**BIOBEHAVIORAL HEALTH**

**Graduate Program Head**  
Thomas Gould

**Program Code**  
BBH

**Campus(es)**  
University Park (Ph.D., M.S.)

**Degrees Conferred**  
Doctor of Philosophy (Ph.D.)  
Master of Science (M.S.)  
Dual-Title Ph.D. in Biobehavioral Health and Bioethics  
Dual-Title Ph.D. in Biobehavioral Health and Clinical and Translational Sciences

**The Graduate Faculty**  
View [here](https://secure.gradsch.psu.edu/gpms/index.cfm?searchType=fac&prog=BBH)

The graduate program in Biobehavioral Health (BBH) is an interdisciplinary program provided by the College of Health and Human Development and involving faculty from its departments. The focus of the program is on the interaction of biological, behavioral, sociocultural, and environmental variables in the etiology and prevention of health problems and in the promotion of healthy human development. The program is designed to cultivate competence in basic and applied research, in the evaluation of biobehavioral health intervention strategies, and in university teaching. Graduates are prepared for research, teaching, or policy roles in health care settings, private and public research laboratories, government agencies, and universities including medical schools.

Special resources available in the college that students may draw upon and potentially participate in for their research programs include a Health and Human Development Consultation Center, Nutrition Clinic, and Speech and Hearing Clinic; Centers for Gerontology, the Study of Child and Adolescent Development, Developmental and Health Genetics, Locomotion Studies, Worksite Health Enhancement, and Developmental and Health Research Methodology; special laboratories in Behavioral Endocrinology, Biomechanics, Human Performance, Motor Behavior, and Nutrition; and extensive computer resources. Additional resources, including elaborate mainframe and super computer capabilities, are available in other parts of the University.

**Admission Requirements**

Applicants apply for admission to the program via the Graduate School application for admission ([http://gradschool.psu.edu/prospective-students/how-to-apply](http://gradschool.psu.edu/prospective-students/how-to-apply)). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions ([http://gradschool.psu.edu/graduate-education-policies](http://gradschool.psu.edu/graduate-education-policies)).

Scores from the Graduate Record Examinations (GRE), or from the Medical College Admission Test (MCAT), are required for admission. Applicants should have a minimum grade-point average of 3.00 (A=4.00), an above-average score on the GRE or MCAT, and three supporting recommendations. At the discretion of the graduate program, exceptions may be made to these requirements for students with special backgrounds, abilities, and interests. Admission will be offered to candidates who are the best qualified, in the judgment of the faculty, taking all factors into account.

Entering students should have a basic background in biological sciences, the behavioral sciences, or a combination of the two. In addition, they should have a basic background in quantitative methods. In exceptional cases, superior students who do not meet these requirements may be admitted provisionally ([http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/provisional-admission](http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/provisional-admission)), while correcting their deficiencies. This must occur during their first two semesters in the program.

**Degree Requirements**

**Master of Science (M.S.)**

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Requirements. ([http://gradschool.psu.edu/graduate-education-policies](http://gradschool.psu.edu/graduate-education-policies))

Master of Science degree candidates must take five core courses in biobehavioral health and 12 additional credits in methods individually designed in consultation with and with the approval of their adviser and committee. All M.S. degree candidates must complete a formal master’s thesis or a master’s paper. Candidates selecting the thesis option must complete an additional 6 credits of master’s thesis research (BBH 600) for a total of 33 credits. Candidates selecting the paper option must complete an additional 6 credits of individual studies (BBH 596) in lieu of the 6 thesis credits. The master’s thesis will typically describe original research. The master’s paper may describe original research, but may also involve a substantial review of the literature, or a substantial description of a new research-related procedure. The choice of thesis or paper options will be made by the student in consultation with the adviser. The student’s advisory committee judges the quality and acceptability of the paper or thesis. Additionally, the thesis must be submitted to, and accepted by the Graduate School.

**Thesis Research**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BBH 501</td>
<td>Biobehavioral Systems in Health and Development: Theory and Processes</td>
<td>3</td>
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<tr>
<td>BBH 502</td>
<td>Health: Biobehavioral Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>BBH 503</td>
<td>Biobehavioral Systems in Health and Development: Processes and Integration</td>
<td>3</td>
</tr>
<tr>
<td>BBH 504</td>
<td>Behavioral Health Intervention Strategies</td>
<td>3</td>
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<tr>
<td>BBH 505</td>
<td>Behavioral Health Research Strategies</td>
<td>3</td>
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**Individual Studies**

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<th>Credits</th>
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<tr>
<td>BBH 600</td>
<td>Thesis Research</td>
<td>6</td>
</tr>
<tr>
<td>or BBH 596</td>
<td>Individual Studies</td>
<td>6</td>
</tr>
</tbody>
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**Total Credits**  
33

**Doctor of Philosophy (Ph.D.)**

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Requirements. ([http://gradschool.psu.edu/graduate-education-policies](http://gradschool.psu.edu/graduate-education-policies))

All doctoral students must take five core courses in Biobehavioral Health and 12 additional credits in research methods individually designed in consultation with and with the approval of the student’s adviser and committee to develop doctoral-level competence in biobehavioral health and one or more related specialized areas.
Communication and Language Requirement
Doctoral students must demonstrate competency in spoken English as judged by the faculty and in technical writing as demonstrated in research papers and/or publications. In addition, they must demonstrate competence in one of the following areas:

1. a foreign language
2. computer science
3. college teaching
4. logic or philosophy of science

Dual-Titles
Dual-Title Ph.D. in Biobehavioral Health and Bioethics
Requirements listed here are in addition to requirements listed in GCAC-208 Dual-Title Graduate Degree Programs (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-208-dual-title-graduate-degree-programs).

Admission Requirements
Students must apply and be admitted to the graduate program in Biobehavioral Health and the Graduate School before they can apply for admission to the dual-title degree program in Bioethics. Students must apply and be admitted to the dual-title degree program in Bioethics prior to taking the qualifying exam. In addition, applicants should have a junior/senior cumulative average of at least 3.0 (on a 4.0 scale) and an appropriate background in undergraduate coursework. Prospective dual-title students will write a statement of purpose that addresses the ways in which their research and professional goals reflect an interest in interdisciplinary bioethics research. Refer to the Admission Requirements section of the Bioethics Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/bioethics).

Degree Requirements
Biobehavioral Health Ph.D. students may pursue additional training in bioethics through the dual-title Ph.D. program in Bioethics. To qualify for the dual-title degree, students must satisfy the requirements of the Biobehavioral Health Ph.D. program. In addition, students must complete the degree requirements for the dual-title Ph.D. in Bioethics, listed on the Bioethics Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/bioethics). Within this framework, final course selection is determined by the student, their Biobehavioral Health adviser, and their Bioethics program adviser.

Qualifying exam
In accordance with Graduate Council policy, there will be a single qualifying examination for both the primary program and the dual-title program. At least one member of the qualifying exam committee must come from the Bioethics program. Faculty members who hold appointments in both programs' Graduate Faculty may serve in a combined role.

Comprehensive exam
In addition to the general Graduate Council requirements for dissertation committees (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-600/phd-dissertation-committee-formation), the dissertation committee of a Biobehavioral Health and Bioethics dual-title doctoral degree student must include at least one member of the Bioethics Graduate Faculty. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. If the chair of the committee is not also a member of the Graduate Faculty in Bioethics, the member of the committee representing Bioethics must be appointed as co-chair. The faculty member (or members) affiliated with the Bioethics Program will be responsible for administering a portion of the comprehensive exam that will require the student to demonstrate an understanding of various theoretical and methodological approaches to bioethics, and an ability to apply them to issues and problems (including, where appropriate, practical problems) in their primary field.

Dissertation and dissertation defense
A dissertation on a bioethics-related topic or with a substantial bioethics component is required of students in the dual-title Ph.D. program. The bioethics-related topic of the dissertation or the bioethics component will be approved by the student’s dissertation committee. Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The dissertation must be accepted by the dissertation committee, the head of the graduate program, and the Graduate School.

Dual-Title Ph.D. in Biobehavioral Health and Clinical and Translational Sciences
Requirements listed here are in addition to requirements listed in GCAC-208 Dual-Title Graduate Degree Programs (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-208-dual-title-graduate-degree-programs).

Admission Requirements
Doctoral students with research and educational interests in clinical and translational science may apply for the Dual-Title Ph.D. degree in Biobehavioral Health and Clinical and Translational Sciences following admission to the Graduate School and Biobehavioral Health graduate degree program and prior to taking the qualifying examination in Biobehavioral Health. An admissions committee comprised of faculty affiliated with the dual-title program will evaluate applicants. Applicants must have a graduate GPA of at least 3.5 in a research area related to human health. Prospective dual-title program students will write a statement of purpose that addresses the ways in which their research and professional goals will be enhanced by an interdisciplinary course of study in clinical and translational sciences. Refer to the Admission Requirements section of the CTS Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/clinical-translational-sciences).

Degree Requirements
This dual-title degree program emphasizes interdisciplinary scholarship at the interface of basic sciences, clinical sciences, and human health. Students in the dual-title program are required to have two advisers from separate disciplines: one individual serving as the primary mentor in the graduate program in Biobehavioral Health and another individual serving as the secondary mentor in an area covered by the dual-title program who is a member of the Clinical and Translational Sciences faculty.

To qualify for the dual-title degree, students must satisfy the degree requirements for the Ph.D. degree, listed on the Degree Requirements tab. In addition, students must complete the degree requirements for the dual-title Ph.D. in CTS, listed on the CTS Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/clinical-translational-sciences). Some courses may satisfy both BBH program requirements and those of the CTS program. Up to 12 credits of CTS approved courses can be double-counted from the BBH required course work. Final course selection must be approved by the student’s dissertation committee.

In accordance with Graduate Council policy, the qualifying examination committee must include at least one member of the Clinical and Translational Sciences Graduate Faculty. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single qualifying examination which will
include content from both the graduate program in Biobehavioral Health and the Clinical and Translational Sciences programs. The qualifying exam must be taken within four semesters (summer sessions do not count) of entry into the doctoral program.

The student’s dissertation committee must include at least one member of the Clinical and Translational Sciences Graduate Faculty. Faculty members who hold appointments in both programs' Graduate Faculty may serve in a combined role. If the chair of the committee is not also a member of the Graduate Faculty in Clinical and Translational Sciences, the member of the committee representing Clinical and Translational Sciences must be appointed as co-chair. The fields of Biobehavioral Health and Clinical and Translational Sciences will be integrated in the student’s comprehensive examination.

All students are required to conduct dissertation research that contributes fundamentally to the fields of Biobehavioral Health and Clinical and Translational Sciences. Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The dissertation must be accepted by the dissertation committee, the head of the graduate program, and the Graduate School.

Student Aid
Graduate assistantships available to students in this program and other forms of student aid are described in the Tuition & Funding section of The Graduate School’s website. Students on graduate assistantships must adhere to the course load limits 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.

Biobehavioral Health (BBH) Course List

Learning Outcomes
KNOW:

1a. Graduates will be able to demonstrate mastery of the literature regarding biological, psychological, sociocultural, ethical, behavioral, and environmental influences on various health behaviors;

1b. Graduates will be methodologically proficient so as to comprehend the results of a broad scientific literature encompassing these areas.

APPLY/CREATE:

2a. Graduates will be able to review the relevant literature and generate ideas for novel research questions;

2b. Graduates will be able to design a research plan to answer novel research questions that move the field forward and carry it out to completion.

COMMUNICATE:

3a. Graduates will be able to write articles suitable for publication in top tier peer review journals;

3b. Graduates will be able to present the results of their research in a clear and concise manner to an audience in a professional society meeting;

3c. Graduates will be able to write research grant proposals to external funding agencies (e.g., NIH, NSF, or foundations).

THINK:

4. Graduates will be able to think critically about research regarding biological, psychological, sociocultural, ethical, behavioral, and environmental influences on various health behaviors.

PROFESSIONAL PRACTICE:

5. Graduates will demonstrate leadership, professionalism, and the highest ethical standards.

Contact
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Program Contact Shannon L Anthony
Program Website View

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(814) 863-7424

View (http://bbh.hhdev.psu.edu/graduate)