

NEW GRADUATE CONCENTRATION PROPOSALS ARIZONA STATE UNIVERSITY GRADUATE COLLEGE

This form should be used for academic units wishing to propose a new concentration for existing graduate degrees.

A concentration is a subspecialty within a degree and major which reflects that the student has fulfilled a designated, specialized course of study which qualifies the student as having distinctive skills and training in one highly concentrated area of the major. Concentrations are formally-recognized educational designations (including the assignment of a university plan code for reporting/record-keeping purposes and appearance on the ASU transcript). Concentrations are to be distinguished from not formally recognized academic distinctions frequently referred to as "emphases," "fracks," "foci," "options," etc.

Submit the completed and signed (chairs, unit deans) proposal to the **Office of Graduate Academic Programs.** Mail code 1003 and electronic copies to ozel@asu.edu or Denise.Campbell@asu.edu

Please type.

Contact Name(s): Ana Magdalena Hurtado	Contact Phone(s): (505) 507-0957			
College/School/Division Name: College of Liberal Arts and Sciences (CLAS)				
Academic Unit Name: School of Human Evolution and Soc	al Change (SHESC)			
(or proposing faculty group for interdisciplinary proposals)				
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Existing Graduate Degree and Major under which this co	oncentration will be established: PhD in Global Health			
Existing Graduate Degree and Major under which this corresponded Concentration Name: Evolutionary Global Healt				
Proposed Concentration Name: Evolutionary Global Healt Requested Effective Term and Year: Spring 2011				

1. Overview

A. Provide a brief description (*not to exceed 250 words*) of the new concentration (including the specific focus of the new concentration, relationship to other concentrations in this degree program, etc).

This new "Evolutionary Global Health Sciences" concentration under the PhD in Global Health will provide research training in anthropological and evolutionary theories and methods to investigate complex relationships among the processes by which cultural, ecological, environmental (natural, and built) and genetic dimensions produce, through intergenerational transmission, the uneven but shared patterns of human population health. It is a standard type of concentration to be offered only under the PhD in Global Health. The curriculum draws from a trans-disciplinary academic approach based on the fields of cultural evolutionary ecology and human behavioral ecology in combination with evolutionary theories (niche construction, dual inheritance and life history) and observational social sciences and public health methods that simultaneously take into account the effects of culture, ecology, environment and genetics on health. The concentration requires training in universal principles of research design from experiments to systematic qualitative and quantitative description - data analyses methods (quantitative and qualitative) and anthropological interpretation, or the identification of determinants of the origins and distribution of health phenotypes in past and present human populations. Students will choose from a wide range of data collection and inferential tools in order to address specific questions, through a combination of lecture and guided reading courses designed to master the highly diverse literature in evolutionary global health sciences that best pertains to their career goals. The PhD in Global Health degree has one concentration already, Urbanism. Additional concentrations will be proposed concurrently to this one: Computational Epidemiology and Global Health, and Global Health Governance. The concentrations are being proposed to provide differentiation within the degree relevant to differentiation in career tracks post-graduation; they also relate to specific clusters of strength within the degree faculty. A new required course for the PhD program, SSH 502 Professional Seminar in Global Health, will provide additional intellectual articulation across the concentrations.

2. Impact Assessment

A. Explain the unit's need for the new concentration (e.g., market demand, research base, direction of the discipline, and interdisciplinary considerations). How will the new concentration complement the existing degree program, including enrollment, national ranking, etc?

The addition of this concentration, along with the three other new concentrations being proposed, will provide clarity for potential students about the areas in which training can be best focused with the PhD in Global Health, further rationalize and coalesce faculty efforts from a wide range of units, and better communicate to potential employers the specific skills sets that degree graduates have. For example, individuals with "evolutionary global health sciences" training in the PhD in Global Health program will be qualified to manage basic or applied science teams who design programs (research, education, prevention or intervention) that take into account two or more components of the problem under study, or targeted for intervention - social, cultural, environmental, ecological or genetic.

B. Please identify other <u>related</u> ASU programs and outline how the new concentration will complement these existing ASU programs? (If applicable, statements of support from potentially-affected academic unit administrators need to be included with this proposal submission.)

The new concentrations, including this one, merely formalize what is already being done in the degree program, so novel impacts on other programs are minimal. The formal recognition of concentrations will also help units more clearly devise commitments to apply resources (e.g., TA lines) to support graduate students and is expected to increase and normalize graduate student support across the degree regardless of the home unit of the students' supervising faculty.

C. Is this an interdisciplinary concentration? If yes, please address the relationship of the proposed concentration to other existing degree programs and any parallel or similar concentrations in these degree programs. (Please include relevant Memoranda of Understanding regarding this interdisciplinary concentration from all applicable academic units.)

This is a concentration within an interdisciplinary degree. This is one of four new concentrations being added at the same time to clarify the opportunities to students and role of associated units in relation to the degree. In addition to this Evolutionary Global Health Sciences concentration, other concentrations being added in the future are Global Health Governance, and Computational Epidemiology and Global Health. This proposed concentration in Evolutionary Global Health Sciences will be administered and managed by the School of Human Evolution & Social Change. Other units may add concentrations under their management in the future.

3. Academic Requirements and Curriculum

A. What are the total minimum hours required for the major and degree under which the proposed concentration will be established?

84 credit hours total are required for the PhD and of that 84, 15 credit hours will be required for this concentration.

B. Please provide the admissions criteria for the proposed concentration. If they are identical to the admission criteria for the existing major and degree program under which this concentration will be established, you may attach a copy of these criteria as they appear on the departmental website, or other source (please indicate source). Please also list all undergraduate and graduate degrees and/or related disciplines that are required for admission to this concentration program.

The core faculty will be responsible for the selection of students for admission to their concentration, and will review and make recommendations for admissions once a year when students apply to the PhD in Global Health program. Starting fall 2010, all students must elect a concentration to be admitted to the PhD degree program. Current students in the program will be grandfathered in (and may elect a concentration if they wish but are not required to do so).

While the minimum requirement is a Bachelor's degree or equivalent from a regionally accredited institution, normally only truly exceptional students will be considered without a relevant Master's degree from the evolutionary sciences (genetics, evolutionary ecology), public health sciences, economics and all subfields in anthropology. Value will be placed on prior social science, public health science, biological research and community-based and cross-cultural/international experiences. Decisions to admit will also be based on fit to available faculty.

Given the interdisciplinary goals of the program, however, a diverse pool of students is desirable. Thus, prior training in any one particular social science or health field will not be considered a necessarily better preparation, and selection of applicants will also seek to maintain some diversity based on prior disciplinary training and experiences.

Minimum GPA for consideration for admission would normally be 3.2 on a 4.0 scale for the last two years of study leading to the Bachelors degree, or 3.5 average GPA or equivalent on a Masters degree. Admission decisions will be competitive, based on evidence of GRE scores, undergraduate and graduate GPA, letters of recommendations,

prior relevant experience, and statement of purpose. Admissions processing will be conducted using a procedure analogous to that followed for all PhD programs in SHESC. SHESC will oversee the nuts and bolts of the admissions process, but the core faculty tied to each concentration will make their own recommendations for admissions. SHESC will then approve those admission requests in their totality across all concentrations based on such factors as any caps on numbers of students and students meeting minimum requirements and will send admission recommendations to the Graduate College. At this time any core deficiencies will be identified for incoming students based on the concentration they are entering. Applicants submit an official ASU graduate application to the Graduate College. In the application process they identify a concentration and proposed faculty they wish to work with, provide official GRE scores and transcripts of all undergraduate and graduate coursework, a statement of purpose outlining career and educational goals, and three letters of academic recommendation.

C. If the proposed concentration is part of a larger, interdisciplinary agenda, please provide additional admission information related to students who may enter with various academic backgrounds, including expected entry-level competencies. As applicable, please also address the courses that must be taken to remedy any relevant deficiencies for incoming students.

NA

D. What knowledge, competencies, and skills (learning outcomes) should students have when they graduate from this proposed concentration program? Examples of program learning outcomes can be found at (http://www.asu.edu/oue/assessment.html).

In addition to those required for the PhD, students completing the Evolutionary Global Health Sciences concentration will demonstrate that they:

- (A) Identify aspects of one or more evolutionary conceptual frameworks that are essential to determine the origins and spread of numerous global health problems.
- (B) Provide state-of-the-art training that will allow students to become leaders in global health and other professions in global health sciences with a strong cultural evolutionary ecology and biology background.
- (C) Are able to translate theories and methods into feasible field and/ or laboratory research that are specific but with clear implications for understanding health patterns globally as directors or members of multidisciplinary teams of investigators.
- (D) Must understand the human rights implications of their research regionally and globally, as well as the research ethics of procedures used, and dissemination of research results.
- (E) Join networks of global health scientists or professionals in order to disseminate information about the student's research on global health at ASU in national and international contexts, and in order to learn more about existing career opportunities in global health, and how to create them.
- E. How will students be assessed and evaluated in achieving the knowledge, competencies, and skills outlined in 3.D. above?

Examples of assessment methods can be found at (http://www.asu.edu/oue/assessment.html).

- (A1) Students must complete all required core courses or approved equivalents (see below), with a grade of B+ or higher.
- (A2) Students will produce a PhD proposal at the time of their written/oral doctoral exam that demonstrates sophisticated application of global health sciences conceptual frameworks and methods.
- (B1) Students must complete all required concentration courses —or equivalent with a score of B+ or higher.
- (B2) Students will produce a PhD proposal at the time of their written/oral doctoral exam that demonstrates sophisticated use of methods for the study of cultural aspects of health, including their correct integration with theory.
- (C2) Students will complete a dissertation project that shows sophisticated application of theory and methods to address a health challenge from an evolutionary global health perspective.
- (D1) During oral doctoral exams students will be required to articulate advanced understandings of potential ethical and social justice issues related to their proposed evolutionary global health research.
- (D2) In order to pass the dissertation, students must include an extensive and sophisticated discussion of ethical and social justice issues related to the completed evolutionary global health research project and its dissemination.
- (E1) With the help of a faculty mentor, students will develop and teach a course in the area of evolutionary global health sciences; the faculty mentor will provide a peer evaluation of teaching effectiveness.

Student Assessments: Students will each provide, on an annual basis, a self-assessment based on their progress through the program and how well they are meeting the learning goals of the concentration as well as the degree.

Faculty Assessments: Each supervising faculty will provide, on an annual basis, a review of their students' progress through the program both in terms of expected timelines, requirements, and degree and concentration learning goals.

Students are strongly encouraged to apply for external funding for their pilot and dissertation research, professional publications relevant to evolutionary global health sciences such as *Evolutionary Anthropology*, *Emerging Infectious Diseases*, *EcoHealth*, *American Journal of Human Biology*, *Social Science and Medicine and PLoS Neglected Tropical Diseases*. Students are also encouraged to join international research projects and organizations through volunteer work, internships, or practica, and to gain instructional experience through design and teaching of relevant courses or as a teaching assistant. They should also be active in relevant professional organizations.

F. Please provide the curricular structure for the proposed concentration.

 Additionally, please ensure that all <u>new</u> required course proposals have been submitted to the Provost's office through the ACRES online course proposal submission system for approval before this concentration is put on the University Graduate Council and CAPC agendas.

Required Core Courses for the Degree *				
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total) 10	
SSH 510	Health: Social and Biocultural Theories or approved equiv	No	3	
SSH 513	Research Design and Proposal Writing in Health Social Science or approved equiv	No	3	
SSH 502	Professional Seminar in Global Health or approved equiv	Yes	1 (x 4)	
Required Concentration Courses			Credit Hours	
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total) 16	
SSH 503	Advanced Medical Anthropology or equivalent	No	3	
ASB 500	Ethnographic Research Methods or equivalent	No	3	
ESS 513	Institutions or equivalent	No	3	
ASM 560	Human Growth and Development: An Evolutionary Perspective or equivalent	No	3	
SSH/ASM 514	Infectious Disease and Human Evolution	No	4	
(as	Credit Hours			

(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total) 16
ASB 510/SSH 510	Health - Social and Biocultural Theories or approved equiv	No	3
ASM 546	Principles of Human Genetics or approved equiv	No	3
ASB 537 OR ASM 591	Topics in Mesoamerican Archeology OR Human Growth and Development	No	3
	And other relevant electives from SHESC, ** SOLS, etc.		7
E.g Capstone project, a	Credit Hours (Insert Section Sub-total) 12		
SSH 799 Dissertation			12
Other Requirements E.g Internships, clinical requirements, field studies as applicable			Credit Hours (Insert Section Sub-total)
<u>For doctoral programs</u> – allow 30 credit hours fron applicable, please indicat	30 maximum		
	Total required credit hours		84

^{*} Note: Required core courses for the PhD degree listed above are somewhat different from those currently required for this degree. However, starting Fall 2010, SHESC is no longer admitting new students to the degree (plan code LASSHPHD), and will only admit students to individual concentrations. Therefore, the core required courses listed above represent the new set of required core courses for the degree program. Current students who chose not to move to one of the new concentrations will have the option to complete the new set of required courses or the old set towards their degree requirements.

- ** Additional SHESC elective course option examples AML 591 (Prob. & Stats w/ Applications to Life and Social Science or equivalent), SSH 691or AML 591 (Topics in Applied Math and Epidemiology or equivalent)
 - **G.** Please describe the primary course delivery mode, (e.g., online, face-to-face, off-site etc.). **Please note:** If this proposed initiative will be offered **completely** online, clearly state that in this section.

Face to face lectures and seminars.

H. Please <u>describe</u> the culminating experience(s) required for completion of the existing degree and major, and the proposed concentration (e.g., thesis, dissertation, comprehensive exams, capstone course(s), practicum, applied projects, etc.).

Students will complete and defend a research-focused dissertation in which they identify a theory-driven problem related to evolutionary global health problems, collect and analyze data, and interpret results using evolutionary conceptual frameworks.

 Please <u>describe</u> any other requirements for completion of the existing degree and major, and the proposed concentration (e.g., internships, foreign language skills, etc.).
 N/A J. For interdisciplinary programs, additional sample curricular structures must be included as appendix items to this proposal relating to students with various academic backgrounds who may pursue the proposed concentration, including expected mastery of core competencies (e.g., course work, skills, and/or knowledge).

4. Administration and Resources

A. How will the proposed concentration be administered (including recommendations for admissions, student advisement, retention etc.)? Describe the administering body in detail, especially if the proposed concentration is part of a larger interdisciplinary agenda. How will the graduate support staff for this proposed concentration program be met?

This concentration will be managed by the School of Human Evolution and Social Change (SHESC), which also manages the PhD in Global Health. However, to allow for intellectual autonomy of all concentrations and the equitable involvement of other units, there are several different layers in the administration of the degree relevant to the concentrations.

- (1) CONCENTRATIONS. The core faculty tagged to each of the 4 concentrations in this degree will be responsible for the selection of admissions to their specific concentration (starting 2010, all students must elect a concentration to be admitted). The concentrations are (1) Culture and Health, (2) Evolutionary Global Health Sciences (3) Computational Epidemiology and Global Health, (4) Global Health Governance (all being proposed at this time) and (5) the existing Urbanism concentration. These faculty cores also provide any required courses for that concentration on a regular basis, approve major professor selections, and annually evaluate and fund students in their concentration. Each concentration will have one lead faculty who is appointed to the degree executive committee. Each concentration will also contribute one core course annually that is open to all students in the PhD regardless of concentration. To allow for clarity in responsibilities, each concentration is fundamentally tied to a single unit (e.g., this one to SHESC), although core and affiliated faculty can come from any unit at ASU. Affiliated faculty need not be attached to specific concentrations, except that they must be approved by that concentration to chair any committees of students attached to that concentration. Those applying to join the graduate faculty are reviewed and approved by the executive committee annually.
- (2) EXECUTIVE COMMITTEE. The executive committee for the degree will consist of one representative from each concentration (governance for how that person is selected stays with that concentration), the administering unit's (SHESC) graduate coordinator, two members at large from the affiliated faculty voted for by the graduate faculty at large, and the director of the PhD program (below). The executive committee will be responsible for maintaining standards and coordinating across the concentrations and the shared parts of the degree (such as coordinating the core courses all students take, setting overall admissions targets) issues related to program-wide curricular development, proposing students for awards, conducting regular degree-wide assessments of the learning outcomes, and decisions regarding academic exceptions (such as delays in expected timelines or student requests for approved equivalents for required courses or electives).
- (3) PHD PROGRAM DIRECTOR. While each concentration has relative autonomy, overall coordination across the concentrations and between the degree program and the Graduate College, etc, will be managed by the appointed PhD program director. The program director is appointed by the administering unit's director, and is charged with chairing the executive committee, liaising across units as needed, and interfacing with the school's other graduate programs and the graduate college. The PhD program director also represents the degree program within and outside ASU, coordinate marketing of the program in and outside of ASU, manage student visits and inquiries, coordinate any funding across the degree, approve and process degree paperwork, coordinate admissions numbers and progress for the degree as a whole in line with unit and ASU priorities and needs, oversee elections, seek out and coordinating student opportunities for research experience, training, and additional support, and chair the executive committee. The director will also convene the SSH 502 Professional Seminar in Global Health for all students (1 cr, one hour weekly, minimum of 4 semesters per student) which acts as the intellectual integration of the concentrations. The director is assisted in managing the overall functions of the degree program by SHESC's existing graduate coordinator and works closely with SHESC's school-wide graduate director and serves as a representative of the degree in the SHESC school-wide graduate committee, since SHESC is the administering unit.
- **B.** How many students will be admitted immediately following final approval of the concentration? What are enrollment projections for the next three years?

Year 1: 4 students, Year 2: 8 students, Year 3: 12 students.

C. What are the resource implications for the proposed concentration, including any projected budget needs? For Doctoral students, how will the students be supported financially? Will new books, library holdings, equipment, laboratory space

and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this concentration please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this concentration.

None: this is being done through reorganization of existing resources already attached to the degree.

D. Please list the primary faculty participants regarding this proposed concentration. For interdisciplinary concentrations, please include the relevant names of faculty members from across the University.

The core required courses will be taught by:

Ana Magdalena Hurtado, Professor, PhD, evolutionary global health sciences, indigenous health, infectious diseases (50% instructional effort)

Alexandra Brewis Slade, Professor, PhD, culture and health, obesity and metabolic disorders (25%)

Dan Hruschka, Assistant Professor, PhD, medical anthropology, native peoples of Asia (25%)

Jonathan Maupin, Assistant Professor, PhD, community-based indigenous health research (25%)

Kim Hill, Professor, PhD, evolutionary cultural ecology (50%)

Anne Stone, Associate Professor, PhD, molecular anthropology of disease (10%)

Gary Schwartz, Professor, PhD, growth and development (10%)

Ananias Escalante, Professor, PhD, molecular epidemiology (10%)

Alicia Wilbur, Adjunct Faculty Member, PhD, host-pathogen coevolution (10%)

Jane Buikstra, Professor, PhD, host-pathogen coevolution (10%)

Brenda Baker, Professor, PhD, paleopathology (10%)

There is a long list of faculty already approved to serve on dissertation committees for this degree. Any approved to chair committees for the degree are eligible to serve as chairs for students in this concentration.

E. Is there a graduate faculty structure for this concentration program that will differ from the original degree program graduate faculty structure (*for PhD programs only*)? If yes, please include the name of the graduate faculty group and whether they will participate in offering this concentration.

No, it will match the existing degree.

5. Additional Material — Please attach any additional information that you feel relates to the proposed concentration. (Please label accordingly, i.e., Appendix or Attachment A, B, etc.)

Approvals (if the proposal submission involves multiple units, please include letters of support from those unit	its)
DEPARTMENT CHAIR (Please print or type)	
(See attached Email Approval)	
SIGNATURE	DATE
DEAN (Please print or type)	
SIGNATURE	DATE
The following section will be completed by the GC following the recommendations of faculty governance	e bodies.
UNIVERSITY VICE PROVOST AND DEAN OF THE GRADUATE COLLEGE	
SIGNATURE	DATE

<u>Please note:</u> Proposals for new concentrations also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate (Information item only), and the Office of the Provost before they can be put into operation.

The final approval notification will come from the Office of the Provost.

GF0809E-92

SHESC APPROVAL EMAIL NOTIFICATION

Hi Denise,

Yes, the proposal looks fine. Please let me know if you need anything else. Thank you, Alissa

ALISSA RUTH

Director of Student and Academic Services

School of Human Evolution and Social Change

College of Liberal Arts and Sciences

Arizona State University | P.O. Box 872402 | Tempe, Arizona 85287-2402 | SHESC Bldg. #229 480.965.4628 | Fax: 480.965.7671 | e-mail: alissa.ruth@asu.edu

ASU School of Human Evolution and Social Change — Prepare to make a difference

From: Denise Campbell

Sent: Wednesday, October 13, 2010 7:42 AM **To:** Alexandra Brewis Slade; Alissa Ruth

Hello Alex, thank you very much for your response.

Hi Alissa, if you will respond to this email and let us know if you approve of the changes as submitted, I will use this email correspondence as the needed SHESC approval of this concentration.

Best wishes,

Denise

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From: Alexandra Brewis Slade

Sent: Tuesday, October 12, 2010 5:09 PM

To: Denise Campbell **Cc:** Alissa Ruth

Subject: RE: Evolutionary Global Sciences Conc. - PhD in Global Health Proposal - (GC

10/12/10)

HI Denise

If Alissa has signed off with changes, I am happy with those.

Very best

Alex

Alexandra Brewis Slade, PhD

Executive Director

School of Human Evolution & Social Change.

Arizona State University

Tempe, AZ 85287-2402

Tel. (480) 727-9879

Fax. (480) 965-7671

For calendar and scheduling please contact:

Melissa Birling, Assistant to the Executive Director

Tel (480) 965-0499 or Melissa.Birling@asu.edu

CLAS APPROVAL and DEAN APPROVAL

From: Linda Lederman

Sent: Friday, February 19, 2010 2:25 PM

To: curriculumplanning@asu.edu

Subject: FW: Graduate Concentrations - Culture and Health Conc./Evolutionary Global Health

Sciences Conc.

These concentrations meet my approval. Thank you. Linda Lederman

Linda Costigan Lederman, Ph.D.

From: Jenny Smith

Sent: Friday, February 19, 2010 1:20 PM

To: Linda Lederman **Cc:** Janice Clark

Subject: Graduate Concentrations

Linda,

The attached graduate concentrations have been approved by the CLAS Curriculum Committee and Senate. Please forward them with your endorsement to curriculumplanning@asu.edu

Thanks, Jenny

JENNY SMITH

Executive Assistant

College of Liberal Arts and Sciences

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