**JCV3063H ~~ Advanced Topics in Cardiovascular Sciences: Vascular**

**Course Director: Dr. Scott Heximer**

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**Day/Time: Fridays, 10:00-12:00pm**

This course is one of a set of seven advanced seminar half-credit courses dealing with current research areas in the cardiovascular system. Specifically, JCV3063H covers all aspects of the vascular system from genetic to molecular, including developmental biology, the diseased state and clinical treatments.

Areas that may be covered include:

* The elastic matrix of vascular tissue: regulation of synthesis and assembly and role in vascular pathology
* Angiogenesis/Vasculogenesis
* Platelets
* Endothelial cell function
* Vascular response to angioplasty injury
* Role of smooth muscle in vascular responses
* Pathogenesis of atherosclerosis: investigations of cellular and molecular mechanisms
* Microvascular tissue perfusion
* Hemodynamics in cardiovascular disease
* Pulmonary vasculature
* Current status of vascular surgery
* Vascular Malformations
* Vascular Regenerative Medicine

**Prerequisites:** None

**Maximum Enrolment:** 15

**Minimum Enrolment:** 10 registrants for the course to run

**Enrolment:** Graduate students interested in heart research. Preference will be given to students enrolled in the Cardiovascular Sciences Collaborative Specialization.

**Grading: 40%** oral presentation

40% written essay

20% participation