EECS 522 Final Project

- Worth 33% of total grade
- Open-ended project: be creative
- Final presentations given in class
  - Fill out evaluations of other groups' presentations
  - Everyone votes on the "Best Project"
  - 2% of total grade based on presentation attendance

- Cash prize for best project: **$500/student** sponsored by Texas Instruments

Project Scope

- Come up with an application: RF, ADC/DAC, bio-medical, MEMs, etc.
- Think simple: complex doesn't always mean better
- Look at ISSCC papers on IEEEXplore for ideas
  - Radio receiver, quadrature LC-oscillator, etc.
- If choosing a large application, target individual components of the overall design for your project
  - Specs are driven by the application
- Modeling, design, and layout
  - DRC, LVS checks (no post-layout simulations required)

Project Deliverables

	Monday	Wednesday	Friday
March	2 **15min meeting with me discussing project**	4 **Project abstracts due**	6
	9	11 **PS4 Due**	13 **Quiz 1**
	16 **Block Diagram and Goals**	18 **CAD2 Due**	20
	23	25 **PS5 Due**	27
April	30	1 **PS6 Due**	3
	6	8 **PS7 Due**	10 **Report Due**
	13 **Project Presentations**	15 **Project Presentations**	17

Meeting (3/2) and Abstract (3/4)

- Email me to setup a time to meet on M 3/2
  - Between 2pm-5pm
- Come prepared to the meeting to give an overview of your group's idea for a project
  - Bring any related journal or conference publications
  - Our objectives will be to make sure the scope is appropriate and identify the parts your group will design
- The abstract should be **150 words or less**, and should describe the overall idea/application and the project goals

Block Diagram and Goals (3/13)

- Your group will submit a detailed block diagram of your project
  - This should include all components you will be designing
  - Should be detailed (biasing, control, gain stage, buffer, …)
- At the same time, your group will submit two bulleted lists
  - Project goals (such as specifications for each block)
  - Deliverables and division of labor (who is doing what): items such as circuit design, layout, DCR, LVS should appear here

Final Report (Due 4/10)

- 4 page report including abstract, figures, text, references
  - IEEE Journal format (use IEEE template posted on project page)

- In your report, focus on
  - The main challenges
  - The interesting parts of the design/application
  - Include your relevant results (power, bandwidth, offset, etc.) in a summary table as one of your figures on page 2

- You will lose points for illegible graphs

Presentation

- Each group gets about 15 min. to present + Q&A
  - **Rehearse, Rehearse, Rehearse** so you don't run over
- Introduce your project idea/application, then focus on the key design and results
- Each group member should have a turn to speak
- Keep your slides concise: 1 idea per slide, budget 1 minute per slide
- Clear, readable text and figures (no 12pt font)

Project Grading

	Points
Design methodology, functionality, specs	**15**
Report	**8**
Presentation	**8**
Class participation (group presentations)	**2**
Total Points	**33**