

## Program Requirements of the Physiology and Pharmacology Graduate Program – January 2010

### **Preamble:**

Following a decisive departmental vote conducted in November 2009, favouring consolidation of the Physiology and Pharmacology & Toxicology graduate programs to become the Physiology and Pharmacology Graduate Program, the department held a retreat focused on defining the program requirements and graduate course offerings for the consolidated program.

Several recommendations were put forward from the discussions held at the departmental retreat. These include:

- 1) That the consolidated program be composed initially as a single Physiology and Pharmacology stream.
- 2) It was recommended that the additional 0.5 credit currently required for our MSc students in both programs be adjusted to a single 1.0 credit represented by the CCT course.
- 3) With regard to the development of graduate courses, it was proposed that the department should not immediately develop a large number of these courses and it would be best to begin with the offering of the bench to bedside translational research course.

### **Restructured Program:**

Based on these recommendations from the retreat the Graduate Studies committee met on January 12, 2010 to define the structure and program requirements for the consolidated Physiology and Pharmacology Graduate Program as follows:

#### **MSc students:**

- 1) Must enrol and successfully complete the Communications and Critical Thinking Graduate Course – 1.0 full credit
- 2) May enrol and complete additional course work based upon the student's desire, and recommendations of their advisory committee and supervisor. This course work is not required to complete their MSc program, but would provide course credit for students that transfer to the PhD program (see below). Additionally their grades could assist in them receiving scholarship support.
- 3) Must complete research studies equivalent to the content of a single strong research manuscript and successfully write and defend their thesis

#### **MSc transfer PhD students:**

**To transfer from the MSc program to the PhD program the student must have demonstrated significant progress on their research project that usually represents the accumulation of sufficient data to represent a publication quality study. The advisory committee must be of the opinion that the**

**student has the expected aptitude to complete a strong PhD thesis and that the project has sufficient scope to encompass a PhD project. The transfer between programs must occur before the student completes the 5<sup>th</sup> term of graduate studies**

- 1) The CCT course is required. If these students have already completed the CCT course, they will receive credit for that course.
- 2) They must complete an additional 0.5 course credit (see below for acceptable course offerings). If they have already completed an appropriate 0.5 course credit before transfer to the PhD program, this 0.5 credit will be acceptable.
- 3) All PhD students must complete the 1.0 credit grant writing course (currently held in the fall each year).
- 4) All PhD students must successfully pass an Oral Comprehensive examination, which is no longer a course, but is a program requirement.
- 5) All PhD students must present a departmental seminar of their research findings approximately 1 year before the completion of their studies. This is also now a program requirement, not a course.
- 6) All PhD students must complete novel research studies **that are determined by their advisory committee and PhD defence examination committee to have significantly advanced their field of study**

**PhD students who have received an MSc from our Department, another UWO Department or another University.:**

- 1) The CCT course is required. If these students have already completed a course deemed to be equivalent to the CCT course based on a review and recommendation from the Graduate Studies Committee, they will receive credit for that course. Nevertheless, all students are required to attend the introductory first 4 week lectures of the CCT course that covers program requirements, research ethics, professionalism and effective communication instruction.
- 2) They must complete an additional 0.5 course credit (see below for acceptable course offerings). If they have already completed an appropriate 0.5 course credit before entering the PhD program, this 0.5 credit will be acceptable.
- 3) All PhD students must complete the 1.0 credit grant writing course (currently held in the fall each year).
- 4) All PhD students must successfully pass an Oral Comprehensive examination, which is no longer a course, but is a program requirement.
- 5) All PhD students must present a departmental seminar of their research findings approximately 1 year before the completion of their studies. This is also now a program requirement, not a course.
- 6) All PhD students must complete novel research studies **that are determined by their advisory committee and PhD defence examination committee to have significantly advanced their field of study**

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**Direct Entry PhD students:**

- 1) The CCT course is required. IF these students have already completed the CCT course or they have already completed a course deemed to be equivalent to the CCT course based on a review and recommendation from the Graduate Studies Committee, they will receive credit for that course. Nevertheless, all students are required to attend the introductory first 4 week lectures of the CCT course that covers program requirements, research ethics, professionalism and effective communication instruction.
- 2) They must complete an additional 0.5 course credit (see below for acceptable course offerings).
- 3) All PhD students must complete the 1.0 credit grant writing course held in the fall each year.
- 4) All PhD students must successfully pass an Oral Comprehensive examination which is no longer a course but a program requirement.
- 5) All PhD students must present a departmental seminar of their research findings approximately 1 year before the completion of their studies. This is also now a program requirement and not a course.

6) All PhD students must complete novel research studies **that are determined by their advisory committee and PhD defence examination committee to have significantly advanced their field of study**

**Course Offerings and 0.5 Credit Eligible Courses:**

The consolidated Physiology and Pharmacology Program will offer at least the following 6 graduate courses each year if enrolment satisfies the minimal class size requirement for each course. These include:

- 1) Communications and Critical Thinking Course – 1.0 Credit
- 2) Molecular Techniques Course – 1.0 Credit
- 3) Drug Discovery Course – 0.5 Credit
- 4) Pharmacogenomics Course -0.5 Credit
- 5) Translational Research Course – 0.5 Credit
- 6) PhD grant writing course- 1.0 Credit

Students may also select from the relevant course offerings of other Schulich Graduate Programs as available and as warranted based upon their research area. To be acceptable for the required 0.5 course credit in the PhD program, the selection of these courses must be upon the recommendation by the student's supervisor and advisory committee and be approved by the Graduate Studies Committee.

Students are also able to take additional courses (such as other departmental offerings and 4<sup>th</sup> year undergraduate courses taken as graduate courses) based upon their needs and recommendations of their supervisor and advisory committee; however, those courses would not be considered for the 0.5 course requirement for the Physiology and Pharmacology graduate program.