

## Program of Study and Research for the Doctoral Degree

This program of study must be submitted to the Graduate School before the end of the first year of study for students holding a master's degree. Those holding only a baccalaureate degree must file this form by completion of 12 credit hours or by the third registration, whichever comes first. Completion of all work indicated on this program of study is a prerequisite for conferring the degree. Any changes to the course work listed on this program of study should be submitted to the Graduate School on the "Change in Program of Study" form. Please retain a copy for yourself.

Date received by Graduate School

*Please type or print clearly*

Name \_\_\_\_\_ ID # \_\_\_\_\_  
(First Last) 7 digit Student ID

Email \_\_\_\_\_ Phone \_\_\_\_\_

Current mailing address \_\_\_\_\_

Degree sought ☐ Ph.D. ☐ Ed.D. Field of study \_\_\_\_\_

Concentration (if applicable)

**\*\*Required for I.Ph.D. programs\*\***

Date \_\_\_\_\_ Student's Signature Vanessa Marie Mahan

Advisory Committee (please type or print)

Signatures (electronic signatures accepted)

Chair

Kimberly

Graduate Coordinator (Required)

Institutional Unit Requirements (specify language and/or skill requirements and comprehensive examinations): \_\_\_\_\_

Responsible Conduct for Research Requirement Met: ☐ YES ☐ NO ☐ N/A Course Taken: \_\_\_\_\_

Human/Animal Subjects Review Committee Approval: ☐ YES ☐ NO ☐ N/A

Dissertation topic: \_\_\_\_\_

Statement of the scope and proposed plan of treatment for the dissertation: \_\_\_\_\_

Requests for all committee changes should be sent via email from current advisor to Emily Kuhlmann at [Emily.Kuhlmann@maine.edu](mailto:Emily.Kuhlmann@maine.edu).

ID # \_\_\_\_\_

## Course Work

List in chronological order all courses that fulfill the requirement for the degree attempting. This includes prerequisites and courses to be transferred in from another institution. Please be advised: only 400 level and above courses can be used toward a degree. When listing prerequisite or audit courses - enter 0 (zero) in the "Course Credits" field.

[illegible]

UMaine credits:                      Transfer credits:                      Total number of credits:

# **Investigating the Influence of Tidal Distortion on Material Transport and Contaminated Sediment for Diadromous Fish Habitat in a Tidal River System**

Vanessa Mahan

This dissertation aims to comprehensively examine the relationship between sediment transport dynamics and diadromous fish habitat, with a particular focus on understanding the potential implications of sediment contamination. The research objectives include investigating the impact of tidal distortion on material transport through field observations, developing a suite of models that quantifies the geographic range and location of spawning and juvenile diadromous fish habitat using habitat suitability indices, and considering the potential impacts of this transport phenomena on fish habitat when the sediment is contaminated. This research encompasses sediment contamination, tidal distortion, and habitat modeling to comprehensively investigate their combined effects on diadromous fish habitats.