## Non-Thesis Masters Programmatic Study in Medicinal Chemistry (16:663:620)

## **Course Description:**

All non-thesis MS students in the Graduate Program in Medicinal Chemistry are required to take the Non-Thesis Masters Programmatic Study in Medicinal Chemistry (16:663:620) before they can graduate. This is a literature review or a small research project culminating with a final critical essay that a non-thesis student needs to write and present to a master's committee of three members.

Students can perform a variety of projects under the non-thesis option. Examples of a suitable project for the non-thesis programmatic study include:

- Surveying the literature on a new drug target or a class of drugs and writing a critical, focused paper on the topic
- Performing a small research project that is not as involved as a thesis and writing a project report describing their study and significant results obtained. The research projects can be on a variety of topics such as
  - > Development and application of a new analytical method using LCMS,
  - > Identification of new drug metabolites using LCMS and/or NMR,
  - Optimization of a new set of reaction conditions for a chemical conversion,
  - > A computational docking and virtual screening project

The non-thesis option is for students who are working and cannot commit to the time necessary for a thesis or who don't wish to perform a large scale project like a thesis. NOTE: ALL students must have a faculty advisor for their project. Students are not assigned to a faculty member; but, instead they must take the initiative to contact a faculty member working in their area of interest. The sooner a student finds an advisor the better!

Students need to develop with their advisor an appropriate topic for the critical essay. A term paper submitted for another course is unacceptable as a critical essay, and the submission of such will be considered as a violation of academic integrity.

**Prerequisites:** 

Completion of at least 28 credits of coursework including the 16 credits of the required courses and 12 credits of approved electives for the master's degree by the end of the semester the student is enrolled in the Non-Thesis Masters Programmatic Study in Medicinal Chemistry

Registration upon approval by the Graduate Program Director

Course Credits: 3

**Instructor**: Graduate Program Faculty

Time and Schedule: By appointment

**Grading**: Pass or Fail