COURSE SUBJECT and COURSE NUMBER COURSE TITLE

SEMESTER and YEAR

CLASS DAYS and TIME: July 18th-August 31st/3-5PM

CLASSROOM: Dental Building/Diabetes Division 3rd Floor Room 3.380S

COURSE FACULTY: Ralph A. DeFronzo, MD, Eugenio Cersosimo, MD, Devjit Tripathy, MD, Nicolas Musi, MD, Luke Norton, Ph.D, Geoffrey Clarke, MD, Alberto Chavez-Velasquez, MD, Curtis Triplitt, Pharm D, CDE, Bruno Doiron, Ph.D, Janet Blodgett, MD, Stephanie Jardeleza, M.S.

OFFICE LOCATION and HOURS: Diabetes Division Room 3.380S/Monday-Friday 8AM-5PM

EMAIL: balmer@uthscsa.edu

TELEPHONE: 210-567-6691

READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

The normal regulation of glucose metabolism will be reviewed integrating whole body, organ, cellular, and molecular control mechanisms. Dysregulation of these control mechanisms in diabetes and other common metabolic disorders such as obesity and the metabolic syndrome will be examined in detail. State of-the-art in vivo and in vitro techniques essential for the study of normal and deranged glucose homeostasis will be discussed in depth. Diabetic microvascular (nephropathy, retinopathy, neuropathy) and macrovascular complications and their relationship to impaired glucose metabolism will be reviewed. Lastly, pharmacologic therapy of diabetes and its associated complications will be discussed.

Pre-requisites – None

Semester credit hours – 1 credit hour

By the end of this course, each student should be able to:

- To review the regulation of normal glucose homeostasis including the role of the liver, muscle, adipocyte, beta cell and alpha cell.
- To review the dysregulation of glucose metabolism in type 2 diabetes, type 1 diabetes, and obesity with emphasis on impaired insulin secretion and insulin resistance.
- To review the pathophysiologic mechanisms responsible for prediabetes
- To review the available methods for quantitating insulin secretion and insulin action (insulin clamp, hyperglycemic clamp, indirect calorimetry, radioisotope techniques, muscle/adipose tissue biopsy with basic molecular mechanisms, MRI/MRS, PET)
- To review the treatment of type 2 diabetes, type 1 diabetes, and obesity
- To review the etiology and treatment of diabetic complications (retinopathy, nephropathy, neuropathy)

COURSE ORGANIZATION

The main teaching modalities used in this course include:

1) 2-hour diabetic lectures with active participation from students; handouts of all lectures will be reviewed with direct student interaction

Materials - Where pertinent, key up-to-date article will be provided as ancillary reading

<u>Computer Access</u> – Not applicable

Reading Assignments - Where pertinent, key up-to-date review articles will be provided

ATTENDANCE

Required

TEXTBOOKS

Required: None

Recommended: Will be given at or prior to each class

GRADING POLICIES AND EXAMINATION PROCEDURES

No final exam; pass/fail based upon participation during lecture presentations

Grading System

Pass/Fail

A = 90-100% B = 80-89% C = 70-79% F = < 69%

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, **Request for Accommodation Under the ADA and the ADA Amendments Act of 2008 (ADAAA)**, any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100). to his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at <u>http://uthscsa.edu/eeo/request.asp</u>.

ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy/

TITLE IX AT UTHSCSA

Title IX Defined:

Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

University of Texas Health Science Center San Antonio's Commitment:

University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director. In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567-2800. Additional information may be obtained at http://students.uthscsa.edu/titleix/

EMAIL POLICY

Not applicable

USE OF RECORDING DEVICES

Up to student whether he/she wants to record each presentation

ELECTRONIC DEVICES

Students can use electronic devices

TENTATIVE CLASS SCHEDULE

COURSE SUBJECT and COURSE NUMBER

COURSE TITLE

SEMESTER and YEAR

WEEK	DATE	ΤΟΡΙϹ	Assignment	Instructor and Modality				
Week 1								
Week 2								
Week 3								
Week 4								
Week 5								
Week 6								
Week 7								
Week 8								
Week 9								
Week 10								
Week 11								
Week 12								
Week 13								
Week 14								
Week 15								
Week 16								
Week 17								

DIABETES LECTURE SERIES PHYL 6020 ROOM 3.382S

DATE	DAY	<u>TIME</u>	<u>TOPIC</u>	<u>SPEAKER</u>
July 18 th	Monday	3-5PM	Diabetes Classification & Epidemiology	DeFronzo
July 19 th	Tuesday	3-5PM	Interorgan Exchange of Glucose	DeFronzo
July 20th	Wednesday	3-5PM	Pathogenesis of T2DM	DeFronzo
July 21st	Thursday	3-5PM	FFA Metabolism/Fat Topography and T2DM	DeFronzo
July 22 nd	Friday	3-5PM	Treatment of T2DM #1	DeFronzo
July 25 th	Monday	3-5PM	Treatment of T2DM #2	DeFronzo
July 27 th	Wednesday	3-5PM	Treatment of T2DM-Insulin	Cersosimo
July 29th	Friday	3-5PM	T1DM	Tripathy
August 1st	Monday	3-5PM	IGT/IFG	DeFronzo
August 3 rd	Wednesday	3-5PM	Insulin Resistance Syndrome	DeFronzo
August 4 th	Thursday	3-5PM	Measurement of Insulin Sensitivity	DeFronzo
August 5 th	Friday	3-5PM	Measurement of Insulin Secretion	DeFronzo
August 8 th	Monday	3-5PM	Tracer Technology	DeFronzo
August 9 th	Tuesday	3-5PM	Indirect Calorimetry	DeFronzo
August 10 th	Wednesday	3-5PM	Lab Techniques	Musi/Norton
August 11 th	Thursday	3-5PM	Genetics of T2DM	Norton
August 12 th	Friday	3-5PM	ASCVD	Cersosimo
August 15 th	Monday	3-5PM	Dyslipidemia	Chavez-Velasquez
August 17 th	Wednesday	3-5PM	MRS/MRI	Clarke
August 19th	Friday	3-5PM	HTN	Triplitt
August 22 nd	Monday	3-5PM	Obesity	Doiron
August 24 th	Wednesday	3-5PM	PET	Clarke
August 25 th	Thursday	3-5PM	Diabetic Retinopathy	Jardeleza
August 26 th	Friday	3-5PM	Diabetic Neuropathy	Blodgett
August 31st	Wednesday	3-5PM	Diabetic Nephropathy	DeFronzo