

2.12 Doctoral Degrees. The school shall offer at least three doctoral programs that are relevant to three of the five areas of basic public health knowledge.

Required Documentation*

2.12.a Identification of all doctoral programs offered by the school, by degree and area of specialization. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

The College offers seven PhD programs, as shown in the Instructional Matrix, Table 2.1.a.1. Four of the programs are in areas of basic public health knowledge: Biostatistics, Epidemiology, Health Services Research and Public Health. The Public Health PhD has three concentrations: Environmental and Global Health, One Health, and Social and Behavioral Sciences. The other three PhD programs are Communication Sciences and Disorders, Psychology, and Rehabilitation Science.

During the past three years, PhD program assessment and planning have been priorities for the University and College. As a result of these priorities, the UF Graduate School is tracking specific data on all PhD programs on an annual basis, such as number of faculty, time to degree and student graduation and attrition rates. In addition, each PhD program produced a five-year enhancement plan, which was reviewed at the College and University levels. Implementation of the plans started in spring 2012. Copies of the five-year plans for each PhD program are in the Resource File.

Based on the University-level review, a “Best Practices” document was developed and disseminated to all colleges for consideration for use by PhD programs. Congruence between the University’s best practices and the PhD programs in the College was the subject of a retreat of the Executive Leadership Committee (ELC) on September 14, 2012. During that meeting, a set of best practices was agreed upon by the ELC. It addresses recruitment, retention, curriculum, communication, faculty preparation and other issues of importance to a successful PhD education. The minutes of the retreat, delineating these items, are in the Resource File.

The steps described above provided an opportunity for PhD programs to examine themselves on a variety of criteria. Programs in Epidemiology, Biostatistics and Public Health were very new at the time of the PhD program reviews, so the data established baselines for these programs, and the substantive discussions helped program directors and chairs identify the measures to be tracked in subsequent years.

2.12.b Description of specific support and resources available to doctoral students including traineeships, mentorship opportunities, etc.

PhD students in the College are supported through a variety of sources that range from four-year fellowships to teaching or research assistantships. The University of Florida provides three primary sources of fellowship funds to PPHP PhD students:

* Other professional degrees are not included in the responses to this criterion.

Graduate School Fellowships: The Graduate School Fellowship program (GSF) represents the most prestigious graduate student award available at the University. To ensure that Graduate School Fellows receive every opportunity to succeed, the fellowship provides at least four full years of support through a nationally competitive stipend and tuition waiver. Most Graduate School Fellows receive research and/or teaching assignments.

The University applies an algorithm to award graduate student fellowships to PhD programs. This algorithm is based on the number of students who graduate each year, averaged over a five-year period of time. Colleges are allocated one fellowship for every four students who graduate. In addition, colleges receive consideration for fellowship awards based on recruitment of students from underrepresented minority groups. In 2012-13, 45 PhD students in the College received Graduate School Fellowship support.

Grinter Fellowships: Grinter Fellowships are intended to recruit exceptional graduate students. Currently enrolled graduate students are not eligible, except when entering a PhD (or other terminal degree) program. Stipends are normally \$2,000 to \$4,000. Continuing the Grinter Fellowship beyond the first year depends on satisfactory student progress. Eleven students received Grinter Fellowship support in 2012-13.

McKnight Doctoral Fellowships: The Florida Education Fund (FEF) awards McKnight Doctoral Fellowships to African American and Hispanic students newly admitted into selected PhD programs at institutions in Florida. The Fellowship provides a \$12,000 annual stipend, tuition, fees and health insurance for up to five years, provided there is satisfactory progress toward completing the degree. African Americans and Hispanics who are U.S. citizens are eligible to apply for the McKnight Doctoral Fellowship. In 2012-13, nine PhD students were supported by McKnight Fellowships.

Other Sources of Support: In addition to fellowship support from the University, the College has two T 32 National Research Service Awards, one in Psychology and the second in Neurosciences, supporting nine PhD students. A T32 application to NIDA has received a very favorable score and is expected to be funded in 2014.

Between 2009-10 and 2012-13, the College received an annual allocation of funds from the Public Health Traineeship Program, Bureau of Health Professions, HRSA. Since the funding level was low, less than \$13,000, the entire allocation was usually awarded to a single student. The Public Health Traineeship Program was terminated in June 2013.

The Dean's Office also provides several supplemental fellowships each year. The supplemental funds are typically used in combination with other program support to create adequate stipends for recruitment of top students. In order to be competitive, multi-year funding is typically provided, assuming adequate student progression. In 2012-13, funding totaled \$21,850, not including one-time recognition awards.

Thirty-five percent of PhD students in the College are supported on research grants of their mentors or a combination of grant and department support. Other sources of support include teaching assistantships, named fellowships at the department level, student-obtained grants (from home country, for example), and need-based scholarships. Students may receive support from a

few different sources simultaneously or sequentially. While there are a few PhD students in the College without a specific source of support, these are usually part-time students who are also employed.

Student travel is often supported by grant and indirect costs funds of the student's mentors. In addition, the University has two resources for student travel support.

The UF Office of Research (OR) and the UF Division of Sponsored Programs (DSP) offer travel funding for graduate students, with the highest funding priority given to doctoral-level students and students in other terminal-degree programs (e.g., MFA) who are:

1. Invited to give major talks and are not offered funds from the meeting organizers, -or-
2. In the final year of their programs and are presenting work at a national meeting where they will be evaluated by potential employers, -or-
3. Offered a unique opportunity to conduct research on material at an off-campus site or can become involved in a special collaboration that may be available only under a limited set of circumstances.

Students apply for these funds and, if accepted, the Office of Research provides travel awards up to \$400 per trip and requires matching funds from the department and/or college. These funds are primarily for assistance with the cost of travel, particularly airfare, and may be awarded to Graduate Students for traveling once per fiscal year.

The UF Graduate Student Council also offers travel grants, which may be used to cover travel-related expenses for presenting research or participating in professional development at a professional conference. Reimbursement may cover conference registration, transportation, and lodging. The maximum grant is \$350.

2.12.c Data on student progression through each of the school's doctoral programs, to include the total number of students enrolled, number of students completing coursework and number of students in candidacy for each doctoral program. See CEPH Data Template 2.10.1.

Table 2.12.c.1 shows progression of students through the PhD programs in the College. Students are progressing at expected rates in all programs, except Biostatistics. (See Criterion 2.7.b for discussion of issues and plans in the PhD in Biostatistics program). At UF, candidacy follows completion of didactic coursework, passing the qualifying examination and identification of a viable dissertation research project. Once admitted to candidacy, completion of the degree usually takes another one-two years. The One Health concentration in the Public Health PhD program admitted its first students in fall 2012. The first cohort is progressing and should be admitted to candidacy in 2013-14.

Table 2.12.c.1 PhD Student Progression 2012-2013

Progression	Biostatistics	Communication Sciences and Disorders	Epidemiology	Health Services Research	Psychology	Public Health Environmental and Global Health	Public Health One Health	Public Health Social and Behavioral Sciences	Rehabilitation Science
# Newly admitted in 2012-13 ¹	7	8	9	4	17	4	2	3	5
# Currently enrolled (total) ²	16	24	24	17	83	10	9	12	33
# Completed coursework during 2012-13 ²	1	5	2	5	15	3	0	6	4
# Advanced to candidacy (cumulative # candidates) during 2012-13 ²	1	3	3	4	18	3	0	3	4
Total # candidates ²	1	9	6	8	52	3	0	5	19
# Graduated in 2012-13 ²	0	2	3	5	13	1	0	2	10

¹ Semesters included: Summer 2012, Fall 2012, and Spring 2013

² Semesters included: Fall 2012, and Spring 2013 and Summer 2013.

2.12.d Identification of specific coursework for each degree, that is aimed at doctoral-level education.

Each of the PhD programs in the College requires 90 post-baccalaureate credits and follows a similar curriculum template. New students start with a set of core courses and/or pre-requisites that are often part of master's-level instructional programs. These are followed by a set of four-five 3-credit core courses that are designed to develop discipline-specific research capability (content knowledge and/or skills) at the doctoral level. PhD students also organize a focused area of specialization within the discipline and take didactic courses on that topic. This latter group of courses is specific to each student and usually includes courses drawn from other departments and programs. Didactic courses are usually 3 credit hours, while courses that provide credit for supervised or dissertation research offer variable credits. PhD program handbooks are in the Resource File. Table 2.12.d.1 lists the PhD-level courses offered by each PhD program in the College and other courses at the PhD level that are often taken by students in those programs.

Table 2.12.d.1 Courses Specifically Designed for PhD Students

PhD Program	Course
Biostatistics	PHC 7056 Longitudinal Data Analysis
	PHC 7066 Large Sample Theory
	STA 7179 Survival Analysis
	STA 7249 Generalized Linear Models
	STA 7346 Statistical Inference
	STA 7347 Advanced Inference
	PHC 7979 Advanced Research
	PHC 7980 Dissertation Research

PhD Program	Course	
Communication Sciences and Disorders	RSD 6110 Rehabilitation Science Theory and Application	
	RSD 6706 Scientific Writing for Rehabilitation Professionals	
	SPA 6581 Practical Statistics	
	SPA 690 Supervised Research	
	SPA 6930 Proseminar in CSD	
	SPA 6936 Special Topics in CSD (e.g., Voice & Respiration, Single Subject Design, Speech Science)	
	SPA 6940 Supervised Teaching	
	SPA 7415 Neurolinguistics of Adult Language Disorders	
	SPA 7979 Advanced Research	
	SPA 7980 Research for Doctoral Dissertation	
	VME 6767 Issues in the Responsible Conduct of Research	
	Epidemiology	PHC 6020 Clinical Trials Methods
		PHC 6711 Measurement in Epidemiology and Outcomes Research
PHC 6846 Meta-Analysis in Clinical, HSR, and Public Health		
PHC 6937 Cancer Epidemiology		
PHC 6937 Critical Skills in Epidemiologic Data Management		
PHC 6937 Supervised Teaching in Epidemiology		
PHC 7000 Epidemiology Seminar II		
PHC 7038 Psychiatric Epidemiology		
PHC 7065 Back to Basics of Epidemiological Data Management		
PHC 7427 Ethics in Population Science		
PHC 7727 Grant Writing in Epidemiology and Clinical Research		
PHC 7901 Epidemiology Journal Club		
PHC 7902 Epidemiology Writing Circle		
PHC 7910 International Field Epidemiology		
PHC 7916 National Field Epidemiology		
PHC 7934 Epidemiology Seminar I		
PHC 7979 Advanced Research		
PHC 7980 Dissertation Research		
Health Services Research		HSA 6911 Research Seminar in Health Services Research
	HSA 6940 Supervised Teaching	
	HSA 7106 Seminar in Health Care Access and utilization	
	HSA 7414 Society, Health, and Medical Care	
	HSA 7437 Advanced Health Economics	
	HSA 7707 Health Services Research Methods I	
	HSA 7708 Health Services Research Methods II	
	HSA 7759 Quality and Outcomes in Health Services Research	
	HSA 7905 Advanced Individual Study in Health Services Research	
	HSA 7936 Seminar in Health Care Costs and Financing	
	HSA7938 Advanced Seminar in Health Services Research	
	HSA 7979 Advanced Research	
	HSA 7980 Research for Doctoral Dissertation	
Public Health	PHC 6937 Supervised Teaching in Public Health	
	PHC 6900 Environmental and Global Health Journal Club	
	PHC 6937 Instrument Development for Health Behavior	
	PHC 6937 Public Health Journal Club	
	PHC 6937 Qualitative Data Analysis	
PHC 6940 Seminar in Public Health Teaching		

PhD Program	Course
	PHC 7587 Theory Development and Testing in Behavioral and Community Public Health
	PHC 7907 SBS Journal Club
	PHC 7935 Critical Thinking in Environmental and Global Health
	PHC 7979 Advanced Research
	PHC 7980 Doctoral Research
Psychology	CLP 6527/6528 Research Methods, Design, and Statistical Analysis I and II (2 semester sequence)
	CLP 6943 Core Practicum in Clinical Psychology (3- 4 semester sequence)
	CLP 6945/6946/6948 Advanced Practicum in Neuropsychology/Health Psychology/Child and Pediatric Psychology
	CLP 6947 Practicum in Intervention (2-5 semesters)
	CLP 7934 Special Topics Courses (Professional Issues and Ethics, Neuropsychology of Aging, Cognitive Basis of Behavior, Behavioral Health and Illness, Behavioral Treatment, Parent Child Interaction Therapy, Advanced Psychotherapy, Pediatric Psychology, Rehabilitation Psychology, Advanced Writing Seminar, Psychotherapy with Older Adults, Child and Family Treatment, Health Promotion)
	CLP 6971/7979/7980 Master's Research, Advanced Research, Doctoral Research
	CLP 6476/6430/6407 Lifespan Psychopathology, Lifespan Assessment, Lifespan Introduction to Treatment
Rehabilitation Science	ALS 6046 Grant Writing
	CLP 6527C Measurement, Research Design, and Statistical Analysis in Clinical Psychology I
	CLP 6528C Measurement, Research Design, and Statistical Analysis in Clinical Psychology II
	EDF 6401 Educational Statistics
	EDF 6403 Quantitative Research Methods in Education
	PHT 6935C The Art of Scientific Dissemination
	RSD 6110 Rehabilitation Science Theory and Application
	RSD 6706 Scientific Writing Seminar
	RSD 6900 College Classroom: Teaching process and Practice
	RSD 6905 Independent Work
	RSD 6935C Doctoral Seminar in Rehabilitation Science
	RSD 6940 Supervised Teaching in Rehabilitation
	RSD 7979 Advanced Research
	RSD 7980 Doctoral Dissertation
	STA 6126 Statistical Methods in Social Research I
	STA 6127 Statistical Methods in Social Research II
	VME 6767 Issues in the Responsible Conduct of Research

A survey of alumni of PhD programs within five years of graduation was undertaken in spring 2011 to assess perceptions of the strengths and weaknesses of the College's programs. The results, also shown under Criterion 2.7, are in Table 2.12.d.2. Respondents felt that their preparation in research methods, statistics and research ethics was very strong. Grant writing, preparing teaching materials and teaching courses were not as strong; suggesting that additional content in these areas at the PhD level was needed. Since that time, structured content in each of these areas has been reinforced in the PhD programs. In addition, a council of PhD program directors has been developed. The council met for the first time in fall 2013 and will continue to meet at least twice each academic year to discuss and address issues of

mutual interest. This forum will promote development and sharing of courses on topics of broad application, such as teaching and grant writing.

Table 2.12.d.2 PhD Graduates' Assessments of Level of Preparation, Spring 2011

Questions Regarding Preparation for a Career in Research and Academia	Agree	Strongly Agree
I obtained strong foundational skills in the following areas:		
Research methods	25%	68%
Statistics	39%	57%
Manuscript writing	46%	39%
Grant writing	54%	14%
Research ethics	39%	50%
Preparation of teaching materials	18%	29%
Teaching courses	14%	32%
During my PhD program, I acquired the skills needed to be competitive for employment after graduation	29%	68%

2.12.e Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. The College has seven PhD degree programs, four of which are in public health disciplines.
2. The University of Florida and the College assessed the structures, processes and outcomes of PhD programs in depth in 2011 and 2012.
3. Key metrics on PhD programs are tracked annually by the UF Graduate School and reported to the College.
4. PhD students in the College are supported through a variety of sources, including UF fellowships, federal training grants, research grants of faculty mentors, and College and department support.
5. PhD programs offer selections of doctoral-level didactic courses as appropriate for their disciplines.
6. Graduates of PhD programs recognize strong training in research methods, statistics and research ethics.

Weaknesses:

1. While PhD students are supported by a variety of sources, the College has relatively few sources of external funding, such as institutional and individual National Research Service Awards.

Plans:

1. Continue to apply for institutional and individual NRSA and other awards that support PhD training.