AAR Degree requirements.

MS requirements. In discussion with your committee.

1. A minimum of 30 credits.
2. A minimum of 12 credits of 500-level courses or higher. These should have a syllabus. i.e. they should not be 'special topics' or 'independent study' classes. However, you can special topics classes in addition to these 12 credits.
3. Minimum of three credits of Statistics. Options include BIO509, STS437, STS436 and other relevant graduate level special topics in statistics and bioinformatics as approved by the student's graduate advisory committee.
4. Demonstrated proficiency in topics relevant to aquaculture and the project focus. Courses taken from previous degrees may be considered based on the discretion of the graduate advisory committee.
5. A maximum of 9 credits may be taken at 400-level. Some instructors will allow 400 level classes to be taken at 500 level.
6. Two one-credit or one two-credit graduate seminar class.
7. Minimum one-credit course on Responsible Conduct in Research (RCR). This must be completed in the first 6 months.
8. Fulltime registration usually consists of minimum of 6 credits per Fall/Spring semester and 3 credits in the summer semester.

PhD requirements – as above plus.

1. Written and oral comprehensive exams covering topics decided by the graduate advisory committee. Written and oral comprehensive exams must be taken after completion of at least 90% of the courses approved by the committee.
2. Minimum of 6 thesis credits.

Seminar course: Seminar experience, consisting of at least two 1-credit courses or one 2-credit course, is required. Any seminar course will qualify as long as it includes a presentation by the student.

Written Research Proposal and Pre-thesis Seminar. A written research proposal must be approved by the student's advisory committee no later than 12 months from the time of matriculation of an M.S. student or 18 months from the time of matriculation of a Ph.D. student. A pre-thesis seminar, outlining the research planned or presenting preliminary results, is expected. This requirement may be fulfilled as part of a seminar course or as a non-credit presentation.

Graduate Advisory Committee and Program of Study: Each student will be advised by a graduate advisory committee consisting of at least three graduate faculty members for M.S. students or five graduate faculty members for Ph.D. students. The advisory committee should

be formed during the first year of graduate study. A Program of Study, approved by the student's graduate advisory committee, is due within the first 6 months of registration.

Area Requirements for the M.S. Degrees: The student's advisory committee will determine how the requirements are to be met and will report this to the graduate coordinator:

A) *Coursework*: A minimum of **30 credit hours**, including credit given for the thesis, is required. A graduate student working toward a master's degree will be required to present a minimum of 12 hours (exclusive of thesis) of 500- and/or 600-level course work to partially satisfy requirements for that degree. The minimum amount of credit for the thesis is 6 hours (5 hours plus RCR) and in no case may it exceed 15 hours. If more than 10 semester hours are allowed for the thesis, the candidate must spend at least two academic years in resident graduate study.

B) *Requirement for Proficiency in Statistics*, via at least one course approved by the committee.

Requirements for the Ph.D. degree: The comprehensive written examination will be given before the oral comprehensive examination. This will consist of 5 questions, one from each committee member. The student is required to pass all five parts of the comprehensive written examination in order to pass the examination. The student may fail and be re-examined on each part only once. The examining committee may require additional coursework before the examination is retaken.

The comprehensive oral examination will be administered by the same committee that gave the comprehensive written examination. The oral examination is designed for broad coverage of the subject and may be attended by any member of the University faculty, who may ask questions of the candidate. The examination is considered to have been passed if at least four members of the examining committee consider the performance passing and no more than one dissenting vote is cast.

A) *Coursework*: There are no general requirements for the number and kind of formal courses which are part of the program. A graduate student will be required to present a minimum of 12 hours (exclusive of thesis) of 500- and/or 600-level course work. Each student's graduate advisory committee shall, in close consultation with the student, determine the makeup of the student's program of study.

B) *Comprehensive Examinations*: Before a student is admitted to candidacy as defined by the Graduate School, he or she must pass a comprehensive written examination and a comprehensive oral examination. These examinations should be scheduled no earlier than the end of the third semester of graduate study, must be initiated by the fifth semester, and all taken and passed no later than the eighth semester.

Thesis or Dissertation Submission and Defense: Master's degree students in research/thesis degree programs must submit a thesis describing the results of an original research

investigation. Doctoral students who have been admitted to candidacy must submit a dissertation describing the results of an original research investigation. The acceptability of the Master's thesis or Doctoral dissertation shall be determined in a final oral thesis defense or dissertation defense conducted by the student's graduate advisory committee. Preceding the thesis or dissertation defense, each candidate must present a public seminar describing the results of the research. Normally this seminar will be scheduled immediately before the defense of the thesis or dissertation.

For the Ph.D. in Aquaculture & Aquatic Resources, the student must complete a minimum of 30 credits, a minimum of 18 course credits (12 credits 500 level or above), and a minimum of 6 credits thesis research. Most PhD students take many more credits than this. A program of study, including a list of courses to be taken, should be completed in consultation with your advisor and signed off by your entire graduate advisory committee. The student is expected to form a graduate advisory committee and to submit this fully signed program of study to the Graduate Coordinator by the end of the second semester of study. The student's graduate advisory committee will be composed of a minimum of five faculty. The chair/co-chair is required to be a UMaine faculty. Other committee members must be UMaine or adjunct faculty. Adjunct faculty need to be approved by the home department and the Graduate School prior to addition to the committee.

To be admitted to candidacy for the Ph.D., the student must successfully complete a comprehensive examination consisting of written and oral questions prepared by her/his graduate advisory committee. The structure of the written and oral exam depends largely on the traditions of the advisor's home department. Timing and grading also depend on the advisor, advisory committee, and home department traditions. Students should work with their advisor and graduate advisory committee members to understand the structure and expectations of the comprehensive exams. In general, students are expected to take the written component of the comprehensive examination by the end of the second year of study. The Graduate School provides relevant forms related to comprehensive exams that students should make themselves aware of and complete. Graduate School rules regarding failed exams apply.

Prior to initiation of the dissertation research, each student should prepare a written thesis proposal and present a thesis-proposal seminar to her/his graduate advisory committee. This proposal may or may not be a public seminar, depending on the advisor's preferences. The seminar should discuss the objectives, hypotheses, background, literature and methods of the proposed research investigation.

After the doctoral candidate has completed the research dissertation, they must undergo a thesis defense administered by their graduate advisory committee. This defense will consist of a public seminar and open question session followed by a separate session of questioning by the student's graduate advisory committee. Upon successful completion of the thesis defense and final revision of the dissertation, the student will be awarded the Ph.D. degree. It is expected that the student will complete the Ph.D. within four years.

Students will be expected to meet all general requirements of the Graduate School not explicitly indicated here. Students may not modify any of the degree requirements without explicit approval of the Graduate Coordinator.