

Questionnaire – EE 523

Student Name: SCIPER ID:

Please tick all the checkboxes that apply:

1. Which of the following topics are you familiar with?

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|--|---|--|
| <input type="checkbox"/> Single-Stage Amplifiers | <input type="checkbox"/> Differential Pairs | <input type="checkbox"/> Frequency Response |
| <input type="checkbox"/> Feedback and Stability | <input type="checkbox"/> Operational Amplifiers | <input type="checkbox"/> Switched Capacitor Circuits |
| <input type="checkbox"/> Noise Analysis | <input type="checkbox"/> Design Methodologies (For example, g_m/I_D , Inversion Coefficient, ...) | |

2. Have you credited any of the following courses (at EPFL) or their equivalents (outside EPFL)?

- ☐ EE-320 – Analog IC Design by Prof. Mahsa Shoaran
- ☐ EE-424 - Fundamentals of Analog VLSI Design by Prof. Christian Enz
- ☐ EE-429 – Fundamentals of VLSI Design by Prof. Andreas Burg and Dr. Alexandre Levisse

Have you taken any other courses on CMOS IC design? Please explain.

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3. Are you familiar with the Cadence Virtuoso Tool (which will primarily be used during this course)? This means that you know how to create a schematic and simulate it.

- ☐ Yes ☐ Yes, but I need a quick refresher ☐ No

4. Are you familiar with layout?

- ☐ No, I have not done layout and do not understand the different layers in a layout (For example metal, poly, N-well, P-well, etc.)
- ☐ No, I have not done layout, but I have a basic understanding of layout and the different layers
- ☐ Yes, I have done layout before

5. Have you done a custom layout (manual, not Digital PnR) before?

- ☐ Yes ☐ No

6. Are you interested in reading reference scientific papers (wherever applicable) related to the topics in the Lecture or Practical Sessions (TPs)?

- ☐ No, I prefer just to focus on the Lecture slides and the TP documents
- ☐ Yes, I am interested

7. Typically, for the Practical Sessions (TP), the document detailing all the steps would be provided before the session. During the TP session, we can proceed in one of the following ways:

- ☐ I don't need the TAs to present a quick introduction. I will do the simulations by following the document, and consult the TAs if I have any question
- ☐ I would like the TAs to present the contents of the TP for the first 30 mins (to get an overall picture of the TP). Then I will follow the document and consult the TAs if I have any question.

8. How comfortable are you with the mathematical and signal analysis of analog circuits (For example, small-signal analysis, Laplace transforms, pole-zero analysis, Fourier analysis, etc.)?

- ☐ Comfortable. I know the theory and have applied it to some extent in my earlier courses
- ☐ Somewhat comfortable. I know the theory, but have not applied it much
- ☐ Not comfortable. I am an upcoming circuit designer, not a mathematician 😊

9. What are your learning expectations from this course?

- ☐ Develop a strong theoretical understanding of the course curriculum
- ☐ Develop circuit intuition and verify my learnings through simulation
- ☐ Be able to do layout of different blocks like comparator, amplifier, etc.
- ☐ Design an ADC and characterize its performance using simulations
- ☐ Read up circuit blocks not covered during Lectures or TPs from journal papers and simulate them as a part of the course project
- ☐ Others (Please specify in the next page)

10. Would you like to fill out a similar feedback questionnaire mid-way through the course to let us know how things are going?

- ☐ No, I am good
- ☐ Yes, I think that would be useful

If you would like to spare some more thought or have any concerns related to the course, please go ahead and jot them down in the box below!

Thank You!