AQUATIC AND COASTAL SCIENCES (AQUA)

AQUA 199 # - Freshman Seminar in Aquatic and Coastal Sciences  
1 Credit  
An experience for entering students that will help them to succeed  
as Coastal and Aquatic Sciences majors by learning study skills and  
becoming acquainted with the culture of higher education. Meets Gen Ed  
2002 - New Student Seminar. 1 hour lecture.

AQUA 351 # - Aquatic Biological Processes  
4 Credits  
Prerequisite(s): BIOL 113, CHEM 120, CHEM 121. Aquatic Biological  
Processes is a course that introduces students to the fundamental  
biological systems associated with marine and fresh water communities  
and serves as the foundation aquatic biological course for the BS/MS  
program in Aquatic and Coastal Sciences. 3 hours lecture, 3 hours lab.

AQUA 490 # - Senior Seminar  
3 Credits  
Prerequisite(s): AQUA 351, AQUA 495, EAES 230, EAES 322. This seminar  
is a required course for the curriculum in the BS/MS Coastal and Aquatic  
Sciences program and fulfills the Graduation Writing Requirement.  
Students participate in active discussion regarding current research  
topics in the field and are required to present the result of their research  
activities or planned research for their Master’s Thesis. Meets the  
University Writing Requirement for majors in Aquatic and Coastal  
Sciences. 3 hours lecture.

AQUA 495 # - Research in Aquatic and Coastal Sciences  
4 Credits  
Prerequisite(s): AQUA 351, EAES 230, EAES 322. This course is designed  
to provide students in the Aquatic and Coastal Sciences BS/MS program  
with a research-oriented internship utilizing one of the Montclair State  
University’s off-campus research facilities including the School of  
Conservation, Passaic River Institute, or the Sandy Hook Marine Science  
Consortium facility.

AQUA 515 # - Graduate Research Seminar  
1 Credit  
Prerequisite(s): AQUA 351, AQUA 495, EAES 230, EAES 322. This seminar  
is a required course for the graduate curriculum in the BS/MS Coastal  
and Aquatic Sciences program. Students participate in active discussion  
regarding current research topics in the field and are required to present  
their current research activities or planned research for their Master’s  
Thesis. 1 hour seminar.

AQUA 551 # - Advanced Aquatic Biological Processes  
3 Credits  
Prerequisite(s): AQUA 351, EAES 230, EAES 322 or departmental  
approval. Advanced Aquatic Biological Processes is a graduate course  
which builds upon the fundamental biological systems associated with  
marine and fresh water communities and serves as the culminating core  
aquatic biological course for the BS/MS program in Aquatic and Coastal  
Sciences. 3 hours lecture.

AQUA 599 # - Graduate Research in Aquatic and Coastal Sciences  
4 Credits  
Prerequisite(s): Program Director/Thesis advisor approval. A research  
experience in which students will conduct independent research  
approved by their graduate advisor leading to the collection of data  
for the completion of their Master’s Thesis. Students will be exposed  
to current aquatic and coastal techniques by working with scientific  
investigators in industry or within the department. Students will work on  
projects involving research techniques, data collection and the analysis  
and interpretation of the data.

AQUA 698 # - Master’s Thesis  
6 Credits  
Prerequisite(s): Program Director/Thesis advisor approval. Independent  
research project done under faculty advisement. Students must follow  
the MSU Thesis Guidelines, which may be obtained from the Graduate  
School. Students should take AQUA 699 if they don’t complete AQUA 698  
within the semester.

AQUA 699 # - Master’s Thesis Extension  
1 Credit  
Prerequisite(s): Program Director/Thesis advisor approval. Continuation  
of Master’s Thesis Project. Thesis Extension will be graded as IP (in  
Progress) until thesis is completed, at which time a grade of Pass or Fail  
will be given.