ECE2000
ECE Integrated Sophomore Experience I
Autumn 2015
http://u.osu.edu/khanece2000and2100/

Instructor:

Furrukh Khan, khan.1@osu.edu
Caldwell Lab. 377
http://u.osu.edu/khan.1/

In-class lecture, no recitation

Lecture times:
MWF, 11:30 a.m.-12:25 p.m., 113 Dreese Lab

Lecture GTA:
Xuan Zhang, zhang.3262@buckeyemail.osu.edu
Office: Caldwell Lab 350

Lab supervisor/GTA:

Gregg Chapman, chapman.415@osu.edu
Office: Caldwell Lab. 237

Hua Chen, ohen.3824@buckeyemail.osu.edu
Office: TBA

First Day of Labs (Caldwell Lab 237):
Monday Labs – Sept. 14
Tuesday Labs – Sept 15
Thursday Labs – Sept 3
Friday Labs – Sept 4

Online recitations Instructors

Monday 12:40 p.m. - 2:00 p.m., Psychology Bldg 010
Wednesday 8:00 a.m. – 9:20 a.m., Caldwell Lab 277
Instructor: Fangzhou Chen, chen.1953@buckeyemail.osu.edu
Office: Dreese. Lab 661

Monday 12:40 p.m. - 2:00 p.m., Orton Hall 110
Wednesday 8:00 a.m. – 9:20 a.m., Bolz Hall 318
Instructor: Ria Mazumder, mazumder.4@buckeyemail.osu.edu
Office: Caldwell Lab 372
Office Hours (any student can go to any office hour):

Xuan Zhang (Caldwell Lab 350):
   Tuesdays 10:00 a.m. – 11:00 a.m.
   Thursdays 2:00 p.m. – 3:00 p.m.

Fangzhou Chen (Dreese Lab 661):
   Fridays 9:30 a.m. – 11:30 a.m.

Ria Mazumder (Caldwell Lab 372):
   Mondays 2:10 p.m. – 3:10 p.m.
   Wednesdays 9:30 a.m. – 10:30 a.m.

Furrukh Khan:
   By appointment (khan.1@osu.edu)
   *If none of the GTAs can resolve your question/problem then please contact me*

Textbooks:

Lecture Topics and Coverage:

- Introduction (1)
- Introduction to Number systems and Conversion (2)
- Boolean Algebra (3)
- Karnaugh Maps (2)
- Multi-Level Gate Circuits (2)
- Multiplexers, Decoders and PLDs (3)
- Latches and Flip-Flops (3)
- Registers and Counters (4)
- Timing (delays, timing diagrams) (1)
- Analysis of Clocked Sequential Circuits (general models for sequential circuits, timing charts, state tables, graphs) (4)
- Design of Clocked Sequential Circuits (3)
- Sampling, Aliasing, Sampling Theorem (2)
- Discrete Linear Time Invariant (LTI) Systems (3)
- Impulse Response and Convolution for Discrete Systems (2)
- FIR Filters, Implementation of FIR Filters (3)

Assignments and Exams:

- **Lab reports**: 20%
- **HWs**: 20%
All HWs are weighted equally (Not all HW problems will be graded, only a selection of HW problems will be graded)

- **Midterm 1**
  (Mon. Oct. 12, 6:30pm - 7:25pm, ???): 15%

- **Midterm 2**
  (Mon. Nov. 16, 6:30pm - 7:25pm, ???): 20%

- **Final** (Fri. Dec. 11, 8:00pm-9:45pm, SM1153, DL0113): 25%

Midterms and Final will be **open-book, open notes and closed technology**

One HW with the lowest grade will be dropped

!!Exams Make-up Policies!!

- The final examination may only be taken at the scheduled time. **You must not make travel plans that conflict with the final exam schedule.**
- Midterm and final examination may be made up only due to illness on the days of the exam (a doctor’s note is required) or by advance arrangement (a written request at least one week in advance of the exam is required). The instructor reserves the right to deny any advance request for a make-up exam.

**Academic Misconduct Statement:**

**Academic Misconduct will be handled seriously!**

Any student found to have engaged in academic misconduct, as set forth in the Code of Student Conduct Section 3335-23-04, Prohibited Conduct, will be subject to disciplinary action by the university. Academic misconduct is any activity that tends to compromise the academic integrity of the university, or subvert the educational process.

**Student Conduct:**

Students are expected to abide by the provisions in the Code of Student Conduct. The University’s Code of Student Conduct and Sexual Harassment Policy are available on the OSU Web page

**Disabilities Statement:**

Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss specific needs. Please contact the
OSU Office for Disability Services for assistance in verifying the need for accommodations and developing accommodation strategies.