Course Director: Dr. James Granneman, 2414 Integrative Biosciences Building, 313 577 5629, jgranne@med.wayne.edu, Office hours: Tues 11:45 AM –1 PM and by appointment. Co-Director: Dr. Lawrence Grossman

Instructors: See course schedule for a list of individual instructors and topics.

Information: All official information regarding this course, including schedule updates, policies, discussion forums, lecture slides and notes, supplementary reading and other assignments will be posted on the Blackboard web site. Please consult the site regularly.

Required textbook: None

Credits and Class Meetings: The class will meet Tuesdays and Thursdays, 3:30PM to 5:00 PM in the CMMG conference room. Fall Semester for 2 credits. See schedule for specific lectures/topics.

Learning Objectives:
1. Students will understand the basic elements of mammalian cellular metabolism.
2. Students will be familiar with current topics that relate to metabolism and disease, including diabetes, cancer, obesity, circadian rhythms, neural control of energy balance, nutrient control of gene expression, longevity, and microbiome.
3. Students will develop an appreciation for the scientific rigor and current technical approaches in metabolic disease research.

Structure: The course will consist of lectures and interactive presentations of current research literature addressing topics in metabolism and disease. In general, Faculty will deliver background material covering the fundamentals of a specific research domain. In addition, the faculty will assign one to three research reports. All students are expected to have read the articles and have a command of background, technical approached used, the basic findings, interpretation and limitations of the data. Each student will present at least one figure of the articles, and will comment on interpretation and limitations thereof. For each article, students prepare a one paragraph summary that is sent to the course director.

Grading Policy: Students are graded on the quality and depth of presentations of journal data, as well as participation in discussions and feedback to fellow students. The final exam will entail a short summary of the student’s ongoing/planned research, and a brief research proposal that is outside of their immediate area which must incorporate technical approaches that we used in any of the papers presented. Final paper will be graded according to scientific premise and technical approach.