

FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL¹

UGPC APPROVAL _____
 UFS APPROVAL _____
 SCNS SUBMITTAL _____
 CONFIRMED _____
 BANNER POSTED _____
 CATALOG _____

DEPARTMENT: BIOMEDICAL SCIENCE COLLEGE: COLLEGE OF MEDICINE

RECOMMENDED COURSE IDENTIFICATION:
 PREFIX PCB COURSE NUMBER 6665 LAB CODE (L or C) No
 Lab
 (TO OBTAIN A COURSE NUMBER, CONTACT [MJENNING@FAU.EDU](mailto:mjenning@fau.edu))
 COMPLETE COURSE TITLE: HUMAN GENETICS

EFFECTIVE DATE
 (first term course will be offered)

 SPRING 2015

CREDITS²: 3 TEXTBOOK INFORMATION: Thompson & Thompson Genetics in Medicine, 7th Edition
 By Robert L. Nussbaum, MD, Roderick R. McInnes, MD, PhD, FRS(C) and Huntington F. Willard, PhD

GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR SATISFACTORY/UNSATISFACTORY _____

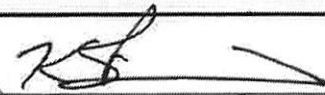
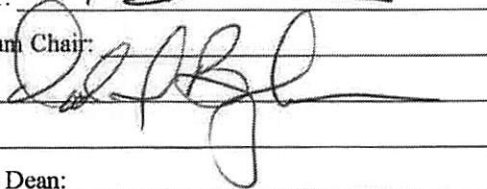
COURSE DESCRIPTION, NO MORE THAN THREE LINES:
 Human Genetics is a course designed to provide students with a functional understanding of the field of human genetics as it applies to progressive research and medicine. The course will emphasize the integrated understanding and application of Genetic Analysis, Diagnosis and Mechanisms in human disease

PREREQUISITES*: NONE	COREQUISITES*: NONE	REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)*: INSTRUCTOR PERMISSION REQUIRED
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* PREREQUISITES, COREQUISITES AND REGISTRATION CONTROLS WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE: BIOMEDICAL FACULTY OR COM FACULTY

Faculty contact, email and complete phone number: Dr. Marc Kantorow mkantoro@fau.edu 561-297-2910	Please consult and list departments that might be affected by the new course and attach comments. None
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Approved by: Department Chair: <u></u> College Curriculum Chair: <u></u> College Dean: _____ UGPC Chair: _____ Graduate College Dean: _____ UFS President: _____ Provost: _____	Date: <u>8/26/14</u> <u>8/26/14</u> _____ _____	1. Syllabus must be attached; see guidelines for requirements: www.fau.edu/provost/files/course_syllabus.2011.pdf 2. Review Provost Memorandum: Definition of a Credit Hour www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf 3. Consent from affected departments (attach if necessary)
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Email this form and syllabus to UGPC@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

Human Genetics- Spring 2015

Course # PCB (TBD) - 3 credits
Course Requisites: Instructor Permission
Instructors: Marc Kantorow, Ph.D.
Course hour: MW 4-5:20 (To be confirmed)
Place: TBD
Office hour & place: Office 207 Lab 212
561.297.2910 office/ 561.297.2918 lab
Email: mkantorow@fau.edu
Office hours- Friday 2-4:30 or by appointment

Text: Thompson & Thompson Genetics in Medicine, 7th Edition
Authors: By Robert L. Nussbaum, MD, Roderick R. McInnes, MD, PhD, FRS(C) and Huntington F. Willard, PhD

Course Description:

Human Genetics is a course designed to provide students with a functional understanding of the field of human genetics as it applies to progressive research and medicine. The course will emphasize the integrated understanding and application of Genetic Analysis, Diagnosis and Mechanisms in human disease. Students will be evaluated based on their cumulative performance on one mid-term and one final exam. Exams will be cumulative. Attendance is not mandatory but students are responsible for knowing all information presented during lecture. The instructor reserves the right to alter the schedule or content of the course at anytime. This course will be taught using case-based models for genetic analysis, diagnosis, mechanisms and how they contribute to human disease phenotypes. These models have been chosen for their applicability to illustrate and apply important genetic concepts. Where applicable therapies and treatment options will be discussed. Students will be expected to learn course material independently outside of class since this is case-directed graduate-level course. This self-directed learning will include but not be limited to reading assignments given out bi-weekly during lectures. The majority of these assignments will come from Thompson and Thompson, GENETICS IN MEDICINE, 7th Edition.

Course Objectives: This course will emphasize mechanistic principles of human genetics and disease. These include but are not limited to: pedigree construction and analysis, linkage mapping, modes of inheritance, gene function analysis, genotype-phenotype correlations, disease mechanisms, epigenetic regulation, genetics of sex, signal transduction, cell-transport, DNA replication and repair, genetic mechanisms of immune tolerance, genetics of metabolism, gene expression control, mitochondrial regulation and disease, epidemiology, genetic association,

mosaic gene expression, genetic recombination inheritance, advances in genetic technologies, population inheritance and gene frequency and many more!

Course Schedule:

January 2015

Monday 5th: Intro to the course and Achondroplasia

Wednesday 7th: Alzheimer Disease

Monday 12th: Hereditary Breast and Ovarian Cancer

Wednesday 14th: Chronic Myelogenous Leukemia

Monday 19th: No School- M.L. King Jr. Holiday

Wednesday 20th: Duchenne Muscular Dystrophy

Monday 26th: Familial Hypercholesterolemia

Wednesday 28th: Glucose-6-Phosphate Dehydrogenase Deficiency

February 2015

Monday 2nd: Hereditary Nonpolyposis Colon Cancer

Wednesday 4th: Holoprocencephaly

Monday 9th: Huntington Disease

Wednesday 11th: Insulin-dependent Diabetes Mellitus

February 16-20: EXAM 1- Midterm

Monday 23rd: Marfan Syndrome

Wednesday 25th: Miller-Dieker Syndrome

March 2015

Monday 2nd: SPRING BREAK

Wednesday 4th: SPRING BREAK

Monday 9th: Myoclonic Epilepsy

Wednesday 11th: Non-Syndromic Deafness

Monday 16th: Polycystic Kidney Disease

Wednesday 18th: Prader-Willi Syndrome

Monday 23rd: Retinoblastoma

Wednesday 25th: Sex Reversal

Monday 30th: Cystic fibrosis

April 2015

Wednesday 1st: Tay-Sachs Disease

Monday 6th: Xeroderma Pigmentosum

Wednesday 8th: Rett Syndrome

Monday 13th: Fragile X Syndrome

Wednesday 15th: Exam Preparation Day

Monday 20th: In Class Review

Wednesday 22nd: In Class Review??

March 23-29: FINAL EXAM

Course Policies: Makeup tests and late work are not allowed unless an approved physical problem or schedule conflicting with University-approved activities

Classroom etiquette: Please refer to the FAU Catalog and Student Handbook. Compliance with university rules and regulations is expected of all students.

Academic Honor Code: Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility.

The FAU Honor Code requires a faculty member, student, or staff member to notify an instructor when there is reason to believe an academic irregularity is occurring in a course. The instructor must pursue any reasonable allegation, taking action where appropriate. The following constitute academic irregularities:

1. The use of notes, books or assistance from or to other students while taking an examination or working on other assignments, unless specifically authorized by the instructor, are defined as acts of cheating.
2. The presentation of words or ideas from any other source as one's own is an act defined as plagiarism.
3. Other activities that interfere with the educational mission of the University.

For full details of the FAU Honor Code, see University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Honor_Code.pdf.

Students With Disabilities: In compliance with the American Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) – in Boca Raton, SU 133 (561-297-3880); in Davie, MOD 1 (954-236-1222); in Jupiter, SR 117 (561-799-8585); or at the Treasure Coast, CO 128 (772-873-3305) – and follow all OSD procedures.