Academic Program Review

THE DEPARTMENT OF PSYCHOLOGY

The University of Tennessee at Chattanooga

Graduate Programs

Academic Years: 2019-2023

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Preface & History

Brief History of Graduate Programs in Psychology

Graduate study in the Department of Psychology (PSY) at The University of Tennessee at Chattanooga (UTC) began in 1975 when the department created three Master's of Science (MS) degree programs in Clinical, School, and Industrial-Organizational (I-O) Psychology. These programs were initiated while Dr. Edward J. Green served as department head. The programs were coordinated by Dr. Irene (Nicky) Ozbek, Dr. George Helton, and Dr. Lynn Ourth, respectively. In 1979, a fourth degree involving a Research Masters (PS) in Psychology was added. This research program was created as a vehicle for students who wished to pursue study in psychology beyond the undergraduate level and for those who wished to pursue doctoral degrees. The PS was named Psychological Science (PS) for Academic Year 2021 to better reflect the goals of the program.

The Psychology Department offered these four programs through the 1985-1986 academic year at which point the department decided it could no longer support the Clinical MS program and also opted to transfer the School Psychology program to the College of Education. From 1987 to 2022, the department offered a single MS degree with two programs, I-O and PS where each program had its own focused curriculum. In Fall 2022, the I-O and PS programs were officially separated into autonomous entities with different CIP codes and core curricula (see Appendix A and Appendix B, respectively), although there are still shared learning activities and courses that students from both programs take together. The I-O program's new CIP code is 42.2804, which is specific to Industrial-Organizational Psychology and recognizes I-O as a STEM discipline. The PS program's CIP remained 42.0101, Psychology, General, which covers the broad array of topics the degree covers. The I-O program also reduced the number of required credit hours for graduation from 48 to 45 effective in Fall 2023 to increase its competitiveness with other graduate programs in that domain.

The past five years within the Department of Psychology have seen several departures and additions to the full-time graduate faculty resulting in a small overall increase in faculty headcount. As of Fall 2024, the roster of full-time faculty who are also members of graduate faculty is as follows:

Table P.1. Full-Time Graduate Faculty in PSY (Fall 2024)

Faculty Member	Rank	Primary Field	Appointed
Dr. Ralph Hood	Full	PS: Psych of Religion	Fall 1971
Dr. Amye Warren	Full	PS: Developmental	Fall 1984
Dr. David Ross	Full	PS: Social	Fall 1995
Dr. Brian O'Leary	Associate	I-O: Diversity & Org. Justice	Fall 2001
Dr. Chris Cunningham	Full	I-O: Occupational Health	Fall 2007
Dr. Amanda Clark	Associate	PS: Biological	Fall 2012
Dr. Jill Shelton	Full	PS: Cognitive	Fall 2013
Dr. Kristen Black	Associate	I-O: Occupational Health	Fall 2017
Dr. Ashley Howell	Assistant	PS: Clinical	Spring 2020
Dr. Ruthie Walker	Assistant	PS: Social Inequalities	Spring 2020
Dr. Feng Guo	Assistant	I-O: Machine Learning	Spring 2023

Faculty Member	Rank	Primary Field	Appointed
Dr. Bret Eschman	Assistant	PS: Child Developmental	Spring 2023
Dr. Pratibha Deepak	Assistant	I-O: Leadership	Fall 2024
Dr. Max Teaford	Assistant	PS: Multisensory Integration	Fall 2024
Dr. Ricardo Wilhelm*	Assistant	PS: Emotion, Attention, Motivation	Fall 2024

*Hired after review period

Recent Changes and Developments

Since the review of our graduate programs in 2018, several notable events and changes have occurred, all of which have positively impacted our graduate programs. As noted above, the I-O and PS programs split into autonomous entities in Fall 2022, enabling each to better meet the needs of their unique student cohorts. Possibly most significantly, due to the COVID-19 pandemic and new evidence questioning the validity of that assessment as an equitable predictor of graduate student performance, the Department of Psychology decided to eliminate the Graduate Record Examination as an admissions requirement beginning with the 2020-2021 admissions cycle. Results indicate that this change has increased the demographic diversity of our graduate student cohorts. More details of changes during this review period for each graduate program are provided in the following subsections.

I-O Program

Dr. Chris Cunningham continues to ably serve as Graduate Program Director, a role he has held since Fall 2015. Through the support of Dean Pam Riggs-Gelasco, the I-O program was able to hire two new faculty who are primarily associated with this graduate program: Dr. Feng Guo in Fall 2022 and Dr. Pratibha Deepak in Fall 2023, the latter of whom replaced Dr. Alexandra Zelin who departed academia after the Spring 2023 semester to pursue other opportunities. Both Dr. Guo and Dr. Deepak were selected after competitive searches and bring a tremendous combination of research, teaching, and service capabilities to support the I-O graduate program, the Department of Psychology, and the broader university. Thus, the number of faculty aligned with the I-O program increased by one over the review period. This has allowed us to support a wider diversity of courses and a modest increase in student enrollment. Under Dr. Cunningham's leadership, the program has evolved into one of the premier MS programs in I-O psychology.

The change in this program's CIP code (to 42.2804) strengthened the program's footing as an internationally recognized and desirable terminal graduate degree program for international applicants. This shift also aligns this program even more fully with guidance from the Society for Industrial-Organizational Psychology (SIOP) and the Department of Homeland Security's (DHS) STEM Designated Degree Program List. More specifically, this change provides several benefits:

1) It clearly designates the content of I-O Psychology as research-focused, quantitative, STEM discipline which enables us to better market our identity about how the workplace is well-informed by the science of work.

2) STEM fields attract more federal grants and I-O psychology graduate students and faculty providing more STEM-related opportunities and collaborations.

3) It enabled the I-O program to take a positive step toward addressing a broken work authorization system that negatively affects our international students. Our university system, like many others, is pushing for growth in international student recruitment and retention – such students pay higher tuition rates but also face higher hurdles and greater challenges when it comes to their career access and mobility after graduation. A STEM degree grants international students the opportunity to participate in an extended Optional Practicum Training (OPT) program for a total of 29 months, which encourages American employers to prefer STEM graduates, as it gives the employers more flexibility and time to file work authorization papers. In contrast, a degree in a non-STEM field (such as I-O psychology without a STEM designation) allows international students 12 months of OPT, which makes hiring recent graduates from these fields a higher-risk proposition for any employer. This is incredibly important to international applicants, as we have been hearing for years. Our graduate program is among the strongest in the world and this reclassification has strengthened our appeal among international applicants.

Other notable program-related changes during this review period were the increased curricular attention to data and people analytics, and the reduction in our overall minimum credit requirement for graduation. The former change involved updating content in several existing program courses and the development and introduction of a new Introduction to People Analytics courses beginning in Fall 2023 (originally designed by Dr. Cunningham and improved and taught by Dr. Guo). These modifications were in response to growth in the demand for analytics expertise in many I-O related careers. The latter decision to reduce our minimum credit requirements from 48 to 45 credits was in response to increasing competition from other I-O and related degree programs that require fewer credits than we were requiring. This change also enabled us to reevaluate the typical course progression for our students such that we now front-load coursework for first-year students to better prepare them for internship, and then we have increased flexibility for second-year students to facilitate ongoing practicum work and/or thesis or other research in their second year.

PS Program

The breadth and strength of the PS program has continued to grow. Dr. Jill Shelton took over as Graduate Program Director in Fall 2019 when Dr. Amanda Clark was promoted to Assistant Dean for the UTC College of Arts & Sciences. Under Dr. Shelton's leadership, the PS program has changed its name to better reflect its purpose and total enrollment is up significantly. The program also added a practicum requirement, PSY 5370, to reinforce its commitment to applied research. There was considerable change in the faculty supporting the PS program, with ten graduate faculty supporting PS as of Fall 2024 (see Table P.1). Finally, Dr. Shelton has invested a great deal of effort in updating the PS program website which is an important gateway to recruitment.

Trends in Graduate Program Enrollments and Completions (AY 2019-2023)

Over the past five years, growing interest in our graduate programs has resulted in a net increase in applications and enrollments. Application, enrollment, and completion numbers differ between programs, as can be expected given their differing missions, and the trends for each program are explained below.

I-O Program Enrollments

The I-O program received between 75 and 150 completed applications each year of the review period. From these applications, a cohort of between 16 and 19 students was admitted each year. The following table summarizes enrollments over the past five years.

Table P.2. I-O Program Completed Applications and Enrollments, 2019-2023

	F19	F20	F21	F22	F23
Total Applications (selected + rejected)	75	80	100	150	120
1ˢᵗ Year Enrollments (selected only)	16	19	18	19	18
Total Enrollment	35	34	34	36	37

Note. The numbers summarized above refer to the applicants and enrolled students for their respective start year (e.g., F19 = Class of 2021, F20 = Class of 2022).

Enrollment expanded to 20 incoming students for Fall 2024 and we anticipate cohorts of between 20 and 23 for the foreseeable future. The level of academic and professional ability among admitted I-O program students is very high, with average undergraduate GPAs generally being higher than 3.65 in each cohort and most incoming students having meaningful past experiences in research and paid employment settings prior to beginning classes. Within each of these cohorts, the I-O program has a consistent record of diversity with respect to sex and race/ethnicity (especially students who identify as African American, Asian, Hispanic, and Indian). Over the past five years, we have also had several very strong international students successfully complete the program. Although the level of interest is very high among international applicants, we limit our international admissions due to limitations in campus- and community-level support resources for these students. For nearly the past 30 years, the I-O program has admitted at least one minority student within each cohort.

With very rare exception, students complete the I-O program in just under two years (20-21 months, depending on graduation dates).

PS Program Enrollments

The PS program is based on a mentoring model and includes a research-based thesis requirement. In addition to chairing master's thesis committees, PS faculty serve as non-chair members of thesis committees and lead PS students in other research experiences through the PS 5370, *Practicum in Psychological Science*, course. Consequently, student enrollment is dependent on the availability and workload of faculty members associated with this program. With these small numbers in mind, we are relatively selective in our admission decisions. Indeed, students coming into our program have a mean GPA of approximately 3.55 and the average program GPA for all PS students at the end of the Spring 2024 semester was 3.9. While we generally admit more students than we enroll (those who decline generally cite our inability to provide guaranteed graduate assistantships or in-state tuition), between 9 and 12 students

enrolled each year during the review period drawn from a pool of 15 to 31 applicants. The review period also saw a growth in overall diversity. A total of 12 new students enrolled for the Fall 2024 semester.

With respect to program completion, the PS students who complete the program have generally done so in the course of two academic years on average. It is important to note that not all students who enroll in the PS program complete it. During the review period, the average program completion rate was 88%. The reasons for non-completion included both personal and financial issues, as well as decisions to step away from the program to pursue other interests.

Table P.3. PS Program Completed Applications and Enrollments, 2019-2023

	F19	F20	F21	F22	F23
Total Applications (selected + rejected)	15	20	20	20	31
Enrollments (selected only)	4	10	9	9	9
Total Enrollment	14	18	20	21	15

Note. The numbers summarized above refer to the applicants and enrolled students for their respective start year (e.g., F19 = Class of 2021, F20 = Class of 2022).

Response to Previous Program Review and Recommendations

Our previous external reviewer, Dr. Kelly Madole, Department Head in the Department of Psychological Sciences at Western Kentucky University, observed that both the I-O and Research Psychology (now Psychological Science, PS) programs were designed to prepare students for employment or further doctoral studies. She noted that the I-O program being highly ranked by SIOP for its curriculum and applied experience which was structured to meet SIOP competencies. She stated that the RM program focused on research skills essential for doctoral placements and employment with a more flexible curriculum focused on research and methodological skills. Dr. Madole also found that students reported a positive experience, with high enrollment and good access to faculty mentorship, although she raised concerns about minority student recruitment and inadequate graduate assistantship funding.

Dr. Madole stated that faculty members were well-qualified but faced heavy workloads which could hinder their research productivity. She recommended that future hiring strategies consider whether to maintain a broad range of subdisciplines or focus on overlapping interests to encourage collaboration. She acknowledged that learning resources and administrative support were adequate and regularly updated. Overall, she proclaimed the graduate programs strong and healthy, with good prospects for continued success. However, she warned that strategic planning in faculty hiring, curriculum development, and resource allocation would be needed to maintain and enhance program quality.

Previous Recommendation 1: Develop a Staffing Plan for PS Aligned with Program Goals
Dr. Madole recommended that course loads for tenured and tenure-track (TT/T) faculty be reduced to enable TT/T faculty to focus on their research and support student research. The course load at the time of the review was a 4-4 for all full-time faculty, both TT/T and Lecturers, with no distinction, in terms of load credit, between teaching an undergraduate vs. graduate course.

Response: It is difficult to align a "staffing plan" with program goals when limited faculty resources and pressure to provide the broad array of courses limit our ability to develop concentrations at either the graduate or undergraduate levels. Normal teaching load for a TT/T faculty at the beginning of the review period was generally accomplished through the assignment of two "single" sections with enrollments of 30 to 40 students, and one "double" section with enrollments between 46 and 250. There is no "triple" credit regardless of the size of the course. The UTC Administration noted inconsistencies in the required course loads for TT/T faculty across the university, particularly in the College of Arts & Sciences, and mandated reduced course loads for TT/T faculty to a 3-3 beginning in Spring 2021. The course load for Lecturers, whose primary responsibility is instruction, remained at a 4-4. While the change was welcomed by TT/T faculty, the course reduction also resulted in the loss to the Department of instructional coverage equivalent to three full-time faculty at a 4-4 load without a commensurate increase in the number of faculty. Further, independent studies, honors and master's theses (i.e., PSY 4997R and 5997R Research, 4998R and 5998R Individual Studies, PSY 4995R Honors Thesis and PSY 5999R Master's Thesis), which averaged over 124 student credit hours (SCH) per semester during the AY 2019-2023 review period, are not considered in load, and are essentially uncompensated. The PS Practicum, PSY 5370R, which was implemented in Fall 2021, averaged an additional 13 uncompensated SCH per semester.

The number of TT/T faculty directly supporting the PS program increased by one, from nine to ten, over the review period.

The number of TT/T faculty directly supporting the I-O program increased by one over the period, from four to five, with the addition of Dr. Feng Guo in Fall 2022 and Dr. Pratibha Deepak in Fall 2023, and the departure of Dr. Alex Zelin at the end of AY 2022-2023.

Previous Recommendation 2: Identify Core Knowledge Goals for PS

Response: When the PS program transitioned to a stand-alone master's program, we developed a new mission statement (see program overview section), as well as a list of core competencies that the curriculum is designed to build in our students. As noted by Dr. Madole, identifying the knowledge outcomes expected from PS program graduates helps them to be more competitive for the next steps in their career journey. Students in our program will acquire a set of marketable skills through coursework, direct research supervision, and a thesis project. While we strive to tailor students training based on their research interests and career goals, a core set of competencies will be acquired through successful completion of the UTC Psychological Science MS program. Core competencies include:

- Knowledge of a variety of research designs
- Proficiency in a wide range of data analytic approaches, including quantitative and qualitative methods
- Ability to collaborate effectively within professional settings
- Effective instructional skills and knowledge of high-impact teaching practices
- Knowledge of core psychological science sub-disciplines
- Ability to critically evaluate theoretical and empirical work within the Social and Behavioral Sciences
- Effective written and oral communication skills

- Knowledge of ethical and methodological considerations in research with people from diverse backgrounds
- Ability to develop evidence-based solutions to real-world problems

The core competencies we have outlined align well with program learning outcomes, and providing this information to potential applicants through our newly developed program website has helped to recruit a stronger, and more diverse, group of students. Additionally, the curriculum and experiential learning opportunities developed to foster these skills places our graduates in a strong position to achieve their career goals. The 100% success of PS program graduates earning positions in Ph.D. programs, other academic positions, and research-based industry jobs during the review period is a testament to the training and professional development provided to our students

Previous Recommendation 3: Develop Strengths and Relationships in Occupational Health for the I-O Program

Dr. Madole's recommendation here was very high-level, that the I-O program, "continue to develop strengths in occupational health and strengthen connections with health care partners within and outside the university. "

Response: It is encouraging that Dr. Madole recognized this was already a strength for our program at the time of our previous review. We do not agree that it is wise to limit ourselves to partnerships with healthcare partners, however, so we have not focused on that industry and instead have focused on growing our partnerships in broader ways. Since our previous review, we have continued to lean into what we were already doing well, which is emphasizing the importance of protecting and promoting worker health, safety, and well-being wherever it is appropriate and pertinent to do so. Over this review period, we have also increased our status and recognition in the occupational health arena through actions of our program faculty and students. We are among the only master's-level programs in the world that offer specific training and research opportunities in occupational health psychology. In addition to this, which is a huge draw for at least a third of our students each year, our faculty have continued to develop their prominence in this area of work and also to elevate the visibility of our program at UTC in this area. Specifically, Dr. Cunningham finished a six-year stint in president-level leadership for the Society for Occupational Health Psychology, became an advisory board member for the Society for Total Worker Health, and had opportunities to speak about occupational health psychology to major national conventions in the disciplines of industrial hygiene and medicine, as well as specific groups including multiple doctoral programs in I-O and the occupational health team for NASA (twice). He and Dr. Black published what has become a popular and well-regarded text on the *Essentials of Occupational Health Psychology* in 2021 (through Routledge/Taylor & Francis) and also were contracted to develop and deliver a 10-part, internet-based burnout prevention training program for the National Institute for Occupational Safety and Health (NIOSH). Dr. Black's research in occupational health helped her also successful earn tenure and both Dr. Black and Cunningham were awarded with named professorships primarily for their research and practice work linked to occupational health topics. The full I-O faculty team also shares an interest in "making work better" for all who do it and manage it; as a result, our emphasis on occupational health has never been stronger than it is today.

Previous Recommendation 4: Develop a Workload Model

Dr. Madole recommended that we "consider the development of a workload model that rewards research active faculty members by giving credit for independent study and thesis commitments. Encourage external funding applications by matching dollars for assistantships provided by external sources."

Response: The definition of workload for TT/T faculty is an ongoing issue across campus, with a continuing effort to develop a workable solution. The vast majority of our TT/T are research active while also supporting the teaching mission of the Department at both the undergraduate and graduate levels, in addition to their many service commitments. There are no easy solutions given budgetary and personnel constraints. At the Departmental level, we make every effort to accommodate faculty preferences on their teaching schedules, doing what we can to minimize the number of preps in a semester, and assigning them one "double" section and one "single" section to meet their 3-3 course load. We work to ensure that thesis and independent study responsibilities are distributed equitably across faculty and recognize those who go above and beyond in these areas in the annual EDO performance evaluation process. We understand that this is a suboptimal solution, but other options, like course banking, are problematic given the difficulty of ultimately making "withdrawals," while unequal teaching loads based on "research productivity" and external grant funding can ultimately fracture the Department by fomenting unhealthy competition and resentment among those who are deemed to be "less productive." While our faculty are, and always have been, very research-productive and remain committed to the production and dissemination of high quality, high impact research, we are cognizant of our mandate to support the instructional and educational needs of the over 900 majors and graduate students who call the UTC Department of Psychology home. Given our limited faculty resources, it is a difficult balance, but one that we have been fairly successful at maintaining throughout our history.

We will continue to monitor developments at the University level and modify our workload process to accommodate any changes in policy.

Previous Recommendation 5: Consider New Programs with Caution

Dr. Madole noted the temptation to add grad programs to increase revenue but cautioned that doing so without additional resources would do nothing to improve the current situation.

Response: We agree with Dr. Madole's assessment. We have been committed to continually improving both of our outstanding MS programs to the mutual benefit of our students and our faculty. While we have no current plans to add new programs, we have submitted a curriculum proposal to add a Joint Undergraduate Master's Program (JUMP) option to the PS program. JUMP is a UTC based program that allows undergraduate students to take up to 9 credit hours in graduate courses and allow those hours to count toward their undergraduate AND graduate degree completion (If eventually accepted to the graduate program). This could allow a student to complete the graduate degree in less time and for less cost than the traditional graduate program. Additionally, enrollment in JUMP would afford the opportunity for UTC undergraduate students to build on ongoing research projects with faculty mentors, thereby maximizing their professional development and potential for success in the UTC PS program.

We remain open to possibly developing certificate programs that build on the strengths of our existing faculty. We continue to receive pressure from university administration to increase our graduate enrollments, and we will do what we can to accommodate that growth to the extent that available faculty resources allow it.

Current Review – AY 2019 to AY 2023

For the current review, we have organized our response based on the criteria outlined in the rubric provided in the UTC Academic Program Review, <u>Graduate Program On-site Visit Packet for 2020-2025</u>, as follows:

1. <u>Learning Outcomes</u>
2. <u>Curriculum</u>
3. <u>Student Experience</u>
4. <u>Faculty</u>
5. <u>Learning Resources</u>
6. <u>Support</u>

Section 1: Learning Outcomes

Criterion 1: Learning Outcomes
1.1 Program and student learning outcomes are clearly identified and measurable.
1.2 The program uses appropriate evidence to evaluate achievement of program and student learning outcomes.
1.3 The program makes use of information from its evaluation of program and student learning outcomes and uses the results for continuous improvement.
1.4 The program directly aligns with the institution's mission.

Departmental Goals/Outcomes Statements

The two graduate programs in the Department of Psychology have very different foci and ultimate career pathways for students. As a result, each program necessarily focuses on its own set of learning outcomes, and corresponding evaluation methods and standards. However, there is a department-wide emphasis on equipping our graduate students with the necessary knowledge, research-related skills, and communication skills and abilities to be successful as a professional in their chosen fields. In the following subsections, we present evidence pertaining to these and other program-specific learning outcomes for each graduate program.

I-O Program

The mission of the Industrial-Organizational (I-O) psychology MS degree program at UTC is to provide students with the training necessary to pursue a variety of I-O related careers. These include, but are not limited to, positions in human resources departments in work organizations (e.g., job analyst, testing specialist, trainer, compensation analyst, organizational development specialist, generalist), and human resource management consultant. In addition, our I-O program can be used as preparation for the pursuit of doctoral training in I-O or related fields of study.

The fundamental educational philosophy of the program is to train students at least to a level of proficiency with respect to four meta-competencies we developed after carefully reviewing and integrating a larger set of 26 core competencies for I-O professionals as established by SIOP. These four meta-competencies are (1) psychology of work, (2) professional practice, (3) talent management, and (4) work design. In addition to developing professional competence, we strive
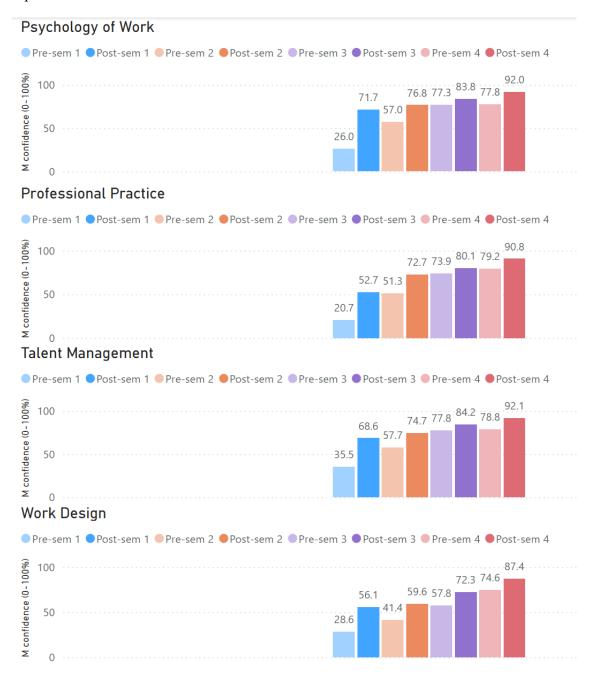
to help our students learn how to think in a logical and critical manner. As a comprehensive terminal MS degree program, our curriculum necessarily accomplishes these broad aims by addressing both the industrial and organizational aspects of our field. The industrial psychology domain includes topics such as job analysis, selection, tests and measurements, and training. The organizational psychology domain includes topics such as work motivation, justice in the workplace, organizational development, culture, occupational health, and conflict management. Spanning both of these general domains is a third domain that focuses heavily on methodologies for research and analyses and includes content such as univariate and multivariate statistical analysis, experimental design, survey research, and scale construction. In a more generalizable way, then, the I-O program curriculum addresses learning objectives that include critical reasoning, ability to apply and effectively share scientific knowledge in diverse situations, formal scientific methods and thinking, and advanced statistical analysis.

There were significant changes in the I-O program curriculum over this review period. The historical development of this curriculum is summarized in Appendix C. The learning outcomes over this period, therefore, were restricted to the department-wide outcomes outlined in the previous section (i.e., knowledge, research-related skills, and professional communication skills/abilities). Beginning in 2016 and running through 2017, we engaged in a complete review and overhaul of our I-O program curriculum to align with new guidelines for graduate education in I-O psychology put forth by the Society for Industrial and Organizational Psychology (SIOP, 2017). These guidelines emphasize 26 competencies associated with professional capabilities as an I-O psychology professional. Within the I-O program, these guidelines triggered a complete critical evaluation and revision/updating of our curriculum and associated learning outcome evaluation strategy. This revised curriculum (Appendix A) and evaluation plan (Appendix F) was fully implemented for the Fall 2018 semester. The competency focus makes it possible for us to evaluate Student Learning Objectives (SLO) at the competency level, rather than in an abstract sense. Unfortunately, SIOP has not offered clear guidance on evaluating SLOs associated with their competency framework. A related challenge is that the SIOP competencies for graduate education are not level-specific and apply to both doctoral and master's level programs. This being the case, we developed our own master's level SLOs, summarized along with the competencies and their definitions in Appendix F.

I-O Program Outcomes and Goals (1.1)

As outlined in the previous section, a more comprehensive plan for I-O learning outcome evaluation was implemented for the Fall 2018 semester. The first couple of years of data collected for this new model ended up not being of high quality or utility. A new and more comprehensive version of this assessment was implemented beginning with the Class of 2022. This evaluation is now administered to all I-O program students at the end of each Fall and Spring semester. The full value of this new competency-focused semesterly assessment is only now becoming visible for cohorts that have provided these data since their first semesters in the program. Although granular data are available at the level of specific LO statements drafted to be applicable to master's level I-O professionals and aligned with all 26 of the SIOP competencies for graduate education, for the present purposes, it is sufficiently illustrative to review the aggregated data from these assessments, as summarized in the following figures. The bars in these charts represent the average self-reported confidence of students in each cohort that they have the ability to do or accomplish a series of behaviors or tasks (reflected in the specific LO statements noted earlier in this paragraph), aggregated up to the level of each meta-competency.

In other words, these data enable us to track the development of our students' perceived confidence in their abilities to be competent I-O psychology professionals. The main takeaway from these data is that our students are experiencing real and meaningful growth and development within and across each of their four core semesters.

Psychology of Work

● Pre-sem 1 ● Post-sem 1 ● Pre-sem 2 ● Post-sem 2 ● Pre-sem 3 ● Post-sem 3 ● Pre-sem 4 ● Post-sem 4

M confidence (0-100%)

26.0 · 71.7 · 57.0 · 76.8 · 77.3 · 83.8 · 77.8 · 92.0

Professional Practice

● Pre-sem 1 ● Post-sem 1 ● Pre-sem 2 ● Post-sem 2 ● Pre-sem 3 ● Post-sem 3 ● Pre-sem 4 ● Post-sem 4

M confidence (0-100%)

20.7 · 52.7 · 51.3 · 72.7 · 73.9 · 80.1 · 79.2 · 90.8

Talent Management

● Pre-sem 1 ● Post-sem 1 ● Pre-sem 2 ● Post-sem 2 ● Pre-sem 3 ● Post-sem 3 ● Pre-sem 4 ● Post-sem 4

M confidence (0-100%)

35.5 · 68.6 · 57.7 · 74.7 · 77.8 · 84.2 · 78.8 · 92.1

Work Design

● Pre-sem 1 ● Post-sem 1 ● Pre-sem 2 ● Post-sem 2 ● Pre-sem 3 ● Post-sem 3 ● Pre-sem 4 ● Post-sem 4

M confidence (0-100%)

28.6 · 56.1 · 41.4 · 59.6 · 57.8 · 72.3 · 74.6 · 87.4

In addition, through AY 2022, for our annual assessment efforts, both I-O and PS reported on the more general department-wide learning outcomes of knowledge, research-related skills, and professional communication skills/abilities.

With respect to *knowledge outcomes*, the I-O program requires students to either (a) successfully pass a four-hour comprehensive exam in their final semester or (b) successfully propose, carry

out, and defend an in-depth thesis research project over their final two or three semesters. Roughly 90% of students opted to complete the comprehensive examination during the review period.

The comprehensive exam requires students to choose and fully respond to four of six integrative questions, with at least one coming from two major sections of questions, one pertaining to I-O theory, research, and evidence, and the other section pertaining to I-O related statistics and methodology. To facilitate preparation for this examination, students are given (approximately two months ahead of the exam date) a list of 20 exam-type questions, broadly covering these two main assessment domains. The actual questions on the exam are not pulled from this review list, but instead are more holistic and integrative, requiring students to interpret and construct a detailed and appropriate response on the test day, within a tight time limit. These conditions mimic common work-related pressures these students will face after graduation. The pass-rate on this exam over the past five years has been 100%, but not without a handful of students in each cohort needing to present an oral defense to address one or more insufficiencies in their initial written answers. We have permitted this two-stage process (i.e., written first, followed by oral defense if required) as a mechanism for holding students accountable, but not derailing their progress toward degree completion. In the past five years, all students have performed at or above the required level on this overall comprehensive exam process.

Students who do not opt to complete the comprehensive exam are required to complete our alternative capstone requirement, which is a thesis research project chaired by an I-O faculty member and two other graduate faculty members (the three faculty members together constitute the student's thesis advisory committee). These thesis projects are primarily student-initiated within an area of expertise that is supported by one or more of our I-O program faculty members. These projects are typically not based on existing data sets and, therefore, require students to engage not only in study design and analyses, but also in sampling, data collection, and data cleaning and management. We also expect that students will make every effort to present their theses at a regional or national conference and ultimately publish at least one manuscript based on their theses. Our success rate as a program in this regard is high, with approximately 80% of completed theses within the past five years earning presentation spots at refereed conferences and/or peer-reviewed publication status in a variety of outlets. You can review a list of recent I-O focused thesis projects through the university's online UTC Scholar system.

With respect to *research-related skills*, I-O students are challenged to interpret, present, translate, and apply theory-driven, empirical research related to I-O psychology topics in every core course. Methodological and analytical skills are directly taught and assessed in the first-year methods and statistics course sequence, PSY 5100 and 5130. Written applications and translations of applied psychological research in a work-related context are required in that first-year methods and statistics course sequence as well as PSY 5060, *Organizational Psychology* seminar, and the PSY 5210, *Organizational Health*, elective.

In addition to completing written assignments, students work in teams and as individuals to complete applied projects demonstrating their ability to gather, analyze, report, and act on data from an organizational setting in the following courses: PSY 5120, *Employee Performance And Development*, PSY 5160, *Human Resources Training*, PSY 5200, *The Uses Of Groups In Work Organizations*, PSY 5220, *Introduction To People Analytics*, PSY 5250, *Core Business and*

Analytics Skills for I-O Psychologists, PSY 5260, *Organizational Development/Design and Change Management*, and PSY 5270, *Job/Work Analysis and Personnel Selection*. This means that a writing component is a requirement in all core content courses in the I-O program. Beyond the research emphasis in the classroom for all students in our program, the thesis option mentioned above is available to I-O students who opt not to complete the alternative comprehensive examination. Typically, two to four students in each cohort take this option. Thesis project work begins in the Spring of students' first year in the program and continues through the second year, culminating in a defense in the Spring, approximately one month before the end of classes. A handful of I-O students will also pursue a PSY 5997, *Individual Studies,* or PSY 5998, *Research,* option, or volunteer to support ongoing research in an existing research lab during their time in the program.

With respect to *professional communication skills and abilities*, the opportunities for learning and evaluation are incorporated into every course, as detailed in the course syllabi (Appendix E), and the two capstone options in our curriculum. Beginning with the capstone options, comprehensive exams clearly provide the opportunity for I-O students to demonstrate their ability to communicate in writing. I-O thesis students must also successfully pass an oral thesis proposal meeting and also an oral defense of their thesis. In the context of the other core courses and electives, students are regularly assigned to present and/or co-facilitate portions of weekly class meetings. In most courses these presentations are evaluated by a large subset of peers and the course instructor. In some cases, external stakeholders from the local business community are also involved in evaluating these presentations. As a few more specific examples (from among others), in PSY 5250, *Core Business and Analytics Skills for I-O Psychology* students must complete a stakeholder pitch project to gain buy-in to move forward with a new organizational initiative and the other is a role play presentation in which a challenging HR-related situation is presented and discussed interactively with the rest of the class there is . A similar applied presentation opportunity is provided to students in PSY 5210, *Occupational and Organizational Health Seminar,* and PSY 5260, *Organizational Development/Design and Change Seminar*. Students are also externally evaluated by their PSY 5360, *Practicum,* supervisors with respect to their professionalism and communication abilities within their respective practicum.

I-O Course Syllabi

Course syllabi for all I-O courses are available via hyperlinks included in [Appendix E](#).

I-O Placement of Students and Graduates

For students enrolled in the I-O program, practicum/internship placement rates are 100%, driven by our requirement that all students complete a minimum of 300 hours of supervised practicum before graduation. For a list of recent organizations who have employed our students as interns (during practicum) and as full-time employees post-graduation, please refer to [this table](#) from our regularly updated program website.

The I-O psychology program also has a long history of excellent job placement rates for students who complete the MS degree. Although no formal post-graduate surveying mechanisms yet exist for graduate-level students within the university, our recent efforts to stay connected with alumni and to maintain an active [LinkedIn group](#) for our current students and alumni (currently with 448 members) enables us to estimate with great confidence that our placement rates within three months of graduation are at or above 99%. It is our experience that the students who are not

employed by this point are individuals who are either being very picky about the type of opportunity they choose to pursue (either for location reasons or due to certain personality characteristics or styles that pose challenges for them when interviewing). Even these individuals ultimately land employment if they keep actively looking. This is a real testament to the overall high employability of our graduates.

In general, graduates of our program are employed in roles that involve performing some or all of the following types of work on a regular basis:

- Job/work analysis and job description updating; identifying essential job functions
- Design/implementation/evaluation of workforce training programs; program delivery; policy development
- Survey design and administration; exit/stay interviews; customer satisfaction reviews
- Development and administration of performance evaluation and management systems/programs
- Assessment validation and evaluation
- Recruitment and retention planning
- Organizational development/change management projects

A brief, but representative summary of example job/position titles and associated organizations for program graduates is provided in Table 1.1.

Table 1.1. Example I-O Job Placement Titles and Organizations

Job/position title	Organization
Associate Implementation Specialist	HealthcareSource
Continuous Improvement Specialist	Tractor Supply
Director of Global Talent	Rivian
Executive Compensation Consultant	Unum
Senior Research Scientist	Amazon
Assessments and Employee Engagement Analyst	HCA Healthcare
Human Resources Manager	Shaw Industries
Talent Development Specialist	Signal Energy Constructors
Director, Learning, Growth & Management	Tennessee Valley Authority (TVA)
Talent Analytics	The Dow Chemical Company
Corporate Business Partner	TVA
HR Business Partner	Infineon
Divisional Training & Development Manager	Shaw Industries
HR Project Manager	BlueCross BlueShield of Tennessee
HR Analytics Professional	Unum
Manager, Research Translation	Society for Human Resource Management
HR and Compensation Consultant	Gallagher

Employer Satisfaction with I-O Program

Employers of I-O students and program alumni are extremely satisfied with the talent that we recruit and train in this program. We have long-standing relationships with most of our internship sites and we are a recruiting source of choice for many regional organizations (i.e., they come to us first when looking to fill critical HR and organizational development roles). The following employer quotes illustrate the type of feedback we frequently receive from employers working with our students on practicum or with our alumni in full-time positions:

> *"It was great having [Student] join our team in Dallas for the summer. She helped us analyze the effectiveness of our flagship leadership development program, and because of her we've overhauled some of our evaluation processes. You all are doing something right with the program, because she hit the ground running here and added value quickly."*

> *"[Student] went above and beyond my expectations for her. She did necessary research to become knowledgeable on topics that were not in her field of study. She related well with those she worked with and she provided very beneficial insight to her tasks at hand. She was able to compile years' worth of information and run statistical analyses on the benefits of our fitness programs vs. the medical claim and prescription costs of the participants before and after their engagement in the programs. This information was presented and is currently being used to justify the possibility of new positions to be created. [Student] also did analyses for [company CEO] that looked at the relationships between heart rate and glycogen burn. This compliments of efforts as a company to develop a consistent message and recommendation when it comes to health and exercise. She has been a huge help and a wonderful individual to work with. I am going to miss her presence and insight."*

> *"[Student] has been a tremendous asset to [company]. He is always seeking challenges and ways to enhance his knowledge in the various avenues of Human Resources. He has helped with recruiting, 401K audit, health benefit billing/reconciliation etc...[Student] handles himself professionally at work and treats all with respect. He is well liked by all levels here at [company] and continues to grow with the company. We are very fortunate to have such a well-rounded intern working with us."*

In addition to quotes like these, employers complete a standardized formal evaluation of student performance while on internship. The following table summarizes the ratings from employers since we implemented a new evaluation form in Summer 2019. As shown in these data, I-O students are perceived very positively by their practicum supervisors, even as graduate students still working toward completion of their degrees. It is very common for students to receive full-time employment offers from the organizations in which they complete their practicum work.

Table 1.2. Summary of Employer Practicum Performance Evaluations

	Class of 2021	Class of 2022	Class of 2023	Class of 2024
# of employer ratings	18	20	20	23
M rating of written and oral communication skills (Demonstrates ability to express ideas and information to others clearly and concisely)	4.67	4.70	4.65	4.30
M rating of interpersonal skills (Demonstrates ability to interact with coworkers and supervisors in a fashion that contributes to overall productivity)	4.27	4.45	4.50	4.61
M rating of technical expertise (Demonstrates thorough knowledge and understanding of the theories and techniques involved in the practice of I-O psychology covered by the practicum)	4.50	4.40	4.55	4.39
% of employers who would definitely choose to work with the same student again in the future	89%	95%	100%	96%

Note: Ratings in this evaluation are provided on the following scale: 1=Outstanding, 2=Above average, 3=Average, 4=Below average, 5=Poor

PS Program

The mission of the PS program is to provide the training and education needed to become a competent psychological scientist. We use a mentorship model that offers our students the opportunity to work within vibrant research programs led by leading Psychological Scientists whose expertise spans a variety of sub-disciplines, including child development, gerontology, clinical, cognitive, biological, and socio-cultural. We have a common goal of leveraging expertise in studying human behavior to promote health and well-being for individuals from diverse backgrounds. In addition to gaining applied research experience, students will take courses within a curriculum designed to foster the skills required to be successful in Ph.D. programs, as well as the applied research sector.

PS Program Outcomes and Goals (1.1)

The strength of the PS program is in the faculty's commitment to personalized mentorship of students toward their individual career goals. Therefore, students in our program are engaged in not only generalized training in conducting research, but also training that occurs within a variety of specific content areas, including the following: psychology and law, clinical psychology, social psychology, psychology of religion, developmental psychology, cognitive aging, sensation and perception, neuropsychology and psychometry, and biological psychology. Applicable to all graduate students, regardless of program or specialty, are goals associated with knowledge

outcomes, research competencies, professional communication skills and abilities, and professional development (see Criterion 2 for more details).

With respect to *knowledge outcomes*, the PS program requires students to successfully propose, carry out, and defend an in-depth thesis project under the direction of their faculty mentor and two other graduate-level faculty committee members. The self-initiated thesis project is designed to assess the student's ability to identify a gap and problem in the existing literature, develop hypotheses, design a research methodology that will allow for testing of those hypotheses, execute the designed study, and communicate the work in an oral defense to a committee of faculty and a written thesis. While not a component of the thesis project assessment itself, students in the PS program are strongly advised to seek opportunities to present, and ultimately publish, at least one manuscript based on their research. Indeed, during the review period students coauthored 12 peer-reviewed publications and 61 conference presentations. This is without taking into consideration the various manuscripts that are under review or in-press as of this year. Participation in such research and authorship is particularly encouraged for those students who intend to pursue doctoral training. A list of the thesis projects completed during the review period can be found at UTC Scholar.

During the review period, the PS labs have significantly enhanced their research resources, affording students more opportunities to engage with cutting-edge tools to explore complex psychological phenomena. Dr. Wilhelm's new EEG lab offers opportunities to study brain activity in real-time, while Dr. Howell's lab features the EyeLink 1000 and Biopac systems, enabling research into eye movement, skin conductance, and general bio-feedback. Dr. Eschman's lab has also obtained an EyeLink 1000 eye-tracking system, providing students with further opportunities to investigate visual attention and perception. Additionally, Dr. Teaford's MS2 Virtual Reality Lab provides hands-on experience with advanced technologies and software, including the HTC Vive Pro 2 system, Valve Index Knuckle Controllers for precise hand and finger tracking, haptic devices, Unreal Engine, and specialized equipment like the Colorado Altitude Technology Hi-Output Altitude Generator and fingertip pulse oximetry for simulating environmental variables and physiological responses. These resources empower students to develop specific research questions before learning how to use the software and hardware necessary to gain insights into their questions using state-of-the-art methodologies.

In addition to demonstrating competency in research methodology and mastery of knowledge in the specific area of the thesis, PS students are also required to demonstrate breadth of knowledge in areas of psychology outside of their specialty. To this end, PS students must complete two topical seminar-style courses. One topical seminar must be in a biological/cognitive specialty (PSY 5950), and another must be in a social/developmental/personality specialty (PSY 5960). The breadth of knowledge is assessed in these courses through the student's ability to identify and critically analyze literature in the seminar topic area and develop/propose a novel and independently derived research idea(s) that would further the state of literature in the seminar topic area. Additionally, students are expected to prepare and deliver formal research-based oral presentations in all seminar courses.

With respect to *research competencies*, the core competencies of identifying, critically analyzing, and presenting empirical research, as well as developing hypotheses and designing novel research questions and methodologies are learning objectives for every course within our

program. The methodological, experimental design, and analytical skills are taught and assessed in the first-year methods, statistics, and design course sequence (PSY 5100/5130/5140). Moreover, written proposals for novel, theoretically driven research are required in each topical seminar course, the methods and statistics courses, and (by definition) any independent study/research/thesis course. PS students must also develop their research presentation competency by presenting papers and/or posters at professional conferences. While this competency is not assessed at a program level, more than 98% of PS students present at at least one national or international conference, and several students have published their thesis data in peer-reviewed journals.

Beyond the research competencies developed through coursework and the thesis (primarily focused in the program's second year), This is possible because faculty mentors are identified and matched as best as possible to the student's background and interests during the program application process. This early identification and alignment generally means that students engage in a first-year research project and support more senior graduate students in their research from day-one, rather than delaying such experiences until the thesis process begins in earnest in the Spring semester of the first year in PSY 5140. All students are expected to engage in additional research activities directly upon beginning the program. To this end, PSY 5370, *Practicum in Psychological Science*, was added to the curriculum in Fall 2021 to provide opportunities for students to broaden their scientific skills by engaging in research outside of their thesis project, with other faculty members or community partners.

Concerning *professional communication skills and abilities*, opportunities for learning and evaluation of both written and oral communication skills are incorporated into every course within the PS program (employing various methodologies; see syllabi in [Appendix E](#)) and thesis project. Specifically, thesis students' written communication skills are assessed in their written proposal draft in PSY 5140, the formal proposal document and final thesis documents; their oral communication skills are assessed in their oral thesis proposal draft in PSY 5140, the oral proposal with their meeting and in an oral defense of their thesis. PSY 5020, *Teaching of Psychology*, is another asset in developing professional communication skills as it requires that students prepare and deliver at least two lectures. By completing PSY 5020, PS students are qualified to instruct an undergraduate section of PSY 1010 during their second year (after completion of 18 graduate credit hours in psychology). In addition, students engage in development of grant-writing skills in PSY 5140, and they are encouraged to engage in grant-writing and manuscript reviewing with their faculty mentor. As discussed above, almost all PS students engage in the oral presentation of their research at [UTC's Spring Research and Arts Conference](#) (previously ReSEARCH Dialogues) and at national and international academic conferences.

Finally, the entire PS program is ultimately focused on *professional development*, and preparing graduates for roles in research, academia and for-profit and not-for-profit organizations. This is further emphasized with the addition of the PSY 5370, *Practicum in Psychological Science*, which is tailored to research and applied work in the community. Additionally, students are expected to engage in several professional development opportunities each month, including our First Fridays brown bag research colloquia and workshops offered by PS faculty and university staff (e.g., CV/resume development, grant-writing skills, research ethics, and the use of experimental software/hardware in research).

PS Course Syllabi

Course syllabi for all PS courses are available via hyperlinks included in Appendix E.

PS Graduate Trajectory

Consistent with the PS program mission to prepare students for rewarding applied research careers and/or doctoral training in psychology, all of the PS students who completed the MS degree during the AY 2019-2023 timeframe were successful in gaining admission to a PhD program or securing an applied research position within three months of graduation (see Table 1.3). Specifically, 11 of 31 were successful in gaining admission to a Doctoral program in their first application year. The other 20 of 31 secured an applied position relevant to their specialty area, gained admission to a non-PhD granting form of graduate studies, or were appointed as adjunct faculty or lecturers at various universities within 3 months of graduation. Of the PS graduates who are not in a PhD program or applied research position, their challenges are frequently related to persisting in the pursuit of a clinical PhD and/or restrictions to PhD programs or careers within a restricted geographical region for personal reasons.

Table 1.3. AY 2019-2023 PS Graduate PhD / Career Placements

Graduate	PhD Program/Applied Setting
Dinsmore, Jonathan	Adjunct Faculty - University of Arkansas; PhD
Jackson, Faith	UTC - EdS, School Psychology
Pusser, Anna	Auburn University - PhD, Cognition and Behavioral Sciences
Woods, Savannah	University of South Carolina - PhD, Clinical Community Psychology
Materia, Melissa	University of North Dallas - PhD, Behavioral Science
Nuno, Christopher O.	Washington University - PhD, Psychology and Brain Sciences
Williams, Akera	Behavioral Health Counselor - Georgia Department of Corrections
Robbins, Robert	Texas A&M - PhD, School Psychology
Swanson, Zachary	Claremont Graduate University - PhD, Psychology
Bettens, Talley	George Mason University - PhD, Criminology, Law, & Society
Mackey, Cameron	University of Miami- PhD, Social Psychology
Swanson, Sally	University of Maine - PhD
Rogers, Kaila	Research Analyst - Hurdle Land & Realty LLC
Robertson, Leslie	Data Analyst and Researcher - NPC Research
Oxford, Skylar	Georgia State University - PhD, Cognitive Psychology
Greenlee, Leanza	Research Analyst/Program Evaluator at Northwest Research Consortium

Section 2: Curriculum

Criterion 2: Curriculum
2.1 The curriculum content and organization is reviewed regularly and the results are used for curricular improvement.
2.2 The program has developed a process to ensure courses are offered regularly and that students can make timely progress towards their degree.
2.3 The program reflects progressively more advanced in academic content than its related undergraduate programs.
2.4 The curriculum is aligned with and contributes to mastery of program and student learning outcomes identified in 1.1.
2.5 The curriculum is structured to include knowledge of the literature of the discipline.
2.6 The curriculum strives to offer ongoing student engagement in research and/or appropriate professional practice and training experiences.
2.7 Programs offered entirely through distance education technologies are evaluated regularly to assure achievement of program outcomes at least equivalent to on-campus programs.
2.8 The program incorporates appropriate pedagogical and/or technological innovations that advance student learning into the curriculum.

Both Psychology graduate programs include comprehensive, quality curricula to prepare students for their respective careers and/or further educational pursuits. Both programs are designed to be presented as two-year programs where students commence and progress as a cohort beginning in the Fall semester. Although each program has its own focused curriculum, as detailed in the following subsections, there are several core courses and some electives that students from both programs take together, providing efficiency in course scheduling and encouraging a department-wide cohort. As examples:

- All graduate students complete PSY 5100, *Statistics and Research Methods in Psychology I*, and PSY 5130, *Statistics and Research Methods in Psychology II*, during their first year in the program

- I-O students intending to complete a thesis have the option to take PSY 5140, *Advanced Research Design*, which is a thesis preparation course
- All students also have the opportunity to enroll in multiple advanced statistics and methodology courses offered on a regular basis (e.g., introduction to Bayesian analyses, qualitative and quantitative methods of evaluation and analysis).
- Students from both programs have the opportunity to take PSY 5020, *Teaching of Psychology*, which prepares students for careers in teaching or other training-related fields. Additionally, PSY 5020 is required for any student who intends to teach PSY 1010, *Introduction to Psychology*, during their second year.

Both our graduate programs offer high-quality Master's level courses. Indeed, for those MS graduates who pursue PhD training, many of their research methods and statistics requirements are satisfied with the course work they completed at UTC. Similarly, many UTC MS graduates who entered PhD programs that require a MS thesis before commencing with doctoral work have had their UTC-based thesis accepted as meeting their new program's degree requirements.

I-O Program Curriculum

The I-O program began with just one full-time faculty member assigned to it, Dr. Lynn Ourth. The remaining courses were taught by adjunct faculty. In 1982-1983, a second I-O faculty member was added. Soon after that, Dr. Mike Biderman began teaching half-time in the I-O program after taking courses in I-O and in research methods relevant to I-O at the University of Tennessee at Knoxville. Since 1992, an average of three to four faculty members have covered all of the required coursework and graduate student supervision for this program.

The curriculum in the I-O program has gone through eight basic incarnations since its inception in 1975. Over this time, the curriculum for this program has also expanded and been revised to align with current and best-practice guidelines for graduate education in I-O psychology as outlined by the Society for Industrial and Organizational Psychology (SIOP, most recently updated to align with the 2016/2017 guidelines). A summary of how this curriculum has evolved over this time is available in Appendix C. Prior to our most recent curriculum revision in 2018, the I-O program's curriculum was fairly constant from the 1993-1994 academic year. Then and now, the curriculum conforms closely to the Guidelines for Graduate Education in I-O Psychology developed and endorsed by SIOP. The current curriculum is outlined in Appendix A. There are 11 required courses (denoted with an * in Appendix A), with the remaining credit hours being earned through completion of approved graduate-level electives offered either within the department or in other relevant departments at UTC (e.g., Management, Public Administration). Within our current curriculum the following points are also especially notable:

- Our core required courses and electives cover the full spectrum of critical I-O content areas at a level of depth that is rarely found in master's level programs. In part this is because of our 45 minimum credit requirement, but it is also a testament to the thoughtfulness with which our curriculum has been designed.
- We require graduate students to complete at least two advanced statistics/research methods courses (PSY 5110, 5130) and regularly offer three additional advanced electives in this domain (5140, 5220, 5510, 5520). This level of emphasis on statistics and research methods is rare for a master's level program, but really helps our students become proficient in research/evaluation methodologies and associated data analysis methods.
- We have a strong emphasis on occupational and organizational health, analytics, and organizational development, design, and change. These areas of emphasis are not jointly common within master's level programs but has been done to meet the demands and interests of incoming students and ultimate employers.

I-O Program Curriculum Management, Review, and Revision

The primary responsibility for ongoing curriculum management, review, and revision rests with the Director of the I-O graduate program, Dr. Chris Cunningham. He is well-connected with both the academic and practitioner arenas, given his outside consulting work in the personnel assessment and applied evaluation domain. Dr. Cunningham supplements these connections and his experience by gathering exit-interview data from graduating students regarding how the curriculum did or did not prepare them for their internships and job searches. Dr. Cunningham also engages in regular discussions with regional business leaders and program alumni to ensure that the I-O program curriculum is current and focused on addressing the needs that exist now

and are developing for the near future. A final element to our ongoing curriculum review is Dr. Cunningham's participation in recurring (nearly monthly) meetings of I-O psychology graduate program directors. The agenda for these meetings involves sharing of updates to graduate education guidance from SIOP and the American Psychological Association are discussed, as well as best-practices and common challenges/resolution strategies faced by other programs.

I-O Course Syllabi

Course syllabi for all I-O courses are available via hyperlinks included in Appendix E. There is also a Campus syllabus that provides information that is common to all courses.

SACSOC Outcomes for I-O Program

All programs at UTC are required to engage in an ongoing process of student learning outcome (SLO) review. This process is managed through the Compliance Assist system for the university by the Office of Planning, Evaluation, and Institutional Research. All programs must enter outcomes assessment data pertaining to each of these SLOs at least once within five years. Through AY 2022, the UTC Graduate School treated our Psychology graduate programs as concentrations within a single MS degree (despite the significant differences in focus and number of required credit hours) and shared a common set of SLOs. A summary of these SLOs and targeted proficiency levels per course for the I-O program is provided in **Table 2.1**. Refer to Appendix E for details of the courses listed in this table.

Note that these general SLOs are monitored in addition to course-specific and competency-based SLOs noted in section 1 of this report and Appendix F. Here is a definition of the five general SLOs for the I-O program:

- *SLO1 - Application of I-O concepts:* Students will apply their knowledge in a practicum/internship with tasks and responsibilities related to the I-O discipline.

- *SLO2 - Core knowledge of I-O domain:* Each of the courses in our I-O MS curriculum adds to core knowledge – either theoretical, statistical, or applied

- *SLO3 - Core knowledge of psychological discipline:* I-O courses focus on people in the workplace, so this SLO broadly applies to all courses in the I-O curriculum.

- *SLO4 - Proficiency in evaluating, designing, and conducting research:* Every course in the I-O curriculum emphasizes interpreting research literature. Several courses also focus specifically on research development and statistical analytics skill development.

- *SLO5 - Proficiency in professional writing and presentations:* The I-O program prepares students to perform as professionals in business settings; professional/technical writing and presenting skills are developed in all courses in the curriculum.

- *SLO6 - Statistical and methodological proficiency:* The I-O program requires completion of at least two statistics and research methodology courses and offers several other elective courses designed to help students progress toward mastery of this SLO.

Table 2.1. Summary of General SLO for the I-O program

Course	SLO1	SLO2	SLO3	SLO4	SLO5	SLO6
PSY 5020	R	I	I		I	
PSY 5060	I, R	I	I	I	I	I
PSY 5100	I, R	I	I	I	I	I
PSY 5120	I, R, M	I, R	I, R	R	I, R	R
PSY 5130	I, R	I, R	I, R	I, R	R	I, R
PSY 5140	R	R	R	R	R	R
PSY 5160	R	R	R	R	R	
PSY 5200	R	R	R		R	
PSY 5210	R	I, R	I, R		R	
PSY 5250	I, R, M	I, R	I, R	R	R	R
PSY 5260	R, M	R	R	R	R, M	R
PSY 5270	I, R, M	I, R	I, R	R	R	R
PSY 5300	I, R, M	I, R	I, R		R	
PSY 5360	R, M	R	R	R	R, M	R
PSY 5400	R, M	R	R		R, M	
PSY 5510/5520	R	R	R	R	R	R
PSY 5997/5998	R, M	R	R	R, M		R, M
PSY 5999	R, M	R	R	R, M		R, M

Note. I = introduced, R = reinforced, M = mastery

I-O Catalog Information

Catalog entries for all I-O courses are available in Appendix E and in the AY 2024-2025 Graduate Catalog.

I-O Curricular Research Opportunities

Although the primary emphasis pertaining to research in the I-O program is on translation and application, there are several students within each cohort who opt to be more extensively engaged in the research process. This is done through the completion of a supervised PSY 5999, *Thesis*, project, and/or through participation in either PSY 5997, *Independent Study*, or PSY 5998, *Independent Research* electives with one or more faculty members (not always within psychology). Table 2.2 summarizes enrollment in each course during the review period.

Table 2.2. Number of I-O Students in PSY 5997/5998/5999

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
PSY 5997	7	6	8	6	2
PSY 5998	2	0	0	1	0
PSY 5999	10	8	8	7	4
Total	19	14	16	14	6

PS Program Curriculum

The PS program is designed to ensure a strong research background, taught in the context of a mentored introduction to a specialty area. The curriculum for the PS program is designed to provide students with both depth and breadth in the science of psychology as well as ample skill and experience in research design and statistics. When originally created in 1979, the PS program drew on the resources of all the faculty in the department. Over time, however, faculty in the department have come to align more closely with either the I-O or PS programs (a summary of how the PS curriculum has evolved over this time is available in Appendix D). PS faculty provide not only generalized training in conducting research but also training that occurs within a variety of specific content areas, including Psychology and Law, Psychology of Religion, Developmental Psychology, Social Psychology, Cognitive Psychology, Neuropsychology, Gerontology, and Memory.

There have been numerous changes to the makeup of the PS faculty over the review period. Dr. Paul Watson passed away in Spring 2018 and Dr. Nicky Ozbek retired in Spring 2020. Dr. Ashley Howell, a Clinical Psychologist, joined the Faculty in Fall 2019. Dr. Ruthie Walker, a Developmental Psychologist, and Dr. Tomorrow Arnold, a Biobehavioral Health Psychologist, joined us in Fall 2020. Dr. Dave Ferrier and Dr. Preston Foerder left to pursue other opportunities after the Spring 2022 semester. Dr. Bret Eschman, a Child Developmental Psychologist, joined the faculty in Fall 2022, and Dr. Max Teaford, a Cognitive Psychologist, joined us in Fall 2023. Dr. Arnold left to pursue other opportunities after the Spring 2024 semester. Finally, we hired Dr. Ricardo Wilhelm, a Cognitive neuroscientist, who began working with us in the Fall 2024 semester. All faculty associated with the PS program hold the terminal degree and adjunct faculty have not been used in the past five years.

The faculty associated with the PS program support the program mission through a combination of elements, a) teaching the 21 required core course hours, b) supervising the six required thesis hours, and c) teaching/mentoring students for their nine elective hours (described in more detail in Appendix B). Five required courses have been part of the program since 1983: PSY 5100 and PSY 5130, *Statistics and Research Methods in Psychology I and II* respectively, PSY 5140, *Applied Research Design*, which focuses on research design and thesis preparation, dealing with topics and issues that students will likely face in the preparation of their theses), and one section each of PSY 5950, and PSY 5960, *Advanced Studies*. The PSY 5950 and PSY 5960 courses are topical seminar-style courses dealing with topics of the instructor's choosing. PSY 5950 is used for topics within the biological/cognitive specialty. PSY 5960 is used for topics within the social/developmental/personality specialty. The seminar topics taught by the PS faculty are similar to the list of previously mentioned research interests. Topics have recently included: Cognition and Health (Dr. Shelton, FA 2022), Psychology of Religion (Dr. Hood, SP 2023, Addictive Behaviors (Dr. Arnold, FA 2023), and Infancy & Childhood (Dr. Eschman, SP 2024).

PSY 5020, *Teaching of Psychology*, is encouraged for all graduate students and is required for those in the PS program, particularly those who wish to teach undergraduate courses, and is required for those interested in teaching PSY 1010, *Introduction to Psychology*, during their second year of enrollment. PSY 5020 also helps to support students supporting other courses, such as our undergraduate labs in research methods, PSY 2020L, and statistics, PSY 2040.

Students are encouraged to use their elective hours to focus more deeply on a specific research area through additional statistics courses, seminar courses, or, more or an additional section of PSY 5370, *Practicum in Psychological Science*. PSY 5370 are not always completed with the faculty mentor but sometimes with another faculty member from the Psychology department, faculty from other departments at UTC or other universities, and community partners. The goal is to offer students opportunities to broaden their knowledge and transferable skills with professionals whose expertise aligns with student's interests and desire for growth. In addition, students may choose to take graduate courses from other departments that complement their professional development (e.g., classes in Program Evaluation, etc.).

PS Program Curriculum Management, Review, and Revision

The primary responsibility for ongoing curriculum management, review, and revision rests with the PS graduate Program Director, Dr. Jill Shelton. This review is primarily based on the interests of the students currently enrolled in the program (e.g., if 30-50% of students are intending to pursue doctoral training in social psychology, we will select a social psychology topic for PSY 5960). Though our course offerings are few, they are consistent with our focus on mentorship and engagement in independent research projects and students who are delayed in their graduation are never delayed due to the number, or breadth, of course offerings (those who encounter delays often need only to complete their thesis project).

Because many of the PS students go on to Ph.D. programs (see Table 1.3.), we work to assure student perceive their course preparation as appropriate. One indication of success in maintaining this level of instruction is that the vast majority of our students who entered Ph.D. programs in other institutions have had their thesis accepted as meeting their new program's degree requirements.

PS Course Syllabi

Course syllabi for all PS courses are available via hyperlinks included in Appendix E. There is also a Campus syllabus that provides information that is common to all courses.

SACSOC Outcomes for PS Program

With the separation of PS into an autonomous degree in Fall 2023, it now has a unique set of program SLOs. A summary of these SLOs and targeted proficiency levels per course for the PS program is provided in Table 2.3. Refer to Appendix E for details on courses listed in this table. Here is a definition of the five general SLOs for the PS program:

- *SLO1 – Demonstrate core knowledge in Psychology:* Students work with an individual faculty member toward the completion of a thesis in one of the many sub-disciplines of psychology. Students also complete no fewer than two topical seminar courses spanning developmental, social, personality, cognitive, biological, and philosophical areas.

- *SLO2 - Proficiency in evaluating, designing, and conducting research:* Every course in the PS curriculum emphasizes interpreting research literature. PSY 5100/5130/5140 focus specifically on skill development in the area of research design and statistical analysis.

- *SLO3 - Proficiency in professional writing and presentations:* The PS program prepares students to perform as professionals in academic and applied settings. Consequently, all

courses within our curriculum emphasize and develop academic writing and presentation skills.

- *SLO4 - Statistical and methodological proficiency:* The PS program requires completion of PSY 5100, PSY 5130 PSY 5370, and PSY 5140, all designed to help students master a variety of statistical methodologies and research design approaches.

- *SLO5 – Professional Development*: The PS program prepares students to apply their knowledge and skills to achieve professional success. Every course in the PS program is focused on career preparation. Additionally, students are expected to engage in professional development workshops and department research colloquia.

Table 2.3. Summary of General SLO for the PS program

Course	SLO1	SLO2	SLO3	SLO4	SLO5
PSY 5020	I	-	I, R	-	I, R
PSY 5100	I, R	I	I	I	
PSY 5130	I, R	I, R	I, R	I, R	I, R
PSY 5140	R	I, R	R	R	R
PSY 5370	R	R	R	R	R
PSY 5510/5520	R	R	R	R	R
PSY 5950	I, R	R	R	R	R, M
PSY 5960	I, R	R	R	R	R, M
PSY 5997/5998	R, M	R	R	R, M	R, M
PSY 5999	R, M	R, M	R, M	R, M	R, M

Note. I = introduced, R = reinforced, M = mastery

PS Catalog Information

Catalog entries for all PS courses are available in Appendix E.

PS Curricular Research Opportunities

Engagement and progression in independent research is central to both graduate student and faculty success in the PS program. As described elsewhere, PS students are encouraged to focus more deeply in specific research areas, through Psychological Science practicum experiences and their thesis projects. Notably, practicum projects are not always completed with the thesis mentor but sometimes with another faculty/professional from the Psychology department and beyond with whom the student's interests and desire for growth align. Most of the PS faculty choose to supervise either undergraduate or graduate independent research projects or research each year. Independent research under these faculty member's direction have ranged from conducting a systematic review and training guide for supporting neurodivergent individuals, engaging in scale development and refinement, to conducting an eye-tracking study to demonstrate prospective memory ability. In Fall 2021, the PS program introduced 3 hours of PSY 5370, *Practicum in Psychological Science*, as a program requirement to replace PSY 5997 and PSY 5998, although we mistakenly registered one student in PSY 5998 in Spring 2023 which would count for PSY 5370 credit.

Table 2.4. Recent Enrollment of PS Students Completing PSY 5370/5997/5998/5999

Course	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
PSY 5370	NA	NA	4	15	7
PSY 5997	0	2	5	0	0
PSY 5998	6	3	0	1	0
PSY 5999	19	13	21	23	12
Total	**25**	**18**	**26**	**24**	**12**

Section 3: Student Experiences

Criterion 3: Student Experience
3.1 The program ensures a critical mass of students to ensure an appropriate group of peers.
3.2 The program provides students with the opportunities to regularly evaluate the curriculum and faculty relative to the quality of their teaching effectiveness.
3.3 The program provides adequate professional development opportunities, such as encouraging membership in professional associations, participation in conferences and workshops, and opportunities for publication.
3.4 The program provides adequate enrichment opportunities, such as lecture series, to promote a scholarly environment.
3.5 The program seeks to include diverse perspectives and experiences through curricular and extracurricular activities.
3.6 Students have access to appropriate academic support services.

The reputation of both of our graduate programs attracts diverse applicants from all over the world. This reputation reflects the quality of our curricular offerings and research opportunities, and the quality of our student experience. The following subsections illustrate why this is the case.

General Academic Support Services (3.6)

Section III of the undergraduate report details the student evaluation of faculty procedure, which is followed for all undergraduate and graduate courses, as well as enrichment opportunities available to all students in our department. In addition, all UTC students have excellent access to full-text journals through several online databases. When students do not have direct access to the full text of a journal article of interest, our interlibrary loan service can generally secure and share the full text within 24 hours. Concerning other general academic support services, all UTC students have access to our Counseling Center, Career Services Center, the Center for Women and Gener Equity, the Athletic and Recreation Center, regular enrichment through activities in the fine arts and sporting events, as well as a variety of nearby campus ministries affiliated with UTC.

I-O Student Experiences (3.5)

The I-O Program Director, Dr. Cunningham, serves as the official advisor to students in the I-O program, although students are encouraged to seek advice from all I-O faculty prior to making curricular decisions. We are continuously working to maintain and improve the quality of our student experiences in the I-O program.

We have also developed a sustainable peer mentoring program through which second year students are matched to incoming first year students every August. We also have an alumni mentoring program that pairs any interested second-year student with an experienced program alumnus/alumna working in an area that aligns with the career aspirations for that student. These programs, combined with a comprehensive new student orientation, help to ensure a smooth transition into and progression through the program for our students. The peer-mentorship also helps our second-year students develop valuable competencies for their future careers.

To further facilitate interaction among students in the program, we removed some restrictions for several of our electives, enabling cross-listing of first- and second-year students in many of the electives. This provides improved access to diverse experiences and perspectives, while strengthening the overall collaborative culture of the program.

Student Enrollment (3.1)

The actual I-O program enrollment trends are summarized in the Preface section of this report (see Table P.2). These trends clearly show our consistent ability to attract and admit a healthy cohort each year. This cohort provides the critical mass of students necessary to ensure smooth and consistent operation of the I-O program. The cohort nature of our program enables us to maintain a strong, collaborative and supportive program culture. This helps us to maintain high levels of student engagement in curricular and extracurricular activities.

Related to our enrollment trends, however, it is important to note that, despite the addition of a faculty member to the I-O program, we continue to operate above a fully comfortable capacity. This conclusion is based on our student:faculty ratio, which currently stands at approximately 8:1, given the part-time program support status for Dr. O'Leary who also serves as the Psychology department head. For perspective, two of our closest and primary competing master's level I-O programs have consistent student-faculty ratios of 4:1 or 5:1.

Student Evaluation (3.2)

Students in the I-O program sincerely appreciate (and regularly comment on) the positive, open-door culture that we maintain when it comes to sharing feedback and ideas for program improvement with program faculty. All I-O students have at least two, one-to-one meetings with the program coordinator (Dr. Cunningham) every academic year. While the primary focus of these meetings is on student advisement, there is an opportunity to discuss ideas for ways to improve the program. Similarly, the final meeting includes a more structured exit interview in which graduating students are asked to share thoughts on program strengths and weaknesses. Beginning in Spring 2024, there is also an exit feedback survey that all graduating students are encouraged to complete (there is not sufficient data to report at this time, but this will be helpful going forward). In addition to these feedback opportunities, there are, of course, the end-of-semester student evaluations of teaching administered by the university which target general perceptions of instructional quality in course settings. Most of our I-O faculty supplement these with mid-semester teaching quality evaluations and a pre/post-course assessment of the competency-based SLOs mentioned in Section 2 of this report on I-O program outcomes and goals.

Student Enrichment and Professional Development Opportunities (3.3, 3.4)

Students in the I-O program have several enrichment and professional development opportunities available to them every semester. Many of these opportunities also extend to program alumni. Each of these opportunities aligns well with the competency-focused nature of the I-O program curriculum, detailed elsewhere in this report.

First, within the required program curriculum, all students must complete at least 300 hours of supervised practicum work (to earn the six required credit hours of PSY 5360). For at least the past 15 years, students have been required to complete the first batch of these credit hours during

the summer terms between their first and second years in the program; the remaining credit hours of PSY 5360 can then be completed either in the Fall or Spring of students' second year. Most students obtain one internship and complete at least 300 hours in that position. Many of our students find that these practicum assignments convert into part- or full-time employment throughout their second year in the program. Sometimes, these positions then turn into full-time job offers post-graduation. Most of the internship sites are in local organizations, although students are encouraged to seek sites outside the immediate area. Since the COVID-19 pandemic, remote and hybrid internship opportunities are also common. Each year, a handful of our students complete at least a portion of their practicum requirement at a site outside the Chattanooga metropolitan area. Practicum sites include experienced supervision for student efforts, and students are encouraged to get involved with multiple projects or applications of their I-O knowledge and skills while working in this capacity. I-O students report that, for the most part, their practicum activities are professionally relevant and helpful to them as they work on forming personal future career aspirations. Practicum requirements for students include:

- Detailed documentation of practicum-related time and effort
- A detailed reflection paper addressing ways in which the practicum enabled or challenged students to apply their I-O knowledge, skills, abilities, or other characteristics

- At least one supervisor evaluation of student performance (using a standardized form distributed via internet survey)

- A brief presentation to the entire I-O program in which students present their experiences on practicum as well as the process by which the practicum was established/secured.

The I-O students also self-manage a student-focused professional development group, Chattanooga Area I-O Psychology Professionals (CHAIOP). This group is managed by an executive leadership team composed of a balanced mixture of first- and second-year students. Membership is optional but encouraged for all current students; generally, more than 90% of students participate. The CHAIOP group functions as an ambassador for the I-O program in the community and also develops and manages its own professional development programming throughout the academic year including job-site visits, discussions with alumni, and other relevant workshops and service activities.

Every Fall since 2008, the I-O program has also hosted the River Cities Industrial-Organizational Psychology Conference (RCIO), which celebrated its 20th anniversary in November 2024 (the first three conferences in this series were hosted by Northern Kentucky University). This recurring event provides incredible opportunities for graduate students from our program and other programs throughout the region to present research and network with students, faculty, and practitioners. The easiest way to understand the emphasis and focus of this conference series is to review the conference website and the online conference proceedings.

Students in the I-O program regularly present thesis and independent study projects at the RCIO event, as well as other research-focused conferences regionally and internationally. Other common presentation venues for I-O student and faculty research include UTC's Spring Research and Arts conference (formerly Research Dialogues), the annual conference of the Society for Industrial-Organizational Psychology (SIOP), and the bi-annual International Conference on Work, Stress, and Health. University funding to support student participation in

off-site conferences is very limited. The PSY Department does all it can to help, providing $200 to each graduate student, which generally covers conference registration. We continue to rely on generous donations of grant funds by faculty, solicited funds from various university administrative offices, student-earned travel funding through the Graduate Student Association, and donations from I-O program alumni to make conference travel and participation a reality for most of our students before they graduate. In recent years, we have succeeded in facilitating at least one SIOP conference participation for more than 97% of our students.

PS Student Experiences

Student Enrollment (3.1)

The PS program enrollment trends for 2019 to 2023 are summarized in the Preface section of this report (see Table P.3). Total enrollment has ranged from a low of 14 in Fall 2019 to a high of 21 in Fall 2022. The Fall 2024 enrollment is 18, with 11 newly-enrolled first-year students. Our faculty generally agree that we function best when we admit seven to nine students. This cohort size provides the critical mass of students necessary to ensure regular course offerings, while not exhausting the mentorship resources of the faculty. With this cohort size. we also note that students are more engaged with each other as students and also provide each other social support.

Student Evaluation (3.2)

Students in all programs have an opportunity to provide course and instructor feedback through the Student Evaluation of Teaching that occurs at the end of each semester. PS graduate students often engage with their thesis advisors and also the other faculty in the department. Faculty are generally on campus from three to five days per week and maintain an open-door policy that makes them accessible to both graduate and undergraduate students. All students have at least two 1:1 meetings with the Program Director, Dr. Shelton, every academic semester and, while the primary focus of these meetings is on student advisement, there is an opportunity to discuss ideas for ways to improve the program, as well as plans and concerns about life after completing the program. Additionally, we recently developed an entry and exit survey for PS program students to gauge their experience, although comprehensive data are not yet available.

Student Enrichment and Professional Development Opportunities (3.3, 3.4)

Students are provided a variety of enrichment opportunities throughout their academic careers through participation in activities sponsored by the Department, UTC, and external organizations. Graduate students in the PS program routinely provide support on the various grants awarded to faculty, such as Dr. Hoods's Templeton Foundation grant with Universitat Bielefeld, and Dr. Shelton's Bingocize and Mental Research Institute grants.

The Department has continued its monthly research "brown bags" which were initiated in Fall 2017. These meetings enable faculty and students to present their current research projects to fellow PS graduate students and departmental faculty. While I-O graduate students are always invited to attend, they are often engaged with internships and employment during the scheduled times. To further encourage enrichment, we have been able to host a guest presenter at least once per semester.

In addition to engaging in grant-writing and data-collection activities, our students are regularly encouraged to present their work at professional conferences. As indicated, 98% of our PS

students presented their research at least once at a regional, national, or international conference. These conferences included the Southeastern Psychological Association (SEPA), the American Psychological Association (APA), Psychonomics, the International Neuropsychological Society (INS), Cognitive Aging Conference, the Society for Personality and Social Psychology (SPSP) conference, the American Psychology-Law Society conference, and others. In addition, the university sponsors an annual Spring Research and Arts Conference (previously called ReSEARCH Dialogues) in which students and faculty can share their research across disciplines in poster or presentation format. The department provides moderate financial reimbursement, generally $200 annually, to graduate students who travel to present at conferences, but this funding is not guaranteed and is subject to budgetary constraints. As such, support for attending conferences often comes through generous donations of grant funds by faculty and encouraging students to apply for SEARCH awards and other funding sources.

Section 4: Faculty

Criterion 4: Faculty
4.1 All faculty, full-time and part-time, meet the high standards set by the program and expected SACSCOC guidelines for credentials.
4.2 The faculty teaching loads are aligned with the highly individualized nature of graduate instruction, especially the direction of theses or dissertations.
4.3 The faculty strives to cultivate diversity with respect to gender, ethnicity, and academic background, as appropriate to the demographics of the discipline.
4.4 The faculty engages in regular professional development that enhances their teaching, scholarship and practice.
4.5 The faculty is actively engaged in planning, evaluation and improvement processes that measure and advance student success.
4.6 The program uses an appropriate process to incorporate the faculty evaluation system to improve teaching, scholarly and creative activities, and service.

Within the Department of Psychology, all faculty support all programs (undergraduate and graduate level). That said, faculty hired with graduate-level teaching responsibilities are generally aligned most strongly with either the I-O or the PS program. The following subsections summarize information about the quality, productivity, evaluation, and service of our faculty that is common to both PSY graduate programs.

Faculty Evaluation (4.1, 4.5, 4.6)

Faculty teaching is evaluated by students at the end of every semester through the Student Evaluation of Teaching. Overall performance for all full-time faculty within the University of Tennessee at Chattanooga is evaluated annually through the Evaluation and Development by Objectives (EDO) process. The EDO process involves two steps: 1) faculty describe a set of objectives around their teaching, research, and service activities during the coming year, and 2) faculty self-evaluate their performance by discussing achievement of their teaching, research and service objectives. While not mandated, faculty who engage in graduate-level teaching and mentorship responsibilities specifically highlight goals and achievements around their graduate-level involvement alongside goals for their undergraduate-level teaching. Both the objective-setting and performance evaluation steps of the EDO process are reviewed by the Department Head, and he/she responds with comments and suggestions for revision, when appropriate. Upon finalizing the EDO documents, the Department Head assigns faculty to one of three categories: meets expectations for rank, needs improvement for rank, or unsatisfactory for rank. The Department Head can also nominate faculty for a fourth category: exceeds expectations for rank. This nomination is submitted to the Dean and is subject to endorsement from the Dean, Provost, and Chancellor. Over the past five years, all the faculty in our department have fully met or exceeded expectations.

Pre-tenure faculty are also assessed during an annual reappointment review that is conducted by the Department Head who then makes a recommendation to the Dean of the College of Arts & Sciences each year that the faculty member is on the tenure track. The Reappointment Folder Checklist outlines the required documentation, which includes a current CV, a teaching statement with accompanying course evaluations, and a research statement. Faculty being

considered for reappointment are encouraged to highlight their involvement with the graduate programs in their dossier. In the year of the mid-probationary review, generally year three, the department's Reappointment, Tenure, and Promotion (RTP) committee, currently co-chaired by Dr. David Ross and Dr. Ralph Hood, also conducts a separate review. All tenured faculty, except for the Department Head, are members of the RTP committee. After reviewing the mid-probationary dossier, the RTP committee votes to make a reappointment recommendation which they forward to the Department Head of Psychology, the College of Arts & Sciences RTP committee, and the Dean of the College of Arts & Sciences. A schedule of the reappointment process is provided at this link.

UTC introduced a post-tenure review (PTR) process beginning with the 2019 Academic Year, which requires a college-level committee review of all tenured faculty members' continued performance every six years after their most recent promotion. This also includes an external review of the faculty member's research productivity. To date, every eligible faculty member in the Department of Psychology has successfully completed the process without issue.

Faculty Credentials, Diversity and Experience (4.1, 4.3, 4.5)

All full-time tenured or tenure-track faculty in the Department of Psychology are current members of UTC's graduate faculty. Conditions of membership to the graduate faculty include providing evidence of an appropriate terminal degree, evidence of on-going scholarly and professional work, documented commitment to graduate education, and a commitment to professional and ethical behavior. Graduate faculty membership is necessary for supervising theses or being a member of a thesis committee.

With respect to evidence of an *appropriate terminal degree*, the Department of Psychology has, as of Fall 2024, 15 full-time faculty, 5 align with the I-O program and 10 align with the PS program. All 15 graduate faculty have PhD degrees, 4 in I-O (Black, Cunningham, Guo, Deepak), 1 in Organizational Behavior (O'Leary), 1 in Clinical Psychology (Howell), 2 in Applied Developmental Psychology (Walker, Eschman), 3 in Cognitive and Behavioral Neuroscience (Clark, Teaford, Wilhelm), 2 in Social Psychology (Hood, Ross), and 2 in Experimental Psychology (Shelton, Warren). The various areas of expertise among our faculty help to ensure an excellent breadth to the research and teaching environment within the department.

With respect to evidence of *on-going scholarship and professional work*, **Section IV** of the Undergraduate Report clearly demonstrates that our faculty in the Department of Psychology represent various expertise areas and are all clearly dedicated to excellence and continued development in teaching, scholarship, and related service activities. A brief description of each faculty member's work and interests is fully explored in Section 4.1 of the Undergraduate Report as well as a summary of the faculty's research outputs, external funding, and service contributions.

The ethnic diversity of the faculty supporting our graduate programs has continued to grow over the review period, with a female majority that reflects both undergraduate and graduate student enrollment in Psychology.

Faculty Professional Development Opportunities (4.4, 4.5)

Although UTC in general, and our department more specifically, can provide only limited financial support for participation in professional organizations and conferences, our faculty regularly engaged in professional development activities, including travel and participation in professional organizations, conferences, workshops, and other learning activities.

Because our annual travel budget per faculty member is (and has been for some time) limited to $500, faculty often pursue and have secured Professional Development Grants from the university, used personally generated F&A funds, and self-supplemented travel and registration for ongoing professional development. Despite these funding limitations, most faculty regularly attend professional meetings. The department also attempts to support as fully as possible (from other parts of the operating budget) faculty travel to one national conference per year. As examples, Dr. Hood regularly presents with his students at the International Association for the Psychology of Religion, the Society for the Scientific Study of Religion, and the Conference of Religion and Spirituality (Division 36, American Psychological Association). Drs. Cunningham, Guo, and Black also regularly present with their students at the Society for Industrial and Organizational Psychology. Dr. Cunningham and Dr. Black also present regularly at the bi-annual Work, Stress, and Health conference. Dr. Howell presents at the annual meetings of the Anxiety and Depression Association of America. Dr. Shelton has presented at the Society for Applied Research in Memory and Cognition and the Southeastern Psychological Association (SEPA). Dr. Walker and Dr. Warren have also presented at SEPA, while Dr. Warren has presented at the American Psychology of Law Society annual conferences. Details on conference presentations are included in the Undergraduate Self-Study.

In addition to professional development associated with our individual research expertise areas, many faculty in our department have also taken advantage of professional development opportunities provided through the university (mostly funded by the university's Office of Research and Sponsored Programs and the Walker Center for Teaching and Learning).

I-O Program Faculty (4.1)

As noted earlier, there are currently five faculty in the PSY department who are primarily aligned at the graduate level with the I-O program (Black, Cunningham, O'Leary, Guo and Deepak) and all have their PhDs. Two of these are junior faculty, Dr. Feng Guo, and Dr. Pratibha Deepak, hired in 2022 and 2023 respectively. Both are tenure-track Assistant Professors. Dr. Kristen Black received tenure and was promoted to Associate Professor in Fall 2023. Dr. O'Leary is also a tenured Associate Professor and Dr. Cunningham is a tenured Professor.

Faculty Workload (4.2)

With the exception of Dr. O'Leary who receives a two-course release per semester as department head (although he regularly carries an overload to cover essential courses), and Dr. Cunningham who receives a one-course release per semester as Director of the I-O program, I-O faculty teach a 3-3 load. I-O faculty members generally teach at least two of the required courses in the I-O curriculum annually and often one or more graduate-level electives. The current distribution of courses per faculty member is evident in the schedule summarized in the second part of Appendix A. Courses are assigned to faculty based on expertise and interest.

PS Program Faculty (4.1)

There are currently ten faculty in the Department of Psychology who most clearly align with the PS program (Clark, Eschman, Hood, Howell, Ross, Teaford, Shelton, Walker, Warren, and Wilhem). During the review period, the PS program faculty has grown by one and the composition of the faculty has changed somewhat, with four departures and five additions. A summary of the changes is available in our undergraduate self-study document.

Faculty Workload (4.2)

The faculty teaching load within the PS program is consonant with the highly individualized nature of graduate instruction, especially the demands associated with supervising theses. To this end, our department head is quite flexible and creative in assigning teaching loads, but the Psychology faculty all hold a teaching load of four courses per semester, with the typical semester load consisting of two single section courses (either at undergraduate or graduate-level), and one double section undergraduate course. This flexibility in allowing larger sections to count as two sections in our overall load considers the extra requirements involved in teaching graduate courses and the sometimes-extraordinary amount of time required to supervise theses and independent studies. However, it is pertinent to note that supervision of graduate (or undergraduate) students in independent study, research, or thesis does not factor into our teaching loads as there is no mechanism within the college or university to facilitate this.

All graduate faculty associated with the PS program teach, and excel at teaching, both undergraduate and graduate courses. Beyond the teaching load, all PS faculty maintain an active research lab supported by graduate students. Many PS faculty are active reviewers and editors for professional journals, as well as serving on grant review committees. The faculty have community consulting activities that bring them into direct contact with the needs of the region in education, medical, and legal settings.

Faculty Scholarly Activity Specific to PS Specialty

All PS faculty regularly engage in scholarly activities that include attending conferences, presenting papers, and publishing journal articles. Moreover, most faculty involve their graduate students in these scholarly activities, often encouraging graduate students to present and/or publish as first-author on the knowledge products. Details are provided in the **Undergraduate Self Study**.

In addition to presenting and publishing, our PS faculty are also highly engaged in the pursuit of research funding, both internally and externally. Despite net reductions in the availability to grant funds to institutions like UTC, our faculty has been highly productive in seeking grants to support the research of our research programs. As highlighted in the table entitled *PSY Grants AY 2019-2023* in the Undergraduate Review, a total of 26 external funding applications were submitted during the review period where a PS faculty member or student was listed as PI or co-PI. These applications requested funds exceeding **$9.6 million**. Of these, 16 external grants were awarded to our PS faculty in the amount of **$2.9 million**. Where allowed by the funding mechanism, we do request external funds for the support of graduate assistantships, provision of tuition waivers and graduate student stipends, and when budgets are small, applications generally request more restricted funds to allow for hiring graduate students on an hourly basis to support the research project.

Section 5: Learning Resources

Criterion 5: Learning Resources
5.1 The program regularly evaluates its equipment and facilities, encouraging necessary improvements within the context of overall institutional resources.
5.2 The program has access to learning and information resources that are appropriate to support teaching and learning.
5.3 The program provides adequate materials and support staff to encourage research and publication.

Both graduate programs in PSY share the same learning resources and all graduate students have access to these resources. Please refer to Section V of our undergraduate report for a summary of the offices, laboratories, classrooms, technology, library resources, and meeting rooms that support both of all of our programs. In addition to the general learning resources available to all PSY department faculty, there are a few specific details worth noting that particularly affect our graduate programs.

Equipment and Facilities

We have all the available statistical software needed to perform the statistical analyses appropriate for the program. Library resources are adequate (see details in the Undergraduate Self-Study), including an automated interlibrary loan facility (ILLIAD) and electronic delivery of many of the borrowed articles and book chapters. The library staff is very helpful, receptive, and forward-looking.

There are no dedicated offices that I-O or PS graduate students can call their own either collectively or individually. However, many are able to work within one or more of the faculty lab spaces. There is a dedicated graduate student lounge centrally located within the PSY department office suite and students use this on a daily basis for meetings, studying, and general socializing between classes.

The department (primarily through the university system's IT licenses and faculty software purchases) has sufficient computer resources to train students appropriately for use in teaching, statistical analysis, and data collection purposes. The core graduate coursework includes training in SPSS, with the opportunity in electives to develop advanced skills with SPSS and Excel.

Students in PS, and those I-O students completing a thesis, are encouraged to generate some of the funds necessary for their thesis using the Scholarship, Engagement, the Arts, Research, Creativity and Humanities (SEARCH) award program . This competitive, university-wide program allows students to gain experience in preparing a grant proposal and in obtaining up to $1,000 in support of their work. During the review period, 31 student projects, supervised by 12 unique faculty members from the Department, secured over $28,000 in funding through this mechanism. These awards to students in the Department of Psychology account for almost **30%** of the 104 awards given across the entire university during the review period.

Table 5.1. Summary of SEARCH Grantees (AY 2019-2023)

Year	Student Name	Project Title	Faculty Sponsor
2019	Aishani Eggenberger	Miranda Rights Comprehension in Juveniles and Adults	Dr. Amye Warren
2019	Leanza Greenlee	Mock Jurors' Perceptions of "I Don't Know" Statements in Child Testimony	Dr. Amye Warren
2019	Adeola Ijiyode	A Retrospective Investigation of Racial-Ethnic Socialization	Dr. Amye Warren
2019	Braden Sanford	Envisioning Success: The Moderating Effects of Episodic Future Thinking on Successful Goal Planning	Dr. Jill Shelton
2019	Molly Sloan	Parental Influence on Emotional Intelligence and Self-Regulatory Abilities of Adults Raised in Single-Father Households	Dr. David Ferrier
2019	Chelsea Wymer	Investigating Perceptions of Unconscious Bias / Awareness Training: An Applied Study	Dr. Alex Zelin
2019	Lydia Fogo	Do workplace aesthetics matter? Testing the moderating effects of need for aesthetics and general mindfulness	Dr. Chris Cunningham
2020	Talley Bettens	Do juveniles and adults use different lying strategies during interrogations	Dr. Amye Warren
2020	Jacquelyn Keaton	Using the Job Demands-Resources model to predict burnout in police officers: A cross-cultural comparison of civilian portrayals	Dr. Kristen Black
2020	Sarah Swaney	Factors Impacting the Decision to Report Sexual Assault: A Qualitative Study	Dr. Hannah Osborn
2020	Stephanie Wells	Minimizing the Impact of Unfilled Goals on Mind Wandering and Anxiety	Dr. Jill Shelton
2020	Camille Wheatley	Are You Busy Right Now An Analysis of Stressor Appraisal and Interruptions to Workflow	Dr. Kristen Black
2021	Akera Williams	Gen Z vs Boomers as Jurors: Do Age and Media Type Influence the Effects of Pretrial Publicity on Verdicts?	Dr. Amye Warren
2021	Audry Darnbush	Emotion Recognition in Individuals with Social Anxiety and Traumatic Stress: Loving-Kindness Meditation as an Intervention	Dr. Ashley Howell
2021	John Dickinson	Effects of Sexual Orientation and Age on Perceptions of the Bereaved	Dr. Ruth Walker
2021	Melissa Materia	Does Cognitive Control Affect Successfully "Sandbagging" of Concussion Symptoms?	Dr. Amanda Clark
2021	Laura Waldron	When Helping Hurts: Identifying unique stressors and recovery systems related to burnout in nonprofit workplaces	Dr. Kristen Black

Year	Student Name	Project Title	Faculty Sponsor
2021	Stephanie Penpek	The Effects of COVID-19 on Employees with Chronic Illness	Dr. Kristen Black
2022	Emma Vosika	Identifying Personal Energy and Recovery Patterns and their Impact on Well-being	Dr. Chris Cunningham
2022	Audrey Pennington	Sexual Harassment in an Overlooked Occupation: Experiences of CNA's and the Influence of Nurses	Dr. Alex Zelin
2022	Anna Pusser	The Ecological Validity of Prospective Memory Experimentation	Dr. Jill Shelton
2022	Lauren Strickland	The Effect of Childhood Adversity on Subjective and Objective Test Anxiety and Working Memory Task Performance	Dr. Amanda Clark
2022	Savannah Woods	Testing Shame as a Moderator of Childhood Trauma Exposure and Social Submissive Behavior in Young Adulthood	Dr. Ashley Howell
2022	Jonathan Dinsmore	Numinous Luminosity: A Scale Development and Mixed-Methods Construct Exploration	Dr. Ralph Hood
2022	Brittany Ikner	Investigating the Role of Emotional Stability in 'Unplugging' from Work	Dr. Kristen Black
2022	Sophia Vlass	Inherent Work-Nonwork Demands and Self-Assessment of Potential Conflicts	Dr. Chris Cunningham
2023	Julia Anglin	Developing and Validating a Measure of Workplace Recovery Motives	Dr. Kristen Black
2023	Ciara Carl	Evaluating the Intersection of Gender and Age on Potential Hiring Bias	Dr. Ruth Walker
2023	Claudia Colpo	Effects of Physical Intimate Partner Violence and Avoidant Coping Mechanisms on Working Memory Among Young Adults	Dr. Tomorrow Arnold
2023	Amira Marquez Moreno	Understanding the Experience of Immigrant Workers: A Qualitative Examination of Work Hazards, Desired Resources, and Barriers to Achieve Optimal Well-Being	Dr. Kristen Black
2023	Skylar Oxford	Can Instructions Improve Mock Jurors' Memory of Trial Information and Reduce the Negative Impact of Pretrial Publicity?	Dr. Amye Warren

Section 6: Support

Criterion 6: Support
6.1 The program's operating budget is consistent with the needs of the program.
6.2 The program has a history of enrollment and/or graduation rates sufficient to sustain high quality and cost-effectiveness.
6.3 The program is responsive to local, state, regional, and national needs.
6.4 The program regularly and systematically collects data on graduating students and evaluates placement of graduates.
6.5 The program's procedures are regularly reviewed to ensure alignment to institutional policies and mission.

We address some of the evidence for Support with respect to each graduate program, separately. The two exceptions to this pertain to the dimensions of Support Staffing and Alignment with Institutional Policies.

Support Staffing (6.1)

The Department of Psychology was ably supported throughout the review period by our Business and Academic Operations Coordinator, Angelique Cook, and our Office Manager, Judy Gallagher. This administrative support is consistent with the resources we have had in the past. Angelique and Judy do an excellent job of supporting the department with the limited resources we have available. Angeliques lifts advisement holds for our graduate students, processes course overrides when necessary, manages internal and external grants that support the graduate students' research, and maintains the departmental books, travel reimbursements, and other expenses. Judy provides day-to-day support for students and faculty regarding schedules, departmental communication, printing, and procurement. We are also fortunate to have a work-study student who supports the department 10 hours per week during the fall and spring academic semesters. We consider these resources to be adequate.

Alignment with Institutional Policies (6.5)

Both graduate programs in our department adhere to all institutional policies regarding admission and management of graduate student progress toward graduation. With respect to admission, both graduate programs in our department routinely exceed (by a wide margin) the university and graduate school minimum requirements for undergraduate GPA. Our admissions procedures are also among the most comprehensive on campus. The net effect is that our two graduate programs have a disproportionate number of the strongest graduate students on campus.

With respect to management of graduate student progress, both graduate programs adhere to graduate school academic and nonacademic continuation standards. In addition, all students in our programs submit a Program of Study or have an updated online MyMocsDegree profile by the end of their first semester. Progress toward this plan is monitored by the respective graduate Program Director each semester, and the final degree audit process is initiated by the graduate program coordinators in conjunction with the graduate school (as per institutional policy).

I-O Program Support

Over the review period, enrollment in the I-O program varied slightly, from a high of 37 in AY 2023 to a low of 34 in AY 2020 and AY 2021. Graduation and retention rates remained at or near 100%.

Operating Budget (6.1)

Although the broader psychology department has an operating budget each year through the College of Arts & Sciences, this budget is extremely limited and inflexible. The lack of a program-specific budget has created challenges when it comes to recruiting and retaining students and faculty. Lack of dedicated funds to support the I-O program has also generally limited our ability to grow as a program and take advantage of opportunities for consulting, conference travel and workshop attendance, and program-related events.

Since taking over as program coordinator in 2015, Dr. Cunningham has worked to increase the amount of flexible funding available to support I-O program operations. This includes the following:

- Shoring up our annual funding model for the RCIO conference series to the point where this program is nearly turning a profit that can support other I-O program educational initiatives.
- Creating the Biderman-Ourth I-O scholarship which will become fully vested for Fall 2025.
- Increasing the connection to the program's vast alumni base and the number of yearly connections with alumni through annual update messages, the annual networking social event, our LinkedIn page, program get-togethers at our annual SIOP conference, and our annual conference series.
- Increasing the relevance of our student-led professional development group (CHAIOP), which sustains itself and other program-related events through student-paid membership dues.
- Increased consulting projects in the community, for which at least one graduate student from the program is always linked for hourly pay associated with work on the project.

The I-O program also has a long and established reputation throughout UTC for providing high quality talent to support the functioning of many critical areas through GA placements. Students in the I-O program compete every year for these positions but have a tremendous track record of securing half and full GA positions. This is summarized in the following table for the past few years, to illustrate this trend:

Table 6.1. Summary of I-O half and full GA Placements (SP 2019 to SP 2024)

Office/Department	# students over all semesters
Office of Research Integrity	11
Walker Teaching Resource Center	24
Honors College	14
Dean of Students	1
Strategic Enrollment Technology	3

University Career Services/Career Connections	10
Office of Civic Engagement	3
Undergraduate Research and Creative Endeavors	14
Office of Student Conduct, Outreach, and Support	4
Office of Research and Sponsored Programs	9
Office of Planning, Evaluation and Institutional Research	8
Center for Women and Gender Equity	7
Office of Student and Family Engagement	5
Housing and Residential Life and/or Greek Life	11
Office of Student Engagement	2
Human Resources	1
Library	4
Psychology department (includes grant/contract positions)	92
Other (non-Psychology) academic departments/programs	17

In a typical year, we may place between 6 and 8 I-O students in administrative GA positions somewhere on the UTC campus which is of mutual benefit. Our students receive funding and the other departments receive dependable and competent employees to fill a variety of needs.

The main downside for I-O students who take administrative GA roles is that these students are often so busy with GA-related work, that they cannot be as involved with I-O research and other projects within the program as they would like. There is also a constant recruiting challenge, every year, given that GA positions are not made available or finalized until after admissions decisions are made (often not until Summer, long after students must make commitment decisions). This creates unnecessary stress and recruitment challenges that could be ironed out with more strategic assignment of GA positions and potentially alternative funding mechanisms that enable the assignment of GA roles at the time an admissions offer is made. On balance, though, the availability of GAs, any number and any kind of GAs, helps us to recruit and retain top talent for the I-O program.

Enrollment and Graduation (6.2, 6.4)

As noted earlier in this report, the graduate programs in the Department of Psychology suspended the use of the GRE for admissions during the COVID-19 pandemic period and have continued this practice. Based on our experience to date, the removal of the GRE from the process has not impacted the quality of our students while it appears to have improved both the number of applications and the demographic diversity of the applicant pool. The current criteria for admission are described on the I-O program's admissions criteria webpage, and include successful completion of a BA or BS degree and critical undergraduate courses, at least two recommendation letters, a CV and a personal statement of purpose. Finalists for admission will also complete an internet-based video interview with the Graduate Program Director, who is responsible for the ultimate admissions decision. Refer to the earlier summary of admissions data (Table P.2) for a sense of the overall quality of the students who have been admitted in recent years.

Probably the best evidence for the consistent application of retention standards in the I-O program is the low attrition rate for the program. The I-O program attracts more than half of its students from out-of-state. These students have typically examined several competing programs and have perhaps applied to two or three of them. When they arrive here, these students are committed to completing the degree. For that reason, very few have left the program. Within the past five years, there have only been one or two departures from the program linked to personal or family medical emergencies.

Responsiveness (6.3, 6.4)

Initially, the I-O program served as a vehicle for individuals already employed in what were then called personnel departments. This degree program was designed then to meet the needs of such working students to further their education and to compete for increased salaries by having an advanced degree. The program maintained that kind of focus throughout the 1980s and into the early 1990s. This focus was particularly evident in the offering of I-O coursework to both on-campus students and to managers at companies in neighboring Cleveland, TN, beginning in 1985. During this period, two parallel I-O tracks operated – one for students attending on-campus at UTC and the other for students attending off-campus classes in Cleveland. The off-campus track continued through the 1991-1992 academic year. During those years, the mixture of students enrolled in the program had always included some full-time students, but that changed by 1993 or so, when all but only one or two individuals entered the program as full-time students who had just completed their undergraduate degree. This student demographic has remained essentially constant since the early 1990s, with approximately 80-90% of each incoming class defined as full-time students who recently received their bachelor's degree. From the beginning, all required courses and virtually all elective courses in the program were offered in the evening.

In recent years, the I-O program has worked very hard to ensure its continued relevance and applicability within the Chattanooga region and the broader global economy. While some courses are still taught in the evening, there are now more courses taught during the day, generally in the afternoon, all of which are in a one-day-a-week, two-and-a-half-hour format, The program is held in high regard by all familiar with it. All our core faculty are engaged not only as academics, but also as consultants and practitioners in a variety of areas within the field. All our faculty are also involved in a variety of regional, national, and international service roles, which help to increase our awareness of professional needs, as well as the broader visibility of our program.

The I-O program has continued its efforts to provide ongoing education and support to our alumni and other members of our broader community. Two examples of this are our annual RCIO conference series and our online working papers series, both described earlier in this report.

PS Program Support

Students in the PS program work with their mentor as their primary advisor and confer regularly with the PS Program Director. Together, they plan a program of study that prepares each student for their degree objectives. PS students are encouraged to discuss their plans with other faculty to broaden their perspective. Virtually all students complete some of their course work through

personalized instruction through PSY 5370, *Practicum in Psychological Science* (see Table 2.2 for details regarding enrollments). In these personalized courses, focused readings are assigned to add depth to the students' content knowledge, typically in support of their thesis research. Students are also encouraged to participate in research projects beyond their theses and PSY 5370. In the Fall of their second year, mentors and students systematically consider the student's next step. Those headed to doctoral programs are helped to select appropriate universities, and those heading to an applied setting are supported in their identification of an appropriate area and development of application materials.

Operating Budget (6.1)

The PS program does not have an independent budget that can be used to support the recruitment, retention, and success of our students. This lack of dedicated funds has made planning for recruitment initiatives challenging. While we are often able to find recruitment options when funds allow, we would be much more successful in our endeavors if we were able to forecast funds and plan accordingly.

Lacking a specific fiscal year budget also affects our ability to forecast GA allocations to students within our program. We are unable to offer graduate assistantship contracts at the time of student acceptance; indeed, GA contracts are often not available until Summer, long after students must make commitment decisions. This has led several of our best applicants to reject our offer of admission in favor of a similar institution who could guarantee funds. Despite our challenges in forecasting funds, many of our graduate students secure at least partial funding, either within the department or through graduate assistantships in other colleges and/or administrative offices.

Enrollment and Graduation (6.2, 6.4)

In response to the COVID-19 pandemic, the graduate programs in the Department of Psychology suspended the use of the GRE for admissions, a practice we have continued. Based on our experience to date, the removal of the GRE from the process has not impacted the quality of our students while it appears to have improved both the number of applications and the demographic diversity of the applicant pool.

During the review period, the PS program admitted and enrolled between 4 and 10 students annually, with a median of nine, which is in the desired range. This cohort size is consistent with the mentoring philosophy that drives the curriculum. In most years, the students come equally from UTC and other colleges and universities in the region and around the country. Due to the limited availability of funds, we do very little advertising for the PS program, so students are attracted by the interests of the faculty. To ensure stability in our cohort size and ensure high quality students, we have developed a stronger web presence and emphasized to our faculty the importance of recruiting strong students capable of supporting their research and teaching.

Generally, the students who enroll in the PS program have a strong academic background. However, it is important to note that the students in our program are often those who are interested in pursuing doctoral training but were not successful in gaining admission to such a program immediately after earning their undergraduate degree. PS students during the current review cycle had GPAs ranging from 3.02 to 4.0.

The students who come into our program with stronger formula scores are not always the ones who complete the program with higher grades, more publications, or more success in PhD program applications. Instead, it seems that perseverance, and fewer external demands (jobs, family obligations, health concerns) are more predictive of success in our program. That said, we continue to implement procedures to increase timely completion. These procedures include a graduate student evaluation each semester that is used as an advisement tool for both the advisor and the student. We also require completion of PSY 5140 to provide detailed information on the thesis process and timeline to keep students on track.

During the AY 2019-2023 cycle, annual completion rates in the PS program averaged about 88%. During the review period, 40 students could have qualified for degree completion and **27** of them graduated. Of those 13 who had not graduated by Spring 2024, four graduated in Summer 2024. The other 9 left either due to extenuating financial or familial circumstances or have chosen another path due to loss of interest in pursuing their MS degree. The Fall 2019 total enrollment of 14 included three students in their third year in the program. All 18 PS students enrolled for Fall 2024 are either in their first or second year in the program, with one having dropped during the semester for personal reasons.

Responsiveness (6.3, 6.4)
There have been notable changes in the competitiveness of the academic job market and perhaps even more so, the competitiveness of PhD programs. With this in mind, we continued to integrate new literature, new methods, and a broader array of statistical packages into our curriculum to ensure that our graduates are prepared to compete at the highest level.

With respect to responsiveness to the needs of the university and community beyond, we believe that PSY 5020, Teaching of Psychology, where our graduate students become well versed in the scholarly literature on effective college teaching and get practical experiences (syllabus creation, test design, rubric development, lecture development and delivery), leads to more effective college educators. After completing their first year (at least 18 hours) and the PSY 5020 course, our students can teach their own sections of PSY 1010 Introduction to Psychology that are coordinated by a full-time member of the faculty. Having a small army of excited and prepared educators for our PSY 1010 course allows us to offer more, smaller, sections to better serve our undergraduate students, and provides excellent teaching experiences that our PS students carry out to the community (several former PS students are teaching in community colleges) or to their doctoral programs. Given the shift in higher education toward fewer tenure-track positions and more lecturer lines, our graduate student educators are well prepared for this changing market. For those who do pursue doctoral work, many PS graduates report that taking this course and teaching PSY 1010 as master's students enables them to obtain a GTA or to waive a similar teaching preparation course required in their doctoral program to begin teaching immediately.

Our graduate program is also making a lasting impression on the greater Chattanooga community through the research projects our students champion. As practicum is required in the PS program, our students often engage in research with faculty at other universities, in other colleges at UTC (e.g., College of Health, Education, and Professional Studies, College of Engineering and Computer Science), university staff (e.g., Disability Resource Center, Student Support Services, Center for Wellbeing), or organizations in the community (United Way, Creative Discovery Museum, Chattanooga Autism Center, Chattanooga Zoo, Tennessee

Aquarium, Siskin Hospital for Rehabilitation, Erlanger Hospital, Life Care Centers of America). These practicum opportunities allow students to conduct research and program evaluations. Greater focus nationally on accountability and documenting outcomes means that the research skills we focus on in our program are highly valued.

Appendices

Appendix A: Current I-O Program Curriculum Map

Typical course scheduling for I-O program (* = required):

	Fall (12 hrs)	Spring (9 hrs)
Year 1	Core: • *5060 • *5100 • *5160 Elective options: • 5020 • 5250 • *5406* • Other approved elective	Core: • *5130 • *5270 Elective options: • 5140 • 5210 • *5300 • 5400 • Other approved elective
	Fall (12 hrs)	Spring (9 hrs)
Year 2	Core: • *5120 • *5200 Elective options: • 5040 • 5220 • 5250 • 5300 • 5360 • 5510 (if available) • 5999 • Other approved elective	Core: • *5260 • *5300 Elective options: • 5210 • 5360 • 5400 • 5520 • 5999 • Other approved elective
	Summer	
Between Y1 & Y2	• *PSY 5360 - Practicum in I-O Psychology (Cunningham) • Optional Elective (TBD)	

Course names and the scheduling plan appear in the table below. Detailed description of the courses appear in Appendix E.

Current I-O Course Scheduling Plan

Fall (min target = 9 hrs)
- PSY 5020 - Teaching of Psychology (required to be a TA or instructor UTC) (Y1)
- PSY 5040 - Qualitative Methods for Research and Evaluation (Y2)
- *PSY 5060 - Organizational Psychology (Y1)
- *PSY 5100 - Statistics and Research Methods in Psychology I (Y1)
- *PSY 5120 - Employee Performance and Development (Y2 recommended/Y1 option)
- *PSY 5160 - Human Resources Training (Y1)
- *PSY 5200 - The Uses of Groups in Work Organizations (Y2)
- PSY 5220 - Introduction to People Analytics
- PSY 5250 - Business and Analytics skills for I-O Professionals (Y1/Y2)
- *PSY 5360 - Practicum in I-O Psychology (Y2)

- *PSY 5406 - Introduction to I-O (required for Y1 w/o I-O intro course OR alt summer option)*
- PSY 5510 - Advanced Methods/Stats I (Y2)
- PSY 5999 - Thesis (Y2)

Spring (min target = 9 hours)
- *PSY 5130 - Statistics and Research Methods in Psychology II (Y1)
- PSY 5140 - Advanced Research Design (optional, encouraged for those with minimal research experience) (Y1)
- PSY 5210 - Occupational and Organizational Health (Y1/Y2)
- *PSY 5260 - Organizational Development and Change Management (Y2)
- *PSY 5270 - Job/Work Analysis and Personnel Selection (Y1)
- *PSY 5300 - Understanding the Psychology underlying Total Rewards (Y2 recommended/Y1 option)
- *PSY 5360 - Practicum in I-O Psychology (Y2)
- PSY 5400 - Trends and Myths in I-O Psychology Science and Practice (Y1/Y2)
- PSY 5520 - Advanced Methods/Stats II (Y2)
- PSY 5999 - Thesis (Y2)

Summer (minimum 3 credits)
- *PSY 5360 - Practicum in I-O Psychology (Y1; Cunningham)
- Optional Elective (Y1; varies)

Additional Information and Notes

Total minimum requirement for graduation: 45 hours (27 hours core + 6 hours PSY 5360 + 12 hours electives); core + practicum tagged with * in the list above. I-O students are required to register for 3 hours of practicum credit in the Summer following their first year of course work.

Periodically, special electives numbered PSY 5950r or 5960r may be offered. I-O students are encouraged to take these courses to fulfill an optional program elective. Students may also be approved by the program coordinator to take certain courses through the business school to fulfill an optional program elective.

Courses for Graduate Students Only - Only graduate students admitted to the appropriate program in Psychology may register for courses numbered 5010 or above without written permission of the instructor. A student may not use more than nine hours in any combination of the PSY 5997r and 5998r courses toward any one master's degree specialty unless specific approval is given by the Program Director. The Director must approve any use of PSY 5999r toward completion of a master's degree.

Appendix B: Current PS Curriculum Map

Typical course scheduling for PS program (* = required, + = optional):

AY	Fall	Spring
Y1	[9 hr min] * PSY 5100: Statistics & Research Methods I * PSY 5950: Advanced Studies * PSY 5020: Teaching of Psychology +/* PSY 5370: Practicum in Psychological Science	[9 hr min] * PSY 5130: Statistics & Research Methods II * PSY 5140: Applied Research Design * PSY 5960: Advanced Studies +/* PSY 5370: Practicum in Psychological Science
Y2	[9 hr min] * PSY 5999: Thesis +/* PSY 5950: Advanced Studies One or Two of the below: + PSY 5510: Advanced Methods & Stats I +/* PSY 5370: Practicum in Psychological Science + Other Approved Elective course	[9 hr min] * PSY 5999: Thesis +/* PSY 5960: Advanced Studies One or Two of the below: + PSY 5520: Advanced Methods & Stats II +/* PSY 5370: Practicum in Psychological Science + Other Approved Elective course

The typical instructors for each of these courses are included in the schedule outline on the next page. To access details about these courses, please review <u>Appendix E</u> in this report.

PS Course Scheduling Plan

Fall (min = 9 hrs)
- * PSY 5100 - Statistics and Research Methods in Psychology I (Y1; Teaford)
- * PSY 5020 - Teaching of Psychology (Y1; Shelton)
- * PSY 5950 – Advanced Studies (Y1/Y2; varies but biological/cognitive specialty)
- PSY 5510 - Advanced Methods/Stats (Y2; Walker)
- * PSY 5370 – Practicum in Psychological Science (Y1/Y2; varies dependent on faculty/Community Partner)
- * PSY 5999 – Thesis (Y2; all as needed)

Spring (min = 9 hrs)
- * PSY 5130 - Statistics and Research Methods in Psychology II (Y1; Black)
- * PSY 5140 - Advanced Research Design (Y1; Shelton)
- * PSY 5960 – Advanced Studies (Y1/Y2; varies but social/developmental/personality specialty)
- PSY 5520 - Advanced Methods/Stats (Y2; Walker)
- * PSY 5370 – Practicum in Psychological Science (Y1/Y2; varies dependent on faculty/Community Partner)
- * PSY 5999 – Thesis (Y2; all as needed)

<u>Additional Information and Notes:</u>

- PS students are not expected to enroll in course work during the Summer, but they are expected to be highly productive with thesis project to progress toward graduation on time.
- Total minimum requirement for graduation: 36 hours (21 core course hours + 6 thesis hours + 9 elective hours)
- Students may also be approved by the Program Director to take certain courses through other colleges at UTC to fulfill an optional program elective.

Appendix C: Historical I-O Curricula

As noted in Section 6 of this report, the I-O program was initially designed in the mid-1970s to meet the continuing education needs of working professionals in what were then called personnel departments. We have never lost this focus, but the focus has evolved over time, particularly through the early 1990s. This focus was particularly evident in the offering of I-O coursework to both on-campus students and to managers at companies in neighboring Cleveland, TN, beginning in 1985. During this period, two parallel I-O tracks operated – one for students attending on-campus at UTC and the other for students attending off-campus classes in Cleveland. The off-campus track continued through the 1991-1992 academic year. During those years, the mixture of students enrolled in the program had always included some full-time students, but that changed by 1993 or so, when all but only one or two individuals entered the program as full-time students who had just completed their undergraduate degree. This student demographic has remained essentially constant since the early 1990s, with approximately 80-90% of each incoming class defined as full-time students who recently received their bachelor's degree. From the beginning, all required courses and virtually all elective courses in the program were offered in the evening.

The significant recent revision to the I-O program curriculum is the reduction of required credit hours for graduation from 48 to 45 effective in Fall 2023 to provide students greater knowledge and skill depth before engaging in their practicum work and to provide greater flexibility for extended work and/or research experience in their second year in the program. We have continued to work hard to ensure the program's continued relevance and applicability within the Chattanooga region and the broader global economy. The program continues to be among the strongest masters-level I-O psychology programs, which is indicative of the careful attention paid to ensuring all our educational content is up-to-date, challenging, and relevant. **Table C1** below presents the essential curricula since the program's inception.

Table C1. Summary of I-O Program Curricula since Program Inception

AY	Class Year	Fall	Spring
1975-77	1st	PSY 506: Industrial Psychology PSY 507: Human Behavior in Orgs PSY 448: Theories of Personality BUSA 545: Behavioral Aspects of Administrations	PSY 517: Industrial Counseling PSY 521: Theories of Therapy PSY 516: Industrial Training Elective
	2nd 37 HRS	ENGR 454: Work Measurement & Design PSY 536: Practicum in Training PSY 537: Practicum in Counseling Elective	
1977-79	1st	PSY 506: Organizational Psychology PSY 507: Industrial Psychology PSY 510: Applied Research Elective	PSY 516: Organizational Training PSY 517: Organizational Interviewing PSY 509: Work Motivation Elective
	2nd 36 HRS	PSY 536: Practicum in Organizational Processes PSY 527: Current I-O Psych Elective Elective	
1979-81	1st	PSY 506: Organizational Psychology 1 PSY 507: Industrial Psychology I PSY 401: Intermediate Statistics Elective	PSY 509: Organizational Psychology II PSY 512: Industrial Psychology II Elective Elective
	2nd 48 HRS	PSY 511: Testing and Education Research PSY 516: Training PSY 517: Interviewing Elective	PSY 526: Current Topics in Organizational Psychology PSY 527: Current Topics in Industrial Psychology PSY 536: Practicum Elective
1983-85	1st	PSY 506: Industrial/Organizational Psychology I PSY 511: Research Methods Elective Elective	PSY 507: Industrial/Organization Psychology II PSY 513: Advanced Research Techniques Elective Elective
	2nd 48 HRS	PSY 516: Training PSY 517: Interviewing PSY 512: Job and Performance Measurement Elective	PSY 526: Organization Development PSY 527: Personnel Selection PSY 536: Practicum Elective
1985-89	1st	PSY 506: Industrial/Organizational Psychology I PSY 511: Research Methods PSY 536: Practicum Elective	PSY 507: Industrial/Organizational Psychology II PSY 513: Advanced Research Techniques PSY 536: Practicum Elective
	2nd 48 HRS	PSY 516: Training PSY 517: Interviewing PSY 512: Job and Performance Measurement Elective	PSY 526: Organization Development PSY 527: Personnel Selection PSY 536: Practicum Elective
1989-93	1st	PSY 506: Industrial/Organizational Psychology I PSY 511: Research Methods Elective	PSY 513: Advanced Research Techniques PSY 536: Practicum Elective Elective

AY	Class Year	Fall	Spring
		Elective	
	2nd 48 HRS	PSY 516: Training PSY 517: Interviewing PSY 512: Job and Performance Measurement PSY 536: Practicum	PSY 526: Organization Development PSY 527: Personnel Selection PSY 536: Practicum Elective
1993-2017*	1st	PSY 5060: Organizational Psychology PSY 5110: Research Methods Elective	PSY 5120: Job and Performance Measurement PSY 5130: Advanced Research Techniques PSY 5160: Training Elective Summer: PSY 536: Practicum
	2nd 48 HRS	PSY 5200: Uses of Groups PSY 5270: Selection PSY 5360: Practicum Elective	PSY 5260: Organization Development Elective Elective Elective
2023-Present	1st	PSY 5060 - Organizational Psychology PSY 5100 - Statistics & Research Methods I PSY 5160 - Human Resources Training Elective	PSY 5130 - Statistics & Research Methods II PSY 5270 - Job/Work Analysis and Personnel Selection Elective Elective
	2nd 45 HRS	PSY 5120 - Employee Performance and Development PSY 5200 - The Uses of Groups in Work Organizations Elective	PSY 5260 - Organizational Development and Change Management PSY 5300 - Understanding the Psychology underlying Total Rewards Elective
*Courses were renumbered from three to four digits in 2011.			

Appendix D: Historical PS Curricula

The PS curriculum has always required 36 credit hours and the successful proposal and defense of a thesis project. Five required courses have been part of the program since 1983 – PSY 5100, *Applied Research I*, PSY 5140, *Applied Research II*, and three sections of topical seminar-style courses PSY 5950 or PSY 5960, *Advanced Studies*. While the topic of focus differs depending on the instructor's area of expertise, PSY 5950 provides coverage of the learning, cognition, psychopathology, and/or biological, while PSY 5960 covers developmental, personality, and/or social. In 2001, PSY 5020, *Teaching of Psychology*, was added to the curriculum to address a gap in the preparation of our students. Finally, in 2012, PS students were required to complete PSY 5130, *Statistics and Research Methods in Psychology II*. Beyond those required courses, the PS program has consistently concentrated on the thesis, and 6 credit hours in PSY 5999, *Thesis*, are a required component of the curriculum. In Fall 2023, PS became an independent program, splitting off from the MS in I-O, which resulted in some minor modifications to the curriculum as outlined in **Table D1** below. This split provides greater flexibility to both programs and raises the possibility of developing specific courses that are more aligned with the goals of the PS program.

Table D1. Summary of PS Program Curricula since Program Inception

AY	Class Year	Fall	Spring
1979-81	1st	PSY 401: Intermediate Statistics PSY 510: Applied Research PSY 595r or 596r: Advanced Studies	PSY 513: Advanced Research Techniques PSY 595r or 596r: Advanced Studies Elective
	2nd 36 HRS	PSY 595r or 596 r: Advanced Studies PSY 599: Thesis Elective	PSY 599: Thesis Elective Elective
1983-2000	1st	PSY 510: Applied Research – I PSY 595r or 596r: Advanced Studies Elective	PSY 514: Applied Research –II PSY 595r or 596r: Advanced Studies Elective
	2nd 36 HRS	PSY 595r or 596r: Advanced Studies PSY 599r: Thesis Elective	PSY 599r: Thesis Elective Elective
2001-12	1st	PSY 510: Applied Research – I PSY 595r or 596r: Advanced Studies PSY 501: Teaching of Psychology	PSY 514: Applied Research –II PSY 595r or 596r: Advanced Studies Elective
	2nd 36 HRS	PSY 595r or 596r: Advanced Studies PSY 599r: Thesis Elective	PSY 599r: Thesis Elective Elective
2012-2022	1st	PSY 5100: Statistics & Research Methods I PSY 5950: Advanced Studies PSY 5020: Teaching of Psychology	PSY 5130: Statistics & Research Methods II PSY 5140: Applied Research Design PSY 5960: Advanced Studies
	2nd 36 HRS	PSY 5999: Thesis PSY 5950 or Elective Elective	PSY 5999: Thesis PSY 5960 or Elective (whichever not in Fall) Elective
2023-present	1st	PSY 5100: Statistics & Research Methods I PSY 5950 or 5960: Advanced Studies PSY 5020: Teaching of Psychology	PSY 5130: Statistics & Research Methods II PSY 5140: Applied Research Design PSY 5950 or 5960: Advanced Studies or PSY 5970 Practicum in Psychological Science
	2nd	PSY 5999: Thesis	PSY 5520: Advanced Statistical Methods II

	36 HRS	PSY 5950 or 5960: Advanced Studies, or PSY 5370: Practicum in Psychological Studies	PSY 5999: Thesis PSY 5950 or PSY 5960: Advanced Studies, or PSY 5970: Practicum in Psychological Studies Elective

Appendix E: List of PSY Courses Linked to Syllabi

Below is a list of all graduate-level courses offered within the PSY department. Each course listed includes a hyperlink that leads to the current (2024-2025) Graduate Catalog details for the course. As noted elsewhere in this report, some of these courses are specific to each of our two graduate programs, while some of these courses are open to students enrolled in either graduate program (as well as a few select and well-qualified graduate students from other, similar graduate program at UTC on a case-by-case basis).

Overlapping courses

- PSY 5020 - Teaching of Psychology
  - Syllabus
- PSY 5040 - Qualitative Methods for Applied Research and Evaluation
  - Syllabus
- PSY 5100 - Statistics and Research Methods in Psychology I
  - Syllabus
- PSY 5130 - Statistics and Research Methods in Psychology II
  - Syllabus
- PSY 5140 - Advanced Research Design
  - Syllabus
- PSY 5220 – Introduction to People Analytics
  - Syllabus
- PSY 5510 - Advance topics in Psychological Statistics
  - Syllabus
- PSY 5520 - Advanced Statistical Modeling
  - Syllabus
- PSY 5997r - Individual Studies
  - No standard syllabus
- PSY 5998r - Research
  - No standard syllabus
- PSY 5999r - Master's Thesis
  - No standard syllabus
- PSY 5010r - Group Studies
  - No current syllabus available; not offered within past 5 years

Primarily I-O courses

- PSY 5060 - Organizational Psychology
  - Syllabus
- PSY 5120 - Employee Performance and Development
  - Syllabus
- PSY 5160 - Human Resources Training
  - Syllabus
- PSY 5200 - The Uses of Groups in Work Organizations
  - Syllabus

- PSY 5210 - Occupational and Organizational Health
  - Syllabus
- PSY 5250 - Core Business Skills for I-O Psychologists
  - Syllabus
- PSY 5260 - Organizational Development and Change Management
  - Syllabus
- PSY 5270 - Job/Work Analysis and Personnel Selection
  - Syllabus
- PSY 5300 - Compensation and Benefits
  - Syllabus
- PSY 5360 - Practicum in I-O Psychology
  - Syllabus
- PSY 5400 – Trends and Myths in I-O Psychology
  - Syllabus
- PSY 5406 - Introduction to Industrial-Organizational Psychology
  - Syllabus
- PSY 5500 - Strategic I-O Psychology and Human Resource Management
  - Syllabus

Primarily PS courses

- PSY 5950r - Advanced Studies in Experimental Psychology
  - Syllabus is different for each course/instructor. Sample syllabus from Fall 2023
  - Fall 2019 – Dr. Preston Foerder, Comparative Psychology
  - Fall 2020 – Dr. Jill Shelton, Diversity in Cognitive Science
  - Fall 2021 – Dr. Ashley Howell, Fear, Anxiety and Stress
  - Fall 2022 – Dr. Jill Shelton, Cognition and Health
  - Fall 2023 – Dr. Tomorrow Arnold, Addictive Behaviors

- PSY 5960r - Advanced Studies in Developmental/Personality/Social Psychology
  - Syllabus is different for each course/instructor. Sample syllabus from SP 2024
  - Spring 2020 – Dr. Ralph Hood, Psychology of Religion
  - Spring 2021 – Dr. Amye Warren, Psychology & Law
  - Spring 2022 – Dr. Ruthie Walker, Social & Emotional Development
  - Spring 2023 – Dr. Ralph Hood, Psychology of Religion
  - Spring 2024 – Dr. Bret Eschman, Infancy and Childhood

Appendix F: I-O Learning Assessment Plans

The current I-O course assessment plan is based on the SIOP Guidelines for Graduate Education and Training in I-O Psychology. Instructors identify one or two of the developed SLO statements for these competencies and engage students to rate their confidence in their ability to do what is outlined in each SLO at the beginning of each course (pre-evaluation) and at the end of each course (a post-evaluation, also including a retrospective pre-evaluation, to account for response shift bias).

The table below outlines our attempt, as outlined in the linked Cunningham and Whitted (2022) TIP article, to simplify and organize the 26 competencies identified in the SIOP Guidelines with associated SLO statements for the UTC I-O MS Degree program.

UTC I-O Core Competency	SIOP Competencies	Student Learning Outcomes (SLO)
Psychology of Work	11. Human Performance	Identify variables that affect human performance including individual differences, task variables, environmental variables, and training variables.
	24. Work Motivation	Understand and apply theories of human motivation (including need-based, cognitive, and reinforcement theories).
Professional Practice	1. Ethical, Legal, Diversity, and International Issues	Apply psychological ethical guidelines to decisions in a work- related context.
	4. Professional Skills	Effectively translate scientific research and/or theory into a form understandable to non-psychologist audiences. Identify and apply core professional skills for effective communication, consulting business development, and project management.
	6. Statistical Methods/Data Analysis	Differentiate between generalizations, inferences, and interpretations that are guided by statistical evidence.
	9. Criterion Theory and Development	Describe the characteristics of good/acceptable performance criteria (including relevance, reliability, and practicality).
Talent Management (i.e., the worker)	7. Attitude Theory, Measurement, and Change	Use applied psychological theories to explain job- and work- related attitude development and change.
	8. Career Development	Identify and describe career-related challenges faced by members of special and/or protected populations (e.g., older

UTC I-O Core Competency	SIOP Competencies	Student Learning Outcomes (SLO)
		workers, women, racial/ethnic minorities, disabled).
	12. Individual Assessment	Identify and explain the primary purposes of individual assessment, and the skills needed for effective individual assessment in a work setting.
	13. Individual Differences	Identify and assess individual differences that are meaningful in a work context and evaluating quality of available measures.
	14. Job Evaluation and Compensation	Demonstrate an applied understanding of various strategies for work-related reward and compensation.
	15. Job/Task/Work Analysis, Competency Modeling	Differentiate between job analysis and competency modelling, in terms of purpose and methods to conduct each technique.
	16. Judgment and Decision-Making	Apply decision and judgment theory to understand and improve choice behavior, employee selection, and human performance in the workplace.
	21. Performance Appraisal/Management	Understand performance evaluation and design a complete performance appraisal system that meets organizational needs while maintaining or enhancing worker motivation.
	22. Personnel Recruitment, Selection, and Placement	Apply theory and empirical evidence to improve talent acquisition (i.e., recruitment and selection) in a given organizational context.
	23. Training	Apply theories of training and scientific methods to complete a needs assessment, and design, conduct and evaluate instructional programs/needs-based training programs.
Design, Structure, and Management of Work (Work Management;	17. Leadership and Management	Know and be able to develop effective leadership and management behaviors to fit a particular organizational context.

UTC I-O Core Competency	SIOP Competencies	Student Learning Outcomes (SLO)
i.e., how the work is done)	19. Organizational Development	Evaluate the outcomes and consequences of organizational development interventions (e.g., program evaluation). Demonstrate the ability to integrate a mix of individual, group, and organizational-level theories, models, and perspectives regarding change in organizational contexts.
	25. Consumer Behavior	Apply appropriate scientific research methodologies to evaluate and understand customer behavior.
	26. Human Factors	Develop safer, more effective, and more reliable work-related systems through an improved understanding of user requirements.