

CLASS SYLLABUS
EE7329-501, Advanced Analog IC Design
Spring 2007
MW 5:30-6:45PM
ECSN 2.126

INSTRUCTOR: Adjunct Professor Dr. Jim Hellums

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COURSE CONTENTS

The course will cover but not be limited to studying advanced architectures for voltage references, current references, operational amplifiers (including voltage, current, transconductance, and transresistance), comparators, transconductors, etc. Emphasis will be on why one topology might be better than another for a given set of specifications or applications. Designs will be considered with power supplies ranging from 16V to 1.5V.

COURSE PLAN

Introduction	1 class
Current references	2 classes
Voltage references	4 classes
TC Amplifiers	4 classes
Opamps	5 classes
Current Feedback Amps	3 classes
Fully-Differential Amps	4 classes
Comparators	3 classes

GRADING

Homework	30%
Design Project	30%
Mid Term Exam	20%
Final Exam	20%

CLASS SCHEDULE

First Class	01/08/07
Mid Term Exam	02/28/07
Projects Due	04/18/07
Last Class	04/23/07
Final Exam	04/25/07

IMPORTANT DATES

Classes Begin	01/08/07
Last Day to Add	01/13/07
Martin Luther King Day (No Class)	01/15/07
Census Day	01/16/07
Last Day to Drop without a W	01/24/07
Spring Break	03/05 - 03/10/07
Last Day to Drop without signatures	03/29/07
Last Day of Classes	04/23/07
Final Exam Week	04/24 - 04/30/07
Commencement	05/05/07

SUGGESTED REFERENCE MATERIALS

Paul R. Gray and Robert G. Meyer, **Analysis and Design of Analog Integrated Circuits**. John Wiley & Sons, (3rded.), 1993 or (4thed.), 2001.

Analog Integrated Circuit Design, by David A. Johns and Ken Martin, John Wiley & Sons, 1997. ISBN: 0-471-14448-7