Global Health (Complex Adaptive Systems Science), PhD

LASSHCPHD

No human health issue exists in isolation; these challenges include past and ongoing sociocultural factors. Become equipped to be a modern problem-solver, to identify, understand and leverage the interconnections between complex issues that defy traditional solutions.

Program Description

Degree Awarded: PHD Global Health (Complex Adaptive Systems Science)
The PhD program in global health draws on the premise that sustainable and satisfying solutions to the most pressing global health challenges require a sophisticated understanding of how cultural context, social and ecological processes and disease are really related.

This transdisciplinary graduate program trains students broadly in cutting-edge health social science research theory and methods. While it leverages the strength in medical anthropology at ASU, including the 15 medical anthropologists on campus, it also takes advantage of a much wider set of skills offered by faculty from such fields as medical sociology, demography, human geography and epidemiology. The program is designed to train those who anticipate working in transdisciplinary academic settings, medical schools or nonacademic health settings, such as the commercial sector, government agencies or nongovernmental organizations.

Some particular thematic foci of the program are:

- biocultural approaches to human coping
- computer-based complexity modeling
- culture and health
- health in the Americas
- indigenous and minority health
- mathematical epidemiology
- nutritional anthropology
- social justice and vulnerable populations
The program draws together some 80 faculty members from across the university to consider how cutting-edge social science can be applied to understand and substantively improve the health of populations. The program favors community-based research and runs collaborative projects in which students are encouraged to gain experience and conduct research, from large U.S. cities to hunter-gatherer communities. Students generally enter the program with a master’s degree in a relevant field.

The complex adaptive systems science doctoral concentration trains the next generation of scientists in advanced concepts and methods needed for approaching diverse phenomena in the social and life sciences. The program is tightly integrated with diverse, ongoing, university-wide research on complex adaptive systems perspective at Arizona State University and emphasizes the value of a complex adaptive systems science perspective to give better insight and a more active role in seeking solutions to a broad array of critical issues facing society today. Students become fluent in the common language of complexity while also receiving a solid foundation in the domain knowledge of existing academic disciplines.

At a Glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe campus

Degree Requirements

84 credit hours, a written comprehensive exam, a prospectus and a dissertation

**Required Core (3 credit hours)**

ASB 510 Health: Social and Biocultural Theories (3)

**Concentration (15 credit hours)**

ASM 570 Fundamentals of CAS Science (3)
complex adaptive systems science application course (3)
complex adaptive systems science mathematics course (3)
complex adaptive systems science modeling course (3)
complex adaptive systems science related research course (3)

**Electives (26 credit hours)**

**Other Requirements (16 credit hours)**

ASB 500 Ethnographic Research Methods (3)
ASB 591 Topic: Professionalism (1)
ASM 579 Proposal Writing (3)  
SSH 591 Topic: Principles of Epidemiology for Global Health (3)  
systematic methods courses (6)

**Research (12 credit hours)**  
SSH 792 Research (12)

**Culminating Experience (12 credit hours)**  
ASB 799 Dissertation (12)

**Additional Curriculum Information**  
Students should see the academic unit for approved concentration coursework.

For electives, students should see the academic unit for a course list approved by the chair.

Other requirement coursework may be substituted with the approval of the academic unit. At least two systematic methods courses in an area other than epidemiology or biostatistics and ethnography, such as nutrition, survey, archival analysis, demography, or geographic information system, should be selected.

When approved by the student's supervisory committee and the Graduate College, this program may allow up to 30 credit hours from a previously awarded master's degree to be used for this program. If students do not have a previously awarded master's degree, the remaining coursework will be made up of electives.

Student doctoral dissertations should include the application of complex adaptive systems concepts and methods in their field of study, and students typically have a member of the complex adaptive systems science graduate faculty as a member of their doctoral supervisory committee.

**Admission Requirements**

Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee  
2. official transcripts
3. personal statement outlining educational and professional goals
4. current curriculum vitae or resume
5. three letters of recommendation
6. proof of English proficiency

Additional Application Information
An applicant whose native language is not English must provide proof of English proficiency regardless of current residency.

Suitable backgrounds for admission include a master's degree in the social sciences (such as anthropology or sociology), public health, human biology or related fields. Students entering directly from a bachelor's degree program should already have completed at least 15 credit hours of social science and six credit hours of human biology, or equivalent, at the senior level and should also have some background in statistics or epidemiology.

Applicants may submit with their application materials an optional scholarly writing sample not to exceed 30 double-spaced pages.

Application Deadlines

Fall

Career Opportunities

Nationally and internationally, the health field provides enormous and varied career opportunities, and demand is high and growing for graduates with specific skills. The major supports the goals of those pursuing careers in academic research, teaching and health services. Sample employment venues include:

- departments of health
- government agencies
- international agencies (World Health Organization, Center for Disease Control, Global Health Council, World Bank, Inter-American Development Bank)
- nongovernmental organizations
- private sector
- universities

The degree program also provides a broad intellectual base for those who plan advanced specialist health training in fields such as:

- dentistry
- medicine
- nursing
- pharmacy
In Arizona and elsewhere, there is a pressing need for professionals with appropriate skills to work in cross-cultural settings or with underserved populations, such as migrants, minorities and those living in poverty, and many of these jobs are directly or indirectly related to health.

**Contact Information**

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Admission Deadlines