

# **CprE 381 – Computer Organization and Assembly Level Programming**

## **Project Team Contract**

Canvas Project Group ID: \_\_\_\_\_

Team Members: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Discuss the following aspects of teamwork with your team – make sure to get input from each member. Write down your team's consensus for each of the bolded headings.*

**Course Goals:** List and acknowledge the goals of each of your individual team members. Examples may include:

- learn everything about computer architecture
- know enough to understand security risks posed by hardware primitives
- get an A/B/C/Pass in the course
- minimize the number of lost points
- prepare myself for a career in hardware design
- prepare myself to be able to do research involving FPGAs
- be able to explain the workings of a stored-program computer from gates to C

Don't just copy/paste from the above – take a few minutes and discuss.

**Team Expectations:** Provide brief, but meaningful answers to the following questions regarding team conduct for the duration of the project.

- **Conduct:** What are the expectations for personal conduct of group members?
  
- **Communication:** What is the best mode of communication for the group? How often should communication occur? How fast should a response be expected?
  
- **Meetings:** Given the significant portion of the course that the lab covers, it is expected that your team will spend more time working on the labs than in your scheduled lab sections. How will your group expect to handle this? Please include at least two additional hours outside of lab that your team can work collaboratively. Examples of other issues to consider include:
  - Work together in-person outside of lab sections?
  - Work together online outside of lab sections?
  - Work separately on responsibilities?
  
- **Peer Evaluation Criteria:** After your team completes the lab you will be individually asked to evaluate the percentage effort and percentage contribution each team member put towards the completion of the lab. Specify how your team will quantify these two criteria. Reference the other team expectations and role responsibilities as needed. Examples could include:
  - Equal contribution is assigned when team members have participated in pair programming (see [https://en.wikipedia.org/wiki/Pair\\_programming](https://en.wikipedia.org/wiki/Pair_programming)) or structured pairing (see <https://docs.lib.purdue.edu/enegs/64/>) for all responsibilities.
  - 50% contribution is assigned when team member delivers all of their lab part responsibilities by internal due date; 40% when some lab part responsibilities were delivered past internal due date; 20% when many lab part responsibilities were not delivered by internal due date; 0% when no lab part responsibilities were delivered; >50% contribution occurs when team member must take over lead of other team member's responsibilities.
  - Percent effort is assigned based on total fraction of hours each team member works on the project.
  - Equal percent effort is assigned if team member always makes meetings, attends lab session, and responds to communications within 8 hours.

Groups with **vastly** divergent scores may require a meeting with the course instructor and result in different grades for different group members. Groups with reasonably equitable scores will receive the same grade.

**Role Responsibilities for Proj-A:** Complete the following planning table, by adding initials to represent the “Lead” for each component, and a date for the Deadline. Each lab part should be the responsibility of one team member. Also make sure that no one team member is the lead on both the design and test aspects of a single lab part. These guidelines aid in all students having a complete view of the lab. Note that the non-lead is encouraged to participate and support the lead wherever possible, increasing both the quality of the lab part and each team member’s knowledge.

Lab Part	Estimated Time	Design		Test	
		Lead	Deadline	Lead	Deadline
1-bit ALU	2.0 hr				
32-bit ALU	2.5 hr				
Barrel Shifter	3.5 hr				
Integrated Datapath	0.5 hr				
Test Programs	3 hr				

*Estimated Time is given as a **very rough** guide for even distribution of tasks assuming you’ve already read through the lab document and have the prerequisite knowledge. Depending on your group’s skill and prerequisite knowledge, some tasks may take disproportionately longer or shorter. For your future planning, track this – for future updates you will be asked to note why past tasks took longer than expected and how you might avoid such issues in the future.*

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_