**OCSC – Comprehensive Examination Procedure** (May 2023)

Memorial University regulations require a PhD comprehensive examination to be completed within 7 semesters of first registration (https://www.mun.ca/regoff/calendar/sectionNo=GRAD-0024). Requests for extensions will be assessed initially by the Ocean Sciences Graduate Studies Committee (OSGSC) as they arise. All extensions must be approved by the Dean of Graduate Studies.

The comprehensive examination procedure shall be initiated by the Supervisor who shall notify the OSGSC, in writing, of the candidate's readiness. The sub-discipline upon which the candidate will be examined should be made known to the candidate no later than three months prior to the examination. The sub-discipline is normally what is listed as the ‘Area of Concentration’ on the ‘Programme of Study’ form filled out when the student was recommended for admission to the PhD programme.

The four sub-disciplines within the Marine Biology Graduate Programme are: (1) Ecology and Evolution; (2) Biological Oceanography; (3) Fisheries; (4) Aquaculture; (5) Functional Biology; and (6) Biogeochemistry.

**The Examination Committee:**

University regulations state that there shall be an odd number of voting members on the Comprehensive Examination Committee. The Committee shall consist of the Dean of Graduate Studies (or delegate; non-voting), Department Head (or delegate; voting) who shall be the Chairperson, the Supervisor (voting), and three other voting members, one of whom may be a co‐supervisor or another member of the Supervisory Committee. The OSGSC may make exceptions to Committee composition if local expertise in the candidate’s sub‐discipline is not available. Voting Committee members may be Ocean Sciences faculty, faculty in other academic departments at MUN, or qualified persons outside the University.

The supervisory committee recommends three names to serve on the Comprehensive Examination Committee, which are then submitted by the supervisor to the Department Head using the form in Appendix A. The OSGSC reviews the suggestions and may recommend changes. Once approved, the recommended examiners’ names are submitted by the OSGSC (via the Graduate Secretary) to the Dean of Graduate Studies for appointment to the Comprehensive Examination Committee.

**Assignment of Essay Topic and Date of Oral Examination**

Once the Comprehensive Examination Committee is appointed, it shall meet and select an essay topic within the student's previously determined sub-discipline. The essay topic will be related to the thesis topic, but intellectually broader and more synoptic. Further, the candidate must be able to relate the specialization of their research to the larger context of the sub-discipline. The examination committee will submit the essay topic and the sub-discipline to the Department Head, on the form listed in Appendix B, for approval by the OSGSC. During the meeting that determines the essay topic for the examination, the examination committee should also set a date for the oral examination. This date should be set with the following in mind:

a) two weeks should be allowed for the transmission of the recommendation of the examination committee and the approval by the OSGSC;

b) the candidate must be notified in writing of their essay topic five weeks before the essay is required to be submitted to the examination committee and Graduate Secretary, and;

c) the examination will be conducted two weeks after the committee has received the essay.

The student, upon receiving the topic, will prepare a paper that is a maximum of 20 pages, exclusive of References, Figures and Tables. The essay should provide an integrative review and critical evaluation of the topic, including novel insights into the current state of knowledge and research needed to advance the field. A potential aim could be to produce a document suitable for publication. The paper shall be double-spaced in 12 cpi size type. It will form the basis of the seminar that the student will give at the beginning of the oral examination. The candidate shall submit five copies (or a PDF if the Examination Committee agrees) of the essay to the Graduate Secretary on the assigned date. The Graduate Secretary will distribute the paper to the Examination Committee members. Within a week of receipt of the paper, the Examination Committee recommends/does not recommend that the examination proceed.

**Format of the oral comprehensive examination:**

The aim of the comprehensive examination is to determine the student's basic knowledge of the field in which he/she is working. Thus, PhD students, upon entering a programme of study, should prepare for their comprehensive by being familiar with the general concepts and techniques of their field and be prepared to critically discuss them during the examination.

At the beginning of the examination, the student will present a 30 minute seminar on the assigned topic. After the oral presentation, the student will be questioned on the seminar topic for approximately 10 minutes by each examiner in turn. All examiners, having had the written paper for 2 weeks, will have had an opportunity to develop appropriate questions for the candidate.

A second round of questions will follow, focusing on the broader sub-discipline area. Again, there will be approximately 10 minutes allowed per examiner. Any examiner may ask to have an answer elaborated on, if it is felt clarification is needed.

At the end of the question period the candidate and the audience will leave the examination room while the examiners discuss all facets of the examination and make their decision.

**Evaluation:**

The Examination Committee will evaluate the candidate based on the three components of the examination: essay; oral presentation; and question‐and‐answer period following the oral presentation.

1. **Essay** (35% of mark)

* *Body* Research results & trends accurately reported; research results & trends well interpreted; open questions, & future directions identified.
* *Introduction* Clear statement of topic, background information explains topic’s scope & importance; key concepts & theories well explained.
* *Presentation* Figures, tables, & statistics if necessary & complement text; figures, tables, & statistical summaries well designed.
* *Literature* Citations necessary; key publications cited; citations current; citations & literature cited match & formatted uniformly.

Score: \_\_\_\_\_/35

2. **Oral Presentation** (25% of mark)

* *Content* Clear introduction, explanation of approach, and conceptual & empirical context; accurate content; mastery of material; comfortable with material; application of theory explained; appropriate level of detail.
* *Organization & Delivery* Presentation clear, logical, organized, well paced; suitable level for general biological audience.
* *Use of Aids* Aids appropriate, necessary, effective & well designed.

Score\_\_\_\_\_/25

3. **Questions & answers** (40% of mark)

* *Content* Understands theories/concepts important to the topic; understands questions & their context; acknowledges limits of knowledge.
* *Organization & Delivery* Answers questions clearly, fully & concisely; asks questions & engages in discussion.

Score\_\_\_\_\_/40

Total\_\_\_\_\_\_/100

The candidate must pass all parts of the exam (i.e. score > 50%) and have a weighted score of > 75%.

**Outcome of the Examination:**

i. The candidate may either pass or fail a comprehensive examination. A pass requires a majority vote by the voting members of the examination committee.

ii. If failed, and it is the first examination, the Committee can decide whether the student may be re-examined.

iii. If passed, but a weakness is identified in a particular area of knowledge related to their sub-discipline, the committee can recommend that the student undertake a course or directed reading to bolster their knowledge in that area.

The results and subsequent action, if any, will be communicated to the Dean of Graduate Studies and supervisor, in writing, by the Chair of the examination committee.

If re-examination (in total or in part) is required, it must take place not less than one month and no more than six months from the first examination. The student may be asked to redo the whole examination or only part of the examination. Re-examination can be in written and/or oral format. The student can be asked to review assigned literature and/or redo an essay topic. The nature of the re-examination will be communicated to the candidate in writing.

The outcome of a re-examination is either pass or fail. This is decided by simple majority. If the result is fail, the student will withdraw from the doctoral programme, as only one re-examination is permitted.

If outright failure is decided on the first examination, with no option for re-examination, this decision requires a unanimous vote.

Appendix A

**DEPARTMENT of OCEAN SCIENCES**

**NOTES ON RECOMMENDATIONS FOR EXAMINERS**

* + Potential examiners for PhD Comprehensive examination shall be discussed and agreed to by the Supervisory Committee.
  + The Supervisor shall then contact the potential examiners to determine if they are willing to have their names put forward.
  + When the list is finalized, it shall be signed off by the Supervisory Committee and submitted to the Department Head.
  + The Ocean Sciences Graduate Studies Committee (OS GSC) shall review the list provided, recommend changes if necessary and once approved, submit the recommended examiners’ names via the Graduate Secretary to the Dean of Graduate Studies.
  + After approval by the Dean, the comprehensive examination committee shall be contacted by the DOS Graduate Secretary to initiate the process of choosing an examination topic and date. Should the Dean not approve the examination committee, the OS GSC upon receiving the reasons for this would respond accordingly.
  + The candidate shall not be involved in the choice of recommended examiners.

Ocean Sciences Graduate Studies Committee

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| **OCEAN SCIENCES GRADUATE PROGRAMME**  **Recommendations for PhD Comprehensive Examination Committee Voting Members** | |
| The Comprehensive Examination Committee shall consist of the Department Head (or delegate, as Chairperson; voting), the Supervisor (voting), and three other voting members, one of whom may be a co-supervisor or another member of the Supervisory Committee. The Ocean Sciences Graduate Studies Committee may make exceptions to Committee composition if local expertise in the candidate's area of concentration and sub-disciplines is not available. Voting Committee members may be Ocean Sciences faculty, faculty in other academic departments at MUN, or qualified persons from outside the University.  The Supervisory Committee shall recommend three people as voting members. | |
| Student Name: I Student Number: | |
| Supervisor/Co-supervisors: | |
| Supervisory Committee: (1) (2)  (3) |  |
|  |
|  |
| Thesis title/topic: | |
|  | |
| Area of concentration: | |
| Sub-discipline: | |
| **Recommendations for Comprehensive Examination Committee Voting Members** | |
| (1) Name: | |
| Address: | |
| Phone: I Email: | |
| Reasons for recommendation: | |
| (2) Name: | |
| Address: | |
| Phone: I Email: | |
| Reasons for recommendation: | |
| (3) Name: | |
| Address: | |
| Phone: I Email: | |
| Reasons for recommendation: | |

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| --- | --- | --- |
| **Signatures of Supervisory Committee** | | |
| **Name** | **Signature** | **Date** |
| Supervisor/Co-supervisor: |  |  |
| Co-supervisor: |  |  |
| Committee Member: |  |  |
| Committee Member: |  |  |
| Committee Member: |  |  |

Ocean Science Graduate Studies Committee

Appendix B

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| **OCEAN SCIENCES GRADUATE PROGRAMME**  **Recommendations for PhD Comprehensive Examination Topic** | |
| Student Name: | Student Number: |
| Supervisor/Co-supervisors: | |
| Examination Committee: (1) ­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  (2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  (3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| Proposed Examination Topic: | |
|  | |
| Rationale: | |
| Thesis Title/Topic: | |
| Sub-discipline: | |
| Requested Date and Time of Examination: | |

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| --- | --- | --- |
| **Signatures of Examination Committee** | | |
| **Name** | **Signature** | **Date** |
| Supervisor/co-supervisor: |  |  |
| Co-supervisor: |  |  |
| Committee Member: |  |  |
| Committee Member: |  |  |
| Committee Member: |  |  |