

Class: Tu/Th 12:30 - 1:45 Kirk 203B

Lab: Th 2:00 - 4:45 Kirk 203B

Instructor: Godi Fischer, Professor, K 214 e-mail: fischer@ele.uri.edu

Office Hours Mo: 2:00-4:00, W: 2:00-4:00

TA: Vijay Peddinti, K 201 e-mail: vijay@ele.uri.edu

Text: Ken Martin: Digital Integrated Circuit Design.
Oxford University Press, 2000, ISBN 19-512584-3.

Syllabus:

1. The CMOS Process (Ch. 2)
2. CMOS Devices and Modeling (Ch. 3)
3. Traditional (Static) CMOS Design (Ch. 4)
4. Transmission Gate Logic (Ch. 5)
5. Timing and I/O Considerations (Ch. 6)
6. Synchronous System Design (Ch. 7)
7. Introduction to Design Project
8. Building Blocks of Digital Integrated Systems (Ch. 10)
9. IC Memories (Ch. 11)
10. Digital System Testing (Ch. 13)

Exams:

1. **Th 2-25-10**, 50 min., 2-page summary
2. **Th 4-08-10**, 50 min., 3-page summary
3. **Tu 5-11-10**, 11:30-2:30, Final, 4-page summary

Grading: The final grade will be a weighted average of the 2 intermediate exams (15% each), three quizzes (5% each), the final exam (30%) homework (5%) and the design project (20%).

Note:

To pass the course, a student must attend **all labs**, take all exams and **complete** the **design project**. The design project is typically carried out by a team of 2 students.