EECE579

ADVANCED TOPICS IN VLSI DESIGN INFORMATION SHEET

http://courses.ece.ubc.ca/579/

EECE579 LECTURES: Wednesdays 3:30pm-6:30pm, Rm. CEME 1204

INSTRUCTOR: Prof. Res Saleh Office: 4017 Kaiser

Office Hours: TBD

Telephone: (604) 822-3702 E-mail: res@ece.ubc.ca

Handouts will be available on the website above

Grading:

Project: 40%
Presentation 10%
Homework: 30%
Midterm: 20%

<u>Text:</u> Analysis and Design of Digital Integrated Circuits - In Deep Submicron Technology, Hodges, Jackson and Saleh, McGraw-Hill, Third Edition, 2004
Journal Papers, Conference Papers, Course Notes (primary source of material for this course)

Other Useful References:

Reuse Methodology Manual, Keating and Bricaud, Third Edition, Kluwer Academic Publishers, 2002. System-on-a-chip Design and Test, Rajsuman, Artech House, 2000.

<u>Recommended Prerequisites:</u> EECE481, EECE479, Familiarity with VLSI design, MOS circuit design, digital logic design and HDL programming.

<u>Related Courses:</u> EECE480 Semiconductor Devices, EECE578 VLSI Design and Test, EECE583 CAD Algorithms for Integrated Circuits, EECE488 Analog Integrated Circuit Design, EECE588 Advanced Topics in Analog Design

Assignments: There will be two homework assignments.

Project: There will be a design project in this course with a due date in mid-April.

EECE579 COURSE CALENDAR

<u>Week</u>	<u>Topic</u>	
1	Overview of Course (Jan. 7)	
2-5	Deep Submicron Design (Jan. 14, 21, 28, Feb. 4, 11)	2 HW (due Jan 28, Feb 11)
6	BREAK (Feb. 18)	
7	Midterm (in class, Feb 25)	
8	ASIC and SoC Design Flow (Mar. 4)	Project Proposals Due
9	SoC Testing (Mar. 11)	
10-11	SoC Debug (Mar. 18, 25)	Projects In Progress
12-13	Student Presentations (Apr. 1, 8)	Projects In Progress
14-15	Apr. 10-21	Projects Due (due April 21 - latest)