LAB Oral Presentation Contents

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Each student must make one oral presentation in lab during the semester. Students will work in teams of two or three students. Your team will give an integrated presentation such that one student hands off to the next student seamlessly. Each student's part of the team presentation will last **five minutes.** Practice your talk and be succinct. Stick to the five-minute time frame for each student.

Presentations will be made in the lab and week indicated by your presentation number, which is assigned at random and handed out in class. A presentation number of, for example, 3.2 indicates that your team will present during Lab 3, week 2. Your team consists of all students with presentation 3.2 in your lab section.

The presentations will be related to the previous week's lab. Your team of two or three must create an integrated presentation covering one of the following topics:

a) New, key concepts that are necessary to solve the part of the lab worked on in the previous week. Each student would present one of the techniques used to solve a circuit in lab the previous week. For example, in Lab 1 week 2, one student might present the mathematical steps required to express inductor current in terms of inductor voltage when starting with the formula for inductor voltage in terms of inductor current. The next student might then discuss why the solution of an RLC circuit is an exponential, and the third student might then discuss how to use initial conditions to find the coefficients in front of exponentials in the solution.

b) An application, different than the lab exercise, for the type of circuit being used in the lab. The discussion of the application must address how such a circuit would be designed and must include some sort of derivations or parts of derivations.

c) A discussion of how data was collected the previous week and an interpretation of the data, typically shown as a plot. The talk must cover how data was measured, including how instruments were used, and the talk must discuss what results were expected and how the actual results compare to the expected results.

d) A live demonstration showing how an instrument in the lab is used. The presentation must be substantive and cover the instrument in significant detail. The presentation must also cover a different instrument than any previously demonstrated to your lab section.

If your team has any questions about suitable content and scope for a talk, you are encouraged to consult with your TA or the instructor. The TA or instructor, however, will expect your team to develop the basic idea for a talk on your own.