CP316 Microprocessor Sysytems and Interfacing Evaluation Results Wilfrid Laurier University

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This evaluation for the purpose of evaluating my teaching methods and your impressions of the course. It is anonymous and you can omit any question(s) you don't wish to answer.

General

Choose the answer which best expresses your feelings about the course.

- 1. The course web page was
 - 20% organized and easy to follow
 - 0% better than having a printed lab manual
 - 80% both of the above
 - 0% neither of the above

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What did you think about the various background resources on the web site for each week? For each item, use the following scale:

- (a) almost never
- (b) rarely

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- (c) fairly often
- (d) almost always
- 2. **0% 20% 40% 40%** I *clicked on* all of the links.
- 3. 0% 40% 20% 40% I was helped by several of the links.

Lectures

- 4. The lecture notes posted online were
 - 80% helpful to follow
 - 20% more useful than the actual lecture
 - 0% both of the above
 - 0% useless
 - 0% unnecessary

- 5. The lectures
 - 40% provided useful background for the labs
 - 20% provided sufficient background for the labs
 - 40% both of the above
 - 0% neither of the above

- 6. The assembly language programming tips were
 - 80% worthwhile, and I used them regularly
 - 20% worthwhile in theory, but I didn't really need to use them
 - 0% mostly things I'd already heard, and so they weren't very useful
 - 0% kind of pointless
 - 0% I don't remember any of them.

Which resource(s) did you find most useful for this course? Use the following scale to indicate how much you value the resources in question:

- (a) never used it
- (b) used it occasionally
- (c) used it fairly often
- (d) used it all the time
- 7. **60% 0% 0% 40%** the textbook
- 8. 0% 0% 40% 60% the PIC documentation
- 9. **60% 40% 0% 0%** online forums
- 10. 0% 20% 80% 0% lecture notes, etc. on the CP316 web site
- 11. $\mathbf{40\%}$ $\mathbf{20\%}$ $\mathbf{40\%}$ $\mathbf{0\%}$ other pages found by Googling specific topics; varied by labs
- 12. **60% 20% 20% 0%** some other course or hobbyist website

If so, give URL:

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Labs

- 13. The online pre-lab quizzes were
 - 25% a good summary of pre-lab requirements
 - 25% a better idea than handing stuff in or getting it checked off in the lab notebook
 - 50% both of the above
 - 0% neither of the above
- 14. Being required to demonstrate things in the lab was
 - 25% useful to summarize important sections of each lab
 - 0% a good way to have part of the lab mark assigned
 - 75% both of the above
 - 0% neither of the above

- 15. Keeping a lab notebook was
 - 0% a good idea because it kept all important information in one place
 - 75% easy to learn to use productively
 - 0% both of the above
 - 25% neither of the above

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For the following questions, use the following scale to indicate how much you agree with the statement that you feel comfortable with the tasks in question:

- (a) disagree strongly
- (b) disagree
- (c) neither agree nor disagree
- (d) agree
- (e) agree strongly
- 16. **0% 0% 0% 50% 50%** I feel comfortable figuring out how to use an unfamiliar microcontroller feature from the data sheet.
- 17. **0% 0% 0% 50% 50%** I feel comfortable figuring out how to use an unfamiliar assembly language instruction from the data sheet.
- 18. **0% 0% 0% 0% 100%** I feel comfortable using interrupts in a program.
- 19. **0% 0% 0% 25% 75%** I feel comfortable figuring out how to make external connections to microprocessor port pins for various functions.
- 20. **0% 0% 25% 25% 50%** Given an unfamiliar microcontroller with a different assembly language, I feel comfortable learning the assembly language on my own.
- 21. **0% 0% 50% 50%** Given an unfamiliar microcontroller with similar features (timers, interrupts, etc.), I feel comfortable figuring out how to use those features on my own.
- 22. **0% 0% 25% 50% 25%** Given an unfamiliar microcontroller with features we *didn't* discuss in CP316, I feel comfortable figuring out how to use those features on my own.

Mini-Project (Screencast)

For the following questions, use the following scale to indicate how much you agree with the statement:

- (a) disagree strongly
- (b) disagree
- (c) neither agree nor disagree
- (d) agree
- (e) agree strongly
- 23. **0% 0% 25% 50% 25%** I liked doing the screencast mini-project more than regular labs or lab tests.
- 24. **0% 0% 0% 75% 25%** I think the screencast mini-project was a good element to have in this course.
- 25. **0% 0% 0% 50% 50%** After doing the screencast mini-project I understood the material better than before I did the mini-project.
- 26. **0% 0% 0% 25% 75%** I liked doing something that would be useful to other people in the future.
- 27. 0% 0% 0% 25% 75% I think the screencasts will be useful for future students in CP316.
- 28. **0% 0% 0% 50% 50%** I think a similar screencast mini-project would be a good idea in other courses like PC/CP300.

Research Paper

For the following questions, use the following scale to indicate how much you agree with the statement:

- (a) disagree strongly
- (b) disagree
- (c) neither agree nor disagree
- (d) agree
- (e) agree strongly
- 29. $0\% \ 0\% \ 25\% \ 75\% \ 0\%$ I thought the research paper was a good element of this course.
- 30. **0% 0% 25% 75% 0%** I think a similar research paper would be a good idea in other courses like PC/CP300.
- 31. **0% 0% 0% 33% 67%** I think the instruction about how to do library research was good for the paper.
- 32. **0% 0% 33% 33% 33%** I think the instruction about how to do library research was good for my career beyond this course.
- 33. What did you think about having several "phases" for the paper; i.e library instruction, one page outline, draft and final?
 - 25% I liked it; that made it easier to manage my time.
 - 0% I liked it; I think it helped my writing.
 - **50%** Both of the above are true.
 - 25% I didn't like it; it just added stress to more of the term.

Final Project

- 34. I thought that the lab project was
 - 25% at a reasonable level of difficulty
 - 0% a good way to bring together important concepts
 - 75% both of the above
 - 0% neither of the above
- 35. As preparation for the final project, the regular labs
 - 100% covered enough background to make the project reasonable
 - 0% covered enough background for some topics, but missed some others that should have been covered
 - 0% covered more than was necessary; several topics were covered that weren't needed
 - 0% covered more than was necessary; several topics were covered in much more detail than was needed
- 36. Creating a final project with a practical purpose, such as making test environments for sensors and actuators
 - 0% made them seem more worthwhile because the results would be useful
 - 50% made it easier to figure out what was expected because the requirements were obvious
 - **50%** both of the above
 - 0% neither of the above

Marking

- 37. A written exam for this course
 - 0% would be useful in addition to the lab as it is
 - 0% would be useful *instead of* some of the lab requirements now
 - 0% a better test of what has been learned than all of the in-lab stuff
 - 100% not a good choice for a course like this

For the following questions, use the following scale to indicate how much weight you think should be placed on each of the components in the final course grade:

- (a) nothing
- (b) 5 or 10%
- (c) 15 or 20%
- (d) 25 or 30%
- (e) more than 30%
- 38. 25% 75% 0% 0% 0% Pre-lab requirements (including online quizzes)
- 39. **0**% **25**% **25**% **50**% **0**% Lab demonstrations
- 40. **50% 25% 25% 0% 0%** Lab notebooks and postlabs
- 41. **0**% **50**% **25**% **25**% **0**% Research paper
- 42. **0**% **50**% **0**% **50**% **0**% Screencast *mini-project*
- 43. **0**% **0**% **0**% **0**% **100**% Lab project
- 44. **75**% **0**% **0**% **0**% **25**% A written *final exam* (which doesn't exist now)

- 45. What did you think about variable weights for the various components of the course?
 - 25% I liked it a lot; it made me worry less about having to do everything well.
 - 75% I liked it a lot; it made me able to focus more on the things that interested me more.
 - **0**% I didn't like it; it made figuring out how I was doing in the course harder.
 - **0%** It didn't really matter to me; I think I'd do about the same however it's done.

Relation to Other Courses

- 46. Did the similarity in format and expectations to the PC/CP300 labs help you in these labs?
 - 100% Yes, quite a bit.
 - 0% Yes, but only a little.
 - 0% No, but neither one seemed very hard.
 - 0% No, this was like a completely different endeavour.
 - 0% I didn't take PC/CP300.
- 47. Did familiarity with concepts from CP216 help you in these labs?
 - 75% Yes, quite a bit.
 - 25% Yes, but only a little.
 - 0% No, but neither one seemed very hard.
 - 0% No, this was like a completely different endeavour.
 - 0% I didn't take CP216.

- 48. Among all of the electronics courses you have done (i.e. PC120, PC200, PC221, PC300, CP319) how does this one compare?
 - 0% Below average amount of work, but more interesting than average
 - 25% Above average amount of work, and more interesting than average
 - 75% About average amount of work and interest
 - 0% Below average amount of work, and less interesting than average
 - 0% Above average amount of work, but less interesting than average
- 49. Among all of the programming courses you have done how does this one compare?
 - 25% The amount of effort interfacing to hardware and debugging electronics is a drawback to this one.
 - 25% Connecting to the "real world" is a strength of this one.
 - 0% The low level manipulation of bits is a drawback to this one.
 - 50% Having absolute control of the hardware is a strength of this one.
 - 0% I enjoy all types of programming about equally.
- 50. In order to improve teaching beyond my own courses, I'd like to be able to share the results of these evaluations with other instructors, students, etc. May I have your permission to do that?
 - 100% Yes, I'd be glad if any improvement could come from this.
 - 0% Yes, this is anonymous enough that I don't mind how the results are used.
 - 0% No, this isn't anonymous enough for me to be comfortable with the results being shared.
 - 0% No, even though this is anonymous I don't want the results to be shared.