**D. Capstone requirements**

The goal of the capstone requirement is to foster application of knowledge and skills learned in the major to completing an advanced project. Senior students must complete a capstone experience through course-work on the history of Psychology (PSYCH 439), senior thesis (PSYCH 493), senior research project (PSYCH 494), academic internship (PSYCH 495), or independent study (PSYCH 496).

Eligibility requirements for PSYCH 493, 494, 495, and 496 are a minimum cumulative GPA of 3.0 and a minimum grade of C in PSYCH 301W. There are no eligibility requirements for PSYCH 439.

Students must complete a Psychology Capstone Application to be considered for any of the capstone options except PSYCH 439. This document is available on the program website ([www.altoona.psu.edu/psych](http://www.altoona.psu.edu/psych)).

Each of these options is detailed below. Interested students should approach a full-time faculty member to further discuss them. Capstone Applications should be submitted **no later than the tenth week** of the regular semester preceding the anticipated capstone semester.

**Capstone Courses**

**PSYCH 439** *“History and systems of psychology”* (3 credits)

PSYCH 439 is appropriate for students who want to better understand the historical bases of modern psychology. The course surveys the development of contemporary psychological theories and research areas from the formal establishment of psychology to the present. When taken to fulfill the capstone requirement, the final paper for the course will require an analysis of selected courses in relation to several intellectual movements in psychology.

**PSYCH 493** – Senior Thesis – “*Supervised senior thesis research in psychology*” (3 credits)

PSYCH 493 is appropriate for students who want to investigate a specific topic in psychology by engaging in archival research. Students will select a narrow area of focus and summarize related research in a coherent and succinct manner. Sources for the paper should include scientific articles in peer-reviewed journals. Students will be required to present a summary of their work in a capstone presentation at the end of the semester.

**PSYCH 494** – Research Projects – “*Supervised student activities on research projects identified on an individual or small-group basis*” (3 credits)

PSYCH 494 is appropriate for students who have a research hypothesis that they want to test. Students will complete all steps of a research project, including producing a literature review, designing and executing an experiment/study, and analyzing and reporting the results. In addition to the written paper, students will also be required to present their study in a capstone presentation at the end of the semester.

**PSYCH 495** – Psychology Practicum – “*Undergraduate student observes and works with psychologists in applied settings*” (3 credits)

PSYCH 495 is appropriate for students who want experience in a practical setting related to psychology. The course is a hybrid academic/professional experience in which students develop a narrowly conceived research focus and integrate it with practical skills/experiences gained in a non-academic setting. Students will have on-site responsibilities, which will be determined in consultation with a site supervisor, and academic responsibilities, which will begin with identifying a suitably narrow area of academic interest related to the practical experience. Students will use the narrow focus to identify and properly summarize empirical journal articles, later integrate those summaries into a research synthesis, and lastly, present their work at the capstone presentation session end of the semester.

**PSYCH 496** – Independent Studies (3 credits)

PSYCH 496 is appropriate for students who want advanced work in a course not normally offered at Penn State. Students will work through an advanced curriculum of primary source-work on a narrowly conceived topic.

**Capstone Presentation Requirements**

The purpose of the capstone presentation is to provide a forum in which the student can demonstrate mastery of advanced knowledge and skills developed from the capstone experience. The capstone presentation session typically occurs early in finals week in a given semester.

Students will give an oral presentation (preferably complemented by PowerPoint) than lasts not longer than 15 minutes. Following the presentation, 5 minutes will be allotted for questions. The presentation timing will be strictly enforced, so students are strongly advised to practice the talk to focus on the most significant content given the available time. A moderator will periodically alert students of the remaining time.

The manor of presentation is important. Professional dress is expected. Students should attempt to effectively use PowerPoint to complement and enhance their oral remarks. This could mean displaying tables or figures from a research paper, examples of psychological assessments, or pictures of equipment or internship sites. *Students should avoid placing large chunks of text on slides and then simply reading the information*. It is advisable for students to solicit feedback from the faculty sponsor on a draft version of the presentation.

The focus of the presentation will be different depending on the type of capstone. Below are the specific requirements.

For an **internship** capstone (PSYCH-495), the presentation should focus on 3 key areas:

1.) Description of the internship. Briefly detail the site name and location, the nature of the clients and work done there, and your responsibilities. Do not allocate more than 1 minute for this information.

2.) Review of literature. Present selected highlights of your research synthesis, along with illustrative examples from your site experience. The goal is to critically relate the literature to practice and practice to the literature. Where do they meet and miss? Plan to allocate 10 minutes to this portion of the talk.

3.) Insight. Discuss two professional (not personal) challenges you encountered or observed over the course of your internship: one relating to a client population or to treatment issues; the other to the organizational, social, or political/policy environment. Drawing explicitly on your review of the professional literature, how would you recommend that your host organization address these issues? Why? Plan to allocate 4 minutes for this portion of the talk.

For a **research**-based capstone (PSYCH-494), the presentation should focus on the major sections of your APA style report. These include:

1.) Introduction. Introduce the audience to the relevant literature related to your topic. Select only the most relevant two or three citations. Do not allocate more than 5 minutes to background information. Provide your hypotheses.

2.) Methods. Describe your sample, operational definitions, and procedure.

3.) Results. Present relevant descriptive and inferential statistics. The use of figures (and possibly tables) is strongly encouraged to facilitate audience comprehension.

4.) Discussion. Discuss your results and the implications of your study, including describing limitations and possible future directions of the work. Provide a take-home message for your audience that encapsulates the most important idea you’d like them to take with them.

For a **literature**-based capstone (PSYCH-493), the presentation should focus on the major sections of your APA style report. Students are encouraged to discuss the implications of the literature that they review. Students might consider presenting a hypothetical proposal or next logical study in this line of research is appropriate as well.

Other requirements for capstone projects will be determined by specific faculty advisors.