UNIVERSITY OF VICTORIA

DEPARTMENT OF BIOCHEMISTRY AND MICROBIOLOGY

Graduate Program Handbook

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REGISTRATION

Students can register on-line or in person at the University Centre (Graduate Admissions). In order to receive full-time graduate student status (and ID) students must be registered in BIOC/MICR 599/699 each and every term. The student photo ID card can be obtained in the University Centre and also serves as a bus pass, library card and recreation pass. Students can apply for UVic e-mail addresses via the website.

FINANCIAL ASSISTANCE

Researchers in the Department of Biochemistry and Microbiology have a strong track record of attracting peer-reviewed funding that allows for the support of a significant number of graduate students. In addition, the Faculty of Graduate Studies and the Province of British Columbia provide generous levels of salary support to graduate students enrolled at the University of Victoria.

Student Stipends

Applicants accepted into regular full-time graduate studies will receive a guaranteed minimum level of financial support in the form of a stipend for each eligible year they are in the program. Student stipends are normally a composite of grant support (in the form of a research assistantship), teaching assistantships, awards, scholarships, and fellowships. While students are guaranteed minimum stipends, students supported by fellowships and awards often earn much more than the minimum.

The current minimum stipend is $18,000 per year; however, most of our students receive additional local and national awards that bring the minimum stipend to at least $23,000 per year. Fellowships are awarded for excellence in research and scholarship, and are the hallmark of a talented young investigator. Eligible students are strongly encouraged to apply.

Entrance & Productivity Awards

All students with a minimum GPA of 7.0 or equivalent in the last 2 years of graduate or undergraduate course work (e.g. an A- average from a Canadian university or a first class from a university in the U.K.) and who do not hold external awards valued at $15,000 per year or higher are eligible for a University of Victoria Fellowship, a Pacific Century Scholarship, or a University of Victoria Graduate Award, which all guarantee a minimum stipend of $23,000 per year. Details for each of these awards are given below.

Recommendations for the UVic Fellows and Pacific Century Scholars are preferentially given to students entering the program, although current students who have achieved outstanding academic or research success in the preceding year may also be recognized by the Graduate Studies committee with a nomination for one of these two awards.

All students with the minimum GPA of 7.0 for the last 2 years of undergraduate or graduate course work who do not hold external awards of $15,000 or more for the current year are eligible for the University of Victoria Graduate Award. There are usually a large number of these awards made available by the Faculty of Graduate Studies each year. The nominees are selected by the Graduate Studies committee with preference given to students who:

a) are early in their studies;
b) show research productivity by peer-reviewed journal papers, conference proceedings, etc;
c) demonstrate academic excellence.
Eligible Years for Guaranteed Funding

The department guarantees that graduate students will receive at least the minimum required stipend yearly for a period suitable to complete their studies.

- For entry with a completed bachelor’s degree (BSc)
  - 2 years guaranteed funding for a masters degree (MSc)
  - 5 years guaranteed funding (total) if transferred to the doctoral program (PhD)

- For entry with a completed masters degree:
  - 4 years guaranteed funding for a PhD

Funding beyond these times is not guaranteed by the Department, and is a matter strictly between the supervisor and student. All support remains subject to satisfactory performance on the part of the student and, after these limits have expired, to the availability of funds.

Supervisor-Held Grant Funds

Researchers in the Department of Biochemistry and Microbiology at the University of Victoria attract over 1 million dollars in research grant funding each year. A significant portion of these funds is used to offer graduate stipends and to supply the materials required for research.

Research Assistantships

All arrangements for research assistantships (grant support) are made directly between the student and his or her supervisor. Supervisors are responsible for ensuring that their students receive the minimum stipend. A supervisor may, at his or her discretion, top up their students’ stipends above the required minima. The minimum is $18,000 per year for students who do not hold awards of $15,000 per year or more, and $23,000 per year for students who hold external awards of $15,000 per year or more or who hold a University of Victoria Graduate Award.

Departmental Teaching Assistantships

All students are normally required to teach in the undergraduate laboratories for three terms (Master’s) or four terms (PhD) within the first two years of entering the program (Master’s) or within the first three years of entering the program (PhD). In special circumstances, the Department Chair may waive the third and fourth term requirement, after recommendation by the student’s supervisory committee. All arrangements for Teaching Assistantships (TAs) are made between the student and the Department. Contact the Department Graduate Program Coordinator to arrange a TAship at the same time as you confirm your acceptance into our program. Selection of your preferred TA position can be made by replying to the Department administrative officer’s e-mail on this subject, which is sent during the summer term. Each TAship is approximately 70 hrs/term.

AWARDS, FELLOWSHIPS, SCHOLARSHIPS & BURSARIES

The following is a summary of some of the many awards and sources of financial assistance available to students. Most are targeted at students just entering the program or in their early years of study. A full listing of all awards is available in the University Calendar or online at http://web.uvic.ca/gradstudies/fund/index.html.
Deadlines

Consideration is primarily given to those new applicants whose complete entrance materials are received by the Graduate Admissions Office before the competition deadlines, which are usually in late spring. New students should apply before February 15 to ensure consideration. Awards commence at the start of the September term. Those students who entered in the previous January or May term will be considered for the September competition.

University of Victoria Fellowships

All new applicants to graduate school in the Department of Biochemistry and Microbiology are automatically considered for University of Victoria Fellowships. The minimum prerequisite is an average of A- (7.0 on the UVic GPA scale) as calculated by the Graduate Admissions and Records Office. The GPA on any graduate course completed in Biochemistry or Microbiology must also be at least A-. The University of Victoria Fellowship is the highest entrance award offered by the Faculty of Graduate Studies.

Fellowships are held for one year (September to August) and are distributed in 12 monthly payments. The awards are typically $10,000 - $15,000 for MSc or PhD students and guarantee a minimum stipend of $23,000 per year in our department. Students who display outstanding research and academic performance may be considered for renewal. MSc Fellowships may be renewable once (to a maximum of 24 months), and PhD Fellowships may be renewable twice (to a maximum of 36 months); however, priority is generally given to students entering the MSc or PhD programs. To qualify, a student must maintain a sessional and cumulative grade average of at least 7.0 to satisfy Faculty requirements, although a student with a GPA of less than 8.0 is rarely nominated by the Graduate Studies committee. Only about 10% of graduate students hold University of Victoria Fellowships at any given time, therefore meeting the minimum standard for consideration does not guarantee renewal.

Students do not apply for the Fellowship directly. The Department Graduate Studies committee examines the CVs of all eligible students and forwards nominations to the Faculty of Graduate Studies for consideration.

Pacific Century Research Awards

These awards are valued at $10,000 per year and are funded by the Provincial Government. They may sometimes be awarded together with a University of Victoria Graduate Award for a total award of $15,000 per year. The awardee is guaranteed a minimum stipend of $23,000 for that year. These awards are made on the recommendation of the Graduate Studies committee, and may not be available every year.

University of Victoria Graduate Awards

The Faculty of Graduate Studies makes available to the Department of Biochemistry and Microbiology funds sufficient to award a large number of UVic Graduate Awards of $1,000 - $5,000 each. They are awarded based on merit to students who do not hold external funding of $15,000 or more for that year, with newer applicants receiving preference. As always, the availability of awards is dependent on the budget of the faculty of Graduate Studies.

President's Research Scholarships

Applicants who hold provincial and national awards (e.g. MSFHR, NSERC or CIHR fellowships) will normally be eligible for an additional award ($4,000) from the President's Research Scholarship fund. To be considered for this award, applicants must notify the
Department and the Office of the Dean of Graduate Studies that they have a national award. The President’s award is given in two equal payments (October and January).

Howard E. Petch and David F. Strong Research Scholarships
Scholarships are named in honour of Presidents Emeritus Howard E. Petch and David F. Strong. Scholarship amounts vary from year to year.

Outstanding Graduate Entry Award (OGEA)
Students in their first year of the graduate program with a minimum first-class GPA on the last two years of study will be considered for an OGEA award.

Other University Awards
There are several other competitive awards available to students. Details are listed in the University Calendar and the Faculty of Graduate Studies website.

Some examples of graduate fellowships and their typical values:
- The Mrs. Annie Greskiw Graduate Award $1,825
- The Charles S. Humphrey Graduate Student Award $2,500
- The Ray Hadfield Memorial Fellowship $2,275
- Martlet Chapter IODE Graduate Scholarship for Women $400
- Victoria, Canada - China Friendship Association Bursaries $350

External Awards
National and provincial agencies such as NSERC, CIHR, and the Michael Smith Foundation for Health Research (MSFHR) offer trainee awards that guarantee a minimum annual stipend between $23,000 and $50,000 per year.

Canadian citizens or landed immigrants resident in Canada are eligible for these scholarships and fellowships, which are awarded on the basis of high scholastic achievement and/or evidence of skill at research. Application forms may be obtained online in early September and the deadline for submitting completed applications to the Department is usually early October.

Students who have been awarded a NSERC PGS/CGS-M will not automatically receive a PGS/CGS-D. Notices of approaching deadlines will be sent but it is the responsibility of the student to submit their application.

Additional information on external awards is available at the Financial Aid Office and the Office of the Dean of Graduate Studies.

You must advise the department and your supervisor of any awards you receive.

DEPARTMENTAL GRADUATE STUDIES COMMITTEE
The Department Graduate Committee consists of at least three faculty members. One committee member is the chair of the committee and assumes the role of Graduate Advisor. The Graduate Advisor nominates one other committee member as an alternate advisor.

The Graduate Committee, assisted by the Graduate Program Coordinator, oversees all aspects of the graduate program. It monitors admission of students to the Department and the selection of supervisory committees, sets guidelines regarding additional course requirements (if any) for individual students, enforces the spirit of the course recommendations, and monitors annual supervisory committee meetings and PhD candidacy examinations. The Departmental Graduate Committee approves all graduate directed studies courses, makes recommendations on scholarships and fellowships, and on changes to the graduate program. The Graduate Advisor
handles all routine admission inquiries and communicates with the Faculty of Graduate Studies.

**GRADUATE STUDENT SUPERVISORY COMMITTEE & ANNUAL COMMITTEE MEETINGS**

Each graduate student must have a supervisory committee, which should be selected within 3 months of entry to the graduate program. The supervisor, in consultation with the student, chooses the supervisory committee members. The Department requires graduate student supervisory committees to be composed as follows:

- **MSc committee**: academic supervisor, one Departmental member, and one member from the University of Victoria who holds an appointment outside the Department of Biochemistry & Microbiology.

- **PhD committee**: academic supervisor, two departmental members, and one member from the University of Victoria who holds an appointment outside the Department of Biochemistry & Microbiology.

Recognized experts from government, industry or other universities are eligible to be appointed to supervisory committees. The Graduate Advisor must approve all supervisory committee selections.

**It is the student’s responsibility to organize supervisory committee meetings.** Students must meet with their supervisory committee within the first six months of their program and at least once per year after that, although the supervisor or the student may call meetings as often as required. Students must book a room for the meeting through the graduate secretaries. **Students who do not hold regular supervisory committee meetings jeopardize their status in the program.**

Students should prepare a summary of their progress and objectives to be sent to their committee members not less than 1 week before a scheduled meeting. The summary should be ~2-4 pages of 12-point double-spaced type (not including figures or references).

The supervisor will chair the committee meeting. The meeting will begin with a 15-20 minute presentation by the student, which should consist of:

- an introduction of the thesis work.
- objectives/hypothesis.
- progress to date.
- short/medium and long term objectives.
- course work completed and remaining.
- time frame for completion of degree.

**The student should give special emphasis to changes in research direction and to research obstacles encountered or anticipated since the last meeting.** A student who believes that he or she has completed sufficient research must submit an outline for the thesis in addition to the project outline, and request permission from the committee to write his or her thesis.

After the presentation, committee members will discuss the thesis work with the student (although questioning and discussion during the presentation is encouraged). The student must be prepared to discuss all aspects of his or her thesis work.

At the end of this discussion the student will be asked to leave the room, and the supervisor will chair the committee’s evaluation of the student’s progress. The committee must make an assessment of the student’s progress and formulate specific advice for the student. Students will be graded under the following scheme:

- **Excellent** – the student has exceeded all expectations, and the progress made on the
thesis work is exceptional.

- **Good** – the student has met all expectations and made significant progress on the thesis work.
- **Needs Improvement** – the student has struggled to meet expectations (some but not all expectations met) or progress is below what is reasonably expected.
- **Not Satisfactory** – indicates, for example, that a student does not pursue goals in a vigorous fashion, does not take direction well, shows disregard for safety, or repeatedly fails to complete routine procedures.

A student rated ‘needs improvement’ or ‘not satisfactory’ must receive detailed written direction from the committee as to how they have failed to meet expectations and how they may improve their rating. *A rating of not satisfactory must be accompanied by a recommendation for the student to remain in or to be expelled from the program.* The committee is obliged to act on any weakness identified in the student’s research progress or in their academic preparedness. Such action may, for example, take the form of assigned essays based on literature reviews, additional course work, or additional supervision in the laboratory.

At the conclusion of the meeting the chair will note the student’s progress toward expectations and the committee’s advice and instructions on the Graduate Student Annual Meeting form provided by the Graduate Program Coordinator. This document, along with the student's outline, will form the basis of the required yearly progress report. Committee members will sign the form to indicate their agreement with the assessment and instructions.

After the meeting has concluded, the supervisor will explain the committee ranking and instructions to the student. Students are not asked for their agreement, but must sign the assessment form to acknowledge that they have read and understand the evaluation and the instructions of the committee.

The form will be returned by the student to the Graduate Program Coordinator who will submit it to the Graduate Advisor for signature. The signature of the Graduate Advisor indicates that the student’s progress has been appropriately documented. The Graduate Advisor will bring to the attention of the department chair any exceptional concerns raised by a student’s progress report.

**GRADUATE STUDENT RESPONSIBILITIES & ENTITLEMENTS**

**Annual Student Progress Report & CV**

Each graduate student is required to have a supervisory committee meeting within the first six months of their program at least once per year after that. A progress report will be completed at the end of each meeting that should detail what has been accomplished and what is left to do in terms of research, course work and thesis requirements. Assessments are based on performance in course and lab work and on the student’s written and oral summaries of research activities. Scheduling of the annual meeting is the responsibility of the student and his or her supervisor.

Supervisory committee meetings may be called by any member of the committee or by the student, or may be called by the Graduate Advisor in cases where student progress is unsatisfactory or as a means to effect dispute resolution between the student and supervisor. However called, the student will endeavor to choose a time and place that is mutually agreeable to all members of the advisory committee and/or the Graduate Advisor if he or she has called the meeting.
Students who wish to be considered for award or renewal of any Faculty of Graduate Studies Awards, such as the UVic Fellowship, the Pacific Century Scholarship, or the UVic Graduate Awards must submit an up to date *Curriculum Vitae* in late May or early June each year. The Graduate Program Coordinator will announce when CVs are due. The accepted formats are NSERC Form 100 or the Common CV CIHR option. New students who have not yet arrived on campus are automatically considered for these awards, and need not submit a CV.

**Safe working environment**

All students are entitled to a physically and emotionally safe working environment. The Building Safety Committee regularly inspects laboratories, but students are encouraged and required to report any safety concerns.

The Department of Biochemistry and Microbiology does not tolerate any form of physical or verbal harassment. Any student who perceives that they the victim of harassment is encouraged to seek confidential advice from the Graduate Advisor or Department Chair who can recommend appropriate remedies and/or avenues of redress. Students may also directly approach the [Department of Equity and Human Rights](https://equity.uvic.ca/).

Any student may occasionally have difficulty in coping with lab life. The University of Victoria offers significant [counselling resources](https://counselling.uvic.ca/) to all students.

**Appeal and Redress**

Students who perceive that they are unjustly treated within the Department are encouraged to seek appropriate avenues of redress or appeal. Both non-academic and academic matters may be brought to the attention of the supervisor, or any member of the student's supervisory committee, or the Graduate Advisor, or the Department Chair, until appropriate solutions are found.

**PROGRAM REQUIREMENTS**

Students must be continuously registered full-time in all three terms in the graduate program. No part-time graduate programs are offered.

**Supervisor**

All graduate students registered for a degree in the Department must have a full-time regular department member of the faculty as their supervisor or co-supervisor. Students who are studying under a member that is adjunct to the Department must have a regular full-time member of the department as a co-supervisor. Unless authorized by the Department and the Dean of Graduate Studies, a student who initiates a degree program under the direction of a given supervisor retains that supervisor until completion of the degree.

**C.A.P.P. (Curriculum Advising and Program Planning)**

Students can view their CAPP through MyPage; students are asked to review their CAPP for accuracy.

**Teaching Assistantship**

All students are normally required to perform at least three terms (Master’s) or four terms (PhD) of Teaching Assistantship (TA) duties as part of the requirement for a graduate degree.
Graduate Course Work

The graduate courses offered by the Department are listed in the Graduate Studies calendar, and summarized below. Candidates for a MSc or PhD degree are required to successfully complete a minimum of 3 units of graduate level courses approved by the student’s supervisory committee. Students may be required to take additional graduate level courses at the discretion of the Graduate Committee or their supervisory committee. The supervisory committee will carry out selection of any additional courses.

- MSc students must register for BIOC 599 or MICR 599 (thesis) and must complete BCMB 580. Successful completion of BCMB 580 requires that students present their own 580 seminar and receive a favourable assessment from faculty in attendance, and that they attend and participate in seminars given by other graduate students as well as seminars from guest scientists.

- PhD students must register for BCMB 693 and BIOC 699 or MICR 699 (thesis), and must complete in sequence both BCMB 580 and BCMB 680. Successful completion of BCMB 580 and BCMB 680 requires that students present their own 580 and 680 seminars and receive a favourable assessment from faculty in attendance, and that they attend and participate in seminars given by other graduate students as well as seminars from guest scientists.

All students entering the MSc or PhD programs are required to take the 1.5 unit course BCMB 500. This is normally offered in the September semester. Students must take this as early as possible in their program. BCMB 500 requires significant student participation, and students are expected to attend every lecture. BCMB 500 may be deferred only under exceptional circumstances and only with advance permission of the Department Chair.

BCMB 500: Critical Thinking in Biochemistry and Microbiology: Allows students to develop their oral presentation and written communication skills and provides students with training in critical analysis of data and peer-reviewed publications.

All students usually make up their remaining 1.5 units by taking three of the following 0.5 unit courses. Three or four of these courses are offered each academic year. MSc students should seek to complete their course work within 18 months. PhD students can elect to take two academic years to complete their required course work.

BCMB 531: Scientific Writing for Biomedical Research: Exploration of the techniques and strategies of effective scientific writing for knowledge dissemination, grant submission, and peer-reviewed journals. Class time will be used to discuss examples from the current literature, from the popular press and from fellow students.

BCMB 532: Regulation of Eukaryotic Gene Expression: Detailed review of current topics in eukaryotic gene regulation with emphasis on the practical aspects of gene expression and chromatin conformation analysis using molecular biology and biophysical techniques such as DNA arrays, QPCR, ChIP, next generation sequencing, analytical ultracentrifuge, FRAP, FRET. The course will be given in a journal club format with class discussion.

BCMB 533: Cell Signaling: Students will develop an understanding of the tools and methods used to dissect Eukaryotic signaling pathways, and learn how diverse approaches can be used to determine molecular mechanisms of signaling. The course will be taught from the primary literature.

BCMB 534: Fundamentals of Crystallography: An exploration of the connection between x-ray diffraction and electron density, including concepts of unit cell, scattering factor, structure factor, anomalous
scattering and fluorescence. Data collection strategies will be discussed, including Bragg angles, the direct and reciprocal lattices, the Ewald sphere, single crystal x-ray diffractometers, area detectors, Laue photography, synchrotron radiation, MAD, SAD and MIR.

**BCMB 535: Practical Crystallography.** Detailed review of the practical aspects of analysis of x-ray diffraction data collected from protein crystals. Includes techniques for growing and mounting crystals, data collection and reduction, and modern software packages for analysis and presentation. Hands-on experience in solving real structures will be given in a workshop atmosphere, and students are encouraged to bring their laptop computers to class.

**BCMB 536: Practical Molecular Biology:** Application of modern methods to the quantitative generation of active proteins using prokaryotic and eukaryotic expression systems. The course deals with the identification and generation of gene constructs corresponding to potentially soluble (and active) protein subunits, and explores the optimization of their expression and purification. The use of different organisms to overcome problems of protein folding and glycosylation will be discussed.

**BCMB 537: Experimental Origins of Molecular Biology:** Examination of the historical development of the guiding paradigms of modern molecular biology. Classic investigations to be examined include the Luria-Delbruck fluctuation test, the Meselson-Stahl experiment, the fine structure mapping of bacteriophage T4, the Jacob and Monod elucidation of the function of the lac operon, and the deciphering of the genetic code.

**BCMB 538: Bacterial Pathogen Alteration of Eukaryotic Host Cell Functions:** The mechanism of action of bacterial pathogens and their effector molecules in altering biochemical processes in host cells. Various topics will be discussed, including detailed study of the six specialized secretion systems of gram-negative bacteria and modern biological and biochemical approaches for studying bacterial pathogenesis.

**BCMB 539: Practical Bioinformatics:** Aspects of bioinformatics will be reviewed, including searching for distant homologues of proteins with similarity search tools, use of modern web-based motif searching tools, gene prediction and annotation tools, dot plots of proteins and genomes. The course will be given in a journal club format with class discussion.

**BCMB 540: Cancer Immunology from Bench to Bedside.** Students are exposed to data and concepts of the immune response to cancer and clinical immunotherapy - specifically cancer vaccines and T cell therapy - with a broad perspective from basic research through to clinical practice. The course includes lectures and student-led presentations of primary literature.

*A student who desires to take a graduate course outside the Department of Biochemistry & Microbiology must obtain permission from the student’s supervisory committee and the Graduate Advisor.*

**Biochemistry & Microbiology 580/680 & Department Seminars**

**Objective, Timelines & Expectations:**

The objective of BCMB 580/680 is to give every graduate student an opportunity to present his or her research to the department in the form of an oral seminar. Oral presentation of one’s research is a fundamental skill that all scientists must develop, and these seminars provide students an opportunity to hone their presentation and questioning skills in front of a broad scientific audience. Further, BCMB 580/680 allows fellow students, post-doctoral fellows and faculty members to keep abreast of research in the department and to provide critical feedback.

**BCMB 580 seminars:**

All MSc and PhD students are expected to give at least one BCMB 580 seminar during their studies:
• *Students in the MSc program on track for a MSc degree* must present their 580 seminar within 18-20 months of entering the program, and before making a formal Request for Oral Examination (please take note of the “scheduling” section below). Seminars should be structured to give a comprehensive review of the work in the thesis, including an introduction suitable for a general scientific audience that clearly identifies the research question(s) under study, hypotheses and objectives, research methods, major findings and conclusions. The expectation is that students will display an advanced knowledge of their field.

• *Students in the MSc program seeking to transfer into the PhD program* must present their 580 seminar within the first 24 months of study, and before formal scheduling of their Candidacy Examination. The seminar should be a comprehensive review of the work to date, including an introduction suitable for a general scientific audience that clearly identifies the research question(s) under study, hypotheses and objectives, research methods, major findings and conclusions, and long-range objectives to be explored over the remaining course of study. The expectation is that students will display an advanced knowledge of their field, a critical analysis of their research progress, and clear strategies to achieve their long-term objectives.

Students who seek transfer and anticipate that their research directions will be changing should speak of the work completed to date, and outline the potential research strategies that may be pursued by other investigators. There is no requirement to discuss their upcoming PhD project, as this will be explored during their Candidacy Examination.

• *Students who hold a MSc degree when they enter the PhD program* must present their 580 seminar within the first 15 months of study, and before scheduling their Candidacy Examination. The expectations are the same as transfer students, where the seminar should be a comprehensive review of the work to date, including an introduction suitable for a general scientific audience that clearly identifies the research question(s) under study, hypotheses and objectives, research methods, major findings and conclusions, and long-range objectives to be explored over the remaining course of study. The expectation is that students will display an advanced knowledge of their field, a critical analysis of their research progress, and clear strategies to achieve their long-term objectives.

**BCMB 680 seminars:**

All PhD students are expected to give at least one BCMB 680 seminar near the completion of their studies. Students must present their 680 seminar before making a formal Request for Oral Examination (please take note of the “scheduling” section below). The talk should be a comprehensive review of the work in the thesis, including an introduction suitable for a general scientific audience that clearly identifies the research question(s) under study, hypotheses and objectives, research methods, major findings, conclusions, and potential future directions. The expectation is that students will present an original contribution to science in the form of a cohesive synthesis of hypotheses, methods and conclusions that demonstrates the student’s ability to analyze their data critically to test the stated hypotheses.

**Before the 580/680 seminar:**

Students will submit a seminar title and appropriate abstract (approximately 200-250 words) to the graduate secretaries no later than 2 weeks before their scheduled talk. For MSc and PhD students completing their degree the abstract submitted should be the thesis abstract. If this is not available, the abstract must be a fair representation of their thesis work. For PhD transfer
students preparing for their BCMB 580 seminar, the abstract should be a fair representation of the work completed thus far.

Content & Timing:
Students may exclude thesis material from their 580/680 seminars only under exceptional circumstances (such as protection of intellectual property rights), and only with the consent of their supervisory committee.

BCMB580 seminars should last 20 minutes and BCMB680 seminars should last between 45 and 50 minutes. All students will be expected to discuss their research in a question period immediately following the seminar. Students must take care to properly attribute all internal and external contributions to their research. This would include, for example, specialized reagents, cell lines or animals, expert assistance in performing and interpreting experiments, and any figures, charts and graphs.

Scheduling:
When possible, the BCMB 580/680 course coordinator will assign students time slots in the regularly scheduled department research seminar series. When insufficient numbers of slots are available the course coordinator will arrange for slots outside the regular schedule.

BCMB 580/680 seminars will not be scheduled during the months of July and August. Students who anticipate defending their thesis in July and August must take care to schedule his or her 580/680 seminar during the months prior.

Attendance of student supervisory committee members
The student and supervisor will invite members of the graduate student’s supervisory committee to attend the 580/680 presentation.

Assessment of student performance
All available faculty members will attend BCMB 580/680 seminars to assess student presentations. Faculty are obliged to provide constructive, written feedback on any category to which they assign a rank of “needs improvement” or “unsatisfactory”. This feedback will be structured in such a way as to support the student in improving their presentation or research approach.

Students can obtain a copy of the 580/680 assessment form from the Graduate Program Coordinator.

Faculty assessments will be submitted to the Graduate Program Coordinator. The faculty assessments will be provided to the student, the student’s supervisor(s) and the student’s supervisory committee via e-mail within two weeks of the presentation. The supervisory committee will be responsible for integrating these assessments in the ongoing evaluation of the student and to support improved performance. In the event that the student receives a majority ranking of “unsatisfactory” in any one of the categories, the supervisory committee, in consultation with the Graduate Advisor, will review the assessments and determine if the seminar should be revised and re-presented. If it is deemed that the seminar must be re-presented, the supervisory committee, guided by the faculty member assessments, will assist the student in developing an actionable plan to support an improved, revised seminar.
Procedures in the case of the 580/680 needing to be re-presented:
Students who re-present their BCMB 580 or 680 presentations will revise their seminar based on advice from their supervisor and supervisory committee, and re-present their work no later than 4 weeks from the initial seminar. In the case where a 580/680 seminar is to be re-presented, the Graduate Advisor shall ensure by written communication that each faculty member is aware of the circumstances surrounding the need to re-present and that the revised seminar be scheduled during a time when the majority of faculty and the supervisory committee are able to attend.

If a student receives a majority “unsatisfactory” ranking within any category on the second attempt the student will meet with their supervisor(s) and supervisory committee within 7 days to assess the student’s overall performance and to form a recommendation in consultation with the Graduate Advisor and Department Chair as to whether the student shall be permitted to continue in the program or shall be required to withdraw as per Faculty of Graduate Studies directives on Academic Performance (detailed on Faculty of Graduate Studies web pages and below). Should the student receive permission to continue in the program the supervisory committee will be charged with ensuring that the student shows unambiguous improvement for each of the deficient criteria listed by the supervisory committee.

Attendance at seminars:
All graduate students are expected to attend BCMB 580/680 seminars given by their colleagues, as well as departmental research seminars given by senior scientists inside and outside the University. Exceptions are made for:

- Students with documented medical or family emergencies.
- Students who have been given permission by their supervisory committee to write their thesis (whose attendance is optional).
- Students who are not available as the seminar conflicts with assigned TA duties.
- Student who can provide advance documentation of extenuating circumstances (such as conference travel).

Finally, the department recognizes the time-sensitive nature of some experiments, and students may be excused from a limited number of seminars with their supervisor’s permission.

Academic Performance & Conditions Requiring Withdrawal
Students must make satisfactory progress in their research, as assessed by the supervisory committee. Any student who fails to meet academic standards, or whose project or dissertation is not progressing satisfactorily, may be required to withdraw from their graduate studies program with the advice and consent of the Graduate Studies Committee and Chair of the Department.

a) Students in the Faculty must achieve a grade point average of at least 5.00 (B) for every session in which they are registered. All students with a sessional or cumulative average below 5.00 will not be allowed to register in the next session until:

- their supervisory committee has reviewed and approved their academic performance;
- the Dean has reviewed and approved their continuation in the Faculty.
Grades on courses designated FNC (for no credit - 100, 200 or 300 level) or transfer credit courses will not be used in the calculation of sessional or cumulative grade averages.

b) Every grade of 4.0 (B-) or lower in a course taken for credit in the Faculty of Graduate Studies is reviewed by the supervisory committee and the Graduate Advisor, who will recommend to the Dean of the Faculty whether or not the student may continue. Such students will not be allowed to register in the next session until the Dean gives such approval.

c) On the advice of the supervisory committee, the Faculty of Graduate Studies may impose special conditions that must be met within a specified time frame or the student will be required to withdraw.

TRANSFER FROM MSc TO PhD

Application and requirements to transfer from the MSc to the PhD program should be completed within 24 months of starting the MSc program or within 18 months for a student already holding a MSc degree.

The Department's formal requirements for transfer from the MSc to the PhD program are:

a) At least a B+ (6.0) average in coursework

b) Successful completion of seminar requirements (BCMB 580)

c) Support of the supervisor

d) Formal endorsement by the supervisory committee

If requirements (a-d) above have been satisfied, the student can proceed with writing a PhD candidacy proposal and scheduling the candidacy exam.

PhD Candidacy Proposal

Students wishing to transfer from the MSc to the PhD program, or entering directly into the PhD program, are required to write and defend a grant-like proposal describing their thesis research. The proposal outlines hypotheses or research questions to be tested, the experimental approaches that will be taken to answer these hypotheses or questions, and the overall significance of the research.

General Layout
- Page 1 is a title page including your name and student number.
- Body of the proposal – refer to “Overview of Proposal Sections”
- References
- Figures/Tables

Proposal Specifics
- The main body of the proposal can be no longer than 7 pages. Two additional pages are allowed each for figures/tables and references (11 pages total)
- Avoid using acronyms and abbreviations but, if used, give the full names the first time they are used.
• Any references cited should use a standard bibliographic format that includes the title of the referenced work.
• Figure legends should be succinct but must be complete, i.e. they should have enough detail to explain the figure without requiring reference to the proposal.
• Figures and Tables should each have a brief, descriptive title.
• Text must be single-spaced (i.e. six lines per inch).
• ¾ inch margins, 12 point font, black ink. No condensed type or spacing.
• Use white paper 8½ × 11” (21.5 cm x 28 cm), portrait format, single column.
• Print on one side of the page or submit an electronic copy to the committee.

**OVERVIEW OF PROPOSAL SECTIONS –**

**Section 1 – Justification of the proposed research**

*Approximately 2½ pages.*

In this section, examiners will assess the quality of what is being proposed. Examiners will be considering the following questions when reading your proposal:

- *Are the research questions justified?*
- *Is sufficient background information provided to enable interpretation of the proposed research?*
- *Are the overall goals and objectives of the project clearly stated and well-defined; with distinct expected outputs?*
- *Is the potential impact of the research well described?*

**Examples of subheadings relevant to Section 1:**

- **Rationale**
  - A brief statement (<½ page) outlining the proposed research
- **Background and Significance**
  - This section should answer 3 questions: what is known, what is not known, and why is it essential to find out
  - Critically evaluate the relevant literature
  - Incorporate your preliminary data where relevant
- **Research Question or Hypothesis**
  - Should flow from questions defined in the Background section.
- **Overall Objective**
  - State the goal of the proposed research
  - Tie in to the underlying question or hypothesis
Example – “The objective of this research proposal is to establish the mechanisms by which apicomplexan parasites attach to invade host cells”

Specific Aims

- State the specific steps that will be taken to achieve the stated objectives of the grant.
- Example – Specific Aim #1 “Establish the basis for inter-genera/species specificity by mapping the AMA1-RON2 interface”

Section 2 – Execution of the proposed research

Approximately 4½ pages.

Use this section to articulate the research methodology. Examiners will be asked to assess the project’s design and plan, including how the project will be completed, the feasibility of the proposed research, and timelines that indicate when the project is expected to be completed. Examiners will be considering the following questions when reading your proposal:

- Are the methods appropriate to deliver the proposed output(s) and achieve the proposed contribution(s)?
- Are potential challenges and appropriate mitigation strategies described?
- Are the metrics for progress and success clearly defined?
- Are the timelines and related deliverables of the project realistic?

Examples of subheadings relevant to Section 2:

- Research Design and Methods
  - The Specific Aims have stated what you propose. Now you must describe how you propose to fulfill the Aims.
  - Be focused and clear. Put the Aims in a logical and sequential order.
  - It is useful to break this section down, beginning with each stated Aim (plus a one-sentence rationale for each aim) and an outline describing how each Aim will be accomplished.
    - Rough guideline – use ~3/4 of a page to present each Aim.
  - Reference, but do not describe, well-known or standard procedures. Describe procedures that are unlikely to be known to the examiners.
  - Explain the processes for data collection, analysis and interpretation. Include needed statistical analyses.
  - Discuss relevant control experiments.
  - Relate each Aim back to the overall objective of the project and clearly articulate how each Aim will advance the field of study.
• **Strengths and Weaknesses**
  - Discuss potential difficulties and limitations of the proposed procedures and give alternative procedures to achieve the aims.
  - State clearly possible weaknesses and/or ambiguities.

• **Timeline**
  - Provide a brief tentative sequence and timetable for the project. Consider doing this using a diagram or table. Clearly define priorities.

**PhD Candidacy Examination**

**Examining committee**

An examining committee will be selected by the Graduate Advisor and supervisor no later than four weeks prior to the exam. It is normally comprised of:

- All members of the student's supervisory committee, excluding the academic supervisor.
- Two examiners drawn from Department faculty by the Graduate Advisor in consultation with the student's academic supervisor.
- An exam chair (Graduate Advisor or designate)

It is the responsibility of the student to arrange a date/time for the examination to take place that works for all the examining committee members, as well as to secure a room for the examination and arrange for the Graduate Advisor or designate to chair the examination.

**Evaluation of the written proposal**

The written proposal will be distributed to all members of the examining committee two weeks prior to the exam. It is recommended that students obtain guidance, feedback and mentorship from their supervisor prior to and during the drafting of their candidacy proposal. However, it is mandatory that the proposal represent an original document created by the student.

If it is deemed suitable for defense by all members, the student is considered to have passed the written component of the exam. This does not preclude examiners from requesting revisions following the oral exam.

Any examiner who requires revisions to the proposal before it can be defended must inform the Graduate Advisor or Graduate Coordinator at least one week prior to the scheduled date of the examination. In this case, the examination will be postponed for not more than four weeks while revisions are made. The student will be required to resubmit the proposal at least one week before the rescheduled examination.

*It is expected that any committee member who wishes to delay an examination to allow for revision of the proposal will consult with the academic supervisor and at least one other member of the examining committee before making the request.*

**The oral exam**

Examiner questions will focus on the research proposal, however, students will be expected to demonstrate broad knowledge of their field of research, to relate their proposed research to the
field as a whole, and to show how the research questions or hypotheses they have formulated address critical areas of the field. They must be able to explain the technical aspects of their proposed experiments, and to defend their choice of experiments as being the best way to address their research questions or hypotheses.

*Exam procedure*

1. The candidate begins with a 10-20 minute oral presentation that highlights the main points of the research proposal.

2. The examining committee asks two rounds of questions.
   - Examiners who are not part of the student’s supervisory committee begin each round, followed by
   - the outside member of the supervisory committee, followed by
   - department members of the committee
   - The supervisor will attend the examination as a silent and non-voting observer. They will not participate in questioning.

Each examiner will be allowed 15 to 20 minutes for questions in the first round, with a second round of questions as time permits. The total time allotted for questions after the candidate’s presentation is normally two hours.

3. The candidate will withdraw at the conclusion of the questioning. The chair will then ask each member of the committee to review the performance of the student and assign a grade of pass, adjourn, or fail.

4. Possible outcomes:
   - **Pass**
     A unanimous vote of pass or, only one vote to fail or to adjourn, will conclude the examination and the student will receive permission to remain in the PhD program. *Passing the candidacy examination does not guarantee the attainment of a PhD degree.*
   - **Adjourn**
     If two or more members of the committee determine that the oral portion did not constitute a pass the exam is adjourned. In this case the committee will give the student an appraisal of weak areas that will be specifically addressed when the examination is resumed. Note that it will remain the responsibility of the student to defend all aspects of their proposal in the resumed examination, which will follow the format of the first examination and take place within two months.
     Under Faculty of Graduate Studies guidelines, the outcome of the second oral exam is final. In this exam the grade of pass or fail is determined by majority vote of the examining committee members. A tie vote will constitute a fail.
   - **Withdraw**
     Students who fail the second oral examination may complete a MSc degree, but will be required to withdraw from the PhD program.
**Thesis/Dissertation Defense**

All students are required to submit a MSc or PhD thesis that must be defended orally before an examining committee. For the MSc degree, the thesis examining committee consists of the supervisory committee and an external examiner from outside the Department. For the PhD degree an external examiner:

- must be selected from another institution, and
- must be an authority in the student’s field of research, and
- be declared by the supervisor as having ‘arms length’ status.

The candidate’s academic supervisor normally chooses the external examiner. A representative of the Dean of Graduate Studies will appoint the Chair for the defense.

A student may proceed to an oral examination once the supervisory committee is satisfied that the dissertation or thesis represents an examinable document for the degree requirements. The supervisory committee confirms their satisfaction by signing the "Request for Final Oral Examination" form. The supervisory committee normally receives a copy of the thesis at least two weeks prior to being asked to sign this form, which enables each committee member to determine if the thesis is examinable. This form must be submitted to the Dean of Graduate Studies at least **twenty working days** (MSc) or **thirty working days** (PhD) before the anticipated date of the oral examination. Guidelines for setting up oral examinations and regulations governing the format of thesis and the dissertation are found at the Faculty of Graduate Studies website.

The decision of the examining committee shall be based on the content of the dissertation or thesis as well as on the student's ability to defend it. Procedures to be followed in the event of a failure in either the written or oral defense portion of the thesis are defined by the Faculty of Graduate Studies.

**Expectations for MSc and PhD Candidates’ Thesis and Final Oral Examination**

**Thesis Structure**

Although a student can exercise considerable discretion in composing his or her thesis, in general it must conform to the structure outlined below.

**Introduction**

The Introduction should provide the relevant background to the thesis work. The introduction should familiarize the reader with what is known about the topic, and identify the key outstanding questions in the field, especially those that are addressed by the thesis research. The goal of this section is to lead the reader to the hypothesis and questions that will be addressed in the thesis. The Introduction should contain a “Research hypotheses/questions and objectives” subsection, and should generally not exceed 30 pages overall.

**Data Chapters**

Although the classic manner to write a thesis is in the passive voice, the Department recognizes that modern scientific writing is frequently in the active voice and will accept theses in either style. It is permissible for data chapters to closely resemble publications but, in general, they should not be identical. In particular, the introduction to a data chapter should not repeat
material already presented in the general introduction of the thesis. Students should try to make the thesis flow as a single cohesive document.

The treatment of collaborations is a particularly important point, as data chapters should describe the experiments performed primarily by the student. The work of collaborators may be included when it is crucial to understanding the student’s own data; however, there must be a clear delineation between work done by the student and work done by the collaborators with a statement at the beginning of each chapter indicating those experiments that were performed by the student and those that were performed by collaborators. If the publication on which a data chapter is based describes a highly collaborative project, then the chapter should not track the publication closely but should be written to emphasize the student’s own work. In addition, relevant experiments not incorporated in the publication (or placed in supplementary material) should be included in the chapter rather than an appendix. Inclusion of these additional experiments will be useful to future researchers in the field.

Concluding Chapter

This chapter should begin with an overall summary of the work that explains how it has advanced the field. Students should refer to questions and hypotheses raised in the Introduction and explain how the research has contributed to our understanding of these problems. As in your Introduction, the concluding chapter can propose hypotheses and models, and should emphasize the student’s own view of the field. The thesis should finish by suggesting future investigations that address the key issues in the field.

Citations and References

The thesis must be a summation of the student’s own work. The work and ideas of others must be properly cited and referenced. In addition, it is unacceptable to misquote or take out of context the ideas or words of others. This most commonly occurs when one cites review articles instead of original works. Reproduction of published work frequently requires the permission of the publisher, and every journal includes appropriate instructions in their ‘information to authors’ section. Students are responsible for obtaining this permission, and any resulting letters from the publisher should be included as an appendix.

Expectations for a Masters Thesis

- A Masters thesis consists of an introduction, at least one data chapter containing results & discussion, conclusions and references.
- The thesis must describe the student’s own work.
- The student must show that they have an advanced knowledge of the literature pertaining to their thesis topic, and that they are able to design and execute experiments appropriate to the topic.
- Although data chapters do not have to be published papers, it is expected that they be of a quality equivalent to or exceeding that of current peer-reviewed publications in the student’s field.

Expectations for a Doctoral Thesis

- A PhD thesis consists of an introduction, at least two data chapters containing results & discussion, conclusions and references.
- The thesis should be an original work that advances the field of study.
• The student should display a mastery of their thesis topic.
• The department expects that PhD candidates will have written first-author publications during their studies.
• Although data chapters do not have to be published papers, it is expected that they be of a quality equivalent to or exceeding that of current peer-reviewed publications in the student’s field.

A new digital resource is available for all graduate students writing theses, or dissertations, called the Thesis Writing Starter Kit. This document is the result of a collaborative effort among numerous UVic services, and will be permanently housed here:


Expectations for MSc and PhD Oral Examinations

• The oral examination begins with a brief presentation by the student (10-20 minutes) of a summary of their work.
• The oral examination centers about the thesis; however, examiners may occasionally ask questions of a more general nature. Students must be familiar not only with their stated hypotheses, but with the foundations upon which they rest. Students should be prepared to defend the formulation of their hypotheses in the context of the current literature and to demonstrate why a particular experiment will settle an outstanding scientific question. An examiner who is not convinced by an hypothesis, by the interpretation of an experiment, or by a stated conclusion will often ask the student to expand on what is written in their thesis by explaining concepts and methods at a fundamental level.
• Students must be intimately familiar with the details of their own experimental methods and findings, and must be able to rationalize such things as the choice of controls, reagents and approaches. The question is often asked, ‘Why did you do it this way?’ Students must be familiar with any potential weaknesses of their methods and be able to discuss the relative merits of potential alternate approaches.
• Students must be able to answer questions based on data generated by others that was included in their thesis.
• Students should be familiar with the important literature cited in their thesis, and should be able to describe the outlines of important relevant papers and the relative contributions of prominent investigators in their field.

Degree Completion and Graduation Requirements

The University grants degrees in November (Fall) and May/June (Spring) each year. Each candidate for a degree must complete a formal application for graduation. Application forms are available from the Biochemistry & Microbiology General Office or the Graduate Admissions and Records Office. A graduation fee is assessed at the time of application, and is payable by the end of the month in which the application is made. Deadline dates for graduation and convocation can be verified with the Graduate Admissions and Records Office (set out in the "Deadlines for Convocation" memo).
The following items will help the student in finalizing his or her thesis, but it is the responsibility of the student to ensure that all requirements of the Faculty of Graduate Studies have been satisfied including but not necessarily limited to:

a) Regulations governing the proper submission procedures are set out in the "Instructions for the Preparation of Master's Thesis and Doctoral Dissertations". Only the latest version of these instructions is valid. Students can obtain a copy from the Graduate Admissions and Records Office or website.

b) Register for UVic DSpace and digitally submit your final thesis. See the library website for details and guidelines.

c) Payment of all outstanding fees. Students who have outstanding accounts will not receive a diploma or be issued any transcripts. Students should be especially aware of the minimum program fee for graduate degrees as outlined in the Graduate Studies Calendar.

See student's checklist for completing your degree requirements for the complete check list. Students must go IN PERSON to the Graduate Admissions and Records office to sign the necessary documents.
**Program Requirement Timeline Charts**

### MSc Program

<table>
<thead>
<tr>
<th>Start</th>
<th>3</th>
<th>Meet with supervisory committee</th>
<th>12</th>
<th>Meet with supervisory committee</th>
<th>18</th>
<th>Meet with supervisory committee</th>
<th>20</th>
<th>Thesis defense *</th>
</tr>
</thead>
</table>

Register for BIOC 599 or MICR 599, BCMB 500 (fall term), and BCMB 580†

Coursework (3.0 units total) →

Teaching Assistantship

Research

* The length of time to defense depends upon many factors including the nature of the research project.

† Register in BCMB 580 only in the term in which you present.

### PhD Program (BSc entry)

<table>
<thead>
<tr>
<th>Start</th>
<th>3</th>
<th>Meet with supervisory committee</th>
<th>12</th>
<th>Complete candidacy exam</th>
<th>18</th>
<th>Meet with supervisory committee</th>
<th>24</th>
<th>Meet with supervisory committee yearly until defense *</th>
</tr>
</thead>
</table>

- Transfer to PhD program†
- Register for BCMB 693 and BIOC 699 or MICR 699, and BCMB 680‡

Register for BIOC 599 or MICR 599, and BCMB 500 (fall term), and BCMB 580‡

Coursework (3.0 units total) →

Teaching Assistantship

Research

* The length of time until defense depends upon many factors including the nature of the research project.

† See graduate secretary for details.

‡ Register for BCMB 580 and BCMB 680 only in the respective terms in which you present.
**PhD Program (MSc entry)**

<table>
<thead>
<tr>
<th>Select and meet with supervisory committee</th>
<th>Meet with supervisory committee</th>
<th>Complete candidacy exam</th>
<th>Meet with supervisory committee</th>
<th>Meet with supervisory committee yearly until defense *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>3</td>
<td>9</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>36-48 months</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Register for BCMB 693, BIOC 699 or MICR 699, BCMB 500 (fall term), and BCMB 580 and 680†

Coursework (3.0 units total)

Teaching Assistantship

Research

* The length of time until defense depends upon many factors including the nature of the research project.
† Register for BCMB 580 and BCMB 680 only in the respective terms in which you present.
Responsibilities in the Supervisory Relationship

The Office of the Faculty of Graduate Studies is dedicated to the promotion of effective graduate teaching/learning/supervisory experiences for graduate faculty, students, Graduate Advisors, and graduate secretaries. Effective supervision is a joint effort and partnership of the supervisory unit, the supervisory committee members, the student, the Graduate Advisor and the Graduate Program Coordinator. This document, Responsibilities in the Supervisory Relationship, is designed to clarify the principles and policies for ‘best practices in graduate supervision’. Faculties are encouraged to generate their own policies and procedures that are complementary to those established by the Office of the Faculty of Graduate Studies.

RESPONSIBILITIES OF THE ACADEMIC SUPERVISOR

The Academic Supervisor is a mentor and advisor who develops a professional, interpersonal relationship with the graduate student that is conducive to scholarly activities and intellectual enhancement.

Mentoring involves a developmental and supportive relationship. The mentoring relationship is an interactive process between individuals within the supervisory mandate and incorporates interpersonal development, career and educational development and professional socialization functions.

The Academic Supervisor is directly responsible for the supervision of the student's program. In this capacity, the supervisor assists the student in planning the program, ensures that the student is aware of all program requirements, degree regulations, and general regulations of the academic unit, the Faculty of Graduate Studies, the University, and external granting agencies. The Academic Supervisor provides counsel for all aspects of the program, and stays informed of the student's scholarly activities and progress.

Overseeing the student’s program

The Academic Supervisor has responsibilities related to:

1.1 to assist the student in forming a supervisory committee;
1.2 to chair meetings of the committee and, if necessary, arbitrate decisions of the committee;
1.3 to be aware of the rules and procedures of the academic unit, the Faculty of Graduate Studies, the University and relevant external agencies, and to make the student aware of them as well;
1.4 to be aware of the standards to which a major paper, thesis, dissertation or creative project must conform and to make the student aware of them as well;
1.5 to maintain contact with the student through mutually agreed upon regular meetings and to be reasonably available for consultation as needed;
1.6 to help in selecting appropriate course work for the program and also involve the supervisory committee as much as is possible and appropriate in the student's program;

1.7 to inform the student and direct them to source material on the Tri-Council Guidelines for Ethical Research in Humans and ensure that, where appropriate, student research or academic proposals involving human subjects have been submitted to the Human Research Ethics Committee for approval before the commencement of the research project;

1.8 to ensure that, where necessary, student research proposals have received approval before implementation from the appropriate committee reporting to the Vice-President Research. Examples include, but are not limited to, the Animal Care Committee, Hazardous Materials Committee, and Biosafety Committee;

1.9 to assist the student in negotiating a realistic timetable for the completion of the various requirements of the program of study;

1.10 to thoroughly examine the work submitted by the student and to make timely and constructive written comments for improvement on a schedule negotiated with the student;

1.11 to determine whether or not a draft of a major paper, thesis, dissertation or creative project is ready for submission to the supervisory committee. If a draft is not to be submitted, to provide to the student reasons in writing;

1.12 to make satisfactory arrangements for supervision of the student if the supervisor is to be away for more than three months and this absence is deemed detrimental to the student’s progress. An interim supervisor is to be arranged by the supervisor and student in consultation, and the Office of the Faculty of Graduate Studies informed in writing. If the absence is extended, a replacement is to be found by the supervisor leaving;

1.13 to work within the academic unit's candidacy structure and with the academic unit's Graduate Advisor and/or Graduate Program Coordinator in initiating the steps required in setting up candidacy examinations. The student should be consulted regarding the scheduling of such exams and expectations (which may or may not be negotiable) and times are to be communicated in writing;

1.14 when appropriate, to direct the student to the Office of Research Administration for advice regarding Intellectual Property; and

1.15 to encourage and assist the student to attend conferences and meetings in his/her field of study.

**Academic integrity and professionalism**

The Academic Supervisor has responsibilities related to the basic principles of academic integrity and professionalism:

2.1 to not withdraw monetary support without reason and due notice in writing and to stipulate a particular length of time before withdrawal of money;

2.2 to acknowledge contributions of the student in published material;
2.3 to withdraw a student when the supervisor, in consultation with the supervisory committee, the head of the academic unit and the Graduate Advisor has reasonable grounds to believe academic progress is not being made and continued supervision will not lead to the satisfactory completion of degree requirements by the student. The supervisor must give reasonable notice in writing of the withdrawal of the student to the student, the Graduate Advisor and the Office of the Faculty of Graduate Studies;

2.4 to withdraw from supervising a student when the supervisor and student, in consultation with the supervisory committee, the head of the academic unit and the Graduate Advisor are unable to resolve interpersonal conflicts which are impeding satisfactory academic progress toward degree requirements. The supervisor must give reasonable notice in writing of the withdrawal of supervision to the student, the Graduate Advisor and the Office of the Faculty of Graduate Studies;

2.5 normally to remain as supervisor until another supervisor is in place or the student is withdrawn;

2.6 the replacement supervisor is expected to be negotiated by the Graduate Advisor, the student, members of the committee and the replacement supervisor in consultation with the Graduate Advisor or head of the academic unit; and

2.7 to be aware of situations of potential conflict of interest, roles and conflict of commitment and to deal with them according to official University guidelines.

2.8 It is unprofessional for a withdrawing supervisor or for a student whose supervisor has withdrawn to engage in personal recriminations related to the termination of the supervisory relationship.

**Responsibilities of the Supervisory Committee**

Each student has a Supervisory Committee consisting of the Academic Supervisor and from one to three additional members depending on the student's program. Although the Academic Supervisor serves as the student's major advisor, the entire committee is expected to be involved in the student's program. Members of the committee are expected to encourage and be available for consultation with the student at reasonable intervals. The supervisor is responsible for arranging regular supervisory meetings. If a committee member is to be away for more than three months, and this absence is deemed detrimental to the student's progress, an interim member is to be arranged by the committee and student in consultation, and the Office of the Faculty of Graduate Studies informed in writing. If the absence is extended, a replacement is to be found by the person leaving.

**Overseeing the student's program**

The Supervisory Committee has responsibilities related to overseeing the student’s program:

3.1 to be aware of the rules and procedures of the Faculty of Graduate Studies, the University, and external granting agencies and to advise the student of them;
3.2 to recommend to the Faculty of Graduate Studies a program that has been worked out with all members of the committee, including the student;
3.3 to ensure that the student is aware of normal expectations concerning the length, quality, style, and standard presentation of the paper, thesis, dissertation or creative project;
3.4 to evaluate the proposed work plan;
3.5 to negotiate and guide the student in the implementation of the work plan, and to evaluate the progress of the student's work;
3.6 to provide regular feedback in writing to the student on the progress of the student's program;
3.7 to aid in the arbitration of problems which arise between the student and the supervisor;
3.8 to evaluate the penultimate and final drafts of the thesis, dissertation or creative project;
3.9 to recommend in writing to the Office of the Faculty of Graduate Studies corrective steps or withdrawal if progress is unsatisfactory; and
3.10 to serve as the core of the examining committee.

_Academic integrity and professionalism_

The Supervisory Committee has responsibilities related to the basic principles of academic integrity and professionalism

4.1 to withdraw from being on a student’s committee when, in consultation with the supervisory committee, head of the academic unit and the Graduate Advisor, the student and committee member are unable to resolve interpersonal conflicts which are impeding satisfactory academic progress and completion of the degree. The committee member must give reasonable notice in writing of the withdrawal from the committee to the student, the Graduate Advisor and the Office of the Faculty of Graduate Studies. The committee member must, in this case, negotiate a change of membership in accordance with this section and so as to minimize to the extent possible the negative impact of the change on the student’s program;
4.2 normally to remain until another committee member is in place or the student is withdrawn; and
4.3 to work with the supervisor, other committee members and the student to find a replacement in order to minimize to the extent possible any negative impact on the student’s program.
4.4 It is unprofessional for a withdrawing committee member or for a student whose committee member has withdrawn to engage in personal recriminations related to the termination of the supervisory relationship.
RESPONSIBILITIES OF THE DEAN OF GRADUATE STUDIES

In the case of alleged non-compliance with these supervisory guidelines by an academic supervisor or supervisory committee member, the Dean of the Faculty of Graduate Studies has the following responsibilities:

5.1 to request a written report from the person making the allegation;
5.2 to review the written report of noncompliance;
5.3 to provide an opportunity for a consultative process with the parties involved;
5.4 where, in the opinion of the Dean, a report of noncompliance constitutes “misconduct” as that term is defined in the University's Policy on Scholarly Integrity, the Dean may make a complaint under the Policy on Scholarly Integrity and the report shall thereafter be dealt with in accordance with that Policy;
5.5 where, in the opinion of the Dean, a report of noncompliance does not constitute “misconduct” as that term is defined in the University's Policy on Scholarly Integrity or does not warrant invoking the University's Policy on Scholarly Integrity, the Dean shall forward a copy of the report to the student's academic supervisor and the members of the student's supervisory committee with an invitation to send a response to the Dean;

5.6 After reviewing any responses to the report, the Dean may:
   a. meet with the person who made the report, the student's academic supervisor and the student's supervisory committee either together or separately to discuss the report and the responses to the report for the purpose of
      a.1 seeking a resolution of any conflicts among the parties;
      a.2 discussing methods of compliance in the future; and
      a.3 proposing education and remedial strategies for particular parties.
   b. where the Dean is satisfied that the matter can be satisfactorily dealt with in writing, the Dean shall send a letter to the person who made the report and all persons to whom a copy of the report was sent.

GRADUATE STUDENT RESPONSIBILITIES

Upon entering a graduate degree program, a graduate student is making a commitment to devote the time and energy necessary to complete the program. The supervisory committee has the right to expect reasonable effort, initiative, respect and receptiveness to suggestions and criticisms. The student must accept the rules, procedures and standards in place in the program at the University of Victoria and is expected to check the University Calendar and academic unit documents for regulations regarding academic and non-academic matters. The student is a participating member of the committee and may initiate and negotiate changes to the program and committee membership in full consultation with the committee and without prejudice due to changes requested.

Graduate Students have the following responsibilities:
6.1 to make a commitment and to show dedicated efforts to gain the background knowledge and skills needed to pursue and complete the research or creative project successfully;

6.2 to develop, in conjunction with the supervisor, a plan and a timetable for completion of all stages of the degree program, and to adhere to a schedule to meet appropriate deadlines;

6.3 to maintain contact with the supervisor through mutually agreed upon regular communication and be reasonably available for consultation as needed;

6.4 to maintain registration throughout the program and (for international students) to ensure that student visas and (where applicable) employment authorization documents are kept up to date. To inform supervisor of any temporary withdrawal from the program and reasons for the absence;

6.5 to keep the supervisor, the Graduate Advisor and the Registrar's Office informed on how the student can be contacted;

6.6 to give serious consideration to and respond professionally to the advice and criticisms received from the supervisor and other members of the supervisory committee;

6.7 to pay attention to the need to maintain a workplace which is tidy, safe and healthy and where each individual shows tolerance and respect for the rights of others;

6.8 to be thoughtful and reasonably frugal in using resources provided by the supervisor and by the University, and to assist in obtaining additional resources for the research or for other group members where applicable and possible;

6.9 to conform to University, faculty and program requirements and to consult with the supervisor, members of the supervisory committee, the Graduate Advisor of the program, the Graduate Program Coordinator of the program, and the Office of the Faculty of Graduate Studies as needed.

6.10 to recognize that the supervisor and other members of the supervisory committee may have other teaching, research and service obligations, which may preclude immediate responses;

6.11 to meet the relevant performance standards and deadlines of the funding organization to the extent possible when financing has been provided under a contract or grant;

6.12 to conform to professional standards of honesty in order to assure academic integrity and professionalism. This includes, but is not limited to, acknowledging assistance, material and/or data provided by others;

6.13 to terminate the work and clean up the workspace, leaving the place to another student, when program requirements have been met;

6.14 to return borrowed materials to the supervisor, academic unit, library or reading room etc. when the academic work has been concluded or when return is requested;
6.15 to identify the contributions of supervisors or committee members in publications as well as identifying fellowship or grant support for research in publications; and

6.16 to address situations that are not working. Students may deal directly with the supervisor and supervisory committee so that dissatisfactions, issues, and conflicts can be resolved. If for any reason the situation cannot be resolved, the student may consult with the Graduate Advisor, or the department, school/faculty chair, director or dean, or take counsel from the Office of the Faculty of Graduate Studies on how to proceed.