

# DEPARTMENT OF ENVIRONMENTAL AND MOLECULAR TOXICOLOGY



## GUIDELINES FOR CONCURRENT MASTERS

Graduate students in the Department of Environmental and Molecular Toxicology obtaining a Ph.D. will obtain a concurrent MS degree in Toxicology (non-thesis). The typical student will not need to take additional courses to satisfy the requirements for an MS degree.

### **OPT-OUT OF CONCURRENT MASTERS (MS)**

All Ph.D. graduate students will automatically be on this track with the option to opt-out for students who already have a MS prior to the start of the Ph.D. in Toxicology. If a student elects to opt-out, a written notification detailing the reason must be submitted to the Director of the Academic Programs for approval by the end of Winter term the first year. For students that opt-out for the MS, the EMT Tox core curriculum requirements remains the same (33 credits, transfer courses can be applied), but will not be required to form a MS committee, and present a public presentation followed by a closed-door session (MS oral exam) the 2<sup>nd</sup> year.

### **STUDENT RESPONSIBILITIES AND EXPECTATIONS**

All students obtaining a Concurrent Masters must complete the required research and course work to be awarded a *Non-Thesis Masters*. Each student must submit the following items for each degree: 1) a separate program of study, 2) separate commencement applications, 3) schedule, and pass the final oral exams.

Students must complete at least 45 credits, present a public research seminar, and hold a closed-door session with their MS committee. The order of events is listed below in the timeline.

### **GRADUATE COMMITTEES**

All Ph.D. students must have a committee with a minimum of 5 members (including a graduate council representative, GCR). For a concurrent MS, a committee is also required, however, it should be a subset of your doctoral committee: 3 faculty members (including your advisor, GCR is not required).

### **FINAL ORAL EXAM FOR CONCURRENT MASTERS**

The timing of the final exam is critical – the exam must be completed prior to the doctoral preliminary exam. The final oral exam will be a 30-minute public research presentation in the EMT seminar series (or an ad hoc scheduled public presentation) followed by a closed-door session with the MS committee (up to 1 hour). The public research presentation will consist of an update on the students current research progress, and future directions/experiments. Students may invite their entire Ph.D. committee to attend to gain a better understanding of their research progress. The exam should be scheduled for 2 hours, but may not take the whole time. Graduate School requires the exam be scheduled with them at least two weeks prior.

Note: Students who elect to *not continue* with the PhD are not eligible for a Concurrent Masters, and can elect to change their degree to a Masters in Toxicology (MTOX) or a Professional Masters (PSMTOX).

### **TIMELINE**

1 <sup>st</sup> year	Winter/Spring Term	File a <a href="#">request</a> for a concurrent Master's degree, and send a PDF copy to the EMT office [Mary Mucia]. Use 'Change of Degree/Major/Certificate' Form to add a concurrent non-thesis MS.
	Summer/Fall Term	Form Ph.D. and MS committees
	Summer/Fall Term	Schedule MS/PhD Program Meeting Once approved – file a <a href="#">digital program of study</a> for MS (non-thesis) and PhD.
2 <sup>nd</sup> year	Spring Term	Schedule <a href="#">MS final oral exam</a> with graduate school (at least two weeks prior) and present in the EMT seminar series. Use 'Exam Scheduling' form. File digital program of study for your Ph.D. (after your Ph.D. Program meeting)
	Before the end of the calendar year	Schedule <a href="#">Doctoral preliminary exam</a> with graduate school (at least 2 weeks prior) Conduct Doctoral Preliminary Exam. Use 'Exam Scheduling form.

## **FORMS FOR SUBMISSION**

- File to request a concurrent Masters: <https://gradschool.oregonstate.edu/forms/#program>  
Use 'Change of Degree/Major/Certificate' Form to add a concurrent non-thesis MS.
- A separate program of study for each degree: <https://gradschool.oregonstate.edu/forms/#program>
- Exam Scheduling Form: <https://gradschool.oregonstate.edu/forms/#program>
- Commencement Applications: <https://gradschool.oregonstate.edu/current/commencement>

## **GUIDELINES OF THE CONCURRENT MASTERS PROGRAM OF STUDY**

A Concurrent Masters Degree requires a minimum of 45 credits. It is recommended that students only include the minimum number of classes necessary to meet the 45 credit requirement on their MS program of study as outlined below to ensure the grad stand-alone requirements are met. See below for tips on how to ensure all credits are counted for in the MS Digital Program of Study. The concurrent masters (Masters Non-Thesis) program of study must have the following components:

- A maximum of 9 blanket courses (any courses with a "0" in the middle") excluding research credits (TOX 501)
- Cannot include any thesis credits (TOX 503)
- Maximum of 3 credits of TOX 507
- A maximum of 6 capstone credits (TOX 501)
- EMT core curriculum of 33 credits
- At least 50% of the total must be graduate, stand-alone courses (not 4XX/5XX slash)
- Each course on a program of study must have a minimum grade of B- (no grades of C or below)
- An overall grade-point average of 3.00 is required: 1) for all courses taken as a degree-seeking graduate student, and 2) for courses included in the graduate degree program of study.
- Courses used for the Ph.D. minor can count on an MS Program of Study

[Note: The PhD program of study requires 63 thesis credits in addition to the courses below; however, students can include additional classes above the minimum required on their PhD program of study.]

## **COMPONENTS OF PROGRAM OF STUDY**

### ***Tox Core Curriculum + PhD Requirement***

<b>Courses</b>	<b>Credits</b>	<b>Grad Stand-Alone</b>
TOX 511 - Fundamentals of Toxicology	3	N
TOX 512 - Target Organ Tox: Mol Mechanism of Environment Disease	4	Y
TOX 555 or 580 -- Environmental Tox and Ecological or Human Health Risk Assessment	3	N
TOX 530 - Chemical Behavior in the Environ	3	N
TOX 557 - Scientific Skills & Ethics	3	Y
ST 511 - Methods of Data Analysis	4	N
TOX 599 – Special Topics	2 total (1 per year)	Y
<a href="#">TOX Electives</a>	5-6	At least 2 credits must be Grad SA
Unrestricted Electives	5-6	
<b>TOX Core Curriculum</b>	<b>33</b>	

### ***Masters Along the Way Requirement***

TOX 501 – Research	6	Y (capstone)
TOX 505 – Lab Rotations	3	Y
TOX 507 – Tox Seminar	3	Y
<b>TOTAL CREDIT NEEDED FOR MASTERS</b>	<b>45</b>	<b>≤50%</b>

### ***Recommended Pre-requisites/Unrestrictive Electives***

Alternative courses recommended by the student's committee can be counted here instead. At least 3 credits of their electives need to be a standalone graduate level course (not a slash course).

Courses	Credits	Term	Grad Stand-Alone
TOX 590 – Environmental Forensic Chemistry	3	Winter	N
TOX 555 – Ecotoxicology: Aquatic Ecosystems	3	Winter	N
TOX 580 – Computational Toxicology	3	Spring	N
ST 512 – Methods of Data Analysis	4	Winter/Spring	N
ST 513 – Methods of Data Analysis	4	Spring	N
BB 590 - Biochemistry	4	Fall	N
BB 591 – Biochemistry 2: Metabolism	4	Winter	N
BDS 574X – Introduction to Genome Biology	3	Fall	N
BOT 576 - Intro to Computing in the Life Sciences	3	Fall	N
ST 599 - Data programming in R	2	Fall	N
IB 531 – Vertebrate Physiology	4	Winter	N
ST 515 - Design and Analysis of Planned Experiments	3	Winter/Spring	N
TOX 575 - Advanced Xenobiotic Metabolism	2	Fall (alt yrs)	Y
TOX 599 – Advanced Regulatory Toxicology	2	Fall (alt yrs)	Y
ST 537 – Data Visualization	3	Spring	Y
BB 585 – Applied Bioinformatics	3	Winter	Y
CH 661 - Separations: Chromatography and Related Methods	4	Fall/Winter	Y
BDS 575 – Comparative Genomics	4	Winter	Y
BDS 599 - ST/RNA Sequencing	2	Fall	Y
BDS 599 – Special Topics/ Python I	1	Winter	Y
TOX 599 – Experiential Learning*	Variable	All terms	Y

\*Experiential learning credits can be given for completion of continuing education courses or workshops completed outside of OSU. Students must plan in advance for approval by Dr. Susan Tilton.

## DIGITAL PROGRAM OF STUDY

In order for the 16 blanket credits to be counted correctly on the Masters (Non-Thesis) digital Program of Study, it is essential to ensure that the TOX 501 (capstone) credits are applied appropriately. TOX 501 will count towards grad-only credits, and the total credits. It does not count towards the blanket credit limit of 9 credits.

- Check here the “capstone” box
- A “Non-Thesis (Capstone)” bin will appear. At this point, you will receive a notification that states the capstone requirements aren’t met.
- Drag and drop in the TOX 501 – Research credits into this “Non-Thesis (Capstone)” bin