

**\*\*Disclaimer\*\***

This syllabus is to be used as a guideline only. The information provided is a summary of topics to be covered in the class. Information contained in this document such as assignments, grading scales, due dates, office hours, required books and materials may be from a previous semester and are subject to change. Please refer to your instructor for the most recent version of the syllabus.

## Course Syllabus:

### **PSY 477: *Human Systems Engineering Capstone Fall 2019***



**Instructor:** Nancy J. Cooke, Ph.D.  
Human Systems Engineering, The Polytechnic School, ASU

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Office: SANCA 150B

Phone: (480) 727-5158

**Office Hours:** Wednesdays 1:30-5:00 PM OR email me to make an appointment

**Class Time & Place:** Classes will be a mix of classroom experiences and one-on-one 30-minute meetings with the instructor. When we meet as a class it will be either Monday or Wednesday 1:30-2:45 in SANCA 151 at the Polytechnic campus on the days designated in the calendar below. Individual meetings with me will take place in my SANCA office (150B) or other mutually convenient location. Students are responsible for making individual appointments with me in person after class or via email and are strongly encouraged to make them as early as possible for maximum scheduling flexibility.

#### **Class Materials:**

- No text book is required
- Recommended readings in accord with project needs

#### **Course Description:**

This course involves a review of research and theory in a variety of applied topics from a systems perspective. Students will identify human systems engineering project topic, write a proposal with timeline, complete a project based on research and/or experience in an applied setting, write a report on the project, and give an “elevator pitch” and a poster presentation at Innovation Showcase. These activities will be accomplished in several group meetings as well as individual meetings with the instructor. Prerequisite: Human Systems Engineering major, Senior standing.

#### **Course Objectives:**

Students will carry out an HSE capstone project and that includes a capstone project proposal, report, and poster that is presented at the end of the semester at Innovation Showcase.

#### **Learning Outcomes:**

After completing this course, students should:

1. Appreciate of the breadth of human systems engineering

2. Have improved understanding of the value-added of the field and how to market this to outsiders
3. Gain hands-on experience with an applied project
4. Improve skills important for further career development (e.g., writing, oral presentations, grad school prep)

#### **My Expectations:**

1. Students will complete any assigned readings before class.
2. Students will come to class and participate in class discussions, demos and assignments.
3. Students will make required appointments with me for one-one-one meetings.
4. Students will carry out independent project in a timely manner.
5. Students will seek help, advice or information from me as they need it.

#### **Academic Integrity:**

Students in this class must adhere to ASU's academic integrity policy, which can be found at <https://provost.asu.edu/academic-integrity/policy>). Students are responsible for reviewing this policy and understanding each of the areas in which academic dishonesty can occur. In addition, all engineering students are expected to adhere to both the ASU Academic Integrity [Honor Code](#) and the Fulton Schools of Engineering [Honor Code](#). All academic integrity violations will be reported to the Fulton Schools of Engineering Academic Integrity Office (AIO). The AIO maintains record of all violations and has access to academic integrity violations committed in all other ASU college/schools.

#### **Disruptive, Threatening, and Violent Behavior**

Please note that the University policies against Disruptive, Threatening, and Violent behavior will be enforced. Please review these in the Student Services Manual, [SSM 104-02](#): <http://www.asu.edu/aad/manuals/ssm/ssm104-02.html>. Any violent or threatening conduct by an ASU student in this class will be reported to the ASU Police Department and the Office of the Dean of Students.

Cell phones and pagers must be turned off during class to avoid causing distractions. The use of recording devices is not permitted during class. Any violent or threatening conduct by an ASU student in this class will be reported to the ASU Police Department and the Office of the Dean of Students.

#### **Copyright**

Course content, including lectures, are copyrighted materials and students may not share outside the class, upload to online websites not approved by the instructor, sell, or distribute course content or notes taken during the conduct of the course (see [ACD 304-06](#), "Commercial Note Taking Services" and ABOR Policy [5-308 F.14](#) for more information).

You must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

#### **Policy against threatening behavior, per the Student Services Manual, SSM 104-02**

Students, faculty, staff, and other individuals do not have an unqualified right of access to university grounds, property, or services. Interfering with the peaceful conduct of university-related business or activities or remaining on campus grounds after a request to leave may be considered a crime. All incidents and allegations of violent or threatening conduct by an ASU

student (whether on- or off-campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students.

### **Harassment and Sexual Discrimination**

Arizona State University is committed to providing an environment free of discrimination, harassment, or retaliation for the entire university community, including all students, faculty members, staff employees, and guests. ASU expressly prohibits discrimination, harassment, and retaliation by employees, students, contractors, or agents of the university based on any protected status: race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, and genetic information.

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

**Mandated sexual harassment reporter:** As an employee of the University I am considered a mandated reporter and therefore obligated to report any information regarding alleged acts of sexual discrimination that I am informed of or have a reasonable basis to believe occurred.

ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish to discuss any concerns confidentially and privately.

### **Students with Disabilities:**

Suitable accommodations will be made for students having disabilities. Students needing accommodations must register with the ASU disabilities resource Center and provide documentation of that registration to the instructor. Students should communicate the need for an accommodation in sufficient time for it to be properly arranged.

### **Syllabus:**

Any information in this syllabus (other than grading and absence policies) may be subject to change with reasonable advance notice.

### **Absences**

As a rule of thumb, to get participation points for the class and individual meetings you need to 1) show up, and 2) contribute something to each class period (even one comment). Individual meetings can be rescheduled as long as you notify me ahead of time. Partial credit can be obtained for an excused absence in exchange for additional work on the part of the student (assignment, essay). Accommodations will be made for religious observances provided that students notify the instructor at the beginning of the semester concerning those dates. Students who expect to miss class due to officially university-sanctioned activities should inform the instructor early in the semester. Alternative arrangements will generally be made for any examinations and other graded in-class work affected by such absences. The preceding policies are based on [ACD 304-04](#), "Accommodation for Religious Practices" and [ACD 304-02](#), "Missed Classes Due to University-Sanctioned Activities."

### **Evaluation:**

Class meetings (5)	20
Individual meetings (3)	12
Project	
Proposal	10
Revised Proposal	13
Report	25
Presentation	10
Poster for Innovation Showcase	10
<b>Total Possible Points</b>	<b>100</b>

### Letter Grades

A= 90-100

B= 80-89

C=70-79

D=60-69

E=<60

Standard rules of rounding will apply, so .5 and above will be rounded up to the next whole number. Top 3 values in each grade bracket (and 100) are assigned a “+”. Bottom 3 values in each grade bracket are assigned a “-“.

Class meeting grade includes following-up on assignments given the class meeting before and being prepared to discuss your project and any other assignments in class. Participation in class discussion is important and not possible without class attendance.

Individual meeting grade includes emailing me ([ncooke@asu.edu](mailto:ncooke@asu.edu)) to set up individual meetings convenient for both of us within the time frame allotted, in order to discuss progress on your project. It is also possible to set up individual meetings at the end of the group class period. We will typically meet in my SANCA 150B office, but can discuss alternative locations if that is not possible. Please let me know ahead of time (early AM that day) if you need to change your individual meeting time.

Projects are the main focus of this class and are to be a culmination of your studies and experience in industrial organizational psychology or human systems engineering. We will discuss the projects and progress toward them frequently and will use the group as a sounding board for issues, ideas and decisions regarding the projects. There will be much flexibility in terms of content and style of projects. Team projects are acceptable, however, each project will be graded as a unit and each team member will be assigned the same points. There are a number of project milestones to ensure that you get started early and maintain some level of activity throughout the semester. A written proposal (3-5 double-spaced pages) will be required which will then be revised based on comments that you receive from me and from the class. A final written report (10 double-spaced pages), oral presentation (2 min elevator pitch), and a poster to be presented at Innovation Showcase will be due at the end of the semester.

### Class Calendar

Aug 26 (M)**	Class week 1**: Introductions & idea brainstorming
Sept 4 1:30-5pm	Ind. Meeting # 1 with Cooke (ideas/readings/copy chapter)*
Sept 18 (W)	Class week 2: Proposal due/present idea to group/Report on chapter
Oct. 2 1:30-5pm	Ind. Meeting #2 with Cooke (proposal feedback, methods)

Oct 23 (W)	Class week 3: Revised prop due/present proposal to group/CERTT tour
Nov 13, 1:30-5 pm	Ind. Meeting #3 with Cooke (data analysis/progress/issues)
Apr 17 (W)	Class week 4: Group meeting to discuss progress/Professional issues
Nov 27 (W)	Class week 5: Report due/Presentation to group
Dec 6 (F)	3-5 Innov. Showcase (tentative date and time)

\*Email [ncooke@asu.edu](mailto:ncooke@asu.edu) to make individual 30 min. appointments on designated dates in the block.

\*\*All class meetings will take place from 1:30-2:45 in SANCA 151 (except tour) on designated days.