Below is a proposed list of goals this academic year of 2019-2020. Each goal is accompanied by a description, rationale, and progress towards that goal that has been made so far when applicable.

Goal 1) Improve student preparedness for completing the human factors project.

Goal description: A common issue that existed during the advisor transition (from Dr. Drews to myself in 2017) was that many students uninformed about the requirements of the independent project, mistakenly thinking it could be completed in their final semester with no research experience or not being aware of the project altogether. This goal is to improve the communication of the requirements of the independent project to encourage students to get an earlier start and set them up for success.

Rationale: To best allow our students to successful complete their projects, it is critical that they have information about the demands of the independent project, essentially the capstone of the certificate, as early as possible. Work towards this goal includes building better expectations of the students in terms of the timeline, making changes to the way the certificate information is presented and drafted to make these changes clearer, and continued outreach with the advising staff to ensure accurate information is being conveyed.

Progress: Initial updates were made in 2017-2018, including updating certificate requirements to require students to complete a semester of research experience prior to their semester of independent project (as well as reflecting these changes on the website), updating the PAC office with Certificate requirements have been updated (in both the application provided by the PAC office and in relevant places on the HF webpage). These changes led to significant improvements in student preparedness. In the 2019-2020 academic year, I have met with the advising staff on three occasions to discuss and implement changes to the application process and course website, provide further clarity to incoming advisors with turnover, and aided in the set up a tracking program together with advising staff. Together, interested students now complete a basic form on the webpage if interested in the program which immediately sends the student useful information about the program, and begins our tracking progress for interested students to allow for systematic and prompt outreach. I have also met with all interested students in the program to discuss the timeline for the project and make sure expectations are clear.

Goal 2) Optimize the format of PSY 4955- Human Factors Independent Project

Goal description: Transform the course structure and content to best offload the demands of completing the written project, sticking to writing deadlines, and providing career-based knowledge from the faculty mentor, thereby allowing them to focus more exclusively on providing the research resources needed to complete the data collection and analysis.

Rationale: Motivation for this redesign is the success of this approach in the Honors Thesis Program. Human Factors Students are expected to execute the bulk of an entire experiment, including writing a conference paper, in a single semester. Additionally, in the past, students' progress on their projects have varied dramatically (from not having a thesis idea to having already completed data analysis), necessarily rendering class time unproductive for some portion of the students. Having a streamlined process leading up to enrollment in 4955, and a well-organized and structured semester with critical assistance from a graduate teaching assistant, the idea would be to greatly reduce both the potential for delays through clear deadlines, and the burden put on the individual advisor of having to keep track of deadlines, due dates, and provide feedback on writing at all stages.

Progress towards goal: First, students are now held to the updated requirement of having a verified thesis, faculty mentor, and plan for completion within the semester prior to enrollment in 4955. This allows students to be in similar project progression when taking the course. Second, course syllabi and material related to writing content and deadlines have been created and edited with student and TA feedback to optimize how course time is spent to help student's complete the project. We feel these changes make the in-class meetings more productive for the student, meets the goal of offloading the writing demands from the faculty mentor to the course, and improves student's expectations of what distinct roles the course and their mentor have in their project completion. This useful course skeleton can also allow varying segments to be covered by the TA for the course, freeing up additional time for me to continue outreach and career preparation materials (see subsequent goals) as well as providing more detailed writing feedback to students. Third, new course content has been added to course to best aid with student success both on their projects and towards the goal of preparing them for a potential career in human factors. The graduate TAs for the course have played a large role in modifying and optimizing the in-course content, including but not limited to valuable statistical labs and training resources. Grant, the current TA, has also been instrumental in aiding students in their statistical understanding of their projects, logging an average of 2.5 hours of meeting time per student outside of classroom time to help with statistical advising this past semester. The feedback on this consultation and training has been very positive, and moving forward I would like to make a high level of statistical competence a requirement for the TA position. We would also like to continue with the development of statistical training and workshop availability for interested students in the upcoming year.

Goal 3) Expand faculty involved in advising human factors students

Goal description: Involve more faculty members in the CNS area, areas outside of CNS, and outside of the department in mentoring human factors students.

Rationale: In the past, mentoring in human factors has primarily fallen on 2-3 faculty mentors. Expanding the mentors involved in the program would serve to both spread out the workload and provide a greater variety of potential projects for student involvement.

Progress towards goal: Since initial efforts in the 2017-2018 academic year, I have consulted with all CNS faculty, faculty members in engineering and business, and several social and clinical faculty members within the psychology department to discuss potential advising for HF students. This year, we have 1 student who is being advised by faculty in business and 1 from the social psychology area, and the remainder are still within the CNS area. Although the primary burden is still falling on 2-3 CNS area faculty, I believe the restructuring of 4955 has assisted with these efforts, as it alleviates some of the pressure of the faculty mentor with much of the set up and writing completed in the course. Due to initial success with the course, my hope is to continue to reach out to faculty members outside of the CNS area so advising for HF is on their radar for future projects.

Goal 4) Improve education of and opportunities for obtaining HF/UX jobs upon graduation

Goal description: This goal focuses on improving education (both internally for myself and the students) about obtaining HF jobs, setting HF-specific internship opportunities, and providing resources to students to generally improve their preparedness for going on the job market in HF/UX fields.

Rationale: Prior to this year, the certificate program has done little outside of providing students with a writing sample and solid letter of recommendation from a faculty member towards the goal of preparing our students for employment in the HF field. As this certificate is largely geared towards students choosing industry over graduate school, my efforts this academic year have shifted towards the goal of improving this aspect of the certificate program (largely due to the extra assistance of a fantastic graduate TA).

Progress: Diverging a bit from the models set forth by the honors program (where students are largely choosing a more academic path after graduation), I have made substantial efforts this year towards outreach with the User experience (UX) and human factors communities to improve my knowledge of what employers in the field are looking for in candidates. I have worked to set up 2 new internship opportunities related to human factors for student after learning how valuable intern experience is in the field. I learned how different resumes are from the standard academic CV, and now provide students with example resumes from industry. I also provide students with resources including mentorship program links, Slack channels related to research industry positions, and meet-up opportunities that connections in industry have suggested as useful to graduates seeking employment. To continue towards this goal, I plan to expand connections and hopefully add at least 1 more internship opportunity for students, and schedule 1 day each semester to bring in someone in industry to give more interactive advice for students.

Communication Productivity	
Students completing 4955	15 (8 currently enrolled)
Students I met with from 4955	15

Additional students I met with who are interested in the program	6
Students matched with faculty mentors	18
Correspondences regarding professional development for students	11