SOCIAL AND BEHAVIORAL NEUROSCIENCE

Graduate Program Head	Lisa Gatzke-Kopp
Program Code	SBN
Campus(es)	University Park
Degrees Conferred	Dual-TItle
The Graduate Faculty	View (https://secure.gradsch.psu.edu/gpms/?searchType=fac&prog=SBN)

Students electing this degree program through participating programs earn a degree with a dual-title at the Ph.D. level, i.e., in (graduate program name) and Social and Behavioral Neuroscience.

The following graduate programs offer a dual degree in Social and Behavioral Neuroscience: Ph.D. in Biobehavioral Health and Social and Behavioral Neuroscience; Ph.D. in Communication Sciences and Disorders and Social and Behavioral Neuroscience; Ph.D in Human Development and Family Studies and Social and Behavioral Neuroscience; Ph.D. in Psychology and Social and Behavioral Neuroscience.

The Social and Behavioral Neuroscience dual-title degree program is administered by the Social and Behavioral Neuroscience Steering Committee, which is responsible for the management of the program. The committee oversees the general direction of the program, identifies faculty and courses appropriate to the program, recommends policy and procedures for the program's operation to the Dean of the Graduate School, and is an advisory body to the program Director. The program enables students from participating graduate programs to obtain foundational graduate-level training in neuroscience as well as expertise in social and behavioral neuroscience theory, research, and methods. This dual-title training will enable rigorous research at the intersection of neuroscience and the students' partner discipline. To pursue a dual-title degree under this program the student must apply to the Graduate School and register through one of the approved graduate programs.

Admission Requirements

Requirements listed here are in addition to requirements listed in GCAC-208 Dual-Title Graduate Degree Programs (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-208-dual-titles/).

Before they can apply for admission to the dual-title degree program, students must apply and be admitted to their primary graduate program and the Graduate School. Applicants who are interested in the dual-title degree program will have the opportunity to indicate this interest when applying to their primary graduate programs. In their statements of purpose for admission to their primary graduate program, applicants may also comment on how their interests in the primary graduate program are related to their interests in Social and Behavioral Neuroscience.

Students may apply for enrollment in the dual-title degree program in Social and Behavioral Neuroscience during their first year (second semester) or second year in their primary graduate program. To apply, a student must submit a letter of application, graduate and undergraduate transcripts, and a letter of recommendation from their graduate adviser. Applications will be reviewed by the Social and Behavioral Neuroscience Admissions Committee. The composition of the admissions committee will be determined by the program Steering Committee. At a minimum applicants must be in good standing in their primary graduate program and be recommended for admission by their graduate adviser. Students must be admitted into the dual-title degree program in Social and Behavioral Neuroscience prior to taking the qualifying examination in their primary graduate program.

Degree Requirements

Requirements listed here are in addition to requirements listed in GCAC-208 Dual-Title Graduate Degree Programs (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-208-dual-titles/).

To qualify for the dual-title degree, students must satisfy the requirements of their primary graduate program in which they are primarily enrolled. In addition, they must satisfy the requirements described below, as established by the Social and Behavioral Neuroscience Steering Committee.

The minimum course work requirements for the dual-title Ph.D. degree in Social and Behavioral Neuroscience are as follows:

Code	Title	Credits
Required Courses		
Course work and other requirements of the primary program.		
NEURO 520	Cellular and Molecular Neuroscience	3
SBN 590	Colloquium (1 credit, taken twice)	2
Select 3 credits from the following:		3
NEURO 511	Neurobiology II	
NEURO 512	Comparative Neuroanatomy	
BIOL 478	COMPARATIVE NEUROANATOMY	
Select a minimum of 9 credits from the following:		9
NEURO 521	Systems Neuroscience	
SBN 505	Seminar in Social and Behavioral Neuroscience	
SBN 508	Methods in Social and Behavioral Neuroscience [1]	
SBN 511	Translational Applications of Social and Behavioral Neuroscience [1]	
HDFS 502	Biological Systems in Developmental Context	
HDFS 512	Developmental Cognitive Neuroscience of Adolescence	
PSY 524	Proseminar in Cognitive Psychology	
Total Credits		**17**

[1] SBN 505, SBN 508, and SBN 511 can be taken more than once, if this involves sections with different topics. Primary graduate programs will determine whether a given section of the SBN courses can fulfill their requirements.

The dissertation must involve the integration of neuroscience and a research question of interest within the primary graduate program.

Selection of specific courses is made by the student in consultation with an adviser from the primary graduate program and an adviser from the Social and Behavioral Neuroscience program. Primary graduate programs may add additional distributional requirements.

Students or faculty may request that the Social and Behavioral Neuroscience Steering Committee consider approval of other courses, including one-time approval for an experimental or variable-title course.

The Steering Committee may delegate this approval process to the program Director, in consultation with academic advisers from a student's primary graduate program and Social and Behavioral Neuroscience.

Qualifying Exam

The dual-title degree will be guided by the Qualifying Exam procedure of the primary graduate program and the Graduate Council. In accordance with Graduate Council policy, the Qualifying Examination requirement shall be satisfied by one of the following:

1. Ideally, a single Qualifying Examination that incorporates content from both the graduate major program and Social and Behavioral Neuroscience is preferred. Dual-title degree students may request an additional semester to fulfill requirements for both areas of study and, therefore, the Qualifying Exam may be delayed one semester beyond the normal period allowable. The qualifying examination committee must include at least one member of the Social and Behavioral Neuroscience Graduate Faculty. Faculty members who hold appointments in both programs' Graduate Faculty may serve in a combined role.
    a. In cases where the timing of the Qualifying Examination in the graduate major program precludes the inclusion of the dual-title, an examination demonstrating proficiency in Social and Behavioral Neuroscience may occur at a later time, but no later than the end of the fourth semester (not counting summer semesters) of entry into the major doctoral program. In cases where separate Qualifying Examinations are administered, Graduate Faculty from both the graduate major program and SBN will administer the SBN Qualifying Examination.
2. With prior approval from the SBN Professor-in-Charge, the dual-title program in Social and Behavioral Neuroscience may allow the Qualifying Examination in Biobehavioral Health alone to satisfy the requirements for the dual-title program.

Ph.D. Committee Composition

The Ph.D. committee must conform to all requirements of the primary graduate program and the Graduate Council. In addition to the general Graduate Council requirements for Ph.D. committees (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-600/gcac-602-phd-committee-formation/), the Ph.D. committee of a Social and Behavioral Neuroscience dual-title doctoral degree student must include at least one member of the Social and Behavioral Neuroscience Graduate Faculty. Faculty members who hold appointments in both programs' Graduate Faculty may serve in a combined role. If the chair of the Ph.D. committee is not also a member of the Graduate Faculty in Social and Behavioral Neuroscience, a member of the committee representing Social and Behavioral Neuroscience must be appointed as co-chair.

Comprehensive Exam

The dual-title degree will be guided by the Comprehensive Exam procedure of the primary graduate program. After completion of required course work, doctoral students enrolled in the dual-title doctoral degree must pass a comprehensive examination. In programs where this includes evaluation of a written exam, the Social and Behavioral Neuroscience representative on the student's Ph.D. committee will participate in the writing and evaluation of the exam, in accordance with procedures maintained by the primary graduate program. In programs where the comprehensive exam involves defense of a dissertation prospectus, the Social and Behavioral Neuroscience representative on the student's Ph.D. committee will participate in the evaluation of the prospectus, including ensuring the proposed dissertation has substantial Social and Behavioral Neuroscience content.

Dissertation and Dissertation Defense

Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. Students enrolled in the dual-title program are required to write and orally defend a dissertation on a topic that reflects their original research and education in their primary graduate discipline and in Social and Behavioral Neuroscience. The dissertation must be accepted by the Ph.D. committee, the heads of both graduate programs, and the Graduate School.

Minor

A graduate minor is available in any approved graduate major or dual-title program. The default requirements for a graduate minor are stated in Graduate Council policies listed under GCAC-600 Research Degree Policies (https://gradschool.psu.edu/graduate-education-policies/) and GCAC-700 Professional Degree Policies (https://gradschool.psu.edu/graduate-education-policies/), depending on the type of degree the student is pursuing:

- GCAC-611 Minor - Research Doctorate (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-600/gcac-611-minor-research-doctorate/)
- GCAC-641 Minor - Research Master's (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-600/gcac-641-minor-research-masters/)
- GCAC-709 Minor - Professional Doctorate (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-700/gcac-709-professional-doctoral-minor/)
- GCAC-741 Minor - Professional Master's (https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-700/gcac-741-masters-minor-professional/)

Student Aid

Graduate assistantships available to students in this program and other forms of student aid are described in the Tuition & Funding (https://gradschool.psu.edu/graduate-funding/) section of The Graduate School's website. Students on graduate assistantships must adhere to the course load limits (https://gradschool.psu.edu/graduate-education-policies/gsad/gsad-900/gsad-901-graduate-assistants/) set by The Graduate School.

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Learning Outcomes

1. **KNOW:** Graduates will demonstrate an understanding of functional and structural neuroanatomy as pertains to the central nervous system. Graduates will be able to describe what and how specific assessment tools used in their research assess about central nervous system function, including the limitations of the technique.

2. **THINK:** Graduates will evaluate comparative research to develop research questions pertaining to the role of the brain in human behavior.
3. **APPLY/CREATE:** Graduates will apply their knowledge of neuroscience to the selection of appropriate measurement techniques to test hypotheses related to how mechanisms transact across at least two levels of analysis (e.g. brain and behavior) in their dissertation research.
4. **COMMUNICATE:** Graduates will communicate, in both written and oral formats, the importance and relevance of a research topic as well as the implications research results have for the field.
5. **PROFESSIONAL PRACTICE:** Graduates will comply with standard ethical regulations regarding the conduct of research, knowledge of ethical guidelines regarding the analysis and publication of scientific research.

Contact

Campus	University Park
Graduate Program Head	Lisa Michelle Kopp
Program Contact	Lisa Michelle Kopp lmk18@psu.edu (814) 867-2371
Program Website	View (https://hhd.psu.edu/hdfs/graduate/dual-title-phd-programs/social-and-behavioral-neuroscience/)