• Goals: Learn how to use transistors for various useful applications

- Teaching Staffs
 - Lecturer: Prof. Woo-Young Choi (최우영) Room: B625, Tel: 2123-2874 Email: wchoi@yonsei.ac.kr, tera.yonsei.ac.kr
 - T.A.'s: 최광천 (c3kc@tera.yonsei.ac.kr) 윤진성 (polo4891@tera.yonsei.ac.kr) Room: B629, Tel: 2123-7709
- Class Hours
- Lecture: Mon. 2:00-3:00 pm, Wed. 1:00-3:00 pm at B041
- Tutorial: Mon. 1:00-2:00 pm at B041

Prerequisite: A passing grade in Electronic Circuits I: What is a transistor?



• Textbook: Microelectronics Circuits (5th Edition) by Sedra and Smith

Class web page: tera.yonsei.ac.kr (Click Classes)
Lecture notes will be available in PDF files the night before the class

Grades

- **Projects**: 20 points x 3 times = 60 points
- Quiz: 10 points x 3 = 30 points
- Attendance and homework: 10 points (No reliance on electronic checking system) (Project presentaion in English for 15 mins.: 3 point, sign-up required)

Attendance: Random sampling Absent: - 0.5 point, Late: - 0.25 point

 Homeworks.: When necessary.
No homework: - 1.0 points, Suspected of copying: -3 points Max. penalty points for attendance and H.W. : -10 points



• Lunch Meeting:

Students are encouraged to participate in lunch meetings with professor. Lunch meetings will be held on Wednesday from 12:00 - 12:50 in my office and sign-up sheets are available. We can have free conversation on electronic circuits, future career plans, etc. Sandwiches and drinks will be provided.



• Class Schedule (Tentative and subject to changes)

-Part 1: Amplifiers

-Part 2: Filters

-Part 3: Phase-Locked Loops



Class Schedule (Tentative and subject to changes)

-Part 1: Amplifiers

- Lect. 1: Introduction
- Lect. 2: Transistors
- Lect. 3: MOSFET
- Lect. 4: MOSFET Frequency Response
- Lect. 5: Amplifiers (1)
- Lect. 6: Amplifiers (2)
- Lect. 7: Amplifier Frequency Response
- Lect. 8: Feedback
- Lect. 9: Operational Amplifiers
- Lect. 10: Differential Amplifiers
- Lect. 11: 2-stage OTA
- Lect. 12-13: Op-Amp Applications

Quiz 1: 3/19

Project 1: Due on 3/25



Class Schedule (Tentative and subject to changes)

-Part 2 : Filters

- Lect. 14: First-Order Filters
- Lect. 15: 2nd-order passive filters
- Lect. 16: Second-order active fitlers
- Lect. 17: Two-integrator-loop biquad
- Lect. 18: Higher-order filters
- Lect. 19-20: Switched Capacitor Filters

Quiz 2: 4/30 Project 2: Due on 5/12



Class Schedule (Tentative and subject to changes)

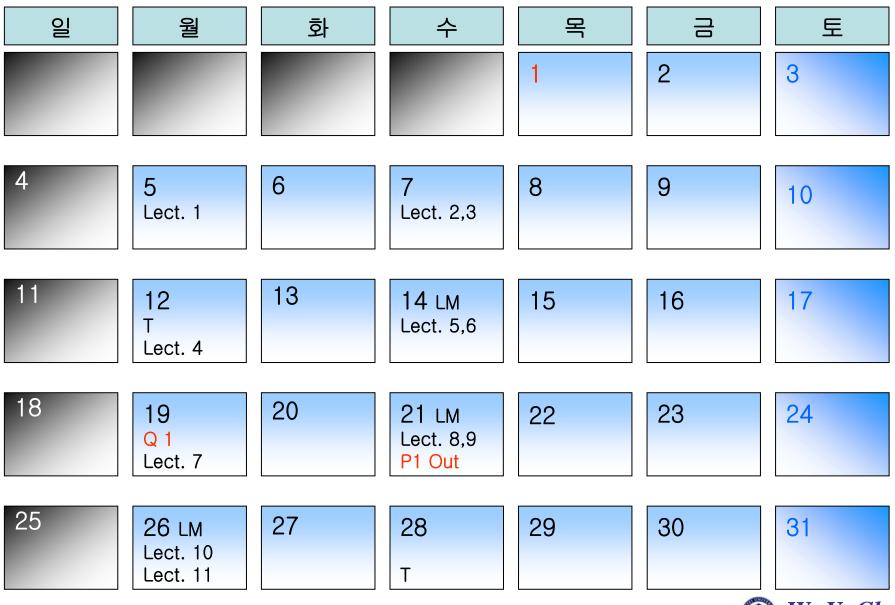
-Part 3 : Phase-Locked Loops

Lect. 21: Inverters Lect. 22: CMOS Logic Gates Lect. 23: Ring Oscillator Lect. 24-26: Phase-Locked Loops Lect. 27-30 : PLL Applications

> Quiz 3: 5/28 Project 3: Due on 6/9



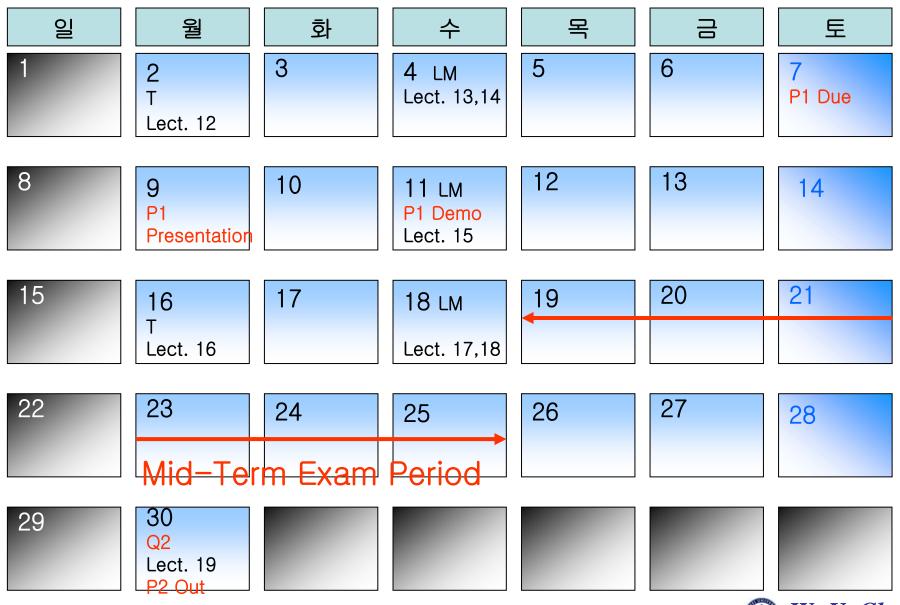
March



Electronic Circuits 2 (07/1)

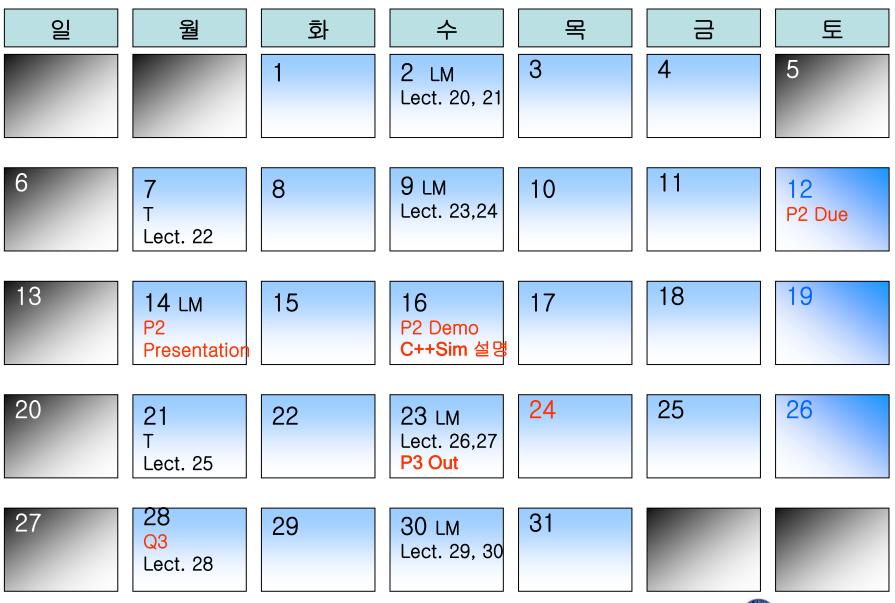
🛞 W.-Y. Choi

April



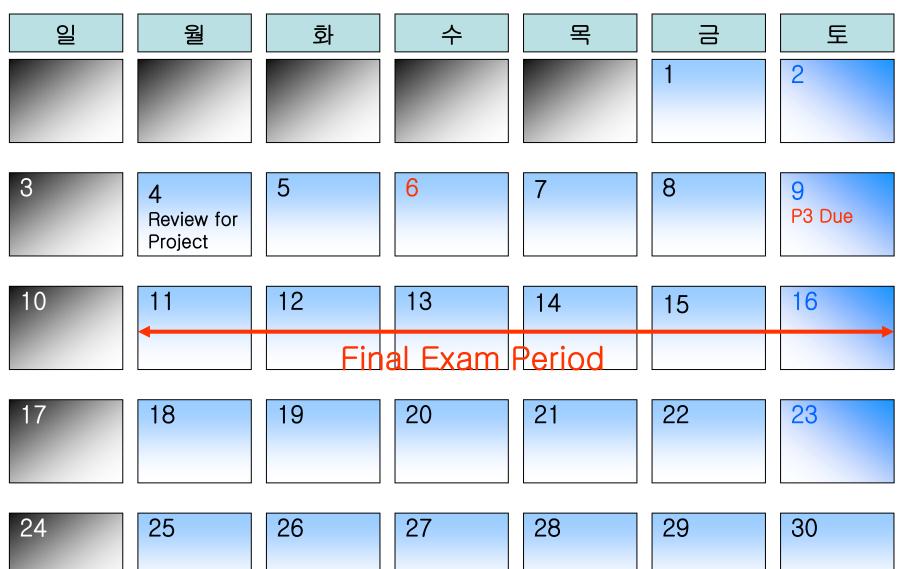


May





June



Electronic Circuits 2 (07/1)

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