for profit) for that company and/or exploit differentiators so that company and technology excels in the market?
   - The Strategy Diamond model should be used to identify and analyze the elements of your recommended strategy and together with the results from your application of other business tools lead to your recommendations for:
     ▪ In what arenas should the selected company compete (target markets – geographical and product/service)?
     ▪ What staging and pacing: which markets and in what order do you recommend the selected company launch this technology (NOT the steps of product development)
     ▪ How will they most effectively sell into each identified target market?
     ▪ How will the selected company make money—who will pay and why? Insurance issues?

6. Global Issues (2-4 pages) (PESTEL and CAGE analyses should be applied here) (50 points business)
   - Identify any Political, Economic, Social, Technological Environmental, and Legal considerations affecting development and launch of the product globally.
7. **Summary and Conclusions (2 Pages)** (50 points each technical and business--business includes appendices)

8. **Methods – Resources Used for Research (1 Page)** (10 points technical)
   - Literature Review: How was it done and what databases were used?
   - List personal and telephone interviews with a brief description of the person's background.
   - Other sources utilized

9. **References (2-3 Pages)**. Make sure inserted hyperlinks are active and citations are complete and well cited in the body of the text. All figure and tables should be referenced as well, if they derived from an outside source. Follow the “Numbered Citation Style” provided. All internet sites referenced should include the date they were accessed. (15 points technical)

10. **Appendices (2-3 Pages total included in the 50 page maximum limit)** (15 points technical, business points included in Summary and Conclusions)

**Procedures**

The capstone project follows a series of checkpoints where the student submits parts of the project to mentors who provide feedback. Checkpoint communication may occur in the following manner: face to face interactions, email correspondence, and written submissions with written feedback.

**Course Schedule**

The M.S. in Biotechnology Program is a locked curriculum. All students within the cohort take the same courses in the same order. Courses are set up as seven sessions that occur every other week throughout the semester. Students must complete all work within one semester to be eligible to move on to the next semester. Students who elect to withdraw from the program may request to be reinstated, but may have to wait a full year in order to move to the next semester coursework. Program staff will work with all students who must withdraw for professional and/or personal reasons.

Program courses are locked in the following fashion.

**Year 1: Fall Semester**

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>CLASS TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRB-800</td>
<td>Intellectual Property, Patents, and Licensing</td>
<td>Thursdays 6:00pm-9:00pm</td>
</tr>
</tbody>
</table>
CRB-802 (2 credits) | Business of Biotechnology: Fundamentals of Product Development | Fridays 8:00am-12:00pm
---|---|---
CRB-803 (2 credits) | Molecular Technologies I | Fridays 1:00pm-5:00pm
CRB-804 (2 credits) | Biotechnology Regulations and Ethics | Saturdays 8:00am-12:00pm

Year 1: Spring Semester

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>CLASS TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRB-820 (5 credits)</td>
<td>Biotechnology Operations</td>
<td>Thursdays 6:00pm-9:00pm, Fridays 8:00am-12:00pm</td>
</tr>
<tr>
<td>CRB-843 (2 credits)</td>
<td>Project Management and Leadership</td>
<td>Fridays 1:00pm-5:00pm</td>
</tr>
<tr>
<td>CRB-824 (3 credits)</td>
<td>Molecular Technologies II</td>
<td>Saturdays 8:00am-12:00pm</td>
</tr>
</tbody>
</table>

Year 2: Fall Semester

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>CLASS TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRB-830 (4 credits)</td>
<td>Early Drug Discovery</td>
<td>Thursdays 6:00pm-9:00pm, Fridays 8:00am-12:00pm</td>
</tr>
<tr>
<td>CRB-841 (2 credits)</td>
<td>Business of Biotechnology: Commercialization Pathways</td>
<td>Fridays 1:00pm-5:00pm</td>
</tr>
<tr>
<td>CRB-834 (2 credits)</td>
<td>Molecular Technologies III</td>
<td>Saturdays 8:00am-12:00pm</td>
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</tbody>
</table>

Year 2: Spring Semester

<table>
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<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>CLASS TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRB-845 (1 credit)</td>
<td>Professional Development and Effective Management</td>
<td>Thursdays 6:00pm-9:00pm</td>
</tr>
<tr>
<td>CRB-844 (3 credits)</td>
<td>Advanced Biotechnology: Global Perspectives</td>
<td>Fridays 8:00am-12:00pm</td>
</tr>
<tr>
<td>CRB-842 (3 credits)</td>
<td>Business of Biotechnology: Sustaining Growth</td>
<td>Fridays 1:00pm-5:00pm</td>
</tr>
</tbody>
</table>
Master’s Degree Checklist: Timeline & Deadlines

The Graduate School maintains a list of steps to complete your master’s degree, including deadlines and important things to know as you progress toward graduation: grad.wisc.edu/current-students/masters-guide.

Program staff work directly with the graduate school regarding warrants and other materials required for graduation. The checklist to graduation includes:

1. Complete all required coursework.
2. Meet minimum cumulative GPA of 3.0.
3. Complete the capstone project
4. Program staff will submit warrant request to the graduate school.

Enrollment Requirements

You are responsible for following Graduate School policies related to course enrollment requirements and limitations:

Adding / Dropping Courses
grad.wisc.edu/documents/add-drop

Canceling Enrollment
grad.wisc.edu/documents/canceling-enrollment

Enrollment Accountability
grad.wisc.edu/documents/enrollment-accountability

Minimum Enrollment Requirements
policy.wisc.edu/library/UW-1208
The M.S. in Biotechnology Program is a locked curriculum, students must take the courses in the given sequence. Students are expected to successfully complete each semester coursework before moving onto the next semester. Incompletes are not allowed. Students are expected to reach out to the program advising team at any time they perceive problems in completing assignments or attending class.

Students who withdraw from the program may request reinstatement, and be approved by the M.S. in Biotechnology Program. Students may have to wait a full year to fit into the next sequence of coursework. For example, a student withdraws and drops all courses for the fall 2022 semester. This student will have to wait until the following fall 2022 semester to take these courses. The student is not permitted start back up in the program for spring 2023 semester. See below for exceptions.

**Academic Exception Petitions**

Academic exceptions are considered on an individual case by case basis and should not be considered a precedent. Deviations from normal progress are highly discouraged, but the program recognizes that there are in some cases extenuating academic and personal circumstances. Petitions for exceptions to the Satisfactory Progress Expectations (academic or conduct) shall be directed to the Director of Graduate Studies or relevant committee chair (example Curriculum Chair).

The following procedures apply to all petitions:
1. The specific requirement/rule/expectation pertinent to the petition must be identified.
2. The student’s academic advisor must provide written support for the petition.
3. All course work substitutions and equivalencies will be decided by appropriate area-group faculty or curriculum chair.

More generally, the Director of Graduate Studies, in consultation with the student’s advisor, may grant extensions to normal progress requirements for students who face circumstances (similar to tenure extensions) as noted in university regulations, this includes childbirth, adoption, significant responsibilities with respect to elder or dependent care obligations, disability or chronic illness, or circumstances beyond one’s personal control. Where warranted, the petition should provide good evidence of plans and ability to return to conformance with the standard and to acceptably complete the program. The normal extension will be one semester; anything beyond this will be granted only in the event of highly extraordinary circumstances. Extensions will be granted formally with a note of explanation to be placed in the student’s file.
Capstone Project

A student who fails the final capstone may be offered a second opportunity to pass the qualifying examination or may be dismissed from the program. Petitions of a decision by the Capstone Committee must be made to the Exceptions Committee within two weeks or they will be final. The Exceptions Committee will make the final decision regarding a petition.

A student who has not satisfied the Capstone within 36 months of entering the program will be dropped from the program, except by appeal in writing to the Exceptions Committee, which will make the final decision.

Extension Requests

Students who have not completed the degree on schedule may request extensions. Requests for a one-semester/year extension can be made to the Exceptions Committee. The Exceptions Committee is authorized to approve these requests upon written justification from the student and their advisor. The student must describe the reasons for the request and provide a proposed timetable for completing all program requirements. The major professor must sign the request form and write comments endorsing the request. The request should be made as soon as the need for an extension becomes apparent. The Exceptions Committee may request additional documentation as needed. Appeals or requests for additional extensions must be approved by the full program faculty.

Satisfactory Academic Progress

Your continuation as a graduate student at UW-Madison is at the discretion of your program, the Graduate School, and your faculty advisor. Any student may be placed on probation or dismissed from the Graduate School for not maintaining satisfactory academic progress, and this can impact your academic standing (detailed below), financial aid (see this policy page: policy.wisc.edu/library/UW-1040), or funding (consult your sources of funding, as applicable). Our program has its own definition of satisfactory academic progress and related procedures that supplement Graduate School policy, as described in this section.

Definition

Information about how the Graduate School determines satisfactory academic progress can be found at this policy page: policy.wisc.edu/library/UW-1218. In addition to the
Graduate School's monitoring of satisfactory academic progress, this program regularly reviews the satisfactory academic progress of its students, defined as the following:

The M.S. in Biotechnology Program follows the graduate school policy on academic progress. Students enrolled in the M.S. in Biotechnology Program must maintain an average GPA of 3.0 or better. Students with a lower than 3.0 cumulative GPA will be notified via email and placed on academic probation. Students are placed on an academic hold while on probation and are not able to enroll in courses until after final grades for the semester have been posted.

Grades lower than a C are considered unsatisfactory and may lead to dismissal from the program. Students are allowed to appeal the final grade following the exception rules stated in this handbook.

Not Meeting Academic Expectations

Student progress will be reviewed through coursework during each semester. If the advisor and graduate committee find at any other time that a student has failed to achieve satisfactory progress in the academic expectations set in this handbook, the student will be notified and given an opportunity to submit a response within a set time period (typically 2 weeks).

The advisor and graduate committee will review the response within 2 weeks and determine if further action is needed. Students may be dismissed from the program. Students may, alternatively, be placed on probation for one semester and then reviewed by the program advisor team following the probationary semester. Students placed on probation may be dismissed or allowed to continue based upon review of progress during the probationary semester. If a student wishes to appeal any decision stemming from this review process, they can do so within 2 weeks of the date of the decision letter through submitting a letter to the chair and requesting a new hearing with the addition of a faculty member external to the original graduate committee.

Personal Conduct Expectations

Professional Conduct

The Office of Student Conduct and Community Standards maintains detailed guidance on student rights and responsibilities related to learning in a community that is safe and
fosters integrity and accountability. You are responsible for keeping aware of their policies and procedures, found at the following page: conduct.students.wisc.edu.

In addition, the MS in Biotechnology Program has a code of conduct for all students to sign. Click here for the pdf version (https://uwmadison.app.box.com/file/846014006199), but it is also found below:

M.S. in Biotechnology Conduct and Community Standards

The purpose of this code of conduct is to ensure that students in the M.S. in Biotechnology Program are aware of their rights and responsibilities. Because education is not simply a one-way exchange from instructors to students, we believe that it is to the benefit of all for students and faculty to engage in respectful and open communication based on clear and reasonable parameters.

As a learner enrolled in the M.S. in Biotechnology program, I pledge to:
1. Engage in courteous respectful dialogue with my instructors and fellow classmates, following the guidelines as outlined in this code of conduct document. “Good netiquette” should be followed for all electronic communications. See Albion.com for a good overview of netiquette rules. I agree to follow the suggestions below for following proper netiquette rules:

1.1. I will remember the person with whom I am communicating.

1.1.1. I will remember that that the person on the other end of the conversation is a human being with feelings and concerns just like me. I will read what I have written before hitting “send” and consider whether or not it would hurt me to read it if coming from someone else. I will verify the intent of the message and that the language used is respectful and professional, as well as grammatically correct.

1.1.2. Electronic communication relies heavily on the written word, so non-verbal cues and tone of voice can be difficult to replicate, leading to misunderstandings and conflict. As you know, typing in all CAPS is often interpreted as SHOUTING. Some people try and use emoji’s to connote tone, but the receiver of the message also needs to understand emoji language and this is not universal and may not cross cultures. Be very cautious when using emojis or humor in email communication.

1.2. I will follow the same set of good behavior guidelines whether I am participating in class, in an online discussion, or when using email.
1.2.1. I will be myself in order to learn and contribute to not only my learning, but also the learning of others. I will focus on my coursework and be an engaged student.

1.3. I will be forgiving and respectful.

1.3.1. I realize that everyone makes mistakes. I understand that it is best for me to focus on my education and not focus on other people’s errors. Everyone will benefit if I focus on the tasks at hand in a positive and constructive manner.

2. Contribute to a positive, respectful, and engaging academic environment by participating regularly in all discussions and completing all assignments in a timely manner as instructed by the course syllabus, calendar, and team expectations. This includes checking my @wisc.edu email for messages from my instructor, the program, and classmates.

3. Comply with the standards of Academic Integrity outlined in the Student Handbook for Graduate Students.

3.1. I will not seek credit for work that I did not do, or plagiarize or cheat in any way.

3.2. I will properly cite sources for all assignments (papers and presentations).

3.3. I understand that my instructors may make use of available dedicated resources and software programs to assure the originality of my work.

3.4. I will follow up with my instructor any time that I feel that I am confused regarding academic misconduct and/or see it occurring.

4. Keep in mind that instructors are here to help students learn and succeed, and that sometimes this can be difficult. I also know that I will be working in groups for many projects during this program, and that conflicts may arise among my teammates. I will make a good-faith effort to work out any differences directly (either with instructor(s) or with classmate(s)) in a respectful manner.

4.1. I understand that there are other resources on campus to help facilitate conflicts, and I know that I can find them by either contacting the M.S. in Biotechnology Office or referring back to the Student Handbook.

4.2. I understand that any instructors, the Program, and other University officials will have to research the problem before resolving any differences and conflicts.
5. Complete the course evaluation for each course. I understand that this is the BEST way for the M.S. in Biotechnology Program to receive my constructive and thoughtful comments and suggestions so that they can continue to improve the courses and the program.

6. Recognize that the M.S. in Biotechnology Program utilizes a global student and faculty base. I understand that cultural and regional differences may arise. I will be respectful and patient in the event of conflict, as negativity, aggression, and hostility have no place in the learning environment or in a professional setting.

In return, as an active and engaged learner, I have the right to expect:

1. Courteous and respectful responses from my other classmates, who have also signed this code of conduct, and from my instructors.

2. Clear course objectives and grading policies, including rubrics. (See the Student Handbook as well as highlights found in the Canvas Orientation module)

3. Prompt grades or responses to assignments that have been completed and handed in on time.

4. An accurate course calendar that reflects clear due dates for assignments.

5. Instructors, while not available 24/7, will make a good-faith effort to respond to my questions and grade my assignments within a reasonable amount of time as specified in the course syllabus.

PRINT NAME: __________________________________________________________
SIGNATURE: ___________________________ DATE: ______________

Academic Misconduct

Academic misconduct is governed by state law, UW System Administration Code Chapter 14. For further information on this law, what constitutes academic misconduct, and procedures related to academic misconduct, see:

The Graduate School

Academic Policies & Procedures: Misconduct, Academic grad.wisc.edu/documents/misconduct-academic
Office of Student Conduct and Community Standards

**Academic Misconduct Website**
conduct.students.wisc.edu/academic-misconduct

**Non-Academic Misconduct**

Non-academic misconduct is governed by state law, UW System Administration Code Chapters 17 and 18. For further information on these laws, what constitutes non-academic misconduct, and procedures related to non-academic misconduct, see:

**The Graduate School**

**Academic Policies & Procedures: Misconduct, Non-Academic**
grad.wisc.edu/documents/misconduct-nonacademic

**Office for Student Conduct and Community Standards**

**Non-Academic Misconduct Website**
conduct.students.wisc.edu/nonacademic-misconduct

**University of Wisconsin System (UWS)**

**Chapter 17: Student Non-Academic Disciplinary Procedures**
docs.legis.wisconsin.gov/code/admin_code/uws/17

**Chapter 18: Conduct on University Lands**
docs.legis.wisconsin.gov/code/admin_code/uws/18

**Research Misconduct**

Graduate students are held to the same standards of responsible conduct of research as faculty and staff. Further information about these standards and related policies and procedures can be found at:

**The Graduate School**

**Academic Policies & Procedures: Responsible Conduct of Research**
grad.wisc.edu/documents/responsible-conduct-of-research
Hostile and Intimidating Behavior (Bullying)

Hostile and intimidating behavior (HIB), sometimes referred to as “bullying,” is prohibited by university policy applicable to faculty, academic staff, and university staff. For further definition, policy, and procedures related to HIB see: hr.wisc.edu/hib. Students who feel they have been subject to HIB are encouraged to review the informal and formal options on the “Addressing HIB” tab of this website.

Grievance Process

Each college or program on campus has a grievance process that students can use to address other concerns regarding their experience in the program. This program’s grievance process can be found detailed at: https://guide.wisc.edu/graduate/cell-regenerative-biology/biotechnology-ms/#policiestext

Process and Sanctions for Violations of Conduct Standards

The program advising team administers the regulations established by the faculty. It makes sure students are meeting the program expectations and imposes sanctions when appropriate. Faculty and faculty committees determine whether the quality of a student’s work and conduct are satisfactory, while the program advising team determines whether the student is satisfying the academic requirements in a timely fashion and meeting program conduct expectations. Students who are falling behind academically or not meeting conduct expectations are first warned, then put on probation, and then dropped from the program if they cannot complete the requirements or remedy their conduct. Within boundaries set by the faculty, the program advising team is authorized to take account of individual circumstances and problems, and to grant extensions of deadlines and waivers of requirements.

Possible disciplinary actions might include but are not limited to:

- Verbal and written reprimand
- Imposition of specific terms and conditions on continued student status
- Probation
- Restitution
• Removal of the student from the course(s) in progress
• Failure to promote
• Withdrawal of an offer of admission
• Placement on leave of absence for a determined amount of time
• Suspension from the program for up to one year with the stipulation that remedial activities may be prescribed as a condition of later readmission. Students who meet the readmission condition must apply for readmission and the student will be admitted only on a space-available basis. See the Graduate School policy on readmission: policy.wisc.edu/library/UW-1230.
• Suspension from the program, ranging from one semester to four years
• Dismissal from the program
• Denial of a degree

Incident Reporting (Hate, Bias, Sexual Assault, Hazing, Students of Concern, Bullying)

The Dean of Students Office maintains a portal to report incidents of hate, bias, sexual assault, hazing, dating/domestic violence, stalking, missing students, and students displaying other concerning behaviors at UW-Madison:

Dean of Students Incident Reporting
doado.wisc.edu/report-an-issue

As noted above in “Personal Conduct Expectations,” students who feel they have been subject to hostile and/or intimidating behavior (i.e., bullying) are encouraged to review the informal and formal options for addressing this behavior (including filing complaints when desired) at:

Human Resources Hostile and Intimidating Behavior Website
hr.wisc.edu/hib

Funding, Employment, and Finances

“Funding” is a term used to describe university employment or support to cover some or all of your costs of graduate education. It varies in kind, amount, and level of guarantee.

Students enrolled in the M.S. in Biotechnology Program are not eligible for funding that is linked with tuition remission. This includes graduate, research, and program
assistantships that are tied to 101 funding or tuition remission and/or stipends. Students may find work on campus, but must be paid an hourly wage as an employee of the university. Most students enrolled in this program are working professionals who may receive tuition reimbursement from their employers. Students may be eligible for financial aid following university policies. It is up to you to investigate these possibilities, but contact Michele if you would like assistance.

Finding Funding Without a Guaranteed Appointment

Campus-Wide and External Sources

To help you find resources to pay for costs related to graduate education, the Graduate School provides a comprehensive overview of the funding process on campus as well as descriptions of the types of funding available, sources of funding, minimum stipend rates and benefits, and links to applicable human resources policies (e.g. GAPP) at:

Graduate School: Funding and Financial Aid
grad.wisc.edu/funding

External Fellowship Database
grad.wisc.edu/funding/external-fellowship-database

UW-Madison Libraries Grants Information Collection
library.wisc.edu/memorial/collections/grants-information-collection

Additional Policies & Resources

Employee Disability Resources
employeedisabilities.wisc.edu

Professional Development

When you participate in professional development, you build skills needed to succeed academically and thrive in your career. The following are professional development activities that we recommend for your consideration. Required professional development will be detailed in “Degree Requirements” above.

On Campus
The Graduate School develops and curates a wide variety of resources for professional development, including a tool to assess your skills, set goals, and create a plan with recommended activities on campus (e.g., the popular “Individual Development Plan” or IDP) as well as programming to help you explore careers, prepare for a job search, build your network and learn from alumni, manage projects, communicate about your research, and much more.

DiscoverPD helps master’s and doctoral students at UW-Madison advance their academic and professional goals with customized recommendations based on a skills self-assessment. The 400+ professional development recommendations available in the DiscoverPD database are available in a range of formats to best meet your diverse needs, including in-person, virtual, asynchronous, and synchronous opportunities. All of this can be found at:

Professional Development from the Graduate School
grad.wisc.edu/professional-development

The Graduate School communicates professional development opportunities through an e-newsletter, GradConnections, that all graduate students receive at their wisc.edu email. Graduate students in traditional graduate degree programs receive the newsletter weekly during the academic year and every other week in the summer. Graduate students in online degree programs receive the newsletter every other week during the academic year and monthly during the summer.

In Our Program/Department

UW-Madison offers a wealth of resources intended to enrich your graduate studies and enhance your professional skills. Starting your very first year on campus, it is expected that you will take full advantage of the career and professional development resources that best fit your needs and support your goals. Since our alumni thrive not only in academia but also in industry, corporate, government, and non-profit arenas, we strive to be in-tune, holistic, and innovative in our approach to meeting the diverse professional development needs of our students. By actively participating in these professional development opportunities, you will build the skills needed to succeed academically at UW-Madison and to thrive professionally in your chosen career.

Professional Skills Development and Management Course
The M.S. in Biotechnology provides an interactive seminar designed to develop, enhance, and practice the critical tools of developing and managing their careers in
biotechnology. Starting in Spring 2021, this course will be added as part of the M.S. in Biotechnology curriculum.

Program Participants will discuss and practice:

- Who they are as an employee -- What are their strengths and how to play to those strengths?
- What they truly offer a team/organization -- In what culture they will thrive?
- How to utilize and be useful in a professional network
- How to find the best organization and opportunity to succeed in their careers
- Develop an effective resume and interview skills
- Expanding leadership skills

Professional Skills Series Outline

- Introduction; Know Thyself; Biotech Executive Panel and Networking
- Networking Continuation and Resume Building
- Resumes and Cover Letters
- What are Hiring Managers Looking For and Mock Interviews with Industry Leaders
- Career pathways: when to shift, when to grow
- Managing people

M.S. in Biotechnology Alumni Association

Beginning with the first graduating Class of 2004, the M.S. in Biotechnology Program today boasts an alumni base of over 400 graduates. As a group, the program’s alumni have consistently found value and support in the relationships within their graduating cohort, and across all the alumni sharing this degree.

Current students are strongly encouraged to participate in any planned alumni events. The M.S. in Biotechnology Alumni Board actively plans annual social networking events, milestone celebrations and scientific presentation events.

LinkedIn and Other Social Media

The M.S. in Biotechnology Program has adopted LinkedIn as the primary method for developing professional relationships, maintaining alumni contacts, and relaying job opportunities and career events.

If they have not done so already, all current students and alumni are strongly encouraged to create a professional LinkedIn profile.

Also, the program has a Facebook page and Twitter handle for sharing news and information in the mainstream social media. If interested, please “Like” and/or “Follow” the program’s social media accounts.

M.S. in Biotechnology Social Media Addresses:
LinkedIn: https://www.linkedin.com/company/master-of-science-in-biotechnology-uw-madison

Twitter: https://twitter.com/BadgerBiotech (@BadgerBiotech)

YouTube: https://www.youtube.com/channel/UCIOgZ_YCGJkmAWO8MEANgyg

Facebook: https://www.facebook.com/msbiotechprogram

Campus-wide Resources for Professional Development
The Writing Center (writing.wisc.edu)
Many of the assignments given in the program require strong writing skills. All students are encouraged to access the services provided by the UW-Madison Writing Center, especially students with English as a second language.

The Writing Center’s programs are staffed by career writing instructors, doctoral teaching assistants from composition and rhetoric and literary studies, and undergraduate Writing Fellows. All tutors in Writing Center programs are highly trained, expert readers and are qualified to offer help with writing in all disciplines and at all levels.

Book on line to make or cancel an appointment with the Writing Center, (writing.wisc.edu). You can also call (608) 263-1992 or visit 6171 Helen C. White (600 North Park Street) to make an appointment.

UW Libraries Services (library.wisc.edu)
You regularly will need to locate research articles and scholarly materials to complete projects and papers assigned to you. Fortunately, the UW Libraries services are convenient, extensive and easy to use.

The M.S. in Biotechnology Program has a UW Libraries liaison assigned to work with the program. Please contact Paije Wilson, the Academic Librarian at the Ebling Health Sciences Library with any questions on how to obtain information through the UW Libraries services. Paije’s email is paije.wilson@wisc.edu and her work phone number is 608.262.2372

Graduate School Office of Professional Development
In addition to opportunities at the local level, the Graduate School Office of Professional development provides direct programming in the areas of career development and skill building, and also serves as a clearing house for professional development resources across campus. The best way to stay informed is to watch for the weekly newsletter from OPD, GradConnections Weekly, and to visit the webpage
https://grad.wisc.edu/uw-events for an up-to-date list of events. For example, typical topics covered throughout the year are:

- Professional Development Plans (IDPs)
- Planning for academic success
- Communication skills
- Grant writing
- Mentoring
- Research ethics
- Community engagement
- Entrepreneurship
- Career exploration: academic, non-profit, industry, government, etc.
- Job search support

Be sure to keep a pulse on programs offered by the following campus services as well.

- Writing Center writing.wisc.edu/
- Grants Information Collection grants.library.wisc.edu/
- Student Technology Training (STS) at.doit.wisc.edu/training/software-training-for-students/
- Delta Program delta.wisc.edu/
- UW Teaching Academy teachingacademy.wisc.edu/
- UW Center for the Humanities humanities.wisc.edu
- Wisconsin Entrepreneurial Bootcamp wsb.wisc.edu/programs-degrees/programs-nonbusiness-majors/morgridge-entrepreneurial-bootcamp