PSY 20671
Developing Technology Applications in Psychology, Business, or Education
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Course Syllabus and Guidelines (rev. 082415)

Description

PSY 20671 is project-oriented. Other than a weekly progress meeting, we will not have group meetings. Once your project is assigned, you will work on it over the course of the semester, reporting to the group or me on a weekly basis. Individual meetings with me are scheduled on a weekly or as-needed basis. As much as possible, I like to use Skype to hold "virtual" meetings and collaborative work sessions via the Internet.

Since this is a 3-hr class, I expect students to put in an effort equivalent to other three-hour courses, plus or minus. Here is my rule of thumb: A 3-hr. class involves roughly 40 hours of class time in a semester. For every hour in class, it is not unusual to spend 2-3 hours outside of class in related work. This would total 120-160 hours over the course of a semester. Planning and developing a functional application easily can take that much time.

This class is not an introductory course on computer applications. You will need to already have (or learn during the semester) the skills needed to complete whatever project we define. Generally, projects are applications or systems that fit into the broad spectrum of my interests in organizational psychology or learning and performance technology. You can get a sense of some these interests by consulting my web page (http://www.nd.edu/~ccrowell) or lab page (http://www.nd.edu/~emotecog). I define a new list of projects each semester. Some recent projects have involved:

1. Developing a web-based system for student advising in the Psychology Department.
2. Completing a database application in Microsoft Access for tracking and reporting manager coaching sessions.
3. Developing a motion capture system to track ergonomically safe and unsafe work posture while sitting at a desk of computer work station.

As you can see, the course requires students to complete an application of some kind. To do this within a semester requires a background in computing and familiarity with one or more software application development environments (e.g., Visual Basic, Access, HTML, etc.). Therefore, this course is not for everyone. To decide if it is for you, I need to know more about your background including a list of the computing-related courses you have taken, a description of the application development environments you are familiar with to this point and what you have done with them, along with a statement about your interests in computing and where you see yourself going with your skills in this area. Ideally, you should have provided this information to me prior to

registration in the course. If so, then you need not provide this information again.

<u>Guidelines</u>

Here is what I expect for an "A" grade in this course. You will need to provide me with a working final project and a brief (3-5 page) written description of what the project is and how it works. Also, you are expected to attend all group progress report meetings and any individual meetings scheduled with me or with other advisors. It is your responsibility to schedule individual meetings as necessary and appropriate.

My definition of a working final project is as follows. The system/application should:

1. Have a complete set of specifications developed in the planning process and approved by me.
2. Operate as indicated in the specifications statement and meet the objectives listed in the project description.
3. Where appropriate, include a menu system to allow users to access all functions with ease.
4. Contain and use all relevant information defined in the planning and specification process.
5. Have a help function where appropriate.
6. Have minimal documentation where appropriate.

The final project and write-up is due on the final exam day for this course, or on the last day of finals, which ever date we agree on. I will evaluate the project based on how it works and how closely it conforms to the above criteria. Also, I will consider meeting attendance. If all criteria are not met, or there were unexcused absences from meetings, a grade less than "A" will be assigned depending on the number of absences and extent of application completeness/usability. If you are working on a team, all members will get the same grade.

Other advisors who may be consulted regarding student projects as necessary and appropriate include Lou Berzai or other CAPP faculty.

Please inform me in advance (via email) of all meetings scheduled with other advisors. Also, we will depend heavily on email and other forms of electronic communication in the course. Check your email regularly. Also be aware, as noted above, that we can use Skype throughout the semester for progress reports and collaborative work sessions. Please plan to learn how this system works.

<u>Final Reports</u>

For each project, I will need an individual or team write-up. This brief document should describe what each of you did in the project and, most importantly, should document the steps involved in what you learned how to do with whatever tools you employed in your project. For example, if your project involved use of a scanner, I would like the specific steps listed for scanning in the materials, as well as the parameters used. Or, if there are things you learned how to do with an application development tool (e.g., Microsoft Access) that are not clearly documented in existing

materials, I would like these included. By documenting these steps, you will be providing a guide for others who may have to do some of these things at a later point.

In the report, I would also like at least a rough statement of the time you devoted to the project in relation to the 160-hr rule-of-thumb noted above.

If the project was not completed as per the original specifications, please clearly indicate what was actually done and what remains to be finished. Also, make sure to indicate the location of all relevant project files, together with file names and any specific instructions for accessing or activating your applications.

Please get me these project write-ups no later than the final exam day for this course, or in some cases, the last day of finals.

In summary, please note that all write-ups should:

1. Be emailed to me on or before the final exam day for this course or end of final week, whichever date we agree on.
2. Include a brief description of what you did and how much time you spent.
3. Describe what tools you employed along with documentation about specific steps to follow in using those tools.
4. Indicate names, locations and instructions (if needed) for accessing all files related to your projects.

Expected Grade

In this class, I ask students at the end of the semester to provide me with a self-assessment of their overall performance. This exercise helps students reflect on their progress, activities and effort in relation to the project objectives and guidelines we established earlier in the course, and it helps me understand their perspectives.

Taking into consideration your overall effort in relation to course expectations and guidelines, the progress you will have made on your completed project, your efforts to keep me informed, and the extent to which your solicited my help or input throughout the semester, I will ask you to provide me with the following honest and realistic assessments:

1. The lowest grade your performance deserves. Why?

2. The highest grade your performance deserves. Why?

3. The grade you really and truly think your performance deserves. Why?

Feel free to combine all the whys into one statement. Note that if all three of your estimated grades are the same, it is possible you are not being completely realistic and objective. Also note that it will not help your cause in my eyes if your response comes across as unrealistic.

I will ask you to provide this information along with, or in advance of, your final project reports.