

## Proposal for New Program, Major, and Minor

### **I. Program title, director, participating faculty, responsible academic unit, and description of the program, as it would be included in the University or Graduate College Catalogue.**

Program Title: Health and Society Program, and  
Major in Health and Society (Bachelor of Arts), and  
Minor in Health and Society

Director: To be determined from current faculty

#### Participating Faculty:

##### *Curriculum Committee:\**

Lynn Blevins, Assistant Professor of Medicine, LCOM  
Peter Callas, Associate Professor of Statistics, CEMS  
Paula Deming, Associate Professor of Health Sciences, CNHS  
Bernice Garnett, Associate Professor of Education, CESS  
Jean Harvey, Professor of Nutrition and Food Science, CALS  
Dale Jaffe, Professor of Sociology, CAS  
Marilyn Lucas, Associate Professor of Business, GSB  
Jeanne Shea, Associate Professor of Anthropology, CAS  
Christine Vatovec, Research Assistant Professor, RSEN

*\* This committee will help to oversee curricular integration and planning across units, coordinating the various health related courses taught in the different colleges and schools.*

##### *Other Faculty:*

Courses for the HSOC major and minor will be taught by faculty in CALS, CAS, CESS, LCOM, CNHS, and RSEN; GSB hopes to develop courses for the program in the future. We welcome faculty from across the university to submit courses for consideration.

#### Responsible Academic Unit:

*Health and Society Program, College of Arts and Sciences*

In line with the interdisciplinary model set by Global Studies and Gender, Sexuality and Women's Studies, the new HSOC major/minor will not be affiliated with a particular department, but will be a free-standing academic program housed in CAS. UVM Associate Provost Brian Reed and Curricular Affairs Committee Chair Laura Almstead have confirmed that this is permissible.

#### Program Description:

This interdisciplinary program brings together insights from a wide variety of academic disciplines to explore human health, focusing on the social sciences and a public health approach. It examines how health and disease are not just rooted in biology, but are also shaped by social and cultural influences. In the program, students examine how health is

influenced by global national, regional, and local forces, including biocultural variation, sociocultural conceptions and practices, societal institutions and social inequalities, political and economic processes, geospatial diversity, the changing environment, and planetary health. Marshalling scholarship from the social sciences and public health, the program offers students the opportunity to learn how experts from different disciplines approach questions of health, healing, and health care. Students enrolled in the major or minor may go on to pursue careers in public health, global health, health care management, research, policy, education, advocacy or industry.

**II. Exact wording of degree to be awarded, if appropriate.**

Major: Bachelor of Arts in Health and Society

Minor: Minor in Health and Society

**III. Rationale for the curriculum, program, or endeavor:**

**A. Philosophic goals statement:**

The HSOC degree is an interdisciplinary program that brings together a rich array of perspectives, methods, and findings from the social sciences in order to address critical questions concerning health, healing, and health care in human populations. The goal of the HSOC program is to bring together a variety of faculty and students to examine the array of ways in which human health, healing, and health care are defined, perceived, and enacted, and in which access to health and health care are distributed, within and across populations. It will be particularly attractive for students who are considering a career related to medicine or public health, areas which are increasingly recognizing the need for nuanced comprehension of sociocultural diversity, social determinants of health, and complex and varied social systems.

The HSOC degree provides a critical complement to STEM and clinical approaches to health, which, though powerful, also have limitations. STEM, with its goal of objective knowledge through the scientific method and empirical observation, has yielded phenomenal advances in science and technology; clinical health professionals make invaluable contributions to healthcare with their scientifically-grounded protocols for practice. Social science adds deconstructionist, constructionist, and political economy frameworks to the picture. These frameworks point to clues for detecting the ways in which all knowledge, including scientific and clinical knowledge, is shaped by different perspectives, values, priorities, identities, cultural frameworks, social conventions, scientific paradigms, and social, political, and financial interests. Social science frameworks also help us to see how health and healing practices are influenced by historical legacies, cultural traditions, ecological settings, social institutions, political and economic systems, and geospatial entanglements. Finally, social science frameworks allow us to examine how and why access to health and health care is often unevenly distributed along the lines of race, ethnicity, nationality, region, class, gender, age, and sexual orientation within and across populations. Overall the curriculum emphasizes social determinants of health as an overarching framework to analyzing and understanding human health.

**B. General and specific objectives.**

The general program objectives of the HSOC degree program are:

1. To bring together a rich array of interdisciplinary perspectives, methods, and findings from the social sciences in order to address critical questions concerning health, healing, and health care in human populations, including social determinants of health.
2. To use social science in order to examine the variety of ways in which human health, healing, and health care are defined, perceived, and enacted, and in which access to health and health care are distributed, within and across populations.
3. To foster understanding of the types of questions that social scientists ask about health, healing and health care and the various ways in which they seek information and evaluate, communicate about, and act upon evidence related to these issues.
4. To elucidate the strengths and weaknesses involved in various social science and natural science approaches to issues surrounding health, healing, and health care, and to consider the benefits and the challenges involved in different kinds of interdisciplinary health-related collaborative projects.
5. To provide guidance to help students to identify how aspects of their HSOC education can be ethically and effectively applied in ways that contribute to needs and priorities identified by the members of specific communities in relation to health.
6. To help students to develop skills relevant to related employment or further education opportunities and the knowledge as to how to locate and apply for such opportunities.

Specific student learning objectives: Upon graduation, students with an HSOC degree will have:

1. Demonstrated the ability to recognize and generate the types of questions that various kinds of social scientists ask about health, healing and health care, including social determinants of health.
2. Developed critical thinking skills to effectively identify and analyze important issues related to social, cultural, geospatial, political, and economic dimensions of health, healing, and health care.
3. Developed the skills to effectively acquire, comprehend, and evaluate information relevant to questions about the variety of ways in which human health, healing, and health care are defined, perceived, and enacted, and in which access to health and health care are distributed, within and across populations.
4. Demonstrated an ability to communicate clearly and effectively in genre-appropriate ways about issues related to health, healing, and health care in interdisciplinary perspective.

5. Shown the ability to conceive of and communicate about multiple ways in which their HSOC education could be ethically and effectively applied to contribute to needs and priorities identified by the members of specific communities.
6. Acquired skills that are relevant to obtaining employment or pursuing further education in fields related to social science approaches to health, such as public health, global health, health care management, research, policy, education, advocacy or industry.

Work toward the above objectives begins with our three gateway introductory courses, HSCI 021: Introduction to Public Health, SOC 054: Health Care in America, and ANTH 089: D2: Global Health, Development, and Diversity. One of these three courses, HSCI 021, will be required for all majors and all minors in HSOC; all three of these courses will be required for HSOC majors. These courses were chosen to provide a grounding in interdisciplinary approaches to public health, the relationship between health systems and social structures, and the diverse influences of culture and development on global human health and related aid efforts. HSCI 021 will provide a broad interdisciplinary overview of different approaches to a range of issues in public health and elucidate various pathways that students can take through the major. SOC 054 will give students an introduction to the health care system in America and to social structural issues that contribute to health disparities and unequal access to prevention measures and health care. ANTH 089 examines how the health of human populations in resource-poor settings is influenced by economic development and cultural diversity and considers tools for assessing the appropriateness of global health interventions. At this level, students will work on foundational skills involving reading comprehension, critical analysis, group discussion and debate, basic library research, assessing evidence, synthesizing and comparing across sources, developing and supporting an argument, and giving and receiving peer feedback. Through these courses, they will also receive an introduction to the major and group and individual advising.

At the intermediate level, students will take a social science research methods course or a statistics course to help them to become more critical consumers of research results and to understand the processes that feed into the production of the knowledge that we read and hear about. We offer a choice of STAT 111, STAT 141 or SOC 100. Non-STEM students will likely take the SOC 100 overview of methods in social research, because they tend to take STAT 051 for their math distributive requirement. STEM students will likely take STAT 111 or 141. The instructors of SOC 100 and STAT 111 and 141 have all indicated willingness to incorporate examples that will appeal to the interests of HSOC students.

Also at the intermediate level, students will take two topical courses chosen out of a list of nine options. Topical course options at this level were chosen to reflect common and vital approaches in terms of sociocultural, environmental, and personal perspectives on health. All of the courses chosen as 100-level core course options have a central focus on health. These courses include topics such as diversity in health and healing, racial and ethnic disparities in health, global health, environment and human health, health care system dynamics, and social history of disease. As more course offerings become regularized and available, they may be added to this list. These courses will provide students with the tools to increase their level of critical analysis through more concerted attention to the influences of disciplinary predilections, theoretical constructs, the selection of research questions, how social problems are framed and prioritized, research methods for data

collection and analysis, and styles of community engagement.

During their junior and/or senior years, students will take two 200-level courses selected out of a list of twelve topical courses and eleven methods courses, of which students will be encouraged to take one methods course. The 200-level topical courses are all centrally focused on some aspect of human health. These topical courses will increase students' knowledge and library research and analytical and oral and written presentation skills through an in-depth exploration of a topic; they will typically involve a blend of individual library research, scholarly literature review, and/or community-based service learning projects. While the 200-level methods course options do not all focus on health, they are all designed such that they will accommodate students who would like to focus their research and/or service learning in the course on some aspect of health. In the 200-level methods course, the aim will be to bring students up to the level such that they have the tools to design and carry out a substantial research or service learning project toward the end of their college careers.

The departments and faculty associated with the above courses have all confirmed that they can offer the relevant courses regularly for HSOC and other students.

#### **IV. Relationship of this curriculum, program, or endeavor to current mission and long-range plans of:**

The HSOC major and minor resonate with the long-range plans of all of the colleges and schools of the University of Vermont, as well as with the university's commitments to health, liberal education, experiential learning, and public service.

##### **A. Participating departments, programs, schools, and colleges:**

The planning process for the HSOC major and minor involved sustained input from faculty in each college and school, as well as communication with the Deans of different units. The resulting HSOC major and minor draw upon the research and teaching contributions of all units.

The planning for the HSOC major and minor was centered on active collaboration from all of UVM's colleges and schools, including CALS, CAS, CEMS, CESS, CNHS, COM, GSB, and RSEN. An initial catalyst for HSOC was a cross-college Honors College Summer Faculty Seminar on Global Health, convened in 2015. That seminar sparked a series of informal cross-college faculty discussions in 2015-2016 about how to coordinate health-related offerings. Such discussions included a large Faculty Activity Network (FAN) event in spring 2016 that brought together faculty from across the university to discuss ideas surrounding undergraduate education in relation to public health. These discussions were formalized in summer of 2016 in the form of an ad hoc Integrating Health Committee charged with developing proposals for how to bring together health courses across colleges into common degree offerings. The Integrating Health committee included seven faculty members, each appointed by the Dean of their respective College/School. Members included:

- Sarah Abrams (CNHS)
- Lynn Blevins (LCOM)
- Deborah Cannon (GSB)

- Erika Edwards (CEMS)
- Bernice Garnett (CESS)
- Jean Harvey (CALs)
- Jeanne Shea (CAS)
- Christine Vatovec (RESNR)

Meeting monthly from summer 2016 to spring 2017, the Integrating Health Committee recommended the formation of a cross-college interdisciplinary Health and Society (HSOC) major and minor to be housed in CAS to complement the new Health Sciences (HSCI) degree offered in CNHS. The committee then drafted an outline for the HSOC major and minor; these draft recommendations were presented for feedback first to faculty across colleges with interests in social approaches to health, and second to the chairs of social science departments in CAS. Based on those conversations, an HSOC curriculum committee to develop a formal proposal for the HSOC major and minor was then formed, drawing its members from the Integrating Health Committee and from the attendees of those broader cross-college and CAS meetings. The members of the HSOC Curriculum Committee include Lynn Blevins (LCOM), Peter Callas (CEMS), Paula Deming (CNHS), Bernice Garnett (CESS), Jean Harvey (CALs), Marilyn Lucas (GSB), Dale Jaffe (CAS), Jeanne Shea (CAS), and Christine Vatovec (RSENr).

Each of UVM's seven colleges/schools has departments and/or programs offering research and/or courses that can contribute to the HSOC major and minor. These contributions are related to the university's own mission to excel in the areas of liberal education, health, and public service. Below we outline the contributions of each of those colleges, beginning with the College of Arts and Sciences (CAS) which will be the home college for the degree.

While HSOC major/minor will draw on courses across units, the committee in consultation with the Deans ascertained that the best administrative home for the major/minor is the College of Arts and Sciences (CAS). There are several reasons for this, and in laying out those reasons, the contributions of CAS to the HSOC major/minor will become clear.

First, CAS houses the largest concentration of social science courses and a wide variety of social science departments, including: Anthropology, Economics, Geography, Political Science, Psychological Science, and Sociology, as well as humanities closely allied with social science (History, Philosophy, and Religion). Each of these CAS departments has a history of having faculty with research and/or teaching interests related to health and society, and the CAS Five-Year Plan (5YP) calls for four hires over the next five years that will contribute to HSOC offerings. Specifically:

- *Anthropology* has offered for decades a number of courses in medical anthropology and biological anthropology which deal with cultural variation in bodies, health, and healing; the department currently has one tenured biological anthropologist and one tenured medical anthropologist specializing in sociocultural anthropology, and the 5YP calls for the hire of a biological anthropologist of global health.
- *Economics* has offered a course in the important field of health economics several times in the past; the department has a senior faculty member with expertise in

health economics on staff, and the 5YP allots a line for the hire of a junior health economist.

- *English* has a faculty member in Critical Race and Ethnic Studies (CRES) Program who is researching racialized medicine; the CRES program is interested in bringing in a Harris Fellow with related interests.
- *Geography* offered health geography courses in the past prior to the passing of an esteemed faculty member; the 5YP offers a line to hire a health geographer to teach related courses. In addition, the department plans to revise some existing courses to include at least 50% health-related content (e.g., GEOG 178, GEOG 245).
- *History* has offered courses in the History of Medicine; current faculty members have expressed interest in teaching courses along those lines (e.g., History of Tropical Medicine, History of Epidemics).
- *Philosophy* in spring 2018 will revive the department's tradition of teaching medical ethics, a subject taught regularly for decades prior to a recent retirement, by teaching an introductory medical ethics course. The plan is to follow up in coming years by teaching one or more upper-level medical ethics course such as PHIL 144 and/or PHIL 244.
- *Political Science* is home to a faculty expert on health policy in the congressional context who is interested in developing a full course on the topic.
- *Psychological Science* has several faculty with related expertise and offers courses on health psychology and cross-cultural mental health; the 5YP includes the hire of one or two social psychologist(s) with a focus on race and ethnicity.
- *Religion* has offered some courses addressing religion and healing; this fall the department is hosting a series of events related to healing in religions of African descent, and the 5YP has a line for a Native American Religion hire which could potentially, although not necessarily, have some tie-ins.
- *Sociology* has long offered a number of courses in medical sociology including comparative health systems, aging, disability, death, and dying, and others; the 5YP includes the hire of a medical sociologist with quantitative research methods expertise.

Second, CAS is likely to be the college with the largest number of students who will declare an HSOC major or minor and enroll in HSOC courses. Such courses have been offered by CAS faculty, in all the departments listed above.

Third, CAS is the only college at UVM which offers the BA degree, which allows students to combine a major area of study (usually met through a 33-credit hour major) with other interests (including a 15- or 18-credit hour minor). Compared to the more exclusively health-focused, course-intensive HSCI BS degree offered in CNHS, the HSOC BA offered in CAS will allow students to combine an interest in health with a broad exploration of the liberal arts. That combination will be appealing to students with diverse interests, but will also be helpful to students who discover an interest in the study of health halfway through their studies at UVM—when it would be difficult if not impossible to complete the required credits for the HSCI major and graduate on time unless they already happened to have accumulated many of the large number of science credits required for the B.S.

Fourth, together with CNHS, CAS is the college with the largest number of pre-health students, a group which tends to be drawn toward health-related coursework. Within CAS, the HSOC program will likely have a strong appeal for B.A. students on a pre-health track, including those with clinical inclinations, public health leanings, or both. Some CAS pre-health B.A. students major or minor in STEM subjects such as Biology or Chemistry; such students could easily pursue an HSOC major or minor. Other CAS pre-health B.A. students pursue majors or minors in the social sciences or humanities, and might choose the HSOC major/minor as a complement to or replacement for those other majors/minors. The popularity of health-related courses and formal or informal health-related tracks in Anthropology, Environmental Studies, Global Studies, and Sociology, suggest the likelihood of student interest in the HSOC major or minor. For example, Global Studies is currently exploring the idea of a concentration in global health. In addition, undecided CAS students may be a significant source of students for the HSOC program. The single largest group of individually designed majors has been in areas related to the social science of health, healing or health care. CAS students undertaking the B.S. in Mathematics: Statistics may also be interested in the HSOC minor if their interests lie in biostatistics or epidemiology.

Outside of CAS, the College of Nursing and Health Sciences (CNHS) will also make a large contribution to the HSOC major/minor, with its substantial faculty resources and course offerings related to the study of health. The HSOC major/minor has been explicitly designed to complement CNHS's new major in Health Sciences (HSCI). These two programs are at once distinct and synergistically intertwined. HSOC and HSCI have different degree requirements, with the HSOC B.A. focused on social science approaches within the context of a broad liberal arts degree and with the HSCI B.S. incorporating an intense focus on health from STEM, clinically-applied or professional, and social science angles. At the same time, the two programs share one required course and some optional core courses and electives, allowing for economies of scale and promoting interdisciplinary cross-fertilization. The HSCI degree is housed in CNHS's Department of Medical Laboratory and Radiation Sciences (MLRS), which has had a long-standing record of offering courses related to interdisciplinary approaches to health and well-being, under the auspices of the HLTH and now the HSCI, course prefixes. Non-CNHS students interested in interdisciplinary studies of health have long been enriching their studies by crossing colleges to elect HLTH courses in subjects like global health, cultural health care, women's health, and racism and health disparities, among many others, either as pure electives or as part of an individually-designed major. At the same time, for decades CNHS students interested in non-clinical approaches to health and health care have been reaching out to take related electives in other colleges at UVM, and a few CNHS students have undertaken individually-designed cross-college minors related to social science approaches to health. The formation of the HSOC major/minor in conjunction with the HSCI degree will help to formalize and coordinate cross-college options in the study of health so that future students can more efficiently find relevant courses and colleges can more effectively share resources while consciously cultivating distinctive contributions. While in the course of their extensive B.S. requirements CNHS students will not have room to major in HSOC, they will have space to elect HSOC courses and declare a minor if they choose. In fact, the HSCI major requires 18-credits of health-related electives *or a related minor* that could be fulfilled with the HSOC minor. Coordination between the HSOC and HSCI programs are already well underway, with the Chair of MLRS having joined the HSOC curriculum committee in spring 2017, and a CAS faculty member on the HSOC curriculum committee having been invited to join the MLRS



search committee to hire a new public-health oriented faculty member over the coming year. Further details about distinctions and synergies between the programs are outlined in section VI of this proposal.

The Rubinstein School for the Environment and Natural Resources (RSENR) has been very active in support of the creation of the HSOC degree. Many RSENR faculty focus on the relationship between the environment and human health, both in research and course offerings, including courses on botanical healing. Within the Environmental Studies Program, at least three faculty members focus on undergraduate education in these areas. The HSOC minor may be attractive for students undertaking the B.S. in RSENR.

The College of Agriculture and Life Sciences (CALs) has a rich tradition of research and education about the biosocial dynamics of nutrition, food systems, human-animal interactions and health, and community-based development and human well-being. Within CALs, the departments of Nutrition and Food Sciences (NFS) and Community Development and Applied Economics (CDAE), as well as the Food Systems Program, all have strong links with the proposed HSOC program. Recently, CALs began to offer a course focusing on “One Health,” or human-animal-planet interactions and health, a cutting-edge area of inquiry, making it available to undergraduates as well as graduate students. In 2017-2018 CALs will be hiring a new faculty member with a focus on public health and nutrition; this year NFS is conducting a search for a faculty member in public food safety. CALs students undertaking a B.S. related to health and nutrition or community development may find an HSOC minor to be a good complement.

The College for Education and Social Services (CESS) has also been very supportive in the development of the HSOC degree. Human well-being in community and school based perspectives is a key part of their mission, and they have several faculty members with related expertise and/or course offerings in areas such as health education or public health. As CESS hosts undergraduate programs in social work and special education and graduate programs in school counseling and social work, comprehensive approaches to wellness, including explicitly focus on mental and emotional health in school and community-based settings complement the strengths of other units associated with the HSOC degree and provide additional entry points for student interest in the major/minor. With approval of her Dean, a CESS faculty member with an MPH and ScD from established schools of public health, Dr. Bernice Garnett, has offered to regularly teach one of the core introductory courses for the HSOC degree. CESS students pursuing a B.S. related to health education, school health, or social work may find an HSOC minor useful.

In collaboration with CAS, the College of Engineering and Mathematical Sciences (CEMS) has offered to contribute its expertise and course offerings in quantitative methods, statistics, biostatistics, and epidemiology. At least two faculty members in Civil and Environmental Engineering are interested in coordinating their teaching and research efforts related to engineering, environment, and health with the program, with special attention to pollution, the built environment, water, air, and human health. CEMS students preparing for a B.S. related to data science, biomedical engineering, or civil and environmental engineering may find important synergies in an HSOC minor.

The Grossman School of Business (GSB) has expressed interest in developing courses in health administration, management, and financing as well as in health-related social entrepreneurship. This would be an important complement to the resources in health economics and health policy available in CAS. Through an HSOC minor, students pursuing a B.S. in GSB who would like to work in health-related businesses or non-profit ventures could access vital expertise in UVM's other colleges.

While not offering undergraduate degrees, the Larner College of Medicine (LCOM) has had a faculty representative from UVM's Masters in Public Health (MPH) program actively involved with the Integrating Health committee throughout the process. That representative is a full-time environmental health faculty member who regularly offers courses on environment and health. In addition, the Director of the MPH program at LCOM has reviewed the proposed curriculum and affirmed that its offerings would provide excellent preparation for the MPH program that LCOM launched in 2014. Advanced undergraduates at UVM are permitted to take up to two courses from the MPH program toward their undergraduate degree.

#### **B. The University.**

The HSOC degree program is designed in fundamental solidarity with the university's vision, mission, and strategic plan. It contributes a critical component to UVM's "comprehensive commitment" to "health," "liberal education," and "public service" through promoting interdisciplinary social science education, research, and service learning on health, healing, and health care as a complement to our related STEM and clinically-focused efforts. The HSOC degree will also foster faculty efforts to "create, evaluate, share, and apply knowledge and to prepare students to be accountable leaders who will bring to their work dedication to the global community, a grasp of complexity, effective problem-solving and communication skills, and an enduring commitment to learning and ethical conduct." HSOC is also dedicated to supporting experiential learning and the practical "creation, dissemination, and application" of knowledge in the context of society in concert with the legacy of John Dewey. These aims are all clearly reflected in the general and specific learning objectives of the HSOC degree outlined in the Rationale section above.

#### **V. Relationship to programs offered currently.**

Across UVM, students are approaching important issues and topics in interdisciplinary perspective. Whether pursuing Environmental Studies, Environmental Sciences, Food Systems, Complex Systems, Gender/Sexuality/Women's Studies, or Critical Race and Ethnic Studies, UVM students embrace interdisciplinary learning opportunities. The new Health and Society (HSOC) major and minor will bring that interdisciplinary approach to the study of health, offering a social science-based approach to health within the context of a liberal arts degree. The HSOC major and minor will draw on existing courses across campus and serve as a complement and supplement to the much more credit-intensive, more science-oriented Health Sciences (HSCI) major offered as a B.S. degree in CNHS. At the same time, it will offer a more in-depth, focused study of health as compared to smaller collections of courses available through health concentrations within Environmental Studies and Anthropology. For the specifics of relationships to existing coursework, as well as the nature of the overlap with ENVS and ANTH, see Sections IV and VI of this proposal.

**VI. Indicate any other programs at the University which are similar in title or content and illustrate how they may overlap or differ.**

**HSOC Major**

There are several majors across UVM which have some shared content and courses with the HSOC major. Most important among these are Anthropology, Environmental Studies, and Health Sciences. All of these, however, are quite distinct from the HSOC major, with a very small degree of overlap. After laying out the HSOC major requirements, below we describe the major distinctions and slight overlaps between these majors and the HSOC major.

<b>Program</b>	<b>Prefix</b>	<b>Degree</b>	<b>Character</b>	<b>Overlap with HSOC</b>	<b>HSOC's Relative Distinctiveness</b>
Anthropology Major: Concentration in Global Health	ANTH	B.A.	Anthropology major with four health-related anthropology courses	A few non-mandatory course options and electives	Interdisciplinary; does not require ANTH focus; all health-related courses; offers health-related major and minor
Environmental Studies Major: Health and Healing Track	ENVS	B.A.	Environmental Studies major with four health and environment courses	A few non-mandatory course options and electives	All health-related courses; does not require ENVS focus; offers health-related major and minor
Health Sciences	HSCI	B.S.	More natural science, STEM, professional/clinically-applied, with social science	HSCI 021 and a few non-mandatory course options and electives	B.A. degree requiring fewer courses for the major (33 in HSOC vs. 72 in HSCI); heavier social science focus; more cross-college distribution of core courses

The box below outlines the requirements for the proposed major in Health and Society (HSOC). The HSOC major begins with three core introductory courses: Intro to Public Health; Health Care in America; and Global Health, Development, Diversity (D2). These are followed by a 100-level introductory methods course chosen from two options and two 100-level topical courses taken from a list of nine options. The major builds to two 200-level courses chosen from a list of twelve topical courses and ten advanced methods courses, for which one methods course is encouraged. Along the way, students are given the opportunity to choose three elective courses drawn from a long list of possibilities, of which one should be at the 100-level or above. All of the non-elective courses are ones which departments are dedicated to offering on a regular basis and ones for which the responsible faculty have agreed to coordinate their teaching efforts with the HSOC program.

**Catalogue Language**

**HEALTH & SOCIETY MAJOR, COLLEGE OF ARTS AND SCIENCES (B.A.)**

*Description:* The Health and Society major requires 33 credits, with at least 12 credits at 100-level and at least 6 credits at 200-level. Courses must be taken from the list provided by the Health and Society Major program. For interdisciplinary exposure, no more than 21 credits shall be taken from any one discipline.

*Requirements:*

Thirty-three credits, as follows:

Three core introductory courses (9 credits total)

HSCI 021	Intro to Public Health
SOC 054	Health Care in America
ANTH 089	Global Health, Development, Diversity

One 100-level methods course (3 credits):

SOC 100	Fundamentals of Social Research
STAT 111 or 141	Elements of Statistics or Basic Statistical Methods

Two 100-level courses from the following list (6 credits total):

ANTH 174/SOC 155	Culture, Health, Healing
EDHE 146	Personal Health (new course #, was 046)
ENVS 107/HLTH 107/NR 107	Human Health & Environment
ENVS 181	Environmental Justice
HLTH 103/ANTH 173	Foundations of Global Health
HLTH 105	Cultural Health Care
HLTH 150/HSCI 102	Epidemics – Dynamics of Infectious Diseases
HLTH 155	Racism & Health Disparities
NFS 114	Human Health in Food Systems

Two 200-level courses (6 credits), of which students are encouraged to take one methods course:

ANTH/BIOL 241	Human Evolution and Diversity
ANTH 288	Anthropology of Global Health
CSD 274	Culture of Disability
ENVS 236	Women, Health & Environment
ENVS 237	Human Ecology & Health in Arctic
NFS 244	Nutrition, Health & Disease Prev.
NFS 262	Community Nutrition
PSYS 276/CRES 276	Cross-Cultural Psychology
PSYS 279	Health Psychology
SOC 223	Sociology of Reproduction
SOC 224	Health Care and Aging
SOC 254	Sociology of Health & Medicine

Methods courses:

ANTH/BIOL 242	Research Methods in Human Diversity
ANTH 290	Ethnographic Methods
CDAE 250	Applied Research Methods
EDFS 209	Introduction to Research Methods
ENVS 200/HLTH 250/CDAE 295	Community Participatory Research
GEOG 202	Research Methods
GEOG 287	Spatial Analysis
POLS 230	VT Legislative Research Service (with health focus)
SOC 274	Qualitative Research Methods
SOC 275	Methods of Data Analysis in Social Research
STAT 200	Medical Biostatistics/Epidemiology

**Nine credits drawn from the list of Health & Society electives each semester**, at least 3 credits of which have to be taken at the 100-level or above. May include any of the courses listed above not already counted toward your degree.

**Other information:** HSOC majors may not minor in HSOC; HSOC majors may not also major in HSCI. No more than one course may overlap between a student's major and minor or between a student's two majors in the case of double major. Students pursuing the Global Health Concentration in the Anthropology major and the Health and Healing track in the Environmental Studies major should be especially mindful of this rule. If pursuing a double major in Anthropology, ANTH courses

used for the HSOC major are included in the 45-credit major rule. If pursuing a double major in Environmental Studies, ENV5 courses used for the HSOC major are included in the 45-credit major rule. For interdisciplinary exposure, no more than 21 credits shall be taken from any one discipline.

It should be noted that the curriculum above represents the reality of what we are able to offer as of fall 2018. In the future, slated hires in social science of health in CAS and public health hires in CALS and CNHS will allow us to expand the curriculum to offer a broader choice of core course options and electives. The core courses above will be adjusted over time as new faculty and new courses become available and as prerequisites become aligned to Health and Society making it possible to enroll without intricate planning. At the 100-level, we aim over time to have courses that deal with social structural, cultural, biocultural, behavioral, geospatial, environmental, economic, and policy aspects of health. Some of these offerings will come from existing faculty, and some will come from new hires. In CAS, over the next five years related new hires are slated for Anthropology (Biological Anthropologist of Global Health), Economics (Health Economist), Geography (Health Geographer), and Sociology (Medical Sociologist with Quantitative Specialization). In addition, the slated Social Psychology hire with a focus on Race and Ethnicity will most likely offer courses of interest to HSOC students. In CNHS, Health Sciences in MLRS is slated for an upcoming hire in which they are seeking a candidate with an MPH. CALS is also planning to recruit an MPH in the coming year.

Both Anthropology and Environmental Studies majors offer students the chance to do a concentration or track related to health. For Anthropology, this is the Global Health concentration; for ENV5, this is the Environment, Health and Healing track. Those concentrations, however, offer a narrower set of courses, representing a smaller proportion of the overall credits towards graduation than will be possible with the new HSOC major. Overall, the HSOC major would require many more credits in health courses than either the ANTH major concentration or the ENV5 major track.

The Anthropology Major concentration in Global Health requires that 12 credits within the Anthropology major be taken from anthropology courses somehow related to human health or well-being, all taught within the department. The remainder of the students' 33 major credits are in any area of anthropology that fits within the general requirements for the major, with course options ranging from archaeology to linguistic anthropology to cultural anthropology to biological anthropology. This contrasts with the HSOC major which will require all 33 major credits to be in health-related courses and that those courses be chosen from two or more disciplines, engaging students more broadly in courses across campus. In addition, the ANTH Major concentration has no specific mandatory core course and allows 14 different anthropology courses to fulfill the 12 credits of health-related anthropology courses. In contrast, the HSOC major has three specific mandatory core courses and has a higher threshold for considering a course related to health. As a result, while in some cases a course or two may overlap, it is very possible for an ANTH Major concentrator to have no courses in common with an HSOC major.

**ANTHROPOLOGY MAJOR CONCENTRATION IN GLOBAL HEALTH,  
COLLEGE OF ARTS AND SCIENCES (B.A.)**

Students interested in human health and its variation within and across different populations, cultures, and societies can tailor their major in Anthropology to focus on global health. The department offers a variety of courses centered on biological and cultural anthropology and related to the body and health in varying cultural, social, and environmental settings.

**Students must take twelve credits from the following course list (12 credits out of a total of 33 required for the major):**

ANTH 026: Biological Anthropology (3.00 credits)  
ANTH 040: Parenting and Childhood (3.00 credits)  
ANTH 085: Food and Culture (3.00 credits)  
ANTH 088: Sex, Gender, Culture, and Health (3.00 credits)  
ANTH 089: Global Health, Development, and Diversity (3.00 credits)  
ANTH 172: Gender, Sex, and Culture (3.00 credits)  
ANTH 174: Culture, Health, and Healing (3.00 credits)  
ANTH 180: Psychological Anthropology (3.00 credits)  
ANTH 184: Street Children (3.00 credits)  
ANTH 189: Anthropology of Aging (3.00 credits)  
ANTH 240: Human Osteology (3.00 credits)  
ANTH 288: Anthropology of Global Health (3.00 credits)  
ANTH 290: Ethnographic Research Methods (with relevant student project) (3.00 credits)  
ANTH 293: Internship (with relevant placement) (3.00 credits)

Beyond the above, special or variable topics course and internships may also be considered with the approval of the concentration advisor.

At least six credits of the above courses must be taken at the 100-level or above.

At least three credits of the above courses must be taken at the 200-level.

In addition, all requirements for the Anthropology major must be fulfilled, with some of the above courses satisfying some of those requirements.

To specify, the requirements of the Anthropology major are as follows, for a total of 33 credits in the major: *Core Courses (twelve credits):* ANTH 021: Cultural Anthropology (3 credits), ANTH 024: Prehistoric Archaeology (3 credits), ANTH 026: Biological Anthropology, and ANTH 028: Linguistic Anthropology (3 credits). *Two 100-level courses in at least 2 different subfields of anthropology (6 credits):* See department course list for subfield designations). *Two courses at the 200-level (6 credits):* Note: ANTH 293 does not count, and only 3 credits of ANTH 200 can count, toward this requirement). *Two additional courses at the 100- or 200-level (6 credits).* *One additional course at any level (3 credits).* Note: Only three credits from the following independent research courses may count toward the major (ANTH 192, 202, 198, 298, HON 202, 203). Only three credits of the following practicum courses may count toward the major (ANTH 093, 191, 193, 293). All students are strongly recommended to also take the proseminars ANTH 105 and ANTH 205, to assist them in planning for their professional goals.

The health track in the Environmental Studies Major requires that CAS students take only 11 credits of health-related courses out of a total of 38 credits required for the ENVS B.A. degree. The students' remaining 27 credits can be drawn from any courses on the environment accepted by the program, many of which may have little or no direct connection with human health. In addition, courses accepted for the ENVS major need not be social-science oriented, but rather may be drawn from the natural sciences. While ENVS courses with a direct focus on human health are options

and electives for HSOC majors, they are not required of HSOC majors. As a result, it would be very possible for a health-track ENVS Major to have no courses in common with an HSOC major.

**Environmental Studies Major: Track in Environment, Health, and Healing, College of Arts and Sciences (B.A.)**

This concentration emphasizes the connection between ecosystem health and human health. Students gain understanding in the environmental and human health impacts of degraded and toxic soils, water, food, and air. Students develop critical skills in problem analysis, systems thinking, and social evaluation with an interdisciplinary grounding in environmental health sciences and social sciences. Students may choose to emphasize western medical or alternative or complementary health models of health and healing.

**ENVS Major Health and Healing Concentration Courses (11 credits out of 38 total for the major):** Choose courses for your concentration from this list, taking at least 11 credits of concentration courses. Students may choose to focus on environmental public health or on health and healing in environmental context. Be sure to check for prerequisites and current offerings. Other courses may be approved by the Environmental Program Director.

**Environmental Health Courses:** ENVS 181/CRES Environmental Justice and Sustainability, ENVS 195 Emerging Technologies, Risk & Health, ENVS 295/GSWS 296 Women, Health, and Environment, ENVS 295 Decolonial Feminist Political Ecology, ENVS 295/GEOG 273 Advanced Political Economy and Ecology: Making Southern Africa, ENVS 295/NR395 Human Ecology of the Arctic, ANTH 174/SOC 155 Culture, Health & Healing, ANTH 180 Psych Anthropology, ANTH 288 Anthropology of Global Health, SOC 121 Sociology of Disaster, SOC 224 Health Care & Aging, HLTH 150 Infectious Disease and Human History, HLTH 155 Racism and Health Disparities, HLTH 195 One Health, HLTH 196 Emerging Infectious Disease, HLTH 296 War and Health, PH 196 Careers in Public Health, NFS 114 Human Health in Food System, NFS 262 Community Nutrition, NFS 296 Food, Culture and Health in Oaxaca MX, STAT 141 Basic Statistical Methods, PBIO 185 Biochem for Life and Health Sciences, ENVS 200/HLTH 250 Community Participatory Res Meth, STAT 200 Medical Biostatistics and Epidemiology, ENSC 202 Ecological Risk Assessment, EC 230 Health Econ Evaluation, or PHRM 272 Toxicology, or Travel Study Courses as Appropriate.

**Health and Healing Courses:** ENVS 153 Ethnobotany, ENVS 154 Traditional Ecological Knowledge, ENVS/PSS 156/195 Permaculture/Permaculture Pract., ENVS 195 Plant Based Healing Medicine, ENVS 195 Ecopsychology, ENVS195/NFS 195 Environmental Cooking, ENVS 195 Therapeutic Herbalism, HLTH 141, 142, 143 Healing Touch, HLTH 195 Intro. To Integrative Health, NFS 195 Food and Culture, PBIO 195 Medicinal Plants, PBIO 195 How Plants Can Save the World, SURG 195 Wilderness First Responder, or Travel Study Courses as Appropriate.

**In addition, all requirements for the ENVS major in CAS must be fulfilled, with the above courses satisfying some of the concentration course requirements listed below.**

To specify, the requirements of the ENVS major for the B.A. are as follows, with a total of 38 credits:  
**Required Core Courses (9 credits):** ENVS 001 Introduction to Environmental Studies (4 credits), ENVS 002 International Environmental Studies (4 credits), and ENVS 195 Academic Planning Workshop (1 credit). **Breadth Requirements (9 credits):** One 3-credit breadth course at the 100-level in each of these three areas: 1) Natural Science: ENVS 188 Sust Science or ENVS 195 Applied Ecology; 2) Humanities: ENVS 167 Global Env. History (preferred) or ENVS 195 Env. Literature, Arts and Media; 3) Social Science: ENVS 141 Ecological Economics or ENVS 195 Environmental Policy and Activism. **Concentration Courses (11 credits):** From approved environmentally-related list of courses at the 100 or higher level, including 3.0 credit hours at the 200 level; for Health and Healing track, from concentration list above. **Senior Capstone (9 credits):** At the 200-level from the following list: ENVS 201 Research Methods (3 credits) and ENVS 202 (6 credits) thesis/project; or ENVS 202 (6 credits)

internship and a 200-level capstone course from list below (3 credits); or Three 3-credit 200-level courses from the relevant major concentration list.

The program with the closest degree of overlap with the HSOC major is the new Health Sciences (HSCI) major within CNHS. That major, intended for students interested in the broad-based study of health with a strong training in the hard sciences, is a B.S. degree that combines 18 credits in core sciences, 36 credits in required courses, and 18 credits in related electives. Of the required courses for the HSCI major, almost all are taught in CNHS, some from interdisciplinary perspectives, and some aimed at professional practice in health fields. The 18 credits in electives for the HSCI major are drawn from courses across the university.

Students in HSOC and HSCI programs will have different entry points into the degree, different levels of concentration on health in their degree overall, different expectations regarding coursework in the natural sciences, and different levels of exposure to contexts of clinical and professional health practice. The HSOC major diverges from the HSCI major in four key ways.

1. Total number of credits required: HSOC will require 33 credits for the major, leaving a lot of flexibility for students to pursue other interests which may be non-health-related through a minor, a second major, and electives. By contrast, HSCI requires 36 in core classes, 18 credits in the basic sciences, and 18 in related electives or a health-related minor—i.e. a total of 72 credits, making it a more programmed degree requiring a tighter focus on health.
2. Nature of the degree offered: Reflecting the differences in credits, the HSOC will be a B.A. degree, in which students will combine their study of health within a larger, broad-based liberal arts education. The HSCI, meanwhile, is a B.S. degree, signaling an investment in scientific approaches within a more focused, targeted concentration on health.
3. Science requirements: 18 credits in the sciences are required for HSCI, whereas there are no required science courses as part of HSOC. CAS students need only take two science courses for general distributive requirements.<sup>1</sup>
4. Health professional context/training: Three courses included in the HSCI major offer specific context needed for professional practice in health care settings; none of these courses appear in the HSOC major. The three courses are:

HSCI 160: Health Communication

HSCI 230: Reading and Evaluating Research for Non-Clinical Health Professionals

HSCI 250: Writing for Health Professionals

5. Different options for when to begin the study of health: For students who decide to pursue the study of health after starting coursework at UVM, the only way to complete the requirements for the HSCI B.S. within four years would be to have majored in a natural science in their first year or so of college. Many students interested in health, healing, or

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<sup>1</sup> CAS students do have to complete 7 science credits as part of their distribution requirements. Many students complete these in their first year or two of studies, however, so students may well complete these credits in courses unrelated to health (e.g. astronomy or geology) before deciding on an HSOC major or minor. So, while it is possible that distribution science credits may be taken in health-related topics, this is not required for the HSOC major or minor.



health care at UVM are, however, not natural-science-oriented; instead they spend their first year or so focusing on the social sciences or the humanities, areas of study which are also highly crucial to a full understanding of health, healing, and health care. In addition, many of these same students do not realize that they are interested in health until their sophomore year or later. The 33-credits required for the HSOC major focused on the social sciences means that it would be possible for students to complete the major even if they only discovered a passion for the study of health in their sophomore year and had taken one science class. By offering the HSOC major, then, we open up an opportunity for students to pursue the study of health at different levels of intensity, regardless of whether they came to UVM with science or health in mind. The option to come later to the study of health will be especially helpful for CAS students in that some 30% of entering CAS students are undecided in terms of majors, and up to 30% of those with a declared major will change that major at least once during their degree.

The HSCI and HSOC majors do share many courses and common themes: public health, global health, health policy/systems, and statistics. But that overlap is intentional, emerging in close consultation with CNHS. Both majors aim to bring students together from across the university to study health. Having HSOC and HSCI students in classes together will create powerful interdisciplinary cross-fertilization, while also allowing efficient sharing of instructional resources across colleges.

That said, the two majors speak to different categories of students: some more interested in science, others more interested in social/cultural perspectives. With the HSOC major, the intent is to offer a supplement and complement to the HSCI major, providing a way for social science students to pursue the study of health in an integrated, coherent, focused way—which will build synergies across programs. At the same time, offering the HSOC major will provide a secondary access point to the study of health for students who discover their interest in health too late in their college career to complete the credit requirements of the HSCI major, or who want to combine the study of health with other topics within a broad-based liberal arts education.

Although there is substantial shared coursework *available* across the HSOC and HSCI majors, there is only one common course that would be *required* of both majors: HSCI 021: Intro to Public Health.<sup>2</sup> Aside from that one course, both majors draw on a shared set of courses, but differ in whether they are required/core or electives. Within the HSOC major, all core requirements can be fulfilled by taking one or two out of a series of options. Often one of the options to fulfill a HSOC requirement is a course required for the HSCI major. Thus, HSCI requires STAT 111 or 141; either of those courses would be an option for fulfilling the 100-level methods requirement in HSOC. Similarly, HSCI requires both HLTH 103/ANTH 173: Foundations of Global Health and HLTH 150: Epidemics-Dynamics of Infectious Diseases; either or both of those courses could be used to fulfill the HSOC requirement for two 100 level courses.

The courses required for the HSOC and HSCI majors are compared in the chart below, with shared courses highlighted in grey. Only one mandatory course is shared across the two majors (grey highlight and bolded). The remaining shared courses include three core course options and some

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<sup>2</sup> HSCI 021 is currently being taught in the 2017-2018 academic year under a previous number, HSCI 101. The MLRS faculty are in the process of renumbering and renaming that course to better fit the needs of both the HSCI and HSOC majors.

electives (grey highlight and plain text); in these latter two cases students in both programs have other courses to choose from.

**COMPARISON OF HSOC AND HSCI MAJORS**  
**Courses highlighted in gray are required in the Health Sciences major in CNHS.**

**HEALTH & SOCIETY MAJOR, COLLEGE OF ARTS AND SCIENCES (B.A.)**

33 credits, as follows:

Three core introductory courses (9 credits total)

<b>HSCI 021</b>	<b>Intro to Public Health</b>
SOC 54	Health Care in America
ANTH 89	Global Health, Development, Diversity

One 100-level methods course (3 credits):

SOC 100	Fundamentals of Social Research
STAT 111 or 141	Elements of Statistics or Basic Statistical Methods

Two 100-level courses from the following list (6 credits total):

ANTH 174/SOC 155	Culture, Health, Healing
EDHE 146	Personal Health
ENVS 107/HLTH 107/NR 107	Human Health & Environment
ENVS 181	Environmental Justice
HLTH 103/ANTH 173	Foundations of Global Health
HLTH 105	Cultural Health Care
HLTH 150/HSCI 102	Epidemics – The Dynamics of Infectious Diseases
HLTH 155	Racism & Health Disparities
NFS 114	Human Health in Food Systems

Two 200-level courses (6 credits), of which students are encouraged to take one methods course:

ANTH/BIOL 241	Human Evolution and Diversity
ANTH 288	Anthropology of Global Health
CSD 274	Culture of Disability
ENVS 236	Women, Health & Environment
ENVS 237	Hum. Ecol & Health in the Arctic
NFS 244	Nutrition, Health & Disease Prev.
NFS 262	Community Nutrition
PSYS 276/CRES 276	Cross-Cultural Psychology
PSYS 279	Health Psychology
SOC 223	Sociology of Reproduction
SOC 224	Health Care and Aging
SOC 254	Sociology of Health & Medicine

Methods courses:

ANTH/BIOL 242	Research Methods in Human Diversity
ANTH 290	Ethnographic Methods
CDAE 250	Applied Research Methods
EDFS 209	Introduction to Research Methods
ENVS 200/HLTH 250/CDAE 295	Community Participatory Research
GEOG 202	Research Methods
GEOG 287	Spatial Analysis
POLS 230	VT Legislative Research Service (with health focus )
SOC 274	Qualitative Research Methods
SOC 275	Methods of Data Analysis in Social Research
STAT 200	Medical Biostatistics/Epidemiology

**Nine credits drawn from the list of Health & Society electives each semester**, at least 3 credits of which have to be taken at the 100-level or above. May include any of the courses listed above not already counted toward your degree.

**HEALTH SCIENCES B.S., COLLEGE OF NURSING & HEALTH SCIENCES**

*36 credits in core courses in the major, 18 credits in related electives in public health or interdisciplinary health, 18 credits in the sciences, 42 credits in other distribution requirements, 6 credits in free electives.*

**Courses highlighted in grey could be used to fulfill requirements for HSOC.**

Core courses (all are required)

<b>HSCI 021</b>	<b>Intro to Public Health</b>
HSCI 102	Epidemics in History & Imagination
or HLTH 150	Infectious Disease and Human History
STAT 111 or 141	Elements of Statistics or Basic Statistical Methods
HSCI 103/ANTH 173	Foundations of Global Health
HSCI 120 or NH 120	Health Care Ethics
HSCI 130	Health Promotion and Disease Prevention Strategies
HSCI 140	U. S. Healthcare Delivery and Financing
HSCI 160	Health Communications
HSCI 2XX	Reading/Evaluating Research for Health Professionals
HSCI 240	Project Planning/Evaluation in Health/Human Service
HSCI 250	Writing for Health Professionals
HSCI 2XX	Fieldwork in Public Health or Health Care Delivery or Fieldwork in Interdisciplinary Health

Electives

18 credits in related courses

Basic sciences (18 credits with preference for the following; alternate options available)

ANPS 19 and 20 (or equivalent)	Human Anatomy and Physiology (or equivalent)
MLRS 34	Human Cell Biology
MMG 65	Microbiology and Pathogenesis
or MMG 101	Microbiology and Infectious Disease
PATH 101	Introduction to Pathology

Other distribution requirements

Choose 12 credits in 2 or more disciplines  
 6 credits  
 6 credits  
 6 credits  
 (may be combined with other requirements)

Due to the number of credits required for the HSCI major (B.S.), HSOC majors (B.A.) will not be able to take an HSCI major, and vice versa.

## **HSOC Minor**

The HSOC Minor will not overlap with other minors offered at UVM. The new HSCI major offered in CNHS does not come with an affiliated minor. While Anthropology offers a major concentration in Anthropology of Global Health and Environmental Studies offers a major track in Environment, Health, and Healing, neither ANTH nor ENVS offers health-related minors.

The Health and Society Minor requires a total of 18 credits. This includes the core course HSCI 021 Introduction to Public Health (3 credits), either SOC 054 or ANTH 089 (3 credits), and 3 credits from the 100-level methods courses listed for Health and Society. Students then choose any three additional elective courses (9 credits) drawn from the list of accepted Health and Society courses, with at least 6 of those credits at the 100-level or above. For interdisciplinary exposure, no more than 12 credits shall be taken from any one discipline.

### **Catalogue Language**

#### **HEALTH & SOCIETY MINOR, COLLEGE OF ARTS AND SCIENCES**

*Description:* The Health and Society minor requires a total of 18 credits, with at least nine credits at the 100-level or above. Courses must be taken from the list provided by the Health and Society Major program. For interdisciplinary exposure, no more than 12 credits shall be taken from any one discipline.

*Requirements:*

Eighteen credits, as follows:

One required core introductory course (3 credits total):

HSCI 021: Introduction to Public Health (3 credits)

A choice of one of the following additional core introductory courses (3 credits):

SOC 054: Health Care in America

ANTH 089: Global Health, Development, Diversity

One 100-level methods course (3 credits):

SOC 100: Fundamentals of Social Research

STAT 111 or 141: Elements of Statistics or Basic Statistical Methods

Nine additional credits in HSOC courses, with six of those credits at the 100-level or above:

These may include any of the courses listed above not already counted toward your minor, any courses listed as options for the HSOC major, and/or listed HSOC elective courses.

**Other Information:** HSOC majors may not minor in HSOC. For interdisciplinary exposure, no more than 12 credits shall be taken from any one discipline. No more than one course may overlap between a student's major and minor. Students pursuing the Health Sciences major, the Global Health Concentration in the Anthropology major and the Health and Healing track in the Environmental Studies major should be especially mindful of this rule. If pursuing an Anthropology major, ANTH courses used for the HSOC minor are included in the 45-credit major rule. If pursuing an Environmental Studies major, ENVS courses used for the HSOC minor are included in the 45-credit major rule. For interdisciplinary exposure, no more than 21 credits shall be taken from any one discipline.

The Health and Society Minor will be compatible with an HSCI major, an Anthropology Major with a Global Health Concentration, and a Health and Healing Track in the Environmental Studies Major, *as long as* students carefully plan their course of study to not overlap more than one course

between their major and minor. For HSCI majors, only one mandatory course (HSCI 21) will overlap between the HSCI major and the HSOC minor; for everything else, other options are available to fulfill the HSOC minor. For ANTH and ENVIS majors with a health concentration/track, there are no mandatory courses that overlap with the HSOC major. The HSOC minor will *not* be compatible, of course, with an HSOC major.

## VII. What comparable programs, if any, are in existence today in reputable colleges and universities:

Programs like HSOC focusing on social/cultural perspectives on health are well-established at an array of highly-regarded universities. Many of UVM's peer and aspirant institutions offer comparable majors or minors which emphasize social science approaches to health, albeit with some differences in emphasis: focusing on medicine as opposed to health, integrating social and natural sciences approaches, etc. Among the many comparable programs, there are five at top schools which most closely resemble our proposed program. Descriptions of the relevant majors (all offer related minors) are:

- **University of Pennsylvania, Health and Society Major**

**Website:** <https://hss.sas.upenn.edu/undergraduate/health-and-societies-major>

*Description from the web:* The Health and Societies (HSOC) major examines health and medicine in social context, equipping students with the critical faculties and multidisciplinary skills that will prepare them for careers in public health, health services, and a variety of other arenas. The program is built on the foundation of three core disciplines: anthropology, history, and sociology. Methods and courses from other disciplines and fields—including epidemiology, political science, business/economics, law, environmental studies, and bioethics—supplement the core disciplines and provide majors with the variety of skills necessary to grasp the forces that have shaped our contemporary health landscapes. The Health and Societies graduate is a “multilingual” scholar and citizen, fluent in the methods and perspectives of several social science disciplines--- theoretically informed but practically minded, with a global outlook and local experience.

- **University of Rochester, Health, Behavior and Society Major**

**Website:** <https://www.rochester.edu/college/ph/undergrad/majors/health-behavior-society.html>

*Goals of the program, from the web:*

- Understand the psychological and societal structures and mechanisms affecting human health behavior.
- Understand that health and disease do not depend uniquely on biological mechanisms, but include societal and cultural influences as well.
- Understand that psychological and behavioral factors affect human health, and interact with surrounding economic and environmental conditions.
- Understand the role of behavioral theory, research, and clinical practice in the promotion and maintenance of physical health and well-being

- **University of Texas-Austin, Health and Society Major**

Website: <https://liberalarts.utexas.edu/hs/>

*Description from the web:* The central goal of Health and Society is to train students to understand the socio-demographic, cultural, political, and ethical contexts that underlie health behavior and health policy. We expect many of our graduates to move into positions in non-profit organizations, government, international development or the healthcare industry. Yet Health and Society is also a Liberal Art. While focusing on health, our graduates acquire a broad set of interdisciplinary perspectives and methods that they can apply to any other substantive area.

- **University of Utah, Health, Society and Policy Major**

Website: <http://hsp.utah.edu/programs/major-requirements.php>

*Description from the web:* Substantive courses from a variety of fields (epidemiology, behavioral sciences, research methods and quantitative skills, administration, philosophy, and history) provide a coherent perspective on health care in its various social and administrative contexts. The program provides students with skills appropriate to research and administrative positions in public and private health care settings. It also offers academic flexibility and breadth for those desiring dual majors or wishing to enter graduate and professional programs in the behavioral sciences, medicine, public health, health services administration, law, or other areas.

- **Vanderbilt University, Medicine, Health and Society Major**

Website: <https://www.vanderbilt.edu/mhs/undergraduate/major/>

*Description from the web:* MHS is an innovative multidisciplinary center that studies the social and societal dimensions of health and illness. Our scholarship, teaching, and wide-ranging collaborative projects explore medicine and science in a wide array of cultural contexts, while at the same time fostering productive dialogue across disciplinary boundaries.

**A. What are the highlights of these programs and how do they compare with the projected program at UVM?**

All these programs offer interdisciplinary approaches to the study of health in its social context, drawing on the perspectives and methodologies of the social sciences. In particular, all these programs encourage students to understand that health and disease are not just rooted in biology, but are shaped by social and cultural influences. Thoroughly rooted in the liberal arts, these majors combine courses on health policy, ethics, socio-demographic contexts for health, cultures of health and healing, and the history of medicine. Alongside those topics, all these programs have a strong emphasis on research methods and practice, asking students to master the core techniques needed to produce new knowledge in health, but also to carefully analyze and assess research in the field.

That said, each program offers a slightly different area of emphasis than the others. Distinctive features of the different programs include:

- University of Pennsylvania: because the Health and Society Major is based in the History and Sociology of Science Department, the major has a particularly strong emphasis on the historical approaches.
- University of Rochester: the Health, Behavior and Society Major is distinctive in the central role given to Psychology; a core course of the major is introduction to psychology, which none of the majors elsewhere require.
- University of Texas-Austin: The Health and Society Major here requires coursework in Biology, integrating basic science into the major.
- University of Utah: The Health, Society and Policy Major places a strong emphasis on health policy and health care administration, integrating economic and management perspectives centrally into the major.
- Vanderbilt University: The Medicine, Health and Society Major offers a distinctive concentration focusing on race, inequality and health, emphasizing health disparities across communities.

Beyond the five programs above, there are many other programs that focus on social science and humanities approaches to health. Host institutions range from the most prestigious private schools to smaller universities and colleges. Some examples include University of Arizona, Beloit College, Brandeis University, University of Cambridge, Columbia University, Cornell University, Emory University, Harvard University, University of Kentucky, LeHigh University, University of North Carolina at Chapel Hill, Ohio State University, Wellesley College, Yale University, and York University.

The proposed Health and Society major in CAS offers a comparable breadth of courses and diversity of perspectives to comparable majors elsewhere. Like our peers, we will be emphasizing interdisciplinary approaches, stressing methodological skills, and encouraging students to think about the way health emerges in social and cultural contexts.

HSOC majors at UVM will certainly not have access to the full array of courses available to students at, say, the University of Pennsylvania. Penn is one of the premier institutions for the study of the history of medicine; it is thus hardly surprising that it has many more faculty who focus in social and cultural approaches to health, resulting in a dizzying breadth of courses. UVM stands alongside the University of Pennsylvania, however, in offering courses addressing health from diverse angles, enabling students to develop a critical understanding of how decisions are made and how health experiences are influenced by context.

CAS has recently committed to a series of faculty hires in the area of health over the next five years, including the following areas of specialty:

Anthropology of Global Health  
 Economics of Health and Society  
 Health Geography  
 Sociology of Health/Illness

Adding faculty in these areas will strengthen our capacity to develop and deliver courses across the social sciences, complementing and supplementing what faculty in CAS and

across the university are already able to offer to students. Descriptions of these positions are included later in this proposal.

**B. Do universities engaging in regional participation with UVM offer these programs? In light of existence or absence of such programs, are there good reasons for promoting UVM or another university for offering this program?**

HSOC has a good chance of drawing additional, highly-motivated students to UVM. This program would not duplicate offerings at other universities engaging in regional participation with UVM. Within Vermont, UVM is unique in offering the depth and breadth of health-related courses available across the social sciences, humanities, and STEM fields. In New England, there is nothing quite like HSOC at other state universities (e.g., University of Connecticut, University of Maine, University of Massachusetts, University of New Hampshire, University of Rhode Island). While University of Massachusetts-Amherst has a Public Health Sciences degree in their School of Public Health which has some required courses in the social sciences, it is a B.S. akin to our HSCI program, with a strong leaning toward STEM and clinically-applied approaches and requiring 68 credits of coursework.

**VIII. Evidence of communication with academic units likely to be involved in or affected by the program.**

As suggested above, discussions about how to better integrate health-related coursework across campus began in the university-wide Honors College Faculty Seminar in the summer of 2015. Since that time, conversations and planning has engaged faculty and administrators across UVM's colleges and schools. Most immediately, the breadth of engagement is visible in the Integrating Health Education Committee, which includes one representative appointed from every school and college. To guide the work of that committee, initial principles for how to develop a major and ground rules for discussions were presented in September 2016 to the three deans most intimately connected to the project: Dr. William Falls, Dean of CAS, Dr. Nancy Mathews, Dean of RSEN, and Dr. Patty Prelock, Dean of CNHS. Those three deans were enthusiastic in their support of the idea of new forms of collaboration and of developing a new interdisciplinary health curriculum with a focus on the social sciences. With that support in hand, the Integrating Health Education Committee met twice a month throughout the fall 2016 semester to prepare an initial plan for a major.

Once an initial plan was in place, it was presented in late November 2016 to Deans Prelock and Falls, to ensure the proposed HSOC major did not compete or conflict with the HSCI major in CNHS; they were both supportive of the plan. Plans for the proposed HSCO major/minor were then presented in mid-December to the faculty of the Medical Laboratory and Radiation Sciences Department, which is offering the HSCI degree; the goal again was to ensure full transparency of the plan across faculty, and to address any possible concerns. The MLRS faculty were also supportive.

With the support of the academic units most closely associated with the courses and proposed major/minor, the Integrating Health Education group then brought its plans in early February 2017 out to the wider cross-college informal faculty group which had met in 2015-2016, gathering suggestions and feedback. Throughout the rest of the spring semester, the Integrating Health Education committee continued to meet twice a month to revise and refine the plans for the major and minor. In addition, the following meetings were held in spring 2017 with relevant stakeholders:



- Group meeting with all CAS social science department chairs
- Individual meeting with the chair of Anthropology, Dr. Deborah Blom, to discuss overlap/competition/complementarity with the ANTH major's health concentration
- Individual meeting with the Director of the Environmental Studies Program, Dr. Nate Sanders, to discuss overlap/competition/complementarity with the ENVS major's health concentration
- Individual meeting with the Director of the MPH program at UVM, Dr. Jan Carney, in order to ensure harmonization of degree requirements at the undergraduate and graduate levels.
- Individual consultation with the chair of the CAS Curriculum Committee, Dr. Nicole Phelps, for advice on proposal development.

We have, in other words, discussed the proposed major and minor broadly with departments, programs and schools across campus; the final details of the proposal have been shaped and made stronger by those conversations.

For evidence of consultation with academic units likely to be affected by or involved with the program, please see the letters of support offered below.

**A. Indicate the effect (cost, enrollment, etc.), the program will have on other academic units.**

We anticipate that this will bring more students to health-related courses across campus, most particularly in the required or core classes for the major and the minor. Exact enrollment effects will be difficult to predict at this stage, but we do anticipate the effect will be spread across units.

**B. Faculty engaged in the development of a new program must discuss the proposal with each dean and chairperson/program director of an academic unit likely to be affected by the new program. All units whose courses are an integral part of the proposed program must be included. A letter of support, or at least a record of e-mail correspondence, from each such unit must be attached to the proposal**

We have discussed staffing of core courses with faculty and their department chairs. Below is a chart indicating which faculty are available to teach HSOC core courses and with what level of frequency. We have confirmed that these courses have the capacity to accommodate students from the HSOC program.

**Staffing Plan for HSOC Core Courses**

Core Number	Title	Faculty	Frequency
HSCI 021	Intro to Public Health	Bernice Garnett + Christine Vatovec	Each semester
SOC 054	Health Care in America	Dale Jaffe + SOC hire	Once per year
ANTH 089:D2	Global Health, Developmnt., Diversity	Jeanne Shea + ANTH hire	Once per year
SOC 100	Fundamentals of Social Research	Dan Krymkowski + Jennifer Strickler	Each semester
STAT 111	Elements of Statistics	Karen Benway + Katherine Merrill + Jacob Martin	Each semester

STAT 141	Basic Statistical Methods	Katherine Merrill + Jacob Martin + Kevin Beard + Mun Shig Son	Each semester
ANTH 174/ SOC 155	Culture, Health, Healing	Jeanne Shea	Once per year
EDHE 146	Personal Health	Bernice Garnett	Once per year
ENVS 107/ HLTH 107/NR 107	Human Health & Environment	Christine Vatovec	Each semester
ENVS 181	Environmental Justice	Bindu Panikkar	Once per year
HLTH 103/ANTH 173	Foundations of Global Health	Rycki Maltby and Jeanne Shea	Each semester; now ANTH 195, to be ANTH 173
HLTH 105	Cultural Health Care	Rycki Maltby	Once per year
HLTH 150/ HSCI 102	Epidemics: Dynamics of Infect. Diseases	Sarah Abrams, Liz Winterbottom	Once per year
HLTH 155	Racism & Health Disparities	Mercedes Avila	Each semester
NFS 114	Human Health in Food Systems	Farryl Bertmann	Once per year
ANTH/BIOL 241	Human Evolution and Diversity	Deborah Blom	Once per year
ANTH 288	Anthropology of Global Health	Jeanne Shea + ANTH hire	Once per year
CSD 274	Culture of Disability	Deborah Lisi-Baker + Winnie Looby	Once per year
ENVS 236	Women, Health & Environment	Bindu Panikkar	Alternate years
ENVS 237	Human Ecol & Health in the Arctic	Bindu Panikkar	Alternate years
NFS 244	Nutrition, Health & Disease Prev.	Elizabeth Pope	Once per year
NFS 262	Community Nutrition	Farryl Bertmann	Once per year
PSYS 276/ CRES 276	Cross-Cultural Psychology	Antonio Cepeda-Benito	Once per year
PSYS 279	Health Psychology	Shamila Lekka	Once per year
SOC 223	Sociology of Reproduction	Jennifer Strickler	Once per year
SOC 224	Health Care and Aging	Dale Jaffe	Alternate years
SOC 254	Sociology of Health & Medicine	Dale Jaffe + SOC hire	Alternate years
ANTH/BIOL 242	Research Methods in Human Diversity	Deborah Blom	Once per year
ANTH 290	Ethnographic Methods	Teresa Mares	Alternating years
CDAE 250	Applied Research Methods	Sun + Wang + Connor	
EDFS 209	Introduction to Research Methods	Sean Hurley	Once per year
ENVS 200/HLTH 250/ CDAE 295	Community Participatory Research	Kate Westdijk	Once per year
GEOG 202	Research Methods	Various Geography Faculty	Once per year
GEOG 287	Spatial Analysis	Various Geography Faculty	Once per year
POLS 230	VT Legislative Research Service (with health focus )	Jack Gierzynski	Once per year
SOC 274	Qualitative Research Methods	Dale Jaffe	Alternating years
SOC 275	Methods of Data Analysis in Soc. Rsrch.	Jennifer Strickler	Alternating years
STAT 200	Med Biostats/Epidemiology	Peter Callas	Each semester

**C. The Graduate College Executive Committee must approve proposals for new graduate programs before they come to the Faculty Senate Curricular Affairs Committee. A letter indicating the approval and explaining the rationale for same must accompany the proposal.**

N/A

**IX. Evidence of demand or need for program:**

**A. Indicate justification of inauguration of program at this time:**

This is an excellent time to launch this program at UVM. Since the cross-college Honors College Summer Faculty Seminar on Global Health in 2015, momentum has been growing for more interdisciplinary cross-college interchange and collaboration in research and education related to health. We have a critical mass of faculty with related expertise who are excited to work together and who are committed to regularly contributing courses to the program. Launching the HSOC program in conjunction with the new HSCI program will help to formalize cross-college collaborations between social science/humanities and STEM approaches to health education. In addition, as mentioned above, CAS, CALS, and CNHS are each poised to add faculty in this area, with CAS making four related hires in the next five years and CALS and CNHS slated to each make a public health hire in the coming year.

Furthermore, student interest in social approaches to health has been steadily growing across the US and beyond over the past two decades as many have become inspired by the social science insights and public health contributions of interdisciplinary intellectuals like Anne Fadiman and others. Student excitement at UVM in particular has been piqued by last year's packed guest lecture in Ira Allen Chapel delivered by Paul Farmer, as well as campus-wide first-year reads about Farmer's and Fadiman's work (Kidder's *Mountains Beyond Mountains* and Fadiman's *The Spirit Catches You*).

Finally, there is a great and growing need for social science and public health contributions to addressing social roots of distress and disease and insufficient and unequal access to health promotion, disease prevention, and health care treatments, both in the US and in the world beyond. In recognition of this, further education and employment in the clinical professions and public health increasingly require preparation in social and cultural aspects of health.

**1. Explain education, personnel needs, and social needs that exist (refer to specific authorities or studies consulted);**

Health and health care are one of the largest concerns of nations across the world today across the board from high, to middle, to low income countries. Many health and healthcare problems stem from social causes, including failures of health promotion and disease prevention, social inequality and inequitable distribution of resources, neglect of the impacts of the externalities of industrial development or social conflict, inefficient or ineffective social systems, or unrealistic or inappropriate policies or programs. Due to these failings, nearly a billion people worldwide are without access to adequate clean water, nutrition, or sanitation. Many more people worldwide go without access to basic health care prevention and treatment services. Even in the US and Vermont, there are people who are food insecure, lack access to health insurance and other necessary health related resources. The effects of prejudice, discrimination and inequity have been shown to have a strong correlation with poor health outcomes and less than optimal treatment

The insights and skills provided by an HSOC degree will be crucial for educating the next generation to be critical consumers and producers of health knowledge and health-related social practices. Whether or not they are clinically inclined, our graduates will need refined tools to assess health-related claims in their personal and professional lives. Just as biomedical treatments from clinical trials supported by Big Pharma need careful scrutiny, so too do the claims of “natural,” alternative, or traditional healers. In addition, it is essential to cultivate graduates who will be distinguished producers of health-related communications, actions, and items, whether at home, at work, or on the web. Students also need the tools to discern and resist discriminatory forms of medical knowledge and practice, as shown by the history of the eugenics movement and the Tuskegee syphilis experiments. Students who hope to work abroad or in multicultural settings require the skills to develop a nuanced multi-dimensional understanding of local social ecologies and their interactions with regional, national, and global systems so as to avoid imposing inappropriate “best practices” or ill-suited “model” systems. All too often in the past, naïve do-gooders who lack a systematic understanding of how different social, cultural, political, economic, and philanthropic systems work have inflicted negative unintended consequences on the intended recipients of their good intentions. We need to educate the next generation to appreciate the complexities they are dealing with and how to listen, communicate, and collaborate in a respectful, efficient, complementary, and synergistic manner.

For pre-health students, there has been growing impetus to balance natural science requirements with broader human perspectives on experiential meanings of illness and caregiving and social roots of distress and disease. This stems from both an intrinsic interest on the part of many pre-clinical and pre-MPH students, as well as an extrinsic trend in medical school admissions toward heightened emphasis on behavior, social context, and interpersonal communication. In addition, both medical schools and MPH programs have increased the priority placed on cultural competence, with the latter recently becoming a core competency expected of all entering first-year students in medicine.

The program will be attractive to pre-meds and be likely to increase their competitiveness and preparation for medical school. Medical schools now include Psychology and Sociology in the MCAT. Medical school admissions committees are now more interested than ever in recruiting students with broad preparation including social science and humanities courses and experiences in diverse community contexts, all of which foster a sense of maturity about the context of clinical practice. It is no longer sufficient to be a straight-A student who does not stray from STEM courses and laboratory experiences. Furthermore, it has long been the case that pre-meds no longer need to major in a lab science in order to be deemed solid medical school material.

Later in this proposal, we outline related careers and employment prospects for graduates of the HSOC program.

- 2. Anticipated enrollment or anticipated impact in case of a service or research endeavor for the first five years (give supporting evidence for estimate);**

The HSOC major and minor do not require either a service or research practicum, so we do not anticipate major staffing needs in this area.

**3. Indicate how this program will meet local and regional needs.**

A sizable proportion of employment opportunities in the surrounding region are in related health and social service jobs in hospitals, clinics, government, nonprofits, insurance companies, consulting firms, schools, and universities. As clinical and public health practice are increasingly held to evidence-based standards, more personnel are needed to design, staff, and manage research and evaluation projects and to analyze and present project results. Since increasing value has been placed on understanding of cultural diversity, biosocial interactions, complex social systems, and regional and global interactions in health care and public health, more and more jobs will need the skills that we aim to cultivate in HSOC students.

In Vermont, a substantial portion of the population is economically disadvantaged in both urban and rural areas of the state. It also has a rapidly aging population and an increasing number of immigrants and refugees, all of whom need special attention in terms of clinical and public health efforts. In addition, Vermont has been a leader in political efforts toward a single-payer system. Students in and graduates of the HSOC program can contribute to addressing these issues through research and applied work.

**B. If a doctoral program, include specific data on previous and present graduate programs at master's level with the number of students and degrees awarded.**

N/A

**X. Students (if curriculum or academic program):**

**A. Indicate:**

We would conservatively estimate that the program would attract at least 20 majors in its first year (2018-2019), followed by at least 20 majors in each following year, for a total of at least 100 majors by the fifth year (2022-2023). It is possible that those numbers may run somewhat higher or lower. At some universities, when Health and Society degrees were instituted, they grew very rapidly within a year or two to many hundreds of majors. We are planning for slower growth at UVM in order to accommodate the fact that new faculty will only come on board between 2019 and 2022. While there is no structural way to limit enrollment in the major or minor in CAS (students declare majors/minors through an online form; no applications are necessary), we will try to minimize enrollment in the initial year by not concertedly advertising the major in 2018-2019. Since new faculty will be on board starting in fall 2019, we will start ramping up communications related to the new minor/major at that point.

While to some degree, the HSOC major and minor will attract students who would have declared other majors and minors in its absence, we also have an excellent chance of attracting and retaining students who would not come to or stay at UVM without clear support for their interests in health and society and its elements such as public health, global health, and health and equity. Student comments on our survey of current students, as well

as verbal comments from prospective and admitted students indicate that there are students who choose to matriculate or transfer elsewhere due to lack of a clear platform for supporting them in pursuing their interests.

Whether students at UVM end up adding an HSOC major or minor or simply retaining their current major or minor but taking some HSOC courses, the HSOC program will serve as a valuable nexus point for students with related interests, whether their ultimate destination is to pursue careers in clinical health professions, public health, STEM, social science, or some combination thereof.

The HSOC degree gives students who do not necessarily know that they are interested in health upon matriculating the chance to pursue a passion that they only realize they have after taking some courses in college. CAS students, in particular, often do not know where their interests lie until their sophomore year, by which time it would be too late to do a B.S. in HSCI. While students would still have time to major in Anthropology with a concentration in global health or in Environmental Studies with health and healing track, not all students interested in health want to focus so intensely on Anthropology or Environment Studies so as to take all of the courses required for those majors (e.g., archaeology in the first case, or introduction to environmental studies in the second case).

#### **1. Evidence of a source of candidates:**

For decades, UVM faculty with related expertise have been receiving inquiries from highly motivated students concerning the possibility of a degree focused on social science approaches to health, healing, and/or health care. These inquiries have come from students in CAS, as well as some students in CALS, CNHS, and RSEN. It is possible that students from GSB or CESS have also made inquiries at some point in the past.

In spring 2017 the ad hoc committee for Integrating Health Education at UVM conducted a survey of UVM students to inquire about interest in a health and society degree. Students had a couple of weeks in March to respond to the survey, which was conducted through the LimeSurvey portal. Students had the default of remaining anonymous, but those who chose to do so were given an opportunity to leave their name in support at the end of the survey.

The survey was not distributed to all undergraduates at UVM; rather it was distributed through the collegial and pedagogical networks of the faculty members on the Integrating Health Education committee. Representing each of their seven respective colleges, those committee representatives distributed a link to the survey to the students in their related courses and also asked colleagues who taught related courses if they would do the same. In addition, the link was distributed to students on the Pre-Health listserv, the Global Studies listserv, the Anthropology of Global Health listserv, the Environment and Health listserv, and the College of Nursing and Health Sciences student listserv. Finally, the link was sent to the faculty on the GlobalPublicHealth listserv at UVM to ask those faculty if they might send the link to their students. The survey was also sent to the leaders of related student clubs at UVM, including MedVida, PIH-Engage, Oxfam Club, Engineers without Borders, Amnesty International, and Feel Good.

**Survey Sample:** The survey collected 163 total responses, including 133 full responses and 30 partial responses. Respondents came from all but one (GSB) of UVM's undergraduate colleges. CAS had by far the most students responding, followed by CALS, CNHS, and RSENR. More specifically, the distribution of respondents by college was: CAS 44%, CALS: 14%, CNHS 12%, RSENR 4%, CEMS 1%, CESS 2.5%, GSB 0%, and No answer 22%. (COM offers only graduate degrees, so the survey was not distributed to COM students.)

Overall, the respondents were a little less than half first or second year undergraduates, with first years (18%) and sophomores (25%). 37% were 3<sup>rd</sup> or 4<sup>th</sup>+ year undergraduates with juniors (23%) and seniors (9%). The remainder were CE or recent alum (4%) or no answer (21%). Notably, the vast majority of respondents identified as women (68%), with the remainder identifying as men (8.5%), non-binary (2%), or no answer (22%).

Current majors commonly reported by the respondents included: Anthropology with Global Health Focus, Biology, Biological Sciences, Chemistry, Environmental Studies with Health and Healing Focus, Exercise and Movement Science, Food Systems, Global Studies, Health Sciences, Mathematics/Statistic, Medical Lab and Radiation Science, Microbiology, Neuroscience, Nutrition and Food Sciences, Nursing, Political Science, Psychological Science, Sociology. Current minors included a similar lineup but more variety with the addition of minors like Behavior Health Change, Business Administration, Community and International Development, Economics, Education, Gender, History, Human Development and Family Studies, Sexuality, and Women's Studies, Pharmacology, Philosophy, and Religion.

**Survey Results:** Among the 163 respondents, there was strong indication of interest in a Health and Society major and minor:

- 38% of the 163 respondents said that they would definitely or possibly consider making HSOC their major if it were offered as a new major now. 45% said that they had already declared their major and/or it was too late to change now. Only 6% said that they were not interested in that kind of major. The remainder gave no answer.
- 55% of the 163 respondents said that they would have considered making HSOC their major if it had been offered earlier in their college career. Only 5% said that they would not have considered it. The remainder gave no answer.
- 71% of the 163 respondents said that they would definitely or possibly consider making HSOC their minor if it were offered as a new minor now, and 16% said that they had already declared their minor and/or it was too late to change now. Only 3% said they were not interested in that kind of minor. The remainder gave no answer.

- 34% of the 163 respondents said that had an HSOC minor been offered earlier in their college career that they would have considered minoring in it. The remainder gave no answer.

The vast majority of the 163 respondents reported that they would consider taking courses related to health and society. Those results are below:

<b>Percentage Who Would Consider Taking HSOC Courses (N=163)</b>	
Courses on global health	82%
Courses on public health	81%
Courses on social, cultural or behavioral determinants of health	81%
Courses on environmental or ecological determinants of health	80%
Courses on health policy, management, and economics	80%

Across those subject areas, students reported high to very high degree of interest in all of them. Comparatively, the highest proportion of the sample reported a high or very high interest in courses in public health (74%), social, cultural or behavioral determinants of health (74%), and global health (68%). That said, more than half of the respondents expressing high or very high interest in environmental or ecological determinants of health (58%) and for health policy, management, and economics (51%). Many of the remaining students reported moderate interest in these kinds of courses. None of the respondents indicated no interest in global health, public health, or social determinants of health courses, and only 1% indicated no interest in the other two course subject areas. The remainder gave no answer.

When asked an open-ended question about the kinds of careers they would like to go into, 45% of the sample responded. The careers they mentioned were all related to some form of public service in support of health and wellbeing. Some of the most common career paths mentioned included clinical healthcare professional (M.D., N.D., P.A., N.P., R.N., O.T.); public health or global health work (M.P.H., M.A.); NGO work in underserved communities; researcher/professor (Ph.D., M.A.); public policy, law and advocacy; human services and community outreach; and health promotion and education.

Students were invited to give open-ended answers as to their reason for interest in the proposed health and society program. The responses can be broken down into three areas:

- 1) the importance of interdisciplinary and systems approaches to health and health care;
- 2) interest in M.P.H. or other non-clinical career paths and social, cultural, ecological, environmental, policy, legal, economic, or social justice aspects of health, healing, or health care; and
- 3) interest in clinical healthcare career and how HSOC would broaden their horizons beyond STEM and the clinic.



Below are some student quotes from the survey regarding their reasons for interest in the proposed HSOC program:

### **UVM Student Quotes Concerning Proposed HSOC Major/Minor**

#### **Importance of interdisciplinary and systems approaches:**

“I think as healthcare becomes more and more important in our society it is clear that healthcare should be looked at from more than just the traditional biomedical or political models. Creating more programs like this will help train people to look at the larger holistic and dynamic systems of health and healthcare are the kinds of steps we collectively have to take in order to make real progress to addressing the national and global healthcare crisis.”

“I am interested in social problems of the world, and health is a social problem. I would like the opportunity to explore these issues in detail, this major/minor would help greatly.”

“I was considering becoming an Independently Designed Major so I could study this at UVM. This major would be perfect for me.”

“This a perfect combination of courses that I am trying to find in my major now.”

“This sounds like exactly the sort of major I was searching for when I started at UVM. Unfortunately I ended up settling and deciding on another major that did not totally fit my interests.”

“It is an area of study that many are interested in but isn’t offered here on campus.”

“I am interested in entering the health field, but there is not currently a major that encompasses my interests, passions, and skills.”

“It already encompasses so much of what I do at school: I’m an ENVS and Sociology major with a self-designed health concentration. I can think of 3 classes I’ve taken so far that would probably qualify. If this isn’t offered as a minor, I want to make the case to self-design one, that’s how closely it relates to my academic track. Thank you!”

“I think this is a much needed discipline there are a lot of directions one could go with this major. It would be an asset to medical professionals, policy makers, and social scientists. Social science, medical science, and environmental science are often siloed. I think this major/minor will result in rich collaborations and research opportunities.”

“This would bridge the connections between my academic interests (in all of the above) and allow me to study the connections and relationships between them in a cohesive manner. I am a current junior and I wish I was able to join this program!”

“It sounds like a great bridge between courses such as sociology and anthropology and, environmental science, and public health.”

“The proposed program would allow me to explore different aspects of global health including economics, policy, and environment, which is something that is currently not feasible to do under my minor as it would require taking lots of elective classes that don’t count toward my major or minor – and I’m not sure if they even exist.”

“This type of program allows for the integration of health in its true environment which is the current culture. Taking medicine out of the context of society hides a lot of the intent and impact that this has on citizens. Studying these relationships is critical for any current prehealth student including myself.”

“Humans in a society have a ton of complex interactions which directly impact health which I just find fascinating. Also, government influences can impact health which can have major social implications.”

### **Interest in non-clinical career paths and social science approaches:**

“I am extremely interested in pursuing my MPH so have this background would be a huge advantage when going into a Master’s program.”

“I am extremely interested in public health and I have been trying to create my course load to relate to this. Finding courses that are appropriate has been challenging. I would definitely add the Health and Society program to my major!”

“I am thinking about getting my MPH and am very interested in the inequalities in our health care system.”

“I would like to learn more about health policy and global health. Anthropology with a global health focus is already my minor and I would be interested in taking more classes related to health policy.”

“It’s good way to gain a world view outside of your own limited perspective of the world, and what better way to do that than through seeing the difficulties other people face in healthcare around the world.”

“I am extremely intrigued by human’s interactions with plants, specifically the plant medicines that cultures value immensely. I want to learn about how plant medicine and alternative ways of achieving wellness can be integrated into modern societies that do not necessarily value plants as medicine.”

“Having a Health & Society program in CAS would be a great addition for students interested in non-clinical health.”

“Seems like a good start if interested in social work or public health administration after undergrad.”

“Not interested in doing pre-med or nursing, but I feel like this would be the perfect approach as more of a policy side of things.”

“I am very interested in the societal aspect of the health discipline and am interested in working with people.”

“I love learning about cultures and the field of health has always interested me as well but I have never wanted to work in a hospital setting that requires the heavy math and science background.”

“To understand health you must also understand the societal implications that come along with it.”

“Because it’s something that all humans need at some point so there is a need for it, and I think that it would better me as a teacher.”

“I’m really interested in what affects kids and a huge part of that is the society around them. The behaviors and views that are held as well as perpetuated around each child is paramount to their

healthy development. This minor would let me explore the bigger scope of what affects students and work with multiple other disciplines so we all can promote a healthy and stable society.”

“I want to go into public health and medicine after undergrad and this seems like a great way to incorporate those studies into undergrad.”

**Interest in enriching a clinical career with perspectives beyond STEM:**

“I’m very interested in health policy and public health, as well as social/cultural/behavioral determinants of health. I’m interested in becoming a physician and have always been interested in healthcare, and these interests span beyond the scope of medicine and into health policy and public health. Since there is currently no public health/health policy major or minor, I’m very interested in this program.”

I’m a “pre-med and I think this program would offer excellent preparation for the social, cultural, and economic aspects of healthcare work.”

“I am a pre-med student looking to get involved in Doctors without Borders after medical school.”

“It’s important to have a health sciences major that doesn’t favor JUST the natural sciences and insist on having a strict line of coursework that allocates only electives as being able to learn about society and people.”

“This would be an option for students in the hard sciences to explore some other topics.”

“I think that learning about health as it relates to society will help prepare more well-rounded people who will later apply for admission to graduate school.”

“It would help provide a better perspective on health as a whole, as the role of society is an undeniable component that I know little about.”

“I’d like a minor that exposes me to courses I may not otherwise take, and exposes me to a side of medicine that I might not normally consider; having this as a minor could open doors to different career paths if clinical medicine doesn’t work out.”

“Learning how to apply all the knowledge I have learned about health into helping the public would be really helpful and open other possible career paths.”

“I am unsure of my options of the health career world and I feel like this would be a great major to explore those possibilities. Traditional biology, chemistry, and physics classes do not cover all of the different areas in this major.”

“It is an area of study that would go well with my major (psychological science) and that I have been interested in for a while.”

“I’m currently a student within the new Health Sciences program in CNHS and I think that although I’ll be graduating next year and won’t have the opportunity to participate in the Health and Society program, that it’s a great idea for a new major/minor and would definitely be interested in making it my minor if I weren’t to be graduating.”

One UVM alum suggested that this program may help to retain or attract more students to the university as she knew several Vermonters who decided to use the

inter-state agreement go to college out of state at places like Umass, because UVM did not have a BA or BS in public health.

**2. Requirements for admission and retention of students;**

Students will declare the HSOC major or minor through the registrar's declaration page. In terms of combining HSOC with other majors/minors, the most basic exclusionary criteria is that students cannot do both a major and a minor in HSOC. In addition, an HSCI B.S. is incompatible with an HSOC major as the number of courses needed would far exceed the total credit requirement for graduation. Beyond that, given how difficult it is to do cross-college majors, students outside of CAS would be encouraged to do a HSOC minor rather than the major.

Careful advising will be necessary to assist students pursuing the HSOC minor in association with the HSCI B.S. degree, or pursuing the HSOC major or minor in association with an Anthropology Major or Minor with a Global Health Concentration, or an Environmental Studies Major or Minor with a Health and Healing Focus. In all those cases, as usual, only one course can overlap between the major and the minor/second major.

As with Biochemistry and Neuroscience majors, in the interdisciplinary cross-college spirit of the HSOC program, HSOC majors will only need to take 84 out of their total 120 credits within CAS.

CAS students majoring in a discipline and minoring in HSOC need to keep in mind the 45-credit rule that they cannot count more than 45 credits in the disciplinary course prefix of their major discipline toward their 120 credits required for graduation.

At least six students who approached faculty about undertaking an IDM in health studies over the past year have opted to follow the drafted HSOC curriculum as the template for their program of study in the absence of this degree. If the HSOC proposal passes, these students are planning to declare an HSOC major.

**3. Selection process;**

As is typical of most majors and minors in CAS, there will be no selection process beyond checking for overlap with courses required for other majors/minors. The director of the program with the help of his/her administrative assistant will screen for those issues. We will monitor enrollments and communicate regularly with department chairs and deans to adjust staffing for related courses if need be.

**4. Financial support available through the department and expected from the Graduate College or other UVM sources (Graduate Programs);**

N/A

**5. Mechanism of advising students;**

Prospective majors and minors will generally receive initial introduction to the Health and Society Program through the three core introductory level courses (HSCI

021: Introduction to Public Health, SOC 054: Health Care in America, and ANTH 089: D2: Global Health, Development, and Diversity).

When students declare an HSOC major or minor, they will then be assigned an HSOC faculty advisor by the program director with the help of an administrative assistant. Students will then be connected to in-person and online advising resources. HSOC faculty advisors will include the program director and other program-affiliated faculty who agree to serve as advisors. Advising resources will be developed in consultation with program faculty, and will be shared with all faculty and declared HSOC majors and minors.

Some members of each of UVM's undergraduate colleges have confirmed their willingness to help with some of the advising. The faculty teaching the three core introductory courses have agreed to serve as faculty advisors for the program: Jeanne Shea and Dale Jaffe have offered to serve as major advisors and Bernice Garnett has offered to serve as a minor advisor. To help with initial demand, Jennifer Strickler in Sociology has agreed to advise HSOC majors. As new health-related hires come onboard in CAS, they will be assigned HSOC advisees as well; for example, the Geography Department has confirmed that the new health geographer will begin student advising in year 2 of his/her probationary period.

In addition, the program has received generous offers of minor advising assistance from around the university, including:

- Ken Allen – Advise CNHS students minoring in HSOC.
- Peter Callas, CEMS – Advise CEMS students minoring in HSOC.
- Jennifer Fath, GSB – Advise GSB students minoring in HSOC.
- Bernice Garnett, CESS – Advise CESS students minoring in HSOC.
- Jean Harvey, CALS – Advise up to five CALS students minoring in HSOC.
- Dale Jaffe, CAS – Advise CAS students minoring in HSOC.
- Marilyn Lucas, GSB – Advise GSB students minoring in HSOC for 2 years.
- Bindu Panikkar, RSENSR – Advise ENV/S/NR students minoring in HSOC.
- Jeanne Shea, CAS – Advise CAS students minoring in HSOC.

\*In some colleges, advising in the first year (CNHS) or two (GSB) is administered through student services and/or program advisors.

Declared students will receive advising through a number of different channels, including online transmission of advising materials and office hours with HSOC faculty advisors. HSOC advising materials will be made available to all declared HSOC majors and minors and to all HSOC faculty advisors through the virtual means of a Health and Society website, an HSOC listserv for students, and an HSOC listserv for faculty. HSOC advising information will include a major and minor handbook, a degree checklist, a four-year plan, study abroad information, internships guide, service learning guide, student research and thesis guide, and information about graduate schools and careers, among other materials. Beyond individual advising, group advising workshops will also be provided each semester to help with course registration and other issues.

Beyond communication by listserv and email, program faculty will be invited to meet in person once a year in the early fall or late spring. The HSOC curriculum committee will meet once a semester, likely in early September and early in the spring term. After the first year, we will hold a program-wide retreat before classes to get a sense of how things are going and to define desired future directions.

To keep track of the evolving needs and opportunities of faculty and students, the HSOC curriculum committee will do curriculum mapping, enrollment planning, and advising planning at least once a year to account for new developments. The curriculum committee will encourage program faculty to share syllabi in order to calibrate offerings for level and synergy and to share helpful advising resources they find.

In advertising the program and advising students, care will be taken to distinguish the HSOC degree from the HSCI degree. This will be supported through clear major and minor checklists and written guidance for faculty and students comparing the natural science vs. social science emphasis, the BA vs. BS emphasis, and the concerted focus vs. more liberal arts emphasis. When we touched base with her last fall, Beth Wisser, Director of UVM Undergraduate Admissions, felt that she would not have any trouble explaining the differences to prospective students.

**6. Prospects for employment or opportunities for further education of graduates.**

Just out of college, students will be prepared for a variety of entry-level jobs in governmental, multilateral, bilateral, nongovernmental, nonprofit, for-profit, consulting, research, advocacy, healthcare, and educational organizations. Since the curriculum offers students the flexibility to tailor courses to their interests, they will be able to prepare for a broad range of employment opportunities. Such jobs include positions like:

- Project manager or administrative coordinator for a nonprofit
- Social media outreach for a health equity advocacy group
- Program assistant for an international health program
- Research assistant for a scholarly research project
- Data entry specialist for government office
- Data analyst for nonprofit
- Outreach coordinator for human services organization
- Public health educator for government agency (e.g., Health Dept.)
- Health teacher in a K-12 school (teaching certification often required)
- Patient advocate, patient representative
- Consumer safety officer, consumer health advocate
- Disaster preparedness researcher
- Paralegal work assisting with social justice cases
- Medical/health writer
- Public health journalist
- Wellness manager for a public health facility or private corporation
- Research consulting for a health-related company
- Marketing or communication for an insurance agency

In addition to entry-level jobs preparation, the HSOC program will strive to prepare students to compete for prestigious post-graduation opportunities, including service learning experiences offered through AmeriCorps, Fulbright Teaching Awards, and Peace Corps and gap-year experiences such as those offered by a Fulbright Research Award, a CDC Training Fellowship, or an internship with the NIH.

Together with other relevant graduation requirements, students who graduate with an HSOC degree will be well-prepared for further education in a variety of graduate programs, including: post-graduate credentials and graduate degrees in public health, global health, health promotion and health education, human services and community outreach, public policy and administration, health delivery systems management, social entrepreneurship, or healthcare, policy, law and advocacy (M.P.H., M.A., M.S.W., M.B.A., M.P.A., M.P.A.P., M.H.A., M.H.S.A., or J.D.), graduate-level clinical healthcare training to be a doctor, nurse, or allied health professional (e.g., M.D., PsyD, D.O., N.D., PA, N.P., R.N., R.D., R.D.N., P.T., O.T., D.C., or L.Ac. ), or graduate degrees in research and/or teaching on health, healing, and/or healthcare (Ph.D. or M.A.). In order to advance in most health-related fields today, some level of graduate education is generally required. If HSOC students prefer to remain in the Vermont area for their graduate education, opportunities to pursue most of these degrees are available locally. If they wish to venture further afield, graduate education opportunities in these areas abound nationally, as well as internationally.

Locally, the HSOC degree program can provide a smooth transition to the already-existing Accelerated Master of Public Health (AMPH) at UVM, which provides a mechanism for students to earn both an undergraduate and master's degree in 5 years. The program requires one undergraduate science and one undergraduate math course for application for the MPH, so students will need to use their distributives and general electives to obtain those requirements. Following acceptance into the Graduate College, students enrolled in the accelerated MPH program apply six Public Health graduate credits during their senior year toward both the undergraduate degree and the MPH. In addition, students can apply an additional three Public Health graduate credits taken during their senior year toward the MPH degree. Students would then take the additional credits required to complete the MPH during a fifth year of study (<https://learn.uvm.edu/com/program/master-of-public-health/#accelerated-mph>).

Additional training will help open up more opportunities. There are many different kinds of jobs which align with the kind of preparation that students will attain through the combination of their undergraduate HSOC and their graduate training. For example, M.P.H. and relevant M.A. graduates are qualified for the following kinds of positions: epidemiologist; biostatistician; researcher; research consultant; senior data analyst; health information manager; legislative policy advisor; congressional staffer; health management policy advisor in government, non-profit or corporate organization; public health planner for state and local government; director of health NGO; academic policy advisor for health education programs; public health consultant for government or healthcare providers; program evaluator;

public health educator; health communications specialist; health journalist; medical interpreter/translator; health promotion program coordinator; employee wellness coordinator in human resources department; health services administrator; program manager; health center administrator in a hospital or other facility; director of family health services facility; social worker; public health information officer; infection preventionist; health regulatory inspector; environmental health and safety manager; or emergency preparedness and bioterrorism coordinator, among many others. Many MPH graduates work with national and international organizations like the Centers for Disease Control (CDC), the National Institutes of Health (NIH), and the World Health Organization (WHO). With a J.D. and related specialization, one can become a health care legal consultant, public health attorney, or human rights lawyer. An M.B.A. degree is often a recommended path for public health positions that require higher-level management acumen, whether in industry, social entrepreneurship, or government. With relevant technical, legal, or management training, graduates may also work in civil or biomedical engineering or in pharmaceutical or biotechnology fields.

To become a university professor or a principal investigator designing large research projects or to lead a large national or international organization conducting non-clinical health, healing, or healthcare research, a Ph.D. is generally required. For positions requiring both high-level clinical expertise and research or management specialization, an M.D. is required together with the relevant research or management qualifications and/or experience. Most international members of Doctors without Borders are M.D.'s.

These possibilities match the areas for further education and careers in which the student respondents to our UVM student interest survey expressed interest.

## **XI. Programs of study:**

Excellent academic programs provide students with a coherent body of knowledge and skills consistent with the University's mission and vision, and lead to the attainment of a specified set of learning outcomes. Excellent academic programs set high expectations; they challenge and inspire students to do their best work. They also provide a rich learning environment where students can grow intellectually with guidance, mentoring, and experience.

### **A. Programmatic Quality and Excellence**

#### **1. Describe the coherent body of knowledge and skills, and the specified set of learning outcomes, that the program seeks to foster.**

The **general program objectives** of the HSOC degree program are:

- To bring together a rich array of interdisciplinary perspectives, methods, and findings from the social sciences in order to address critical questions concerning health, healing, and health care in human populations, including social determinants of health.



- To use social science in order to examine the variety of ways in which human health, healing, and health care are defined, perceived, and enacted, and in which access to health and health care are distributed, within and across populations.
- To foster understanding of the types of questions that social scientists ask about health, healing and health care and the various ways in which they seek information and evaluate, communicate about, and act upon evidence related to these issues.
- To elucidate the strengths and weaknesses involved in various social science and natural science approaches to issues surrounding health, healing, and health care and to examine the benefits and challenges involved in various kinds of disciplinary efforts and interdisciplinary collaborations.
- To provide guidance to help students to identify how aspects of their HSOC education can be ethically and effectively applied in ways that contribute to needs and priorities identified by the members of specific communities in relation to health.
- To help students to develop skills relevant to related employment or further education opportunities and the knowledge as to how to locate and apply for such opportunities.

**Specific student learning objectives:** Upon graduation, students with an HSOC degree will have:

- Demonstrated the ability to recognize and generate the types of questions that various kinds of social scientists ask about health, healing and health care, including social determinants of health.
- Developed critical thinking skills allowing them to effectively use the conceptual tools and empirical findings of the social sciences to identify and analyze important issues related to social, cultural, geospatial, political, and economic dimensions of health, healing, and health care.
- Developed the skills needed to effectively acquire, comprehend, and evaluate information relevant to answering social science questions about the variety of ways in which human health, healing, and health care are defined, perceived, and enacted, and in which access to health and health care are distributed, within and across populations.
- Demonstrated an ability to communicate clearly and effectively in genre-appropriate ways about issues related to health, healing, and health care from an interdisciplinary social science perspective, including attention to the strengths and limitations of natural and social science approaches to the issue at hand.

- Shown the ability to conceive of and communicate about multiple ways in which their HSOC education could be ethically and effectively applied to contribute to needs and priorities identified by the members of specific communities.
- Acquired skills that are relevant to obtaining employment or pursuing further education in fields related to social science approaches to health, such as public health, global health, health care management, research, policy, education, advocacy or industry.

**2. Discuss progression of students through the curriculum, with attention to the developmental sequencing of courses and scaffolding of student knowledge and skills.**

Students will most likely enter the HSOC program through one of the gateway introductory courses, HSCI 021, ANTH 089: D2, or SOC 054, either as pre-declared HSOC majors or minors or as students taking electives or distributive requirements. Those who consider or declare HSOC as a major will be encouraged to take both of the other core introductory courses; minors will be encouraged to take HSCI 021 and either SOC 054 or ANTH 089. At this level, students will gain fundamental knowledge concerning interdisciplinary approaches to studying and addressing public health issues, health and social inequalities in the US, and sociocultural issues in global health. At the same time, they will work on foundational skills involving reading comprehension, critical analysis, group discussion and debate, basic library research, assessing evidence, synthesizing and comparing across sources, developing and supporting an argument, and giving and receiving peer feedback. Through these courses, they will also receive an introduction to the major and group and individual advising.

At the intermediate level, students will take a social science research methods course or a statistics course to help them to become more critical consumers of research results and to understand the processes that feed into the production of the knowledge that we read and hear about. STEM students will likely take STAT 111 or 141 and then come into HSOC as a minor. Non-STEM students will likely take the SOC 100 overview of methods in social research, because they tend to take STAT 051 for their math distributive requirement. While it would be ideal to have one dedicated introduction to research methods course for the HSOC major and minor, that is not currently feasible in terms of staffing. However, the instructors of SOC 100 and STAT 111 and 141 have indicated willingness to incorporate examples that will appeal to the interests of HSOC students.

Also at the intermediate level, students will take two topical courses chosen out of a list of nine options. These courses include topics such as diversity in health and healing, racial and ethnic disparities in health, global health, environment and human health, health care system dynamics, and social history of disease. Topical course options at this level were chosen to reflect broad and vital approaches in terms of sociocultural, environmental, and personal understandings of health. Sometimes one

or more of these topical courses will be taken before the 100-level methods course. These courses will provide students with the tools to increase their level of critical analysis through more concerted attention to the influences of disciplinary predilections, theoretical constructs, the selection of research questions, how social problems are framed and prioritized, research methods for data collection and analysis, and styles of community engagement. Opportunities for small-scale scaffolded application of knowledge in community-based service learning research or applied projects will be encouraged as a part of coursework to the extent that is possible. A blend of individual and group work will be sought when possible, and peer feedback skills will be honed.

During their junior and/or senior years, students will take two 200-level courses selected out of a list of twelve topical courses and eleven methods courses, of which students will be encouraged to take one methods course. The 200-level topical course will increase students' knowledge and library research and analytical and oral and written presentation skills through an in-depth exploration of a topic area. These courses will typically involve a blend of individual library research, scholarly literature review, and sometimes small-scale individualized community-based service learning research or service. In the 200-level methods course, the aim will be to bring students up to the level such that toward the end of their college careers, they have the tools to design and carry out a major research project. The upper-level topics or methods course can be taken in any sequence, but students wishing to do a senior thesis or other large independent senior project should take the 200-level methods course in their junior year.

**3. Address both curriculum breadth and depth.**

Breadth in the HSOC degree involves the exposure that students will receive to different topics and issues, disciplinary approaches, theoretical and methodological tools, and geospatial, cultural, social, political, and economic scenarios.

Depth in the HSOC degree is developed as the student chooses core courses at the 100 and 200 level and their major electives, building subject knowledge and disciplinary skills in the field.

**4. Describe the academic rigor of the program and practices that lead to high expectations for student learning.**

The program will have a high degree of academic rigor in fostering critical assessment and analysis of sources, arguments and evidence; promoting understanding of the approaches of different social science disciplines; creating spaces to practice application of theoretical and methodological tools; teaching students how to locate appropriate high-quality sources for answering different types of research questions; encouraging critical reflection on experiential learning; and providing scaffolding for learning how to communicate effectively in a variety of oral and written formats and intellectual and social situations. Relevance of student learning down the road to real-world high-stakes scenarios in clinical and public health settings will underscore the critical importance of diligent study and astute preparation. The design of the program employs high impact teaching practices such

as the common intellectual experiences that all HSOC students will participate in with their introductory core courses. Faculty in the program will also be encouraged to utilize high impact teaching practices, such as collaborative assignments and projects which mirror the collaboration needed in much clinical, public health, research, education, and applied work. While not required, standalone internships, senior theses, readings and research, practicum, and/or immersion opportunities through community-based projects and travel study will also be options that students can work toward. For internships, UVM Lecturer Jeanne Kazka-Calliere has confirmed interest in developing and teaching an internship course each semester for students in the program.

**B. Indicate all courses to be included in the program:**

**1. List existing courses envisioned as a part of a new program. What effect on enrollment is anticipated?**

Below we have listed all of the courses for the major, demarcating which are existing courses requiring no change, which are existing courses requiring change, and which are new courses. Most of the courses are existing courses requiring no change.

We expect that the HSOC program will bring many more students to the gateway core courses of HSCI 021, SOC 054, and ANTH 089, but we have planned those courses to be large lecture courses taught every year, and we have staffing for them (HSCI 021: Bernice Garnett, SOC 054: Dale Jaffe, and ANTH 089: Jeanne Shea). As HSCI 021 is a revised course shared with the new HSCI degree, we expect that as the program ramps up, HSOC will bring in at least 50 students per year considering an HSOC major or minor to the course. SOC 054 and ANTH 089 will be shared with the SOC and ANTH majors, as well as pre-health and ENVIS students and others with a general interest in health or wanting to satisfy a D2 requirement. We also estimate that consideration of an HSOC major or minor will bring at least 50 students per year to those two courses.

As to the 100-level methods courses, existing and new, we have talked with the Chairs of Sociology and Statistics who have confirmed that they have capacity. We estimate that the HSOC major or minor will bring an additional 20 students per year to each of those courses.

With regard to the 100-level topical courses, existing and new, we have contacted the faculty who teach those courses, all of whom confirm that there is room to accommodate more students. Given that there are many choices in this category, the added load on any one course should not be too large, with under ten students per course.

With regard to the 200-level topics and methods courses, we have contacted the faculty and their departments and have confirmed that they have space to accommodate more students. Given that there are many choices in this category, the added load on any one course should not be large, perhaps a few extra students per course. However, since 200-level courses are smaller capacity, this will be the one area in which we may need to increase options if HSOC grows rapidly over the first

five years. Fortunately, CAS has four new hires slated for the next five years which will contribute course offerings to the HSOC program.

Petitioning for individual substitutions for electives:

The program recognizes that in the case of electives, there will be instances in which relevant new courses arise that have not yet been proposed for inclusion in the HSOC program which students discover as potentially relevant for their program of study. For example, perhaps a new 095 History TAP course on Medicine in the Renaissance is offered for the first time without the knowledge of HSOC program. A student who takes that TAP course could petition for it to count as one of their HSOC electives.

In addition, the program recognizes that sometimes a particular course that may not be relevant for, or accessible to, most HSOC majors or minors may make sense for a specific student's HSOC degree. For example, an Engineering major with an HSOC minor may make a compelling case for including a 200-level civil engineering course restricted to Engineering majors which has an interdisciplinary community service learning project on environmental engineering for access to clean water, as long as it would be the only course to overlap between their major and minor.

In such cases, the student should write a detailed letter to the HSOC Program Director, including all needed supporting evidence (e.g., course syllabus, description of assignments, student's course project). Students may petition to up to two of their electives to be considered under the individual petition clause. If the Program Director approves the request, the Registrar will be asked to count the course or courses toward the students' HSOC degree.

**CORE COURSES FOR HSOC MAJOR:**

<b>Three Required Core Introductory-Level Courses (9 credits)</b>			
HSCI 021	Intro to Public Health	Prereq none	<i>Formerly HSCI 101</i>
SOC 054	Health Care in America	Prereq none	Existing course;
ANTH 089:D2	Global Health, Development, Diversity	Prereq none	Existing course

<b>One 100-Level Methods Course from the Following List (3 credits)</b>			
SOC 100	Fundamentals of Social Research	Prereq STAT 051; 3 credits SOC or POLS; sophomore st.	Existing course
STAT 111	Elements of Statistics	Prereq: Sophomore standing	Existing course
STAT 141	Basic Statistical Methods	Prereq: Sophomore standing	Existing course

<b>Two 100-Level Courses from the Following List (6 credits)</b>			
ANTH 174/ SOC 155	Culture, Health, Healing	Prereq: ANTH 021 or ANTH 026 or ANTH 089*	Existing course; adding Anth 089 prereq
EDHE 146	Personal Health	Prereq: Sophomore standing	Existing course; level raised from 046
ENVS 107/ HLTH 107/ NR 107	Human Health & Environment	Prereq: Sophomore standing	Existing course

ENVS 181	Environmental Justice	Prereq : ENVS 001, ENVS 002, or NR 002.	Existing course
HLTH 103/ ANTH 173*	Foundations of Global Health	Prereq: Sophomore standing	Existing course; adding crosslist
HLTH 105	Cultural Health Care	Prereq: Sophomore standing	Existing course
HLTH 150/ HSCI 102	Epidemics: Dynamics of Infectious Diseases	Prereq: Sophomore standing	Existing course
HLTH 155	Racism & Health Disparities	Prereq: Sophomore standing	Existing course
NFS 114	Human Health in Food Systems	Prereq: NFS 043 or NFS 073	Existing course

\* Currently applying to add ANTH 089 as prereq for ANTH 174/SOC 155 and applying to regularize ANTH 195: Introduction to Global Health to be ANTH 173.

<b>Two 200-Level Courses (6 credits), of which One Methods Course is Encouraged</b>			
<b>200-Level Topics Courses:</b>			
ANTH 288	Anthropology of Global Health	Prereq: ANTH 021 or 026 or 089; and ANTH 174/SOC 155 or HLTH 103/ANTH 173	Existing course; adding Anth 173 as prereq
CSD 274	Culture of Disability	Prereq: Junior/senior standing	Existing course
ENVS 236	Women, Health & Environment	Prereq: ENVS 001 and ENVS 002; minimum junior standing	Existing course; being regularized
ENVS 237	Human Ecology & Health in Arctic	Prereq: Junior/senior standing	Existing course; being regularized
NFS 244	Nutrition, Health & Disease Prev.	Prereq: NFS 053, NFS 143, NFS 243, NFS 244	Existing course
NFS 262	Community Nutrition	Prereq: Senior standing; DIET, NFS, DNFS, and HSOC majors only	Existing course; text in red to adjust prereqs
PSYS 276/ CRES 276	Cross-Cultural Psychology	Prereq: PSYS 053 and PSYS 170	Existing course
PSYS 279	Health Psychology	Prereq: PSYS 053 and PSYS 170	Existing course
SOC 223	Sociology of Reproduction	Prereq SOC 001 and one of: SOC 090, SOC 100, SOC 101; junior standing	Existing course
SOC 224	Health Care and Aging	Prereq: SOC 001 and one of: SOC 090, SOC 100, SOC 101; junior standing	Existing course
SOC 254	Sociology of Health & Medicine	Prereq: SOC 001 and one of: SOC 090, SOC 100, SOC 101; junior standing	Existing course
<b>200-Level Methods Courses:</b>			
ANTH/BIOL 242	Research Methods in Human Diversity	ANTH/BIOL 242	Research Methods in Human Diversity
ANTH 290	Ethnographic Methods	Prereq: 12 hrs in ANTH	Existing course
CDAE 250	Applied Research Methods	Prereq: STAT 141 or STAT 111 or equivalent	Existing course
EDFS 209	Introduction to Research Methods	Prereq: None.	Existing course
ENVS 200/ HLTH 250/ CDAE 295	Community Participatory Research	Prereq: HSCI 240	Existing course

GEOG 202	Research Methods	Prereq: Junior standing	Existing course
GEOG 287	Spatial Analysis	Prereq: Junior standing	Existing course
POLS 230	VT Legislative Research Service (with health focus )	Prereq: Instructor Permission	Existing course
SOC 274	Qualitative Research Methods	Prereq: SOC 001 and one of: SOC 090, SOC 100, SOC 101; junior standing	Existing course
SOC 275	Methods of Data Analysis in Social Research	Prereq: SOC 001 and one of: SOC 090, SOC 100, SOC 101; junior standing	Existing course
STAT 200	Med Biostats/Epidemiology	Prereq: STAT 111, STAT 141 or STAT 143; or STAT 211	Existing course

*Note: The core courses above will be adjusted over time as new faculty and new courses become available and as prerequisites become aligned to Health and Society making it possible to enroll without intricate planning. At the 100-level, we aim over time to have courses that deal with social structural, cultural, biocultural, behavioral, geospatial, environmental, economic, and policy aspects of health. Some of these offerings will come from existing faculty, and some will come from new hires. In CAS, over the next five years related new hires are slated for Anthropology (Biological Anthropologist of Global Health), Economics (Health Economist), Geography (Health Geographer), and Sociology (Medical Sociologist with Quantitative Specialization). In addition, the slated Social Psychology hire with a focus on Race and Ethnicity will most likely offer courses of interest to HSOC students. In addition, in CNHS, Health Sciences in MLRS is slated for an upcoming hire in which they are seeking a candidate with an MPH. CALS is also planning to recruit an MPH in the coming year.*

Below we list current electives for the HSOC major. Students interested in pursuing a related independent study, TA or RA practicum for credit, credit-bearing internship, honors theses and/or travel-study program may count those credits towards the electives for the major/minor. Electives will also be adjusted over time as new courses become available and prerequisites are adjusted.

### **ELECTIVES FOR HSOC MAJOR:**

<b>Three Electives of which One Must Be at the 100-Level or Above</b>			
<i>We have divided electives into recommended electives, travel study options, and other electives. Students also have the option to petition to make a case for other courses not on this list.</i>			
<b>Recommended HSOC Electives</b>			
<i>(prereqs relatively easy to obtain; no special permission required)</i>			
00-Level (no prereqs)			
ANTH 026	Biological Anthropology	Prereq: none	Existing course
ANTH 088	Sex, Gender, Health and Culture	Prereq: none	Existing course
BSAD 028	Intro. Mgmt. US Health Care System	Prereq: none	Existing course
CDAE 002	World, Food, Population, Devlpmt.	Prereq: none	Existing course
COMU 022	The Science of Happiness	Prereq: none	Existing course
EDHE 046	Personal Health	Prereq: none	Existing course
EDSP 005	Issues Affect. Persons w/ Disabilities	Prereq: none	Existing course
HLTH 060	LGBTQ Health Disparities	Prereq: none	Existing course
NFS 043	Fundamentals of Nutrition	Prereq: none	Existing course
PSYS 001	Introduction to Psychology	Prereq: none	Existing course

100-Level (only one prereq outside of HSOC core courses)			
Any 100-level HSOC core courses (listed above) not already taken toward the degree			
ANTH 180	Psychological Anthropology	Prereq ANTH 021 or ANTH 089	Existing course; adding Anth 089 to prereqs
ANTH 189	Aging in Cross-Cultural Persp.	Prereq: Prereq: ANTH 021 or ANTH 026 or ANTH 089	Existing course; adding Anth 089 to prereqs
ANTH 143	Forensic Anthropology	Prereq ANTH 026	Existing course
ANTH 141	Death, Burial, and Culture	Prereq ANTH 021	Existing course
EDHE 150	Seminar: Health Education (public health approach to youth violence prevention)	Prereq Six hours in Health Education or instructor permission	Existing course
ENVS 153	Ethnobotany	Prereq one of: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001	Existing course
ENVS 195*	Plant Based Healing Medicine	Prereq one of: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001	Existing course; needs regularizing
ENVS 195*	Therapeutic Herbalism	Prereq one of: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001	Existing course; needs regularizing
GEOG 186	Qualitative Research in Geography	Prereq: Junior standing	Existing course
HDFS 195*	Promoting Mental Health in Schools	Prereq: Sophomore standing	Existing course; needs regularizing
HLTH 101	Intro to Integrative Health	Prereq: Sophomore standing	Existing course
HLTH 102	Science & Evidence in CAM	Prereq: Sophomore standing	Existing course
HLTH 140	Issues in Women's Health	Prereq: PSYS 001; HDFS 005; one Sociology course below 100.	Existing course
HSCI 130	Health Promotion	Prereq: none	Existing course
HSCI 160	Health Communications	Prereq: ENGS 001 or equivalent; minimum Sophomore standing	Existing course
NH 120	Health Care Ethics	No prereq listed.	Existing course
NFS 143	Nutrition in the Lifecycle	Prereq: NFS 043	Existing course
PHIL 144	Phil Problems in Medicine	Prereq: three credits of PHIL	Existing course
PSYS 170	Abnormal Psychology	Prereq: PSYS 001	Existing course
SOC 102	Population, Environment, Society	Prereq: three credits of SOC	Existing course
SOC 120	Aging in Mod Society	Prereq: three credits of SOC	Existing course
SOC 154	Social Org of Death and Dying	Prereq: three credits of SOC	Existing course
*PH 196: Careers in Public Health is also relevant, but it is a one-credit course.			
*Special topics courses that are electives need to apply to be regularized at some point.			
200-Level (two or fewer prereqs outside HSOC core courses; not restricted to prefix majors)			
Any 200-level HSOC core courses (listed above) not already taken toward the degree			
HLTH 212	Intro. to Humanitarian Aid	Prereq: HLTH 211 or PRNU 241	Existing course
HSCI 290	Internship	Offered at departmental discretion	Existing course
PHIL 244	Phil of Medicine: Advanced Topics	Prereq one 100-level PHIL course	Existing course
<b>Travel Study HSOC Electives</b>			
<i>(require additional screening; travel costs)</i>			
<i>(course level, permissions, and prereqs may vary; check registrar page for details)</i>			
HLTH 106: Bali: Consciousness, Culture and Community Course (David Osgood)			



HLTH 145/GSWS 196: Women's Health & Spirituality Course: Belize (Jeanne Kaczka-Valliere)			
HLTH 201: Health & Culture Oaxaca Course (Carol Buck Rolland)			
HLTH 211: Sustainable Development for Public Health Course: Uganda (Sarah Abrams)			
HLTH 211: Sustainable Development for Public Health Course: Haiti (Jeanne Kaczka-Valliere)			
NFS 295/CDAE 295: Sustainable Development and Public Health in Kenya (Farryl Bertmann)			
UVM-UGHE-Partners in Health Internship in Rwanda (summer, by yearly competition, contact Abigail McGowan)			
<b>Other HSOC Electives</b>			
<i>(prereqs or permissions may be difficult to obtain)</i>			
00-Level			
HCOL 086	Medical Anth. and Global Health	Prereq: HCOL student	Existing course
100-Level (two or more prereqs outside of HSOC core courses):			
ASCI 177	Animal Plagues & Global Health	Prereqs BIOL 001 or BCOR 011; and BIOL 002 or BCOR 012	Existing course
CDAE 102	Sustainable Community Developmt.	Prereqs: CDAE 061 or equivalent; CDAE majors/minors only; or Instructor permission.	Existing course
HCOL 186	Controversies in Public Health	Honors College sophomore	Existing course
HCOL 186	Opiates-Policy, Practice, Science	Honors College sophomore	Existing course
200-Level (three or more prereqs outside of HSOC core courses; but not restricted to majors of discipline of the course prefix):			
ANTH 240	Human Osteology	Prereqs: ANTH 024; ANTH 026; one 100-level ANTH course in biological anth. or archaeology	Existing course
ASCI 297	One Health: Zoonoses	Prereq: Instructor permission.	Existing course
CDAE 272	Int'l Economic Development	Prereq: CDAE 102 or equivalent. Co-req: CDAE 273.	Existing course
CDAE 273	Project Development & Planning	Prereq: CDAE 102 or equivalent. Co-req: CDAE 273.	Existing course
EC 230	Health Economics Evaluation	Prereqs EC 11, EC 12, Math 19, EC 170, EC 171, EC 172	Existing course
NFS 243	Advanced Nutrition	Prereqs NFS 043; PBI0 185; ANPS 019; Junior Standing	Existing course
NFS 260	Diet and Disease	Prereqs NFS 053, NFS 143, NFS 243, NFS 244	Existing course
PSYS 270	Behavioral Disorders of Childhood	Prereqs PSYS 001; PSYS 053; and PSYS 150 or PSYS 170	Existing course
PSYS 274	Advanced Behavior Change	Prereqs PSYS 001; PSYS 053; and PSYS 150 or PSYS 170	Existing course
PSYS 296*	Human Sexuality	Prereqs Instructor permission	Existing course
SOC 256	Sociology of End of Life Care	Prereqs SOC 001 and one of: SOC 090, SOC 100, SOC 101; Junior st.	Existing course
SOC 295*	Sexuality and Medicine	Prereqs SOC 001 and one of: SOC 090, SOC 100, SOC 101; Junior st.	Existing course

*\*Special topics courses that are electives need to apply to be regularized at some point. PSYS plans to regularize later this year. Faculty member plans to regularize after getting back from sabbatical.*

## Health and Society Minor

The courses listed above for the HSOC major will also be potential offerings for the HSOC minor, with the caveat that those with many prerequisites such as some of the electives will most likely not be feasible for a minor.

### **HEALTH & SOCIETY MINOR, COLLEGE OF ARTS AND SCIENCES**

*The Health and Society minor requires a total of 18 credits, with at least nine credits at the 100-level or above. Courses must be taken from the list provided by the Health and Society Major program. For interdisciplinary exposure, no more than 12 credits shall be taken from any one discipline.*

One required core introductory course (3 credits total):

HSCI 021: Introduction to Public Health (3 credits)

A choice of one of the following additional core introductory courses (3 credits):

SOC 054: Health Care in America

ANTH 089: Global Health, Development, Diversity

One 100-level methods course (3 credits):

SOC 100: Fundamentals of Social Research

STAT 111 or 141: Elements of Statistics or Basic Statistical Methods

Nine additional credits in HSOC courses, with six of those credits at the 100-level or above:

These may include any of the courses listed above not already counted toward your minor, any courses listed as options for the HSOC major, and/or listed HSOC elective courses.

**Other Information:** HSOC majors may not minor in HSOC. For interdisciplinary exposure, no more than 12 credits shall be taken from any one discipline. No more than one course may overlap between a student's major and minor. Students pursuing the Health Sciences major, the Global Health Concentration in the Anthropology major and the Health and Healing track in the Environmental Studies major should be especially mindful of this rule. If pursuing an Anthropology major, ANTH courses used for the HSOC minor are included in the 45-credit major rule. If pursuing an Environmental Studies major, ENVS courses used for the HSOC minor are included in the 45-credit major rule. For interdisciplinary exposure, no more than 21 credits shall be taken from any one discipline.

- 2. List required new courses or changes to existing courses in order to initiate program. (If new course or changes to existing courses are required, complete a "Course Change Form" for each course and submit request(s) concurrent with the program proposal.)**

Most courses are existing courses that do not require any change. See chart above for new courses or modifications to existing courses. Course change forms for each of those will be completed and submitted concurrent with program proposal.

- 3. Courses offered under the Special Topics course rubric (i.e., x95/x96) may not be listed as requirements for majors, minors or graduate degrees or certificates.**

There are no courses listed as special topics which are required for the major. Some special topics are listed as options for fulfilling elective requirements; we will work with faculty over the next year to regularize those courses and get them permanent numbers.

**C. Research endeavor (list arrangements for collaboration and/or supervision).**

Students who wish to undertake research may do so within the context of their courses and the parameters of instructor's assurances with the IRB. Outside of a regular course, opportunities to do research include independent readings and research and senior honors theses, for which students may earn elective credits toward their major or minor.

Students wishing to do advanced independent research or a senior honors thesis would meet with program faculty during their office hours to see if there is a good research match with a faculty member who has time to supervise them. Students would be responsible for making a case for their research idea and their potential for carrying it out in an ethical and effective manner. When an HSOC faculty member agrees to mentor student research, that faculty member will supervise the student throughout the research process to the best of their ability. If a student does not follow through on their research commitments, their faculty supervisor may need to withdraw their support.

**D. Field work (clinical experience: arrangements for placement and supervision).**

Students who wish to undertake field research or community internships should consult the UVM Career Hub, the HSOC Website and Listserv, their faculty advisor, and the HSOC Program Director for help with placement and supervision arrangements. In the case of research, students would follow the model found in item C above.

**E. Submit two sample programs or otherwise illustrate the selection of courses, course load, and research or service time distribution.**

Below we sketch a four-year plan for students in a regular scenario in which they are on-campus all four years and do not undertake a senior thesis, a junior year abroad scenario, and a senior thesis or other large stand-alone senior year internship or project.

**HSOC Major: Regular Scenario**

**Year 1:**

Core introductory courses (9 credits):

HSCI 021: Introduction to Public Health (3 credits)

SOC 054: Health Care in America (3 credits)

ANTH 089: D2: Global Health, Development, and Diversity (3 credits)

**Year 2:**

SOC 100: Fundamentals of Social Research (3 credits) (satisfied with prereq 3 credits SOC)

Two 3-credit courses from a list of approved 100-level courses (6 credits):

ANTH 174/SOC 155: Culture, Health, Healing (3 credits) (satisfied with prereq Anth 089)

HLTH 103/ANTH 173: Foundations of Global Health (3 credits) (sophomore standing)

**Year 3:**

Two electives at any level from approved list of HSOC electives (6 credits)

HLTH 101: Intro to Integrative Health (3 credits) (sophomore standing)

SOC 102: Population, Environment, Society (3 credits) (prereq 3 credits SOC)

200-level topics course (3 credits):

ANTH 288: Anth of Global Health (3 credits) (prereq ANTH 089, and ANTH 173 or 174)

**Year 4:**

Third Elective at the 100-level or above from approved list of HSOC electives (3 credits)  
HLTH 105: Cultural Health Care (3 credits) (sophomore standing)  
200-level methods course (3 credits)  
SOC 274: Qualitative Research Methods (3 credits) (prereq SOC 100)

### **HSOC Major: Junior Semester Abroad Scenario**

#### **Year 1:**

Three core introductory courses (9 credits):  
HSCI 021: Introduction to Public Health (3 credits)  
SOC 054: Health Care in America (3 credits)  
ANTH 089: D2: Global Health, Development, and Diversity (3 credits)  
First Elective at any level from approved list of HSOC electives (3 credits)  
ANTH 026: Biological Anthropology (3 credits)

#### **Year 2:**

SOC 100: Fundamentals of Social Research (3 credits) (prereq satisfied with 3 credits SOC)  
Two 3-credit courses from a list of approved 100-level courses (6 credits)  
HLTH 155: Racism & Health Disparities (3 credits) (sophomore standing)  
ANTH 173/HLTH 103: Foundations of Global Health (3 credits) (sophomore standing)

#### **Year 3:**

200-level topical course (3 credits):  
SOC 223: Sociology of Reproduction (3 credits) (prereq satisfied w/ SOC 054, SOC 100)  
Second Elective at any level from approved list of HSOC electives (3 credits)  
STAT 141 (3 credits) (sophomore standing)  
Semester abroad (opportunity to apply knowledge through experiential learning abroad)

#### **Year 4:**

200-level methods course (3 credits)  
STAT 200: Med Biostats/Epidemiology (3 credits) (prereq STAT 141)  
Third Elective at the 100-level or above from approved list of HSOC electives (3 credits)  
ANTH 143: Forensic Anthropology (3 credits) (prereq ANTH 026)

### **HSOC Major Senior Thesis or Other Stand-Alone Senior Capstone Scenario**

#### **Year 1:**

Three core introductory courses (9 credits):  
HSCI 021: Introduction to Public Health (3 credits)  
SOC 054: Health Care in America (3 credits)  
ANTH 089: D2: Global Health, Development, and Diversity (3 credits)  
First Elective at any level from approved list of HSOC electives (3 credits):  
NFS 043: Fundamentals of Nutrition (3 credits)  
Prereq for a later course :  
ENVS 001 : Intro to Environmental Studies (3 credits)

#### **Year 2:**

SOC 100: Fundamentals of Social Research (3 credits) (prereq satisfied with 3 credits SOC)  
Two 3-credit courses from a list of approved 100-level courses (6 credits)

<p>ENVS 181: Environmental Justice (3 credits) (prereq satisfied with ENVS 001)</p> <p>NFS 114: Human Health in Food Systems (3 credits) (prereq satisfied w/ NFS 043)</p> <p>Second Elective at any level from approved list of HSOC electives (3 credits)</p> <p>ANTH 174/SOC 155: Culture, Health, Healing (3 credits) (prereq satisfied w/ ANTH 089)</p> <p><b>Year 3:</b></p> <p>Third Elective at the 100-level or above from approved list of HSOC electives (3 credits)</p> <p>EDHE 146: Personal Health (3 credits) (sophomore standing)</p> <p>200-level methods course (3 credits) (students writing senior thesis <b>must</b> take methods course):</p> <p>EDFS 209: Introduction to Research Methods (3 credits) (no prereq)</p> <p><b>Year 4:</b></p> <p>200-level topical course (3 credits)</p> <p>NFS 262: Community Nutrition (3 credits) (satisfied w/ HSOC major, senior standing)</p> <p>Senior thesis or other standalone capstone project (application of knowledge through research or internship)</p> <p>HON 201-202 (6 credits)</p>
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Before Fall 2018, we will also need to run scenarios to help with student advising about paths through the major for: HSCI major/HSOC minor, ANTH Global Health Major/HSOC minor, HSOC Major/ANTH Minor with Focus on Global Health, ENVS Major with Focus on Health and Healing/HSOC minor, HSOC Major/ENVS Minor with Focus on Health and Healing, Global Studies Major/HSOC minor, and HSOC Major/Global Studies Minor.

Since the HSOC minor involves only 18 credits, we do not lay out a detailed four year plan for that, but obviously HSCI 021 and a second introductory core course should be taken in the first or second year if possible to lay the groundwork for the 100- and 200-level work required later on.

**XII. Resources for the program:**

**A. Faculty:**

- 1. Biographies of present faculty who will participate. Include name, degrees, experience, publications, and present teaching, research and service commitments;**

**Core faculty for the program include:**

The following faculty who have agreed to serve as core faculty for the program: Sarah Abrams, Farryl Bertmann, Deborah Blom, Peter Callas, Bernice Garnett, Dale Jaffe, Shamila Lekka, Rycki Maltby, Bindu Panikkar, Jeanne Shea, and Christine Vatovec. Their biographical information is included below. Additional faculty will be added to the core faculty list over time.

**Sarah Abrams, Associate Professor of Nursing, Associate Dean, CNHS**

*Interests:* Dr. Abrams teaches undergraduate and graduate students in public health and geriatric care. Her current research activities dovetail with her service interests in public health nursing, global health, and the improvement of systems to serve the health care needs of underserved populations. She collaborates with other faculty on measuring outcomes of international

educational and service collaborations. Dr. Abrams is also a historian of nursing with a focus on the development of public health nursing education.

*Degrees:* Ph.D., Nursing, University of California, San Francisco; M.S., Yale University, Community Health Nursing Clinical Specialist; B.A., History/Political Science, California State University, Sacramento

*Select recent, relevant publications:*

Abrams, S.E. (2010). Interventions that protect. *Public Health Nursing*, 27(3), 201-202.

Abrams, S.E. (2010). Hope, ethics and action for sustainable change. *Public Health Nursing*, 27(1), 1-2.

Abrams, S.E. (2009). Education at the margins and beyond borders. *Public Health Nursing*, 26(6), 487-488.

Maltby, H. J. & Abrams, S. E. (2009). Seeing with new eyes: The meaning of an immersion experience in Bangladesh. *International Journal of Nursing Education Scholarship*, 6(1), Article 33

Abrams, S. E. (2008). Future families and nurses of the future as seen in 1948. *Public Health Nursing*, 25 (6), 576-78

### **Farryl Bertmann, Lecturer, Food and Nutrition Sciences, CALS**

*Interests:* Dr. Bertmann explores ways to connect low-income, vulnerable community members to healthy, sustainable, nourishing food, with research interests in public health nutrition, food security and associated policy formation.

*Degrees:* PhD, Physical Activity, Nutrition and Wellness, Arizona State University, 2013; M.S., Applied Biology, Arizona State University, 2009; MA, German, Arizona State University, 2004; BS, Wildlife Biology, University of Vermont, 2000.

*Select recent, relevant publications:*

Smith T, Bertmann FMW, Pinard CA, Schober DJ, Fricke H, Shuval K, Nguyen BT, Yaroch AL. Factors associated with Supplemental Nutrition Assistance Program participation among the working poor: findings from 2012 American Community Survey. *J Hunger & Environmental Nutrition* (in press)

Bertmann FMW, Fricke HE, Carpenter L, Schober DJ, Smith T, Pinard C, Yaroch AL. A workplace farmstand pilot programme in Omaha, Nebraska, USA. *Public Health Nutr.* 2015; May 28:1-5 [Epub ahead of print]

Nguyen BT, Shuval K, Bertmann FMW, Yaroch AL. The Supplemental Nutrition Assistance Program, Food Insecurity, Dietary Quality, and Obesity among US Adults. *Am J Public Health.* 2015;105(7):1453-1459.

Bertmann FMW, Barroso C, Ohri-Vachaspati P, Hampl JS, Sell K, Wharton, CM. Attitudes, Perceptions, and Barriers to Arizona WIC CVV: a qualitative exploration of fruit and vegetable purchases across four categories of WIC participants. *JNEB.* 2014; 46(35): S53-S58 (WIC supplement)

*Recent teaching includes:*

NFS 114: Human Health in the Food System

NFS 143: Nutrition in the Life Cycle

NFS 223: Nutrition Education and Counseling

NFS 262: Community Nutrition

### **Deborah Blom, Associate Professor, Department of Anthropology, CAS**

*Interests:* Blom focuses her research in South American Andean regions of Peru and Bolivia, addressing question of health and nutrition, diversity, identity, colonization, and migration within ancient Tiwanaku society, as well as earlier and later developments. Her research has led to publications and conference papers on human sacrifice, mortuary ritual, population movement, health and diet, social complexity, trade, and human body modification as a means of expressing identity.

*Degrees:* B.S. in Anthropology from the University of Houston (1990); M.A. (1992) and Ph.D. (1999) in Anthropology from the University of Chicago

*Select recent, relevant publications:*

Kelly J. Knudson and Deborah E. Blom. "The Complex Relationship between Tiwanaku Mortuary Identity and Geographic Origin in the South Central Andes." In *Bioarchaeology and Identity in the Americas*, edited by Kelly J. Knudson and Christopher M. Stojanowski. University Press of Florida, Gainesville, pp. 194-211, 2009.

Benjamin Vining, Patrick Ryan Williams, Deborah E. Blom and Nicole C. Couture. "Hacia una Imagen del Espacio Social en Tiwanaku: Perspectivas por Medio de Métodos Geofísicos en el Altiplano Boliviano." In *Arqueología de las Tierras Altas, Valles Interandinos y Tierras Bajas de Bolivia: Memorias del I Congreso de Arqueología de Bolivia*, edited by Claudia Rivera Casanovas. La Paz: Instituto de Investigaciones Antropológicas y Arqueológicas, Universidad Mayor de San Andrés, pp. 63-76, 2008.

David E. B. Fleming and Deborah E. Blom. "Evidence for Lead Diagenesis in Ancient Bones of the Southern Andes." *Nuclear Instruments and Methods in Physics Research B* 263 (1): 41-45, 2007.

*Recent teaching includes courses on:* Introduction to Prehistoric Archaeology, Archaeological Theory, Laboratory Methods in Biological Anthropology, Introduction to Physical Anthropology, Origins and Evolution of Human Culture, Peoples of South America, Funerary Archaeology and Bioarchaeology, Advanced Human Evolution, Nonhuman Primate Social Behavior, Life, Death, and the Human Body, and Human Osteology

**Peter Callas, Research Associate Professor, Dept. of Math and Statistics, CEMS, and Department of Medical Biostatistics, LCOM**

*Interests:* Epidemiology; medical biostatistics. Dr. Callas is involved in research on a variety of topics, including prevention and treatment of nicotine, alcohol, and other addictions, investigation of genetic and environmental aspects of thrombosis and hemostasis, interventions for occupational musculoskeletal injuries, evaluation of simulation-based training of surgical residents, outcomes after lower extremity bypass surgery, and evaluation of teaching and health interventions provided over a telemedicine system.

*Degrees:* Ph.D., Epidemiology and Biostatistics, University of Massachusetts-Amherst; MS, Epidemiology, University of California, Berkeley; BA, Biology, California State University, Fullerton.

*Recent teaching includes:*

STAT 200 - Med Biostat & Epidemiology

CTS 320: Analyzing Clinical and Translational Research

CTS 325: Multivariable Analysis in Clinical and Translational Research

**Bernice Garnett, Associate Professor, CESS**

*Interests:* Bernice Garnett is a public health prevention scientist interested in childhood obesity, bullying, discrimination and harassment, youth health disparities, food access and food security, community based participatory research, school climate and restorative justice. School based health promotion and community strategies to promote health and wellness are a central focus of her work. She is interested in integrating interdisciplinary public health undergraduate training in teacher education and other traditional undergraduate disciplines. Bernice Garnett is a faculty member of the Food Systems Initiative at UVM and the Chair of the Vermont Hazing, Harassment and Bullying Prevention Advisory Council.

*Degrees:* S.c.D. in Social and Behavioral Sciences from Harvard School of Public Health; M.P.H in Health Promotion from Columbia University Mailman School of Public Health; B.A. in Health and Society from University of Pennsylvania.

*Select recent, relevant publications:*

- Garnett, B. R., Vierling, D., Gleason, C., Becker, K., DiCenzo, D. & Mongeone, L. (2017). A mixed methods evaluation of the Move it Move it! before school incentive-based physical activity program. *Health Education Journal*, 76(1) 89-101.
- Garnett, B. R. (2017). Teaching social determinants of health in an undergraduate elective course on public health through peer wellness coaching, documentaries and self-reflection. *Pedagogy in Health Promotion*, 3(2) 100-107.
- Conner, D. & Garnett, B. R. (2016). Economic and environmental drivers of fruit and vegetable intake among rural socioeconomically diverse adults in Vermont, *Journal of Hunger and Environmental Nutrition*, 11(2) 263-271.
- Garnett, B.R., Wendel, J., Banks, C., Goodridge A., Harding R., Harris, R., Hacker, K., Chomitz V.R., (2015). Challenges of Data Dissemination Efforts within a Community Based Participatory Project About Persistent Racial Disparities in Excess Weight. *Progress in Community Health Partnerships: Research, Education and Action*, 9(2):289-298.

*Recent teaching includes courses on:* Bullying and Youth Violence Prevention; Mixed Methods Research; Personal Health

**Dale Jaffe, Professor and Chair, Department of Sociology, CAS**

*Interests:* Dr. Jaffe is a qualitative sociologist of aging. His early work focused on various aspects of shared housing between young and old, exploring a number of sociological issues – the social psychology of intergenerational relationships, the sociology of non-institutional forms of living arrangements for frail elders, and a sociologically-informed critique of social policy toward the elderly. Later, he combined interests in aging and health care by conducting a multi-year, multi-site study of group homes for people with Alzheimer’s disease and dementia. In that work, he explores two broad interrelated themes: (a) how the embeddedness of dementia care in specific care settings and caregiving relationships encourages the display of symptoms that are interpreted by many as a "loss of self," and (b) how the larger political economy, structure, and



culture of care settings make the ideals of quality, humane care difficult to achieve.

*Degrees:* Ph.D., Sociology, University of Chicago; M.A., Sociology, University of Chicago; B.A. Sociology, Washington University.

*Select recent, relevant publications:*

Christopher Wellin and Dale J. Jaffe, "In Search of 'Personal Care:' Challenges to Identity Support in Residential Care for Elders with Cognitive Illness," *Journal of Aging Studies*, Vol. 18, No. 3, 2004.

Dale J. Jaffe and Christopher Wellin, "June's Troubled Transition: Adjustment to Residential Care for Older Adults with Dementia," *Journal of Long Term Home Health Care*, Vol. 26, No. 3, 2008

*Recent teaching includes courses on:* Health Care in America; Health Care and Aging, Qualitative Research Methods; Sociology of Health and Medicine

### **Shamila Lekka, Lecturer, Department of Psychological Science, CAS**

*Interests:* Dr. Lekka's primary research interest is the origins and outcomes of parent-child relations in early childhood. Specific areas include: identifying predictors of maternal and paternal sensitivity with an emphasis on parents' emotional responses to infant cues; examining the intergenerational transmission of fathers' emotion relevant parenting practices with an emphasis on identifying factors that contribute to discontinuity; factors associated with effective reintegration of military fathers: pre, during and post deployment stages.

*Degrees:* Ph.D. University of Vermont; M.A. University of Vermont; B.Sc. University of Aberdeen, Scotland

*Select recent, relevant publications:*

Lekka, S.K., Crockenberg, S. C., & Burt, K. (April, 2011). Pathways explaining the development of parenting behaviors in fathers. Poster presented at the 22nd Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Crockenberg, S.C., Leerkes, E.M., Lekka, S.K. (2010, July). Predicting pre- and post-partum depressive symptoms in fathers. Poster presented at the 21st Biennial Congress of the International Society for the Study of Behavioral Development, Lusaka, Zambia

Crockenberg, S. C., Leerkes, E. M., & Lekka, S. (2007). Pathways from marital aggression to infant emotion regulation: The development of withdrawal in infancy. Infant Behavior and Development, 30, 97-113. (Special section: Emergent family systems).

*Recent teaching includes:*

PSYS 001: Introduction to Psychological Sciences

PSYS 150: Developmental Psychology: Childhood

PSYS 259: Psychology of Families

PSYS 279: Introduction to Health Psychology

### **Rycki Maltby, Professor, Department of Nursing, CNHS**

*Interests:* Dr. Rycki Maltby's background is in public health nursing. She has taught in Canada, Australia, South Korea, and Malaysia; and has been at UVM since January 2000. Her research, publications, and conference presentations reflect community-based issues, with current projects of developing cultural

immersion experiences with international partners and cultural competency across nursing programs with co-researcher Dr. Sarah Abrams. Dr. Maltby is a Co-Editor for the International Journal of Nursing Education Scholarship.

*Degrees:* Ph.D., Public Health, Curtin University of Technology, Perth, W. Australia; MScN, Nursing Education, University of Western Ontario; BScN., Nursing, University of Windsor (Ontario); B.A., Psychology, University of Windsor (Ontario)

*Select recent, relevant publications:*

Maltby, H. J. (2016). Ethical photography while on study abroad. In press: *Nurse Educator*

Maltby, H. J., de Vries-Erich, J. M., & Lund, K. D. (2016). Being the stranger: Comparing study abroad experiences of nursing students in low and high income countries through hermeneutical phenomenology. *Nurse Education Today*, 40(2016), 114-119. DOI information: 10.1016/j.nedt.2016.06.025

Charles, L., Maltby, H. J., Abrams, S. E., Shea, J., Brand, G., & Nicol, P. (2014). Expanding Worldview: Australian Nursing Students' Experience of Cultural Immersion in India. *Contemporary Nurse*, 48(1).

Maltby, H. J. (2017). Service Learning. In M. J. Bradshaw & A. J. Lowenstein (Eds.), *Innovative teaching strategies in nursing and related health professions* (7th ed), pp. 381-393. Sudbury, MA: Jones & Bartlett.

Carney, J. K., Maltby, H. J., Mackin, K. & Maksym, M. E. (2011). Community-Academic Partnerships: How Can Communities Benefit? *American Journal of Preventive Medicine*, 41(4s3), s206-s213.

*Recent teaching includes:*

PRNU 241: Public Health Nursing

HLTH 105: Cultural Health Care (undergraduate and RN-BS)

GRNU 337/338: The Science of Nursing: Public Health Nursing

PH 311: Global Public Health

### **Bindu Panikkar, Assistant Professor, Environmental Program, RSENR**

*Interests:* Dr. Panikkar's current research examines how science is constructed, debated and utilized in the permitting process of newly proposed mines in Alaska. It seeks to understand the governance of natural resources in Alaska, especially as it pertains to increasing access as a consequence to climate change. She is also continuing her research project that she started at the Arctic Institute of North America, a citizen science/community-based research project to monitor species diversity, wildlife health, and environmental change in Yukon and Nunavut as well as to understand the Inuit ways of dealing with sea ice changes and their use of scientific weather information in the Northwest Passage. Her previous research focus and interests has included the social, and political challenges involved in the continued operation of the Pilgrim Nuclear Power Station past its design life, reflexive research ethics in fetal tissue xenotransplantation research, occupational health issues among immigrant workers, the ethics of uranium mining research, and the teratogenic effects of depleted uranium.

*Degrees:* Ph.D in Environmental Health, Tufts University; M.S in Environmental Health, Tufts University; M.A in Environmental Policy and Planning; B.A in Literature, University of Kerala (India).

*Select recent, relevant publications:*

- Panikkar B and Sandler R. "The Socio-Ethical Considerations in the Continued Operation of Nuclear Power Plant Past its Design Life." In Taebi B and Roesner S. (Ed) *The Ethics of Nuclear Energy: Risk, Justice, and Democracy in the Post-Fukushima Era*. Cambridge University Press. (In Press)
- Panikkar B. Woodin M, Brugge D, Hyatt R, "Community Partners of the Somerville Community Immigrant Worker Project and Gute DM. Characterizing the Low Wage Immigrant Workforce: A Comparative Analysis of the Health Disparities Among Selected Occupations in Somerville, Massachusetts." *American Journal of Industrial Medicine* 2013.
- Panikkar B. Smith N. and Brown P. "Reflexive research ethics in fetal tissue xenotransplantation research." *Accountability in Research*. 2012, 19:344–369. NIHMSID # 470419
- Panikkar B. Woodin M., Brugge D., Gute DM. et al. "Ethnicity, Years in the US, and English Proficiency and Occupational Health and Safety Experiences Among Self-identified Immigrant Workers Living or Working in Somerville, Massachusetts." *International Journal of Environmental Research and Public Health. Special Issue on Migrant Health*. 2012, 9(12), 4452-4469.

*Recent teaching includes:*

- ENVS 181 D1: Environmental Justice and Sustainability
- ENVS 195 Emerging Technologies and Health
- ENVS 295 Human Ecology, Health and Sustainability in the Circumpolar Arctic
- ENVS 295 Women, Health and the Environment

**Jeanne Shea, Associate Professor, Department of Anthropology, CAS**

*Interests:* As a sociocultural anthropologist who specializes in medical and psychological anthropology, Chinese culture, and the geographic areas of North America and China, Prof. Jeanne Shea's research interests revolve around gender issues, health and healing, human development and aging, and the lifecycle and intergenerational issues. She is interested in cultural and generational differences in experiences of the lifecycle, human development, and aging, in the types of health concerns and social issues that mark lifecourse transitions, and in the influences of gender, class, ethnicity, culture, and generation on experiences of health, illness, healing, and the health care system. In the broadest sense, she is concerned with issues related to cultural processes, ethnic identity, socioeconomic class, economic development, and social change.

*Degrees:* Ph.D., Anthropology, Harvard University; M.A., Anthropology, Harvard University; B.A., Asian Studies, Dartmouth College.

*Select recent, relevant publications:*

- Jeanne Shea and Hong Zhang, co-editors, Special issue on Aging and Caregiving in Chinese Populations, *Ageing International*, 2017(42:2): 114 pages.
- Jeanne Shea and Hong Zhang, "Introduction to Aging and Caregiving in Chinese Populations," *Ageing International*, 2017(42:2): 137-141.
- Jeanne Shea, "Senior Volunteering in Service to Community Elders in Shanghai: Bringing Together Agendas for Productive Aging and Community-Based Social Support for the Aged in China," *Ageing International*, 2017(42:2): 205-235.

- Jeanne Shea and Yan Zhang, "Ethnography of Caregiving of Elders by Elders in Shanghai, China," *Ageing International*, 2016(41:4): 366-393.
- Jeanne Shea, "Revolutionary Narratives of Self-Compassion among Older Women in Post-Mao Beijing," *Anthropology and Medicine*, 2014(21:1): 8-26.
- Jeanne Shea, "Venting Anger from the Body at Gengnianqi: Meanings of Midlife Transition among Chinese Women in Reform Era Beijing," in Caitrin Lynch and Jason Danely, eds., *Transitions and Transformations: Cultural Perspectives on Aging and the Life Course*, New York: Berghahn Publications, 2013: 49-63.
- Jeanne Shea, auth., Cuixia Shi, co-transl., "循证医学在中医学中的应用标：争论与策略" ("Application of Evidence-Based Medicine Standards to Traditional Chinese Medicine"), *中国中西医结合杂志 (Chinese Journal of Integrated Chinese and Western Medicine)*, 2010(30:3):230-233.

*Recent teaching includes:*

- ANTH 89: Global Health, Development, Diversity  
 ANTH 152: Chinese Culture and Society  
 ANTH 174: Culture, Health and Healing  
 ANTH 180: Psychological Anthropology  
 ANTH 189: Aging in Cross-Cultural Perspective  
 ANTH 288: Anthropology of Global Health  
 ANTH 290: Ethnographic Research Methods  
 HCOL 086: Medical Anthropology and Global Health  
 HLTH 103/ANTH 173: Foundations of Global Health

**Christine Vatovec, Assistant Research Professor, RSENR**

*Interests:* As an interdisciplinary environmental health social scientist, Dr. Vatovec roots her work within the research specializations of sustainability science, environmental health, and environmental sociology. She draws on theories and tools from these subdisciplines, but also from anthropology, environmental justice, environmental and medical history, environmental psychology, environmental studies, and public health sciences. Her research focuses on two areas regarding the interplay between human health and the environment: 1) the socio-ecological consequences of medical care (or, how human health-seeking behaviors impact the environment), and 2) the human health benefits of nature contact (or, how the environment impacts human health).

*Degrees:* Ph.D. Environment & Resources, University of Wisconsin; M.S., Conservation Biology & Sustainable Agriculture Systems, University of Minnesota; B.S., Natural Resources, Cornell University.

*Select recent, relevant publications:*

- Vatovec, Christine, Mujde Erten, Jane Kolodinsky, Phil Brown, Marie Wood, Ted James, Brian L. Sprague. 2014. Ductal carcinoma in situ: a brief review of treatment variation and impacts on patients and society. *Critical Reviews in Eukaryotic Gene Expression* 24(4): 281-286.
- Vatovec, Christine, Laura Senier, and Michael Bell. 2013. The ecology of dying: commodity chains, governance, and the medicalization of end-of-life care. Gislason (ed.) *Advances in Medical Sociology: Ecological Health: Society, Ecology and Health*, 15: 195-215.

Vatovec, Christine, Laura Senier, and Michael Bell. 2013. An ecological perspective on medical care: environmental, occupational, and public health impacts of medical supply and pharmaceutical chains. *EcoHealth* 10(3): 257-267.

Severtson, Lori and Christine Vatovec. 2012. The Theory-based Influence of Map Features on Risk Beliefs: Self-reports of What is Seen and Understood for Maps Depicting an Environmental Health Hazard. *Journal of Health Communication* 17(7): 836-856

*Recent teaching includes:*

ENVS 107 SU: Human Health and the Environment

**2. Effect on, and adjustments in, present staff assignments:** CAS is committed to providing administrative staff support to support the student needs and faculty coordination across units likely to be required for a new cross-college program. We anticipate a one-quarter time staff person in the initial years of the program; staffing demands in subsequent years will be assessed as the program develops.

**3. New positions to be added and qualifications to be met:**

**a) Director, if any;**

**Director of Health and Society Program:** Direction of the major and minor in Health and Society. Duties will focus on working to: maintain and coordinate curricular offerings, publicize the major and minor to prospective students, generate relevant advising materials for majors and minors, arrange advisors for students, foster opportunities for intellectual and pedagogical interchange among program faculty, and track students' progress toward the major and minor. Qualifications should include expertise in rank of Associate Professor or higher and expertise in social science approaches to health, healing, and healthcare.

**b) Other positions;**

As mentioned previously, CAS has committed to hiring faculty for four positions which will be able to contribute to teaching courses that will count toward the Health and Society major and minor. Below we have included position descriptions submitted by the relevant departments:

**Anthropology of Global Health:**

*Faculty search in 2019-2020, with position starting in Fall 2020.*

The Department of Anthropology seeks to hire an anthropologist specializing in global health and biological and medical anthropology/human biology. The candidate's research and teaching will focus on human biological diversity, biocultural aspects of global health, and interactions of biological, ecological, and sociocultural processes in shaping the health of modern human populations. Specializing in biological anthropology and human biodiversity, the candidate will support our strength as a four-field department and our major concentration and informal major and minor focus in the Anthropology of Global Health. Potential specializations include: applied anthropology of health; health disparities; health in marginalized groups or developing countries; nutrition, health, and environment; cultural epidemiology; forensic anthropology; human genetic

variation; epigenetics; gender, sex, and biology; critique of race-based medicine; neuroanthropology, brain plasticity, and neurodiversity in relation to social and cultural ecologies; life history and human development; endocrinology and cultural ecology; and human biocultural adaptation to physical, politico-economic, and/or socioemotional challenges. We welcome a critical social justice focus on health disparities generated by biosocial inequalities across regional, class, cultural, race, ethnic, sex, and/or gender lines and their intersections in global perspective.

### **Economics of Health**

*Faculty search in 2020-2021, with position starting in Fall 2021.*

The Department of Economics seeks to hire an economist with a focus on health economics. Behavioral economics and health economics are important and emerging areas in the discipline which will augment our scholarly and teaching portfolio. Both of these topics are of great interest to students, who have sometimes requested courses in these areas. A vibrant curriculum that reflects the direction of our field is necessary to attract and retain students. Scholars in these areas would easily find colleagues with whom to pursue joint research and teaching initiatives.

### **Health Geography:**

*Faculty search in 2018-2019, with position starting in Fall 2019.*

The Department of Geography seeks a scholar of Health Geographies including, but not limited to, spatial epidemiology (with quantitative/mapping expertise), public health, and global health, with a specific focus on race and ethnicity. The hire will focus on digital geographies and visualization: spatial implications of Big Data, cartography, modeling, computation, visualization, geo-referenced data, qualitative and quantitative analysis.

### **Sociology of Health/Illness:**

*Faculty search in 2018-2019, with position starting in Fall 2019.*

The Department of Sociology seeks a scholar of health and illness with a focus on quantitative methods. A longstanding interest of the department has been the study of the social determinants of health, the structure of health care institutions, and health policy. Over the past decade, interest among students in the non-clinical aspects of health and medicine has increased as evidenced, in part, by the volume of CAS individually-designed majors and minors in this area, and the popularity of health-related courses particularly in the social sciences. The College is currently participating in a multi-college initiative to design a non-clinical major in health care and needs additional faculty within CAS to create its component of the interdisciplinary health studies major for CAS students. Research and experiential learning opportunities in this area abound in Vermont, given the State's experimentation with new financial and organizational models for providing care. In addition, we have been contacted by potential collaborators in the College of Medicine who are interested in what we call health services

research and would benefit from the substantive and methodological expertise of social scientists as research partners.”

*Note: While not explicitly identified as an HSOC-related position, the slated Social Psychology hire with a focus on Race and Ethnicity will most likely offer courses of interest to HSOC students. Outside CAS, Health Sciences in MLRS in CNHS is slated for an upcoming hire in which they are seeking a candidate with an MPH, and CALS is also planning to recruit an MPH in the coming year.*

**c) Indication of appointment prospects.**

In terms of the Program Director, Profs. Dale Jaffe of Sociology and Jeanne Shea of Anthropology have been engaged from the beginning in the creation of the HSOC proposal; either would be an ideal director, offering valuable assistance in launching the program. In terms of tenure-track searches, the four CAS searches will be carried out from 2018-2021. Employment prospects should be strong as there are many qualified faculty candidates with related degrees.

**4. Interdepartmental and inter-institutional cooperation planned.**

Within the university, the program director will communicate with Chairs and related faculty in relevant departments across the university in order to keep curricular offerings responsive to student demand. We will aim to have a face-to-face meeting to which all program faculty are invited once per semester in order to promote coordination and collaboration and awareness of changes in course offerings and other opportunities. This will be supplemented with an HSOC program faculty listserv for all faculty who teach or advise for the program.

There is only one formal inter-institutional cooperation thus far. Following a successful informal internship experience of UVM student Gabriela Sarriera in Rwanda, UVM was invited to form an ongoing competitive internship for UVM students at the University of Global Health Equity (UGHE), an affiliate of Paul Farmer’s Partners in Health. We had our first university-wide competition in spring 2017, and the UVM undergraduate selected, Siera Carusone, successfully completed the internship in Kigali in summer 2017.

**B. Library support:**

**1. Present an evaluation of the library resources available currently to support the program;**

Current library resources available at UVM are adequate to the needs of the program.

**2. Indicate additional demands to be made for this program with an estimate of the dollar cost of the additions.**

We do not anticipate specific library demands associated with this program.

**C. Equipment needs and plans to meet them.**

We do not anticipate new equipment needed for this program.

**D. Physical space needs and plans to meet them:**

**1. Classroom and student study space;**

This program will not require any additional classroom or student study space.

**2. Laboratory, research, and field experience space;**

This program will not require any additional laboratory, research, or field experience space.

**3. Office space.**

This program will not require any additional office space; new health-related hires in Sociology, Anthropology, Geography and Economics will be given offices within those departments, in existing spaces which will become available through retirements.

**XIII. Cost estimates:**

**A. First-year costs in addition to current budget;**

**Director stipend and course release:** The program director of HSOC will receive a \$5000 stipend per year, along with a course release to facilitate work on the new major/minor.

**Program operating budget:** CAS is committed to expanding support for the major as demand and enrollment increases. Consistent with other programs in the college, CAS will provide \$5000 in the first year of the program, \$7500 the second year, and \$10,000 a year every year thereafter.

**B. Total costs for first five years in addition to current budget;**

Five times the above, i.e. five course releases, and a total monetary commitment of \$57,500.

**C. Anticipated non-University support, if any, such as federal or industry grants.**

We do not anticipate needing any non-University support to launch this major/minor.

**D. How program will be funded if no new money is available;**

Courses and advising for this major/minor will fall within the workloads of current or projected faculty, with no new money needed to enable those activities.

**E. Proportion of salary of any faculty member who would contribute to program.**

N/A

**XIV. Schedule for curriculum, academic program, research, or service endeavor:**

**A. Proposed starting date:**

We plan to launch the HSOC program in Fall 2018 on a limited scale, with little advertising; many students are already aware of the planning for the major, so we anticipate initial demand will be from those students. As new faculty join in Fall 2019, we will then launch a more concerted campaign to recruit both incoming and existing students into the major and minor.



**B. When will curriculum or academic program be offered-academic year, summer, part-time?**

The program will be offered primarily during the academic year. However, approved courses, internships, research projects, or experiential opportunities that occur during the summer may be applied toward the degree with the program director's approval.

**XV. Evaluation:**

**A. What criteria for evaluation will be applied?**

Student experience in relation to their perceptions of academic coverage of knowledge and skills, the sufficiency of academic rigor, the usefulness of the knowledge and skills they learned, the quality of the instruction and advising they received, and the relationship of the program to their efforts to secure post-graduation employment and further education. Program director and program faculty assessments of all of the above, plus student learning outcomes, and match of program with available opportunities for post-graduation employment and further education. In addition, graduation rates and time to graduation will be tracked.

**B. How and by whom will the program be evaluated?**

The program will be evaluated on the basis of student questionnaires and alumni regarding their experience in the program (LimeSurvey end of each semester) and by program faculty assessments of students' performance on the learning objectives for their courses in relation to the learning objectives of the program (LimeSurvey end of each semester). Baseline for faculty assessments and student ratings will be established during the first year and then compared with subsequent years to the extent that is possible. Data will be shared with program faculty and students in advance of a yearly Town Meeting at which students and faculty troubleshoot together as to priorities, strategies, resources, and constraints. Program faculty and the director will weigh the recommendations and identify a reasonable set of things to work on in the following year, specifying benchmarks for measuring whether those goals were met. In addition to our surveys of alumni, we will also draw on social media like LinkedIn to collect qualitative data on the destination of graduates related to both employment and further education, such as type of graduate degree pursued and sector of employment.

Graduation rates and time to graduation will be tracked with the assistance of the Office for Institutional Research. The UVM alumni office may be a good source of information about alumni employment and further education.

**XVI. Endorsements of the proposal**

Please see the attachments for support letters from the following deans:

- CALS Dean, Tom Vogelmann
- CAS Dean, William Falls
- CESS Dean, Scott Thomas
- CNHS Dean, Patricia Prelock
- RSENR Dean, Nancy Mathews

In addition, we are including support letters from the following:

- Anthropology, Associate Professor and Chair, Emily Manetta
- Environmental Studies, Professor and Chair, Nathan Sanders
- Global Studies, Associate Professor and Director, Jonah Steinberg
- Public Health, Professor and Director of the Masters in Public Health Program, Jan Carney
- Sociology, Professor and Chair, Dale Jaffe
- Statistics, Professor and Chair, Jeff Buzas

## APPENDIX:

A full advising manual will be prepared for HSOC majors and minors. The content below will be one of the items included.

### **Advising Notes on CAS General Distribution Requirements for HSOC Students:**

#### **Recommendations for math distribution requirement:**

Students in the Health and Society major will normally be best served by taking a Statistics course for their math requirement. While STAT 051 is often recommended to students in general, HSOC students who have the ability will want to go directly to STAT 111 or 141. Students who struggle with quantitative reasoning, however, may wish to start with STAT 051.

#### **Recommendations for foreign language distribution requirement:**

You should aim to take a foreign language that will help you in your future activities, whether study abroad, internships, service learning, undergraduate research, graduate school, or your career beyond. Students who intend to remain in the United States should keep in mind the linguistic diversity of our native, immigrant, and refugee populations. Students who intend to work with linguistically diverse populations in the US or to work in global health with populations abroad should try to take foreign language courses beyond the required distributive level. Students planning to go on to graduate school in a field related to the social science of health (e.g., Health Economics, Health Policy, Health Psychology, Health Geography, History of Medicine, Medical Anthropology, Medical Sociology, etc.) or into the field of Global Health should check carefully on languages required for their intended specialization. Some Ph.D. programs in Anthropology, for example, require students to have fluency or near fluency in one foreign language and some training in a second. Many international positions in global health require foreign language fluency.

#### **Recommendations for natural science distribution requirement:**

Students in the Health and Society major should aim to take a minimum of at least two natural science courses related to human health. Students who have a science major or minor, or who are pre-MPH, pre-med, or pre-dental, or who are intending to go on to a graduate-level nursing program must take a larger number of more advanced courses. For up to date pre-health guidelines, see [http://www.uvm.edu/~career/pre\\_health/advising](http://www.uvm.edu/~career/pre_health/advising).

#### *Suggestions for science beginners who are not premed or pre-MPH:*

BIOL 3: Human Biology, BIOL 4: The Human Body

(These are only a few among the many options to fulfill the natural science distribution; see the CAS BA Distribution Requirement checklist for all all natural science courses.)

#### *Natural science course recommendations for Pre-Health Students:*

Suggestions for pre-MPH students\*

BIOL 1 & 2 OR BCOR 11 & 12

Suggestions for pre-med students\*

BIOL 1 & 2 OR BCOR 11 & 12; CHEM 31 & 32 (35 & 36 for majors); CHEM 141 & 142 (143 & 144 for majors); BIOC 295A for non-majors (205/206 for majors);

PHYS 11 with 21 (lab) & PHYS 12 with 22 (lab) (51 & 152 for majors)

Suggestions for pre-dental students\*

BIOL 1 & 2 OR BCOR 11 & 12; CHEM 141 & 142 (143 & 144 for majors); BIOC 295A for non-majors (205/206 for majors); MMG 101; PHYS 11 with 21 (lab) & PHYS 12 with 22 (lab); BCOR 101, 103 (recommended)

\*Guidelines change over time, please consult UVM pre-health website for most recent recommendations and for guidelines for pre-pharmacy, optometry, PA, PT, or other health-related career paths. For most recent UVM guidelines, see [http://www.uvm.edu/~career/pre\\_health/advising](http://www.uvm.edu/~career/pre_health/advising).

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