Biochemistry and Molecular Biology

Division of Environmental and Biomolecular Systems
OHSU Institute of Environmental Health
Program Requirement Checklists

Degree: Biochemistry and Molecular Biology – Master of Science – Nonthesis 2
Track: *Biochemistry and Molecular Biology* 2

Degree: Biochemistry and Molecular Biology – Master of Science – Thesis 3
Track: *Biochemistry and Molecular Biology* 3

Degree: Biochemistry and Molecular Biology – Doctor of Philosophy 4
Track: *Biochemistry and Molecular Biology* 4

Degree: Biochemistry and Molecular Biology – Master of Science – Nonthesis 5
Track: *Environmental and Biomolecular Systems* 5

Degree: Biochemistry and Molecular Biology – Master of Science – Thesis 6
Track: *Environmental and Biomolecular Systems* 6

Degree: Biochemistry and Molecular Biology – Doctor of Philosophy 7
Track: *Environmental and Biomolecular Systems* 7

Degree: **Biochemistry and Molecular Biology – Master of Science – Nonthesis**
Track: **Biochemistry and Molecular Biology**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Written report on the research performed, accepted and approved by advisor
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Division Seminar (EBS 507A) at least two quarters. Waive when part-time:

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 512 – Proteins and Enzymes			
EBS 513 – Introduction to Molecular Biology			
EBS 514 – Metabolism and Bioenergetics			
☐ *Advanced Elective Courses (16 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research and/or Internship (10 credits)*			

Degree: **Biochemistry and Molecular Biology – Master of Science – Thesis**

Track: **Biochemistry and Molecular Biology**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 507A) at least four quarters. Waive when part-time:
- ☐ A written thesis and oral defense composed of original research

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 512 – Proteins and Enzymes			
EBS 513 – Introduction to Molecular Biology			
EBS 514 – Metabolism and Bioenergetics			
☐ *Advanced Elective Courses (8 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research and/or Internship (18 credits)*			

Degree: **Biochemistry and Molecular Biology – Doctor of Philosophy**

Track: **Biochemistry and Molecular Biology**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 135 credits minimum
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 607A) at least eight quarters. Waive when part-time:
- ☐ Qualifying exam. Date Completed: Written Oral
- ☐ A written dissertation and oral defense composed of original research of publishable quality

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 612 – Proteins and Enzymes			
EBS 613 – Introduction to Molecular Biology			
EBS 614 – Metabolism and Bioenergetics			
☐ *Advanced Elective Courses (12 credits, including special topics and independent studies):*			
☐ *Reading Groups (12 credits, includes student seminars):*			
☐ *Research (24+ credits)*			

Degree: **Biochemistry and Molecular Biology – Master of Science – Nonthesis**

Track: **Environmental and Biomolecular Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Written report on the research performed, accepted and approved by advisor
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Division Seminar (EBS 507A) at least two quarters. Waive when part-time:

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 515 – Environ. Biomolec. Hist. Earth			
EBS 516 – Environ. Bioinorganic Chem.			
EBS 517 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (16 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research and/or Internship (10 credits)*			

Degree: **Biochemistry and Molecular Biology – Master of Science – Thesis**

Track: **Environmental and Biomolecular Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 507A) at least four quarters. Waive when part-time:
- ☐ A written thesis and oral defense composed of original research

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 515 – Environ. Biomolec. Hist. Earth			
EBS 516 – Environ. Bioinorganic Chem.			
EBS 517 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (8 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research and/or Internship (18 credits)*			

Degree: **Biochemistry and Molecular Biology – Doctor of Philosophy**

Track: **Environmental and Biomolecular Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 135 credits minimum
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 607A) at least eight quarters. Waive when part-time:
- ☐ Qualifying exam. Date Completed: Written Oral
- ☐ A written dissertation and oral defense composed of original research of publishable quality

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 615 – Environ. Biomolec. Hist. Earth			
EBS 616 – Environ. Bioinorganic Chem.			
EBS 617 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (12 credits, including special topics and independent studies):*			
☐ *Reading Groups (12 credits, includes student seminars):*			
☐ *Research (24+ credits)*			

Environmental Science and Engineering

Division of Environmental and Biomolecular Systems
OHSU Institute of Environmental Health
Program Requirement Checklists

Degree: Environmental Science and Engineering – Master of Science – Nonthesis 2
Track: *Environmental Science and Engineering* *2*

Degree: Environmental Science and Engineering – Master of Science – Thesis 3
Track: *Environmental Science and Engineering* *3*

Degree: Environmental Science and Engineering – Doctor of Philosophy 4
Track: *Environmental Science and Engineering* *4*

Degree: Environmental Science and Engineering – Master of Science – Nonthesis 5
Track: *Environmental and Biomolecular Systems* *5*

Degree: Environmental Science and Engineering – Master of Science – Thesis 6
Track: *Environmental and Biomolecular Systems* *6*

Degree: Environmental Science and Engineering – Doctor of Philosophy 7
Track: *Environmental and Biomolecular Systems* *7*

Degree: Environmental Science and Engineering – Master of Science – Nonthesis 8
Track: *Estuary and Ocean Systems* *8*

Degree: Environmental Science and Engineering – Master of Science – Thesis 9
Track: *Estuary and Ocean Systems* *9*

Degree: Environmental Science and Engineering – Doctor of Philosophy 10
Track: *Estuary and Ocean Systems* *10*

Degree: **Environmental Science and Engineering – Master of Science – Nonthesis**
Track: **Environmental Science and Engineering**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Division Seminar (EBS 507A) at least two quarters. Waive when part-time:

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 510 – Aquatic Chemistry			
EBS 535 – Environmental Organic Chemistry			
EBS 575 – Transport Processes			
☐ *Advanced Elective Courses (16 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research and/or Internship (10 credits)*			

Degree: **Environmental Science and Engineering – Master of Science – Thesis**

Track: **Environmental Science and Engineering**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 507A) at least four quarters. Waive when part-time:
- ☐ A written thesis and oral defense composed of original research

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 510 – Aquatic Chemistry			
EBS 535 – Environmental Organic Chemistry			
EBS 575 – Transport Processes			
☐ *Advanced Elective Courses (8 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research (18 credits)*			

Degree: **Environmental Science and Engineering – Doctor of Philosophy**

Track: **Environmental Science and Engineering**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 135 credits minimum
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 607A) at least eight quarters. Waive when part-time:
- ☐ Qualifying exam. Date Completed: Written Oral
- ☐ A written dissertation and oral defense composed of original research of publishable quality

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 610 – Aquatic Chemistry			
EBS 635 – Environmental Organic Chemistry			
EBS 675 – Transport Processes			
☐ *Advanced Elective Courses (12 credits, including special topics and independent studies):*			
☐ *Reading Groups (12 credits, includes student seminars):*			
☐ *Research (24+ credits)*			

Degree: **Environmental Science and Engineering – Master of Science – Nonthesis**
Track: **Environmental and Biomolecular Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 507A) at least two quarters. Waive when part-time:

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 515 – Environ. Biomolec. Hist. Earth			
EBS 516 – Environ. Bioinorganic Chem.			
EBS 517 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (16 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research and/or Internship (10 credits)*			

Degree: **Environmental Science and Engineering – Master of Science – Thesis**

Track: **Environmental and Biomolecular Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 507A) at least four quarters. Waive when part-time:
- ☐ A written thesis and oral defense composed of original research

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 515 – Environ. Biomolec. Hist. Earth			
EBS 516 – Environ. Bioinorganic Chem.			
EBS 517 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (8 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research (18 credits)*			

Degree: **Environmental Science and Engineering – Doctor of Philosophy**

Track: **Environmental and Biomolecular Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 135 credits minimum
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 607A) at least eight quarters. Waive when part-time:
- ☐ Qualifying exam. Date Completed: Written Oral
- ☐ A written dissertation and oral defense composed of original research of publishable quality

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 615 – Environ. Biomolec. Hist. Earth			
EBS 616 – Environ. Bioinorganic Chem.			
EBS 617 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (12 credits, including special topics and independent studies):*			
☐ *Reading Groups (12 credits, includes student seminars):*			
☐ *Research (24+ credits)*			

Degree: **Environmental Science and Engineering – Master of Science – Nonthesis**
Track: **Estuary and Ocean Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 507A) at least two quarters. Waive when part-time:

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 565 – Estuary and Ocean Systems I			
EBS 566 – Estuary and Ocean Systems II			
EBS 517 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (16 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research and/or Internship (10 credits)*			

Degree: **Environmental Science and Engineering – Master of Science – Thesis**

Track: **Estuary and Ocean Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 45 credits total
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 507A) at least four quarters. Waive when part-time:
- ☐ A written thesis and oral defense composed of original research

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 565 – Estuary and Ocean Systems I			
EBS 566 – Estuary and Ocean Systems II			
EBS 517 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (8 credits, including special topics and independent studies):*			
☐ *Reading Groups (6 credits, includes student seminars):*			
☐ *Research (18 credits)*			

Degree: **Environmental Science and Engineering – Doctor of Philosophy**

Track: **Estuary and Ocean Systems**

Student Name:	*ID#:*	*Matric. Term:*

General Degree Requirements:

- ☐ 135 credits minimum
- ☐ Cumulative GPA at or above 3.0
- ☐ Ethics course (CONJ 650 or approved equivalent): Completed
- ☐ Department Seminar (EBS 607A) at least eight quarters. Waive when part-time:
- ☐ Qualifying exam. Date Completed: Written Oral
- ☐ A written dissertation and oral defense composed of original research of publishable quality

Curriculum:	**Credits**	**Grade**	**Term/Year**
☐ *Core Courses (12 Credits required):*			
EBS 665 – Estuary and Ocean Systems I			
EBS 666 – Estuary and Ocean Systems II			
EBS 617 – Environ. Syst. and Human Health			
☐ *Advanced Elective Courses (12 credits, including special topics and independent studies):*			
☐ *Reading Groups (12 credits, includes student seminars):*			
☐ *Research (24+ credits)*			