

6.111 Lecture # 16

**Final Project**

**This is the 'Project' in 'Project Lab'**

**It is YOUR design**

**Work in teams of 2 or 3 persons**

**Staff will support and help as possible**

**Start NOW**

**Most work done after lab 3 (and other work) is completed**

**Demonstrations last week of term**

**6.905 makes 6.111 an 18 unit subject**

**Prizes...**

**Procedures**

**1. Form Project Teams**

**Generally 2 people**

**Sometimes 3**

**If you want to work alone... Don't**

**Experience is that it always works badly**

**Teams really can get more done**

**But your team should be folks you can work with**

**2. Decide what to build: your project**

**Should DO something**

**Have some unique feature**

**Be visually or aurally appealing**

**(Working projects will be videotaped!)**

**3. Write up Proposal Abstract**

**Convenient form back of project info handout**

**We will use this to map teams to project TA's**

**Steps 1, 2 and 3 should be done this week (Wednesday)**

**Procedures (continued)**

**4. Write the proposal itself**

**Description in words**

**Block diagram of major parts**

**Specifications: what will it do?**

**Division of responsibilities**

**5. Proposal Conference**

**Schedule with your project TA**

**Bring proposal material**

**Expect pointed discussion**

**6. Detailed Design**

**Based on Proposal and Proposal Conference**

**Wiring Diagrams and Source Code**

**Supported by Design Conferences**

**Must be done before construction begins**

**Design Presentations -- scheduled at class hours**

**Procedures (continued)**

**7. Construction**

**Prerequisites: everything else done**

**Labs 1, 2 and 3**

**All homework**

**Detailed design (step 6)**

**8. Demonstrate**

**Typically during last week of term**

**(Earlier is OK!)**

**Working projects will be videotaped**

**9. Report**

**Class Presentation -- to be arranged**

**A formal report as described in Report Guide**

**Report may be prepared jointly**

**Individual sections identified**

**Deadline: COB on last day of classes!**

6.905

Makes 6.111 an 18 unit subject (by adding 6)  
+6 Engineering Design Points  
(But doesn't satisfy any other requirements)

**Grading:**  
does not affect 6.111 grade  
6.905 grade = 6.111 grade

**Requirements:**  
Must have detailed design done and be ready for construction  
Must have all of this done by drop date

**Paperwork:**  
Form (penultimate page in project info) signed by Project TA  
(this must be done after design conference is completed)  
Present this and add card to Kirtley, who will sign as 'instructor'

## Prizes

**George C. Newton Prize**  
Best Undergraduate Project Lab in Course 6  
One per year  
Not always, but usually won by a 6.111 project

**Bell Northern Research Prize**  
Best 6.111 project  
One per term  
=> you can't win both <=