**PSYC 530-001 and 530-002: Cognitive Engineering**

**(Fall 2022)**

**Online Synchronous (meaning we meet online) DL1**

**Online Asynchronous (meaning you can do the work at your own time) DL2**

**You can (if you can) join the online meeting regardless of which section you are enrolled in. The online meeting will be used to provide additional information, feedback, discussion, etc.**

**Instructor:** Prof. William “Deak” Helton

**Office:** 2063 David King Hall

**Online Hours (online):** Scheduled Tuesday 1:30PM-3:30PM or by appointment

**Email:** [whelton@gmu.edu](mailto:whelton@gmu.edu) - note if you email **please use PSY530 in the subject line and which section you are in (001 or 002)** otherwise it may get screened out as spam.

**Text:**

Wickens, C. D., Helton, W. S., Hollands, J. G., & Banbury, S. (2021). Engineering psychology and human performance. Routledge.

<https://www.routledge.com/Engineering-Psychology-and-Human-Performance/Wickens-Helton-Hollands-Banbury/p/book/9781032011738?gclsrc=aw.ds&utm_source=cjaffiliates&utm_medium=affiliates&cjevent=2aaa81f636b011ec8237d4600a82b838>

We will focus on chapters 1, 2, 3, 4, 5, 6, 7, 10, 11, and 12.

**Objective:** The course will provide you with an understanding of contemporary theories and research on Cognitive Engineering (also known as Engineering Psychology).

**Technology:** Powerpoint, computers, internet

**Honor Code:** GMU has an honor code. Follow it or the instructor may have to turn you in for violating it. This could have severe consequences, like failing this course, etc.

**Disabilities:**  If you are a student with a disability and you need academic accommodations, please contact me and contact the Disability Resource Services (DRS) at 703-993-2474. Accommodations have to be made officially through the Disability Resource Services office.

**Attendance Policy:** The online session is encouraged as a place for discussion, however, this is not mandatory. There are graded discussion posts which you must respond to for a grade (this is the equivalent of in class participation).

**Cancellation or Change Policy:** If anything needs to be cancelled, then the class will be emailed as soon as possible and alternative arrangements will be made.

**Grades:** Your grade will consist of marks from discussion posts, four exercises, and a self-project. The due date for all materials is December 3 (midnight). However, I have provided a recommended timeline below.

**Discussion Board Responses (20%):** There are five discussion board topics. You need to respond to each item. You are being graded on participation; this is the part of the course replacing in-class participation. You can respond to others comments in your comment but remember to keep all comments professional and respectful. Each one is worth 4%. These are due by December 3 (Midnight), however, I strongly encourage you examine the recommended timeline for the course (see below). Most of them refer to one of the videos in the Course Content (there are a number of “lectures” there along with some associated papers).

**Exercises (40%):** There will be four exercises throughout the semester. Each exercise will be worth 10% and graded on a 1-10 scale. The exercises are to be short assignments that get you familiar with some of the concepts in the course. They will be due electronically by December 3 (Midnight). More details about the exercises will be provided as they approach in the recommended timeline (see below). They will appear under the Exercises tab in Blackboard.

**Self-Project (40%).** You will conduct a self-experiment and a brief write-up of your findings. The information about this assignment is under the Self Project tab in Blackboard. It should be fairly self-explanatory if you read all the files in the Self Report link in the Self-Report tab (read them all before emailing me questions). This will be due electronically by December 3 (Midnight).

**Grading Scale**

A+ 97+

A 93-96

A- 90-92

B+ 87-89

B 83-86

B- 80-82

C+ 77-79

C 73-76

C- 70-72

D 60-69

F 0-59

Recommended Schedule: 