

## **Research Training**

Research is an essential component of the clinical program at Ferkauf. Whether students hope to continue being involved in research, or whether they plan on a full-time clinical practice, learning to design, conduct, and interpret research studies fosters skills in critical thinking, creativity, and perseverance that are essential for competence as a psychologist. Specific expectations related to the RPI and RPII are described below. Please note, however, that the expectations of a particular research adviser may differ from those listed here. It is the responsibility of the student to ascertain, understand, and fulfill his or her research adviser's requirements.

### **Research Coursework Sequence**

#### Statistics

The format of class time will be lecture, discussion, and vignette case examples. This course will focus on gaining an understanding of parametric and nonparametric statistics. We will emphasize learning the rationale for each statistical test to aid in problem solving through selecting the appropriate test given the experimental design (e.g. intra-individual, between group, and repeated measures designs) and levels of measurement (e.g. nominal, ordinal, integral, and ratio). Understanding the difference between statistical and clinical significance will also be discussed. Topics covered will include central tendency, descriptive statistics, analysis of variance, correlation and regression.

#### Research Methods and Design

This course will cover concepts related to the utilization and design of scientific research in the field of psychology. Students will learn about frequently used research designs in clinical psychology, and about important methodological considerations including reliability, validity, randomization, and power. Students will also have the opportunity to practice designing and conducting their own research studies through two projects – a secondary analysis of survey data, and an original research proposal.

#### Integrating Clinical Practice and Research

This course will build on the knowledge gained in Research Methods; students will learn to apply empirical evidence to their clinical practice by articulating answerable questions, reviewing and evaluating the research, and determining appropriate action.

#### Data Analysis

This course is designed to provide assistance to students in statistically analyzing data and understanding results from statistical analyses for Research Project II.

#### Qualitative Research

This course will cover major methods of qualitative research, together with some useful psychological applications of them. The course is for students who want to do qualitative research and those who want to learn about it.

### **Selecting Research Advisers**

A. Students will have the opportunity to hear the faculty describe their research toward the end of their first semester in the program. In order to consider whom you want to work with, you are encouraged to set up individual meetings with the faculty you would like to consider, talk to their research students, read up on their work, and email them over the break.

B. You may also approach faculty from other programs if their interest matches your own and see if they would be willing to work with you. If none of your interests are shared by the faculty, you may elect to use someone on the outside provided that you select a clinical faculty member to serve as the committee chair and provided that the faculty on the outside is approved by the this chair and has signed the Outside Research Mentor Agreement (please see the Student Resource page).

C. Please make note of the research advisers' class day and time in applying for externship so that your externship dates and times do not conflict with the research seminars of your choice.

D. Please submit a list of 5 faculty members in ranked order to indicate your preference of research advisers by December 11th. Also, please submit a **very brief paragraph** on each faculty (e.g., why you want to work with them, such as your interest in specific areas of their research, your goals for research, ease of working with them etc.). Please forward this list of rankings and descriptions for each faculty to [fgspclinicalprogram@gmail.com](mailto:fgspclinicalprogram@gmail.com). Please make sure this sheet of paper has **your name** on it.

E. The faculty and program director will review this and you will be informed about who your adviser will be before you are required to choose your externship site.

### **Research Seminars**

At the time of registration for the second year of study, students are encouraged to choose, with the help of their advisers, from among a variety of Research Seminars.

Students are required to take two research seminars and may enroll in advanced research seminars (a maximum of 6 credits – only three permitted per year) to continue working on their research. If the faculty member offers only one research seminar, the student may take up to 9 credits of advanced research seminar or may be required to take another course recommended by their research adviser to satisfy the requirement. Research seminars are taught by core faculty and will directly facilitate the development of the student's doctoral research projects.

#### Research seminars offered include:

Research in Psychotherapy (PSC 6524)  
Effective Therapists (PSC 6520 & 6528)  
Psychological Trauma (PSC 6145 & 6146)

Theory and Research in Anxiety and Depression (PSC 6474 & 6475)  
 Depression and Personality Disorder in Older Adults (PSC 6529 & 6530)  
 Research in Couples, Family, & Psychoanalysis (PSC 6468)  
 Emotions, Psychopathology & Socioeconomic Contexts (PSC 6815 & 6816)  
 Investigating Mood Pathology: Assessment, Course & Treatment of Bipolar Spectrum Disorders (PSC 6540 & 6541)  
 OCD, Hoarding, and Related Disorders (PSC 6546 & 6547)  
 Violence, Emotional Regulation, & Substance Abuse (PSC 6548 & 6549)

**Research Project I and Research Project II are doctoral theses**

Doctoral theses are not simply long term papers. They are expected to reflect years of careful planning, deep thinking, and extensive editing. Students should be prepared to devote considerable time to all stages of these projects. Ideas should be carefully formulated. Sentences should be carefully crafted and paragraphs should be well-organized. Multiple drafts should be written and rewritten based on the adviser’s feedback. Students should carefully proofread final drafts and ensure that there are no careless errors or incorrect formatting; the adviser is not your editor. Students are encouraged to ask another student or colleague to read their drafts and provide feedback. Students for whom writing quality has been an issue in the past should read their papers aloud in order to identify sections that require more editing. The final versions of the RPI and RPI are reflections of the student’s learning and ability; students should ensure that these projects demonstrate their competence and professionalism.

**Doctoral Research Project I (RPI)**

Students must write a comprehensive literature review (Research Project I; RPI) on a topic approved by the research adviser in order to meet the requirements for Research Competency I. The student must submit an outline for the RPI no later than June 1st of his/her second year in the program, which must be approved by the research adviser. Based on feedback on the outline, a complete draft of the RPI must be written and turned in by September 1st of the student’s third year. All RPI documents must adhere to APA Style. Over the course of the third year, the student and adviser will work together on the editing process to ensure that a final draft of the RPI is turned in no later than June 15th of the student’s third year. The final draft must then be rated, using the RACER I form, by the RPI adviser and by a fourth year student in the same lab. If revisions are required (see RACER I for specific instructions), they must be completed by September 1st of the student’s fourth year. If the document earns a failing grade after the second submission, another faculty member will read it. If s/he agrees with the failing grade, the student may be dismissed from the program. The timeline for Research Project I is below:

Research Project I	
Outline/skeleton	Submitted June 1st

	of second year
Draft	Submitted Sept 1st of third year
Final draft	Submitted June 15 <sup>th</sup> of third year  Must earn a “Pass” or “High Pass” on RACER I

Upon approval of Research Project I, one signed copy of the cover sheet is filed in the Psychology Office, and the entire completed document is submitted to the faculty adviser. Additionally, the adviser will complete the RACER I using the online survey tool.

**Doctoral Research Project I FAQs:**

**Q: Who reviews Research Project I?**

*A: Research Project I is reviewed by your research adviser and a second reader, selected by your research adviser.*

**Q: Do you receive a grade for Research Project I? What are the criteria for passing?**

*A: Yes, you do receive a grade for Research Project I. Different research advisers may have different views regarding the length and content of the project. Therefore, it is important for students to clarify the expectations of their specific adviser. Research Project I is graded using the RACER I form*

**Q: How much time will I have to make corrections and changes?**

*A: Ideally, Research Project I will be finished by the end of fall of your third year. The earlier you submit a draft, the more time you will have to make necessary corrections. Your Research Project I must pass before you will be allowed to apply for internship.*

**Doctoral Research Project II (RP II)**

Deciding on a research project

Advisers vary on how they work with students to decide on a project for RP II. Some advisers will direct students to focus on a component of a larger study that the adviser is conducting. Alternatively, advisers may encourage students to work in

pairs or small groups to develop and carry out projects. Some advisers have access to databases at other institutions, and those institutions may require students to spend time contributing to data collection efforts before the students can use the data for their own research. Finally, advisers may encourage students to develop their own research ideas and collect their own data independently. The data may be quantitative, qualitative, or a mixed-methods approach. As each adviser approaches research differently, it is incumbent on students to ascertain their advisers' expectations and requirements.

Research Project II is often an outgrowth of Research Project I and may take the form of any one of a wide spectrum of possibilities including the following:

- An original quantitative or qualitative empirical study
- A replication of an empirical study
- Development of an instrument
- Evaluation-outcome research (of a program or intervention)
- A case study
- Meta-analysis

Research Project II can be prepared in one of two formats: (1) in four chapters (Introduction, Methods, Results, and Discussion), or (2) at the faculty's discretion, in the format of an APA article. Copies are submitted to the student's research adviser and two outside readers in preparation for the oral examination.

### **Proposal for Research Project II & Regard for Ethical Principles Of Psychologists**

After conferring with his/her adviser on the topic and design for the study, students must complete a brief research proposal, including Background, Objective, Method, and Analytic Plan. The research proposal must be submitted to Dr. Arsenio and the research adviser no later than June 15<sup>th</sup> of the student's third year. The student and his/her adviser must then meet with Dr. Arsenio to review the RPII proposal. This one-hour proposal review meeting will provide the student an opportunity to receive feedback on his/her idea and to ask questions. This meeting must occur by the end of first semester of the student's fourth year. The student is expected to incorporate feedback from the proposal review meeting into his/her RPII, therefore it is advised that this meeting occur before data collection begins. In situations where Dr. Arsenio is not familiar with the topic area and/or with the methodology proposed, he may ask another faculty member to review the proposal.

After the proposal is approved, the student must apply for IRB approval. The IRB application must be turned in early enough so that it is approved before the end of the student's fourth year. Students must confer with their research adviser to determine which other faculty to invite to be RPII readers. The faculty adviser will then invite the other faculty to participate. The student must submit the final draft of his/her RPII at least two weeks before the defense date. The defense must occur at least two weeks before the student plans to graduate. The committee chair and two Readers will complete the RACER II following the defense. If revisions are required, the student must complete

them before s/he can graduate (students *may* be allowed to walk in graduation as long as they have received a grade of low pass or above). See RACER II for specific scoring instructions. If minor revisions are required, only the adviser has to read and approve the revised document. If major revisions are required, all readers must read and approve the document. If a failing grade is received on any domain, the defense must be held again.

The timeline for Research Project II is below:

Research Project II	
Written Proposal	Submitted June 15 <sup>th</sup> of third year
Proposal meeting	September 1 <sup>st</sup> of fourth year
IRB application	IRB submission by end of fall semester fourth year
Complete paperwork and book room for defense	One month before defense date
Final draft	Three hard copies submitted two weeks before Defense Date
Oral Defense	On or before last day of classes fifth year
Revised final draft	Submitted within six weeks after defense
Approved final draft	Submitted to registrar prior to degree conferral

[Field] **Written Proposals**

Proposals should be written in APA style. They must include the following sections (at the discretion of the research adviser):

- Introduction
  - Brief Literature Review (aim for 2-3 pages)
  - Aims/Objectives (what is your hypothesis or research question?)
  
- Method
  - Participants (include explanation of how you will recruit them and obtain informed consent)
  - Measures (provide psychometrics if possible)
  - Procedure
  
- Tentative Data Analysis Plan (if applicable)
- References

**Note:** Our curriculum sequence requires that students register for Research Project II in the spring semester of their fourth year. Once officially registered for Research Project II, there is a fee for a three-credit course, every semester, until the defense. Registration is not automatically assumed. Therefore, you must register for Research Project II each and every semester until you defend.

- If students defend before the start of the semester, they will not need to pay for that semester. If they don't meet this deadline they will have to register for research.

### Collaborating with the research adviser

Students should work with their advisers to develop a productive collaboration. Advisers differ as to how they approach working with students on projects; students need to take the initiative to make sure they understand their adviser's approach and to communicate clearly and respectfully if they have questions about this approach.

If students are working with a research adviser who is not on the faculty at Ferkauf, then they should use the Outside Research Supervisor Agreement form (included in Appendix IV) to set the terms of the relationship between the outside adviser and the chair of the RPII. It is the student's responsibility to ensure that the research project meets all Ferkauf requirements and that there is clear communication between the student, the outside adviser, and the chair.

Students should take responsibility for their research projects. The adviser will provide guidance, but the student is expected to make progress independently without constant supervision. At times, students may feel reluctant to contact their advisers because they feel that they have not made sufficient progress. These are the times when it is *most* important to contact the adviser. Avoiding one's adviser only makes the situation worse and prevents the adviser from providing assistance. Clear and consistent communication is essential for completing projects successfully.

Students should discuss with their advisers how much time advisers need to provide feedback on drafts of the RPI and RPII. It is neither realistic nor fair for a student to spend months producing a draft, and then expect the adviser to provide feedback immediately. Students are responsible for knowing the deadlines for their projects and for submitting drafts to their advisers well in advance of those deadlines. Students should be prepared for *multiple* rounds of revisions for the RPI and the RPII.

### Being part of a research lab

Many advisers encourage their students to join with the advisers' other students in regular meetings and collaborations. Students may be expected to assist classmates with research design, data collection, or coding. Advisers may require students to attend weekly lab meetings throughout their time at Ferkauf. Being part of a lab is a wonderful opportunity to learn more through collaborating with one's peers. It also entails responsibility to one's peers, to make one's best efforts to offer helpful feedback and assistance on projects that may not directly relate to one's own research.

## Authorship

Because both the RPI and RPII are developed in collaboration with the research adviser, the research adviser is *always* an author on any presentation or publication that comes from these projects.

The order of authorship should reflect the scientific contributions of the authors to the project. When a publication is substantially based on a student's work, then the student should be first author and the adviser a co-author. Any fellow students who also contributed to the project may also be included as co-authors, depending on the nature and extent of their contributions. However, if a project is substantially based on the adviser's work (e.g., the project is a small component of a larger project of the adviser's, or the idea for the project was the adviser's), or if the student fails to take a leading role in preparing a project for publication (e.g., the adviser has to rewrite the paper to make it suitable for publication), then it is appropriate for the adviser to be first author.

Students should discuss order of authorship with their advisers at an early stage in the development of a project, and discussion should continue throughout the project in case changes in relative contributions occur.

## How to graduate on time

### *Deadlines:*

Research Project I first draft Due Sept 1 of third year

Research Project I final version Due Sept 1 of fourth year

Research Project II proposal Due June 15 of third year

Below is a table of sample timelines that students may use for planning purposes to help them complete their RP IIs on time. The top row of the table shows deadlines that students commonly aim for: the four possible graduation dates. Below each deadline is a timeline of possible due dates for each stage of the revision process. Please note, these are HYPOTHETICAL. They show targets students could aim for if, like most students, they need four rounds of revisions before the oral defense. Students must be aware that the number of revisions they will have to do will depend on the nature of their projects and the quality of their work. They must be prepared for the possibility that they will need *more* rounds of revisions than what is presented below.

The sample timelines are based on the following assumptions:

- Students spend about 3 weeks on each complete draft of the RP II.
- Faculty members provide feedback on each draft within about 3 weeks (except for the revisions following the oral defense; these should be completed more quickly).
- The total time from submission of the first draft to the adviser to submission of the final project to the Psychology Office is about **6 months**.

Students should remain mindful of the following:

- Advisers may have different timelines that they follow. Students should speak with their advisers about their preferences.
- Students who wait until close to a graduation deadline to defend will likely find that their adviser and readers need *more* time than usual to provide feedback because they are working with multiple students trying to meet the deadline.
- Students should take into account their advisers' and their own vacations and holidays.

Sample Timelines

	<b>Sept 30 graduation</b>	<b>Jan 31 graduation</b>	<b>June 30 graduation</b>	<b>Aug 31 graduation</b>
First draft to adviser	April 10	August 10	Jan 10	Feb 15
Feedback from adviser	May 1	Sept 1	Feb 1	March 10
Second draft to adviser	May 20	Sept 20	Feb 20	April 1
Feedback from adviser	June 10	Oct 10	March 10	April 20
Third draft to adviser	June 30	Oct 31	March 31	May 10
Feedback from adviser	July 20	Nov 20	April 20	June 1
Fourth draft to adviser	Aug 10	Dec 10	May 10	June 20
Adviser approves sending to	Aug 31	Dec 31	May 31	July 15

readers (readers need to receive paper at least 2 weeks prior to defense)				
Defense	Sept 15	Jan 15	June 15	Aug 5
Revision (based on feedback at orals) to adviser	Sept 20	Jan 20	June 20	Aug 10
Adviser approves final version; submit to Psych Office	Sept 25	Jan 25	June 25	Aug 15

### **Oral Examination**

[Field]

After the student submits three copies of Research Project II to his/her research adviser, the adviser then selects two readers to participate in the oral examination. The readers are selected by the adviser from full-time and adjunct faculty. Under certain circumstances, the Office of the Dean may approve someone other than full-time and adjunct faculty if the particular area under investigation is such that an outside opinion would be indicated. The Psychology Office is advised of the readers and the time and date of the defense, normally at least three weeks hence. The student then completes Form PsyD 03. It is the student's responsibility to schedule the defense with the Psychology Office.

The Oral Examination is usually of one hour duration during which the candidate is expected to give a brief presentation. He/she is then examined by all three persons. If the student has passed, the adviser and the readers sign the appropriate form (**Registrar's Form D30**) at the oral. This is submitted to the Psychology Office for recording in the student's folder and then sent to the Office of the Registrar. The chair of your committee and the two readers will evaluate your RP II and the oral defense using RACER-II.

Before the degree can be awarded, the candidate must include all requested revisions and submit two disks with the document (and other items explained in PsyD Completion form) to the Psychology Office. In addition, a CD with additional items must be submitted to research .

### **Disseminating your research**

A great deal of time and effort goes into completing the RPI and RPII, and it is a shame for these projects to simply collect dust on a shelf upon completion. Students should seek out opportunities to share their findings with the larger community of clinical psychologists. At a minimum, all students are encouraged to present their RPIIs at Ferkauf's Research Day AND all students must apply to present their work as a poster or paper at a conference (e.g., NYSPA, APA, ABCT, ADAA, WCBCT, ICCP, SPR, SEPI, Division 39). In addition, students should strive to publish their RPIs and RPIIs under the guidance of their advisers. The expectation is that all RPIs and RPIIs will be of sufficient quality to be worthy of publication.

### **Additional research opportunities**

Students are encouraged to seek out additional research opportunities, such as collaborating with more advanced students on data collection and coding, and applying for research assistant positions with Ferkauf faculty and externships with a research component. Students are *strongly* encouraged to support their classmates' research endeavors by volunteering as participants for studies for which they are eligible. However, additional research activities should never take priority over a student's own RPI and RPII or other academic responsibilities; students should exercise good judgment in determining how many additional responsibilities to take on.

### **Procedures to Fulfill The Research Requirements For The PsyD Degree**

Candidates in all programs leading to the Doctor of Psychology degree are required to complete two research projects followed by an oral examination. This requirement constitutes partial fulfillment for graduation. The procedure whereby this requirement is completed consists of four steps:

1. Completion of Research Project I: Final Grade for PSC 6915  
Form PsyD 01, Racer I signed by research adviser and program director
2. Approval of Proposal for Form – PsyD 02,  
Research Project II signed by research adviser and  
program director, cover page signed by advisor and Dr. Arsenio
3. Completion of Research Project II: Form – PsyD 03, Racer - II  
(Eligibility for Orals) signed by research adviser and program director.
4. Passing of Oral Examination: Final grade for PSC 6916  
**Registrar's Form D30** signed by research adviser and two readers

5.Revisions of Research Project II:(Revisions must be submitted for students to receive a final grade in PSC 6916 and also for formal awarding of doctoral degree)

*NOTE:* Copies of all forms can be found on the Current Student Resource page. It is the responsibility of the student and the research adviser to see that these forms are appropriately signed and submitted to the Psychology Office. The signed forms of eligibility for orals (PsyD03) must be signed before the orals can take place. After the information is recorded in the student's folder, a duplicate is sent to the Office of the Registrar so the information may then be recorded on the student's transcript.