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Bachelor of Science in Public Health (BSPH)

Degree Descriptions
The undergraduate degree offered is the Bachelor of Science in Public Health (BSPH). Four majors are available to undergraduate students – Biostatistics, Environmental Health Sciences, Health Policy and Management, and Nutrition. Each of these combines features of a broad-based education with concentrated study in a specific public health discipline. The programs prepare individuals for pre-professional positions in health-related fields and provide a firm base for graduate study. Students may pursue two majors in the School. Students are subject to the requirements in place when they are admitted to the Gillings School of Global Public Health as well as to any additional requirements or policies instituted by the School.

The Gillings BSPH Degree
We are committed to preparing all Gillings BSPH students with the knowledge and skills to enter the public health workforce. The Gillings BSPH curriculum consists of the following components:

The BSPH Core
Students in all four Gillings undergraduate majors complete the BSPH core public health curriculum, “the BSPH core”. The BSPH core is designed to:

- Help students develop foundational public health knowledge and skills through integrated courses that reflect the interdisciplinary nature of public health practice.
- Introduce students to the values and underlying principles that inform public health practice.
- Provide students with an opportunity to collaborate across disciplines to examine the root causes of public health problems and develop interventions to address them.
The BSPH core includes the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPHG 351</td>
<td>Foundations of Public Health</td>
<td>3</td>
<td>Junior Fall</td>
</tr>
<tr>
<td>SPHG 352</td>
<td>Public Health Systems &amp; Solutions</td>
<td>4</td>
<td>Junior Spring</td>
</tr>
<tr>
<td>EPID 600</td>
<td>Principles of Epidemiology</td>
<td>3</td>
<td>Junior Fall or Spring</td>
</tr>
<tr>
<td>BIOS 600</td>
<td>Principles of Statistical Inference*</td>
<td>3</td>
<td>Any term</td>
</tr>
</tbody>
</table>

- Introduction to public health
- Learn how to identify, describe and communicate public health problems
- Introduction to health systems in the U.S. and around the world
- Learn how to develop, implement and evaluate solutions to public health problems
- Introduction to epidemiology, the basic science of public health
- Learn how to use epidemiology to better understand, characterize, and promote health at a population level
- Introduction to probability and statistical inference
- Learn how to collect, summarize, analyze and present health data

* BIOS majors take BIOS 500H; HPM majors may take BIOS 600 or ECON 400

Through the BSPH core courses and BIOL 101 Principles of Biology (a prerequisite course required of all Gillings BSPH students), students receive instruction in the following foundational public health domains and demonstrate the following foundational public health competencies:

**Foundational Public Health Domains:**

- The concepts and applications of basic statistics
- The foundations of biological and life sciences
- The history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society
- The basic concepts, methods, and tools of public health data collection, use, and analysis and why evidence-based approaches are an essential part of public health practice
- The concepts of population health, and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations
- The underlying science of human health and disease, including opportunities for promoting and protecting health across the life course
- The socioeconomic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities
- The fundamental concepts and features of project implementation, including planning, assessment, and evaluation
- The fundamental characteristics and organizational structures of the U.S. health system as well as the differences between systems in other countries

**Foundational Public Health Competencies:**

- Communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences
- Locate, use, evaluate, and synthesize public health information
- Describe health inequities, identify their root causes at multiple levels of the social ecological framework, and discuss approaches to advancing health equity
**Major Courses**

Required courses for each major provide students an opportunity to develop discipline-specific knowledge and skills and demonstrate discipline-specific competencies. The required courses for each major and the associated competencies are described below under each BSPH program.

**Culminating Experience**

Students in all four Gillings undergraduate majors complete a culminating experience that requires students to integrate, synthesize and apply the knowledge and skills developed across their program and serves as a capstone for their educational experience. The table below describes the culminating experience requirement for each BSPH program:

<table>
<thead>
<tr>
<th>BSPH Program</th>
<th>Culminating Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biostatistics</td>
<td>BSPH students majoring in Biostatistics are required take BIOS 664 AND BIOS 691.</td>
</tr>
<tr>
<td></td>
<td>• In BIOS 664, students complete a real-world sampling project involving design, data collection, data analysis and presentation of results.</td>
</tr>
<tr>
<td></td>
<td>• In BIOS 691, students travel to at least seven different locations, including pharmaceutical industries, CROs, non-profits and government agencies in the Research Triangle Park to observe and participate in presentations by employers of biostatisticians.</td>
</tr>
<tr>
<td>Environmental Health Science</td>
<td>BSPH students majoring in Environmental Health Science must complete ENVR 593, ENVR 695, ENVR 692H, OR ENVR 698.</td>
</tr>
<tr>
<td></td>
<td>• In ENVR 593, students complete a mentored practicum experience and prepare a reflective report.</td>
</tr>
<tr>
<td></td>
<td>• In ENVR 695, students carry out research with a faculty mentor.</td>
</tr>
<tr>
<td></td>
<td>• In ENVR 692H, students plan and carry out an independent research project under the guidance of a faculty advisor.</td>
</tr>
<tr>
<td></td>
<td>• In ENVR 698, students participate in environmental crisis simulations and develop practical solutions to public health related disasters.</td>
</tr>
<tr>
<td>Health Policy and Management</td>
<td>BSPH students majoring in Health Policy and Management must take HPM 697.</td>
</tr>
<tr>
<td></td>
<td>• In HPM 697, students work in consulting teams with health organizations to solve real-world problems and present their solutions to the clients at the end of the semester.</td>
</tr>
<tr>
<td>Nutrition</td>
<td>BSPH students majoring in Nutrition must complete NUTR 295 or NUTR 692H.</td>
</tr>
<tr>
<td></td>
<td>• In NUTR 295, students carry out research in their mentors' labs, including active participation and presentation at lab meetings.</td>
</tr>
<tr>
<td></td>
<td>• In NUTR 692H, students plan and carry out an independent research project under the guidance of a faculty advisor.</td>
</tr>
</tbody>
</table>
BSPH Admissions Requirements
Students who wish to obtain the BSPH degree typically spend two years in the General College of The University of North Carolina at Chapel Hill (or in an equivalent core program of academic study elsewhere) and two subsequent years under the administration of the Gillings School of Global Public Health. Enrollment in the BSPH degree programs is limited. Typically, a student is selected in the latter half of the sophomore year and admitted on a competitive basis. The minimum recommended grade-point average for admission to programs in Biostatistics, Environmental Health Sciences, Health Policy and Management, and Nutrition is 3.0.

Requirements Common to All Undergraduate Majors in the Gillings School of Global Public Health
The Gillings School of Global Public Health requires that students earn a C (not C-) or better in prerequisite, core public health and department-required courses.

At the end of the sophomore year, students are expected to have earned approximately 60 semester hours of credit. These must include all Foundations and Approaches requirements and at least five Connections requirements, including global issues, experiential education and U.S. diversity. One of the two physical and life science courses must be BIOL 101/101L. (Environmental health sciences majors are not required to have completed all Foundations, Approaches, and Connections courses by the end of their sophomore year.) The junior/senior total of approximately 60 semester hours includes BIOS 600 (BIOS 500H for Biostatistics students, or ECON 400 for Health Policy and Management students), EPID 600, SPHG 351, SPHG 352 and for most departments, a minimum of three electives (seven credit hours) outside the school. (Environmental health sciences majors and health policy and management majors, see details under department-specific requirements.)

Policies, Procedures, and Forms
Most forms for Gillings students can be found on the Gillings Forms page. Many forms for undergraduate are electronic, including the declaration/removal of a minor, overloads, underloads, and exam excuses. Also included are any non-Gillings forms, and directions and procedures for each form. Students should work with their Academic Coordinator to complete each form.

Academic Coordinator/Your Advisor

Academic Coordinator
Each undergraduate student has a department specific Academic Coordinator, who can provide an array of services and resources to prospective, admitted and current students. We aim to enhance student development by providing a supportive and safe environment in which you can achieve academic, social and professional success. Academic Coordinators can assist students in navigating academic policies, accessing campus resources, and ensuring program requirements are fulfilled.

Find your Academic Coordinator here.

Faculty Mentor
Faculty Mentors work in combination with the Academic Coordinators to provide students with a rich advising environment. In addition to being experts in the discipline of study, Faculty Mentors provide advice about course selection, academic goals, professional development, and career interests.
For more information on Faculty Mentors, please consult your Academic Coordinator.

Programs

Biostatistics

Program Mission/ Overview
The Bachelor of Science in Public Health program is designed for students who have strong quantitative abilities and an interest in applications of math, statistics, and computer programming to health-related issues. The program prepares students for entry-level professional statistical and programming careers, and provides a firm academic base for subsequent studies in biostatistics, medicine and other fields.

More information here: BSPH Biostatistics FAQs

Admissions Requirements
The first two years of the four-year course of study are usually completed within UNC-CH's General College. Students typically apply to the BSPH Biostatistics Program in January of their sophomore (or second) year for fall admission in their junior (or third) year. Admission requirements include:

1. Completion of MATH 231, 232, and 233 before an admission decision can be made. Thus, MATH 233 must be completed by May of the sophomore (or second) year.
2. Completion of BIOL 101 and BIOL 101L and COMP 110 (or COMP 116) before entering the program in the fall of the junior (or third) year.
3. Completion of at least 60 credits and the majority of their General College requirements before entering the program in the fall.

Program Competencies

Requirements / Curriculum

Advanced students who wish to double major or have a minor are encouraged to take some of the required courses (such as MATH 381, BIOL 201 (or 202), MATH 347) in their freshman and sophomore years to allow flexibility of scheduling in their last two years.

Students must also meet UNC-CH graduation requirements including: completion of at least 120 semester hours; a 2.0 (C) average on all work attempted at UNC-CH; at least 45 credit hours must be earned from UNC-CH courses; at least 24 of the last 30 credit hours applied to degree requirements must be earned from UNC-CH courses. See the Undergraduate Bulletin for complete details. Experiential Education

Honors in Biostatistics

Dual BSPH/MS Program

Undergraduate students with appropriate math and biostatistics backgrounds have the opportunity to pursue a dual bachelor’s–graduate degree. This dual B.S.P.H.–M.S. program identifies a coherent course
of study for students to complete some of the M.S. degree requirements in biostatistics while pursuing a B.S.P.H. degree with a major in biostatistics. More information is available on the major’s Sakai site.

Resources and Support

<table>
<thead>
<tr>
<th>Resource</th>
<th>Types of support</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melissa Hobgood, Academic Coordinator</td>
<td>General education requirements; course registration; drop/add forms; minor declaration forms; overload forms; graduation audits</td>
<td><a href="mailto:mhobgood@bios.unc.edu">mhobgood@bios.unc.edu</a></td>
</tr>
<tr>
<td>Jane Monaco, Program Director and Faculty Mentor</td>
<td>Program-related issues or concerns; Internship, career, graduate education exploration; course advising;</td>
<td><a href="mailto:jmonaco@bios.unc.edu">jmonaco@bios.unc.edu</a></td>
</tr>
<tr>
<td>BSPH Program in BIOS Sakai Site</td>
<td>FAQs, Forms, Articles, Info about Senior Honor Project and Dual Degree.</td>
<td><a href="https://sakai.unc.edu">https://sakai.unc.edu</a></td>
</tr>
<tr>
<td>Biostatistics student listserv</td>
<td>Announcements; events; internship and job postings</td>
<td>Distributed as needed</td>
</tr>
</tbody>
</table>

Environmental Science and Engineering

Program Mission/ Overview
The undergraduate major in environmental health sciences is designed to develop a comprehensive understanding of the environmental factors that impact human health; the physical, chemical, and biological processes that underlie the impact of human activity on the environment and human health; methods used to assess the impact of human activity on the environment and human health; and science-based solutions for environmental problems. Recent graduates have entered graduate programs in environmental science, microbiology, marine science, applied mathematics, and environmental engineering. Students who pursued employment after completing the B.S.P.H. degree are working in environmental advocacy organizations, environmental consulting firms, industry, and investment banking firms.

Admission Requirements & How to Apply
For admission to the BSPH in Environmental Health Sciences we require a grade of C or better earned at UNC–Chapel Hill (in-residence) in at least one course per group in three of the following five groups: Biology, Chemistry, Computer Sciences, Math, and Physics (see table 1 below). Students that have received transfer or AP credits for all required courses within a group may take a course with a higher course number than the required courses listed below earning a C or better. Students can apply for admission once they have completed the requirements. For most students this will occur in the spring semester of their sophomore year. However, students can apply during the first year if they have completed the requirements.
Table 1. Required admission course selection

<table>
<thead>
<tr>
<th>Biology (BIO)</th>
<th>Chemistry (CHEM)</th>
<th>Computer Skills (COMP)</th>
<th>Math (MATH)</th>
<th>Physics (PHYS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>102</td>
<td>116</td>
<td>231</td>
<td>104</td>
</tr>
<tr>
<td>202</td>
<td>261</td>
<td>401</td>
<td>232</td>
<td>105 or 114</td>
</tr>
<tr>
<td>205</td>
<td></td>
<td>233</td>
<td></td>
<td>115 or 116</td>
</tr>
<tr>
<td>252</td>
<td></td>
<td>383</td>
<td></td>
<td>118</td>
</tr>
<tr>
<td>Or any higher numbered 3 credit course from BIO, CHEM, COMP or MATH</td>
<td></td>
<td></td>
<td></td>
<td>119</td>
</tr>
</tbody>
</table>

Assured Enrollment
Students accepted into the Assured Enrollment program must complete the required in-residence admission courses with a C or better and maintain an overall 3.2 GPA. Students will request approval to join the major by responding to an interest survey sent through email at the end of the fall semester/beginning of spring semester.

The Assured enrollment program conditionally admits high achieving first year students into the ENVR BSPH degree. Incoming first year students can apply to the assured enrollment program when they apply to the University. Students accepted into the Assured Enrollment Program are officially admitted into the degree program in the junior year, after successfully completing the required prerequisite courses and maintaining a 3.0 grade point average. Students enrolled in the program are also welcomed as members of the ESE community and invited to all departmental events. In addition, students are given priority access to the following courses during their first two years, ENVR089, ENVR630 and ENVR205.

BSPH Internal Transfer
The ENHS faculty and staff participate in open houses and information sessions held throughout the year both in the School of Public Health and on the Main Campus, and in Fall Majors Exploration workshops. Prospective applicants are encouraged to take advantage of these opportunities to find out more about our program.

Students apply during the standard ENHS BSPH major period for internal transfers (2nd semester sophomore year). The application requires transcripts, two letters of recommendation, and a personal statement describing their interest in the ENHS major. Applications are submitted through the Office of Undergraduate Admissions using the Transfer Common application.

Undergraduates interested in the BSPH in ENHS should therefore plan to take as many of our STEM required courses as possible during their freshman and sophomore years, so that they have the minimum academic qualifications in hand at the time of application. The Co-Director of Undergraduate Studies for Admissions (DUS-A) and ESE Student Services staff will be happy to work with prospective majors (by appointment or by email) to verify that these requirements are on track to being met and to answer any questions about admission.
Applications for Fall are currently submitted online through the ApplyNow/Slate system and open in October for the following fall. The deadline for application usually falls in mid-February (second Tuesday of February). Students admitted in the Spring semester formally enter the BSPH for the Fall semester of their Junior year and follow that semester’s Undergraduate Bulletin degree requirements. Early admission (applications open in September, close in mid-October) may also be possible for students who have met our academic requirements by that time and would like to begin the program Spring of their Sophomore year.

In addition to the above-mentioned academic qualifications (which are documented by examination of the student’s transcript in ConnectCarolina (the University of North Carolina at Chapel Hill’s data repository based on PeopleSoft) the following materials are required for evaluation:

- A personal statement
- A resume or CV
- Two letters of recommendation

**The Admission Decision**

Although grades in the above-mentioned STEM fields are the first thing that we look at, to ensure that our students have a strong science foundation and will not struggle in our advanced classes, applicants are evaluated on the entirety of their application, not solely on grades and GPA. A stratospheric GPA will not compensate for a poorly argued or irrelevant personal statement. Conversely, a motivated and eloquent personal statement, or evidence of prior involvement in and passion for research or other environmental-health-related activities, can tip the scales in favor of admission. We aim to make admission decisions in time for students to make plans before registration for the Fall semester. Although the DUS-A will communicate decisions informally by email as soon as they are made, the formal offer of admission will be made officially through the SPH Office of Student Affairs; instructions on how to accept or decline admission will be included in this communication. Currently the SPH Office of Student Affairs is planning to send out offers of admission around the time of Spring Break.

**First Steps After Admission**

The Co-DUS for Studies (DUS-S) will make our BSPH ENHS Sakai site which serves as a repository for program-related documentation including forms and worksheets) available to incoming students, and will use the Sakai sign-up function to schedule advising sessions (usually clustered in the last two weeks of March, before registration for Fall courses opens in early April). At this first advising session the overall course of study and the student’s specific goals will be reviewed.

The ESE Department usually schedules a social event on an afternoon in mid-April, incoming students are invited to attend to get to know the incoming cohort and the rest of the Department.

**Concentration Competencies**

The degree-specific competencies for the BSPH in Environmental Health Sciences (ENHS define what students should know and be able to do upon completion of their degree program. They guide our curriculum planning and assessment processes.

1. Define major issues in environmental health, sciences & engineering. ENVR 230 (Spring)
2. Provide quantitative answers to complex environmental questions and describe the potential underlying uncertainties. ENVR 205 (Fall)
3. Describe linkages between sources of environmental contaminants, ambient concentrations, human exposures and possible solutions. ENVR 403 (Spring)
4. Describe the mechanistic basis for environmentally-induced disease and methods for prevention. ENVR 430 (Fall)
5. Demonstrate written and oral communication skills in environmental health, sciences and engineering within a public health context. Culminating experience: ENVR 593, ENVR695, ENVR 691H + ENVR 692H, or ENVR 698 (Spring).

Requirements / Curriculum
The degree requirements of the BSPH in Environmental Health Sciences build upon the University wide General Education Requirements (see below). In addition, the EHNS degree requires a strong background in Basic Science and computer skills. The Gillings School of Public Health requires all undergraduate students to complete the Public Health Core to ensure strong foundational knowledge in the field of Public Health. Students are required to take four environmental health courses, and two advanced environmental health electives with a course number greater than 400. The degree is completed with the culminating experience course (see below).

* Or two electives as specified for the Environmental Health Biology, Environmental Chemistry or Environmental Physics Concentrations.

** Additional basic science requirements: For the Environmental Chemistry Concentration, MATH 233 and 383, CHEM 481, PHYS 118 and 119; For the Environmental Physics Concentration, MATH 383.

Course Selection
The entire course catalog can be found here.

ENVR230 is best taken in the Fall of your Junior year (first semester in the BSPH program) – it is taught Fall only.
ENVR430 is also taught in Fall only, undergraduates usually take this course in the Fall of their Senior year. All students should have completed Chemistry through Organic (or better still, Organic I (261), Organic II (262) and Biochemistry (CHEM430), and BIOL202 (and BIOL205/252) before taking ENVR430. Students on the Pre-Med track will automatically conform with these guidelines if they aim to have completed all their pre-med course-work before they take the MCAT (usually the summer before their final year at the latest).

ENVR 205 and ENVR 403 are taught in the Spring only. ENVR 205 should be taken as early as possible after calculus (Freshman year or later). Students who have taken calculus and chemistry can take ENVR 403 in their Sophomore, Junior or Senior years.

In general, ENVR courses are taught only once per calendar year. The SPH Core courses are taught in sequence (Fall: SPHG 351, Spring: 352) and should be taken in the Junior year. EPID 600 should be taken fall or spring of Junior year. BIOS 600 can also be taken fall or spring.

BSPH Sample Plan

Required Course Sequences

- **ENVR 205** (offered fall semester) should be taken as early as possible after completing MATH 231.
- **ENVR 430** (offered fall semester) is usually taken during Senior year. All students must complete CHEM 101/L, 102/L, CHEM 261 and CHEM 162 before taking ENVR430. It is preferred for students to also have completed Biochemistry (CHEM430), and BIOL202 (and BIOL205/252).
- **ENVR 230** and
- **ENVR 403** (offered spring semester) can be taken after completing CHEM 101/L, 102/L, MATH 231 and MATH 232.
- **SPHG 351/352**, the SPH Core courses are taught in sequence (Fall: SPHG 351, Spring: 352) and are required to be taken in the Junior year.
- **EPID 600** should be taken fall or spring of Junior year.
- **BIOS 600** can also be taken fall or spring, in Junior or Senior year.
**Culminating Experience / Capstone**
The culminating experiences provide students an opportunity to synthesize, integrate and apply knowledge and skills learned in coursework and other learning experiences and require students to demonstrate attainment of program competencies. The culminating experience can take the form of an internship or practicum (ENVR 593, see below), research (ENVR 695), an Honors Thesis (ENVR 691 H + ENVR 692H) or completion of ENVR 698, Senior Capstone Course. A minimum of 3 credit-hours are required and are usually completed during the senior year.

**Internship or Practicum (ENVR 593)**
The practicum provides students an opportunity to apply the knowledge and skills being acquired through their coursework and further develop and demonstrate attainment of program competencies. Students participate in mentored practical extracurricular activities that complement and enrich their studies in Environmental Health Sciences. Such activities typically include internships or volunteer work with an appropriate Agency (e.g., Public Health Departments, non-profits, NGOs) and projects with organizations such as Engineers without Borders. (The University Career Services Office offers resources to help locate internships.) The activity must be environmental health-related, conducive to personal and professional development, and overseen by an identified professional in the field who serves as a mentor rather than merely a supervisor. In order to earn academic credit, the student must submit an original report that both describes the activity and offers scholarly reflection on the significance and impact of that activity. The length of the report will be commensurate with the credit-hours undertaken, which in turn reflect the level of effort out into the practicum activities. 3 credit-hours reflect approximately 120 hours of concentrated full-time effort, or the equivalent pro-rated over a longer period of time.

**FACULTY ADVISOR**
A member of the Faculty of the Department of Environmental Sciences will serve as Practicum Advisor and will have primary responsibility for grading the practicum report. Register for ENVR 593 under this faculty member’s section number.

**REGISTERING FOR ENVR 593 - CAUTION**
ENVR 593 is set up as a variable-credit course (credits commensurate with level of effort, see above) with different section numbers reflecting the different faculty members who will be advising you and grading your report. Three credits are required in order to satisfy the Culminating Experience requirement. Currently ConnectCarolina offers 1 credit and the lowest section number as the default. You will need to click around to get a drop-down menu with a choice of numbers of credit-hours and another menu with a choice of section numbers, from which you should choose the appropriate ones. Also, after you have registered, go back and check that ConnectCarolina is showing the desired credits/section. If these are incorrect and it’s before the end of drop-add, you should be able to fix this yourself by dropping and reregistering. If it’s after Drop/Add or you’re having trouble, see the ESE Academic Coordinator for help.
FORMAT OF THE PRACTICUM REPORT

<table>
<thead>
<tr>
<th>FORMAT OF THE PRACTICUM REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length proportional to number of credit-hours, e.g. ~ 10 pages (single spaced, 12pt Serif font, 11 pt SanSerif, 1 inch margins) for 3 credit-hours. Electronic or hard copy according to the preference of the Practicum Faculty Advisor.</td>
</tr>
<tr>
<td><strong>Introduction:</strong> Setting the stage.</td>
</tr>
<tr>
<td>- Describe the agency/organization in which the practicum is performed, its mission and goals.</td>
</tr>
<tr>
<td>- Describe the purpose of the practicum and how it fits with the agency mission/goals(context)</td>
</tr>
<tr>
<td>- Describe your own goals (with respect to knowledge gained, professional development, personal development) in undertaking the practicum.</td>
</tr>
<tr>
<td><strong>Narrative:</strong> What you actually did.</td>
</tr>
<tr>
<td>- Your activities, arranged logically, in narrative (not diary) form, with documentation that substantiates level of effort (number of hours worked).</td>
</tr>
<tr>
<td>- Different projects undertaken, how you balanced priorities</td>
</tr>
<tr>
<td>- Your relationship/interactions with your mentor - contributions to learning and development - Tangible products, e.g. reports written, latrines dug, web-pages designed...</td>
</tr>
<tr>
<td><strong>Discussion: Reflections on the outcome</strong></td>
</tr>
<tr>
<td>- Your accomplishments</td>
</tr>
<tr>
<td>- How your accomplishments relate to what you actually set out to achieve (original goals)</td>
</tr>
<tr>
<td>- Significance and impact of what you actually accomplished (both with respect to the host agency and with respect to your own personal and professional development.</td>
</tr>
<tr>
<td><strong>References (if appropriate)</strong></td>
</tr>
<tr>
<td>As needed to document cited facts. No specific style (e.g. Chicago) is required so long as the format is consistent and informative.</td>
</tr>
</tbody>
</table>

DEADLINE
The practicum report should be turned in to the Faculty Advisor by the last day of classes.

GRADING
Grading will be based on clarity and logic of general writing, articulation of goals, discussion of accomplishments, and appropriate placement into context.

**NOTE:** All students undertaking a practicum or internship for credit must complete a learning contract at the beginning of the semester. This must be approved by the DUS-S and filed with the student services office every semester of enrollment (see below for more information).

Senior Capstone Course (ENVR 698)
ENVR 698: Senior Capstone in Global Environmental Crisis Management is a culminating experience where students extend, critique and apply knowledge gained in the classroom. This immersive capstone project gives the students the opportunity to integrate and synthesize their learning through a tangible project. This course is taken the spring of senior year and is an experiential learning experience though a real-time simulation of humanitarian and environmental emergencies. During the course students develop practical solutions to public health related disasters.
The course is led by multiple instructors, with at least two Gillings SPH professors and one adjunct with professional experience in emergency management. Depending on the academic background of each enrolled student they are placed in working groups for the course. These working groups will contain students of similar academic backgrounds who have taken UNC courses through either our MPH or MSEE program.

**Honor Thesis (ENVR 691 H & 692H)**

**Honors Options**

An Honors research project provides Undergraduate Students with the opportunity to plan and carry out research designed to answer a specific research question, under the guidance of a faculty Research Advisor. Participation in Honors research requires a minimum Grade Point Average of 3.3 at all times. Findings are written up in the form of a Senior Honors Thesis, and defended in a public seminar (Honors Defense). The Thesis and Defense are evaluated by the student’s Undergraduate Honors Committee. The ENHS Director of Undergraduate Studies serves as overall Departmental Honors Advisor.

Students who successfully complete a senior honors thesis project will have the designation ‘Honors’ or ‘Highest Honors’ printed beside their names in the Commencement bulletins and recorded on their diplomas and transcripts. [Source: Senior Honors Thesis Guidelines for Academic Units, Faculty Advisors, and Students]

**SELECTION OF RESEARCH ADVISOR**

Your Research Advisor is the Faculty Member who agrees to host you in her/his laboratory and who ultimately oversees your research. The Research Advisor is usually (though not necessarily) a member of the Department of Environmental Sciences and Engineering (ESE). One good way to find a Research Advisor is to identify areas of research that you are interested in, then seek out individuals working in those areas. Feel free to talk to DUNS-A or other students in ENHS about the labs where they are carrying out research. The Office of Undergraduate Research maintains a searchable data-base of Undergraduate Research Opportunities. The ESE Student Services Office will periodically circulate information about specific research opportunities. Initiate contact with potential Advisors by email (or as specified in the position advertisement), then follow up in person (make appointment). Your Research Advisor may assign a senior graduate student or postdoc as your day-to-day supervisor, but should be available for career and academic advice, as well as overseeing your research. Think long term: your Research Advisor is also a potential reference for Graduate School or employment opportunities, and a sponsor for the Plus1 Master’s program.

**UNDERGRADUATE HONORS COMMITTEE**

Your Undergraduate Honors Committee is composed of your faculty Research Advisor, one other faculty member from the Department of Environmental Sciences and Engineering, and a third member who can be a faculty member, a postdoctoral fellow/associate, or a senior graduate student, who has been closely involved in your research. You should start thinking about identifying potential committee members as your research takes shape, and you should formally form your committee by the midsemester break of the semester in which you will be defending your Honors Thesis.

**OPPORTUNITIES FOR FUNDING**

Undergraduates have opportunities to apply to Honors Carolina for small grants (usually up to $ 500) to purchase supplies or needed services for their Honors Research Projects. Award of such a grant looks good on your Resume. A call for applications goes out both Fall and Spring semesters, usually in January or early September, with a deadline of late January or late September. For more information see:
http://honorscarolina.unc.edu/research/senior-honors-thesis/ Summer research can be supported by Honors Mentored Research Fellowships, through the UNC-CH Office of Undergraduate Research.

**REGISTRATION FOR ENVR691H -ENVR692H**

Normally you would register for ENVR691H (Honors Research) in the Fall of your Senior year when you are carrying out the bulk of your Honors research, and for ENVR692H (Honors Thesis) when you are writing and defending your Thesis in the Spring - i.e., the final semester before your May graduation. (If a December graduate, adjust semesters accordingly).

ENVR691H and 692H are set up as three-credit courses with different section numbers reflecting the different faculty members available to serve as Research Advisors. Currently ConnectCarolina offers the lowest section number as the default. You will need to click around to get a drop-down menu with a choice of section numbers, from which you should choose the appropriate one. If your chosen Research Advisor is not listed then see the Student Services Office or the DUS for help. Also, after you have registered, go back and check that ConnectCarolina is showing the desired credits/section. If these are incorrect and it’s before the end of drop-add, you should be able to fix this yourself by dropping and reregistering. If it’s after Drop/Add or you’re having trouble, see the Student Services Office (Academic Coordinator) for help.

**TIME-LINE (FOR MAY GRADUATION)**

For December Graduation the deadline for defending is usually in the week before Thanksgiving - adjust your timeframe accordingly.

- **End of January:** Lab work should be just about finished - maybe a few loose ends to tie up.
- **Middle of February:** First draft of Thesis to Research Advisor.
- **Mid-February - Mid March:** Work with Research Advisor to edit/revise Thesis until it is ready for Prime Time.
- **Mid-March:**
  - Form Committee
  - Schedule day and time for Defense - this will involve (probably extensive) negotiation with your committee.
  - Book room for Defense - book room for 2 hours (request a room here). Look at both classrooms and conference spaces. Consider the size of the potential audience that might attend: lab-mates, friends, roommates, BSPH cohort. Also book computer and projector if these are not permanently installed in your selected room.
- **~3rd Week in March (two weeks-10 days before defense)**
  - Circulate Final Draft of Thesis to Committee.
  - Double-check that day/time/room scheduled are still OK.
  - Email the ESE Student Services Office with
    - Your defense day, time, room
    - Title of your Honors Thesis
    - Abstract of your Thesis
    - Graphic to be included in your Defense announcement (optional)
    - Names of your Research Advisor and Committee Members
- **Last week in March:** Prepare your presentation (usually PowerPoint or similar)
- **First Week in April** (before Honors reporting deadline - Monday April 10th 2017 for May graduation and Monday, November 13th, 2017 for December graduation): Defend Thesis
- Second-Third Week in April: Make final revisions to Thesis
- By Last Day of Classes: Turn in final “perfect” .pdf files of Title Page and Thesis to the Carolina Digital Repository and two bound hard copies of Thesis to the ESE Student Services. Before proceeding with step, please speak with the ESE Academic Coordinator.

**FORMAT OF THE HONORS THESIS**
Length 20 ~ 30 pages double spaced, 12pt, plus appendix if appropriate.

Two bound (in Acco binder) copies of the final Thesis (after all revisions requested by the Committee have been completed) should be turned in to ESE Student Services. One bound copy is retained in the Department files, the other goes to the student’s Research Advisor. Before proceeding with step, please speak with the ESE Academic Coordinator.

The ENHS Honors Thesis includes the following components:
- Title Page see model
- Abstract 150 to 200 words
- Acknowledgments both personal and institutional e.g., funding
- Table of Contents
- List of Tables (if more than ~ 3 are included)
- List of Figures (if more than ~ 3 are included)
- Introduction
- Materials and Methods
- Results
- Discussion/Conclusions
- References
- Appendix if appropriate

**HONORS DEFENSE**
The Honors Defense is a public seminar in which you will present the results of your research, using visual aids (e.g. PowerPoint) as appropriate. In 30-40 minutes, introduce your Specific Aim(s), describe the Background and context of your research, your experimental design (and hypothesis if appropriate), your experiments and the results that you obtained. Finish with a discussion of the significance of your findings, and the implications for Environmental Health. The general audience will then have the opportunity to ask questions. After the open questions (and possibly a short break, and/or private discussion among the committee), the committee will meet in closed session with the candidate to ask more detailed questions about the research, the presentation and interpretation of the results, the conclusions, and potentially any other material that a student graduating from ENHS could reasonably be expected to know. At the conclusion of the closed session the candidate will be excused while the committee confer among themselves to evaluate the Thesis and the Defense.

**GRADING**
At the conclusion of the Defense, the student will be judged to have Passed, Passed with Honors, or Passed with Highest Honors.

- Pass: The Thesis and its defense are acceptable.
- Honors: The Thesis and its defense are excellent.
• Highest Honors: The Thesis and its defense are outstanding, comparable in calibre and quality to a good Masters’ degree candidate.

Grading will be based on both the Thesis and the oral presentation. The Thesis will be evaluated on clarity and logic of general writing, articulation of goals, clarity of presentation of results, interpretation of results, discussion of significance, and appropriate placement into context. The Oral Presentation will be evaluated on organization, clarity, appropriateness of visual aids, and the candidate’s handling of questions both from the general audience and from the Committee.

AFTER THE DEFENSE
The Committee will make recommendations for revisions of the Thesis. The final revised version should be signed on the cover page by the Committee members to signify their approval of the final revised version. Two bound (in Acco binder) copies of the final Thesis (after all revisions requested by the Committee have been completed) should be turned in to the Student Services Office and a .pdf file of the final Thesis should be uploaded to the Carolina Digital Repository.

ELECTRONIC SUBMISSION OF THESIS
Students will submit their theses electronically via the Carolina Digital Repository (CDR). Submissions are due by the last day of class in the semester in which students complete their theses. The University Library will catalog electronic theses and make them available to the public.

Students who have supplemental files larger than 500MB should contact the CDR staff at cdr@unc.edu to arrange an alternative file transfer method.

1. Click “Submit Deposit”
   • Each student’s thesis will be held in the CDR until that student’s graduation date, when Honors Carolina will clear the thesis for online publication. Once published, theses will be publicly accessible via the Carolina Digital Repository website. Students may request a one-or two-year delayed release of their work via the CDR. Such requests must be submitted in writing to honorscarolina@unc.edu before the last day of class in the semester of submission.

NOTE: All students undertaking a practicum or internship for credit must complete a learning contract at the beginning of the semester. This must be approved by the DUS-S and filed with the student services office every semester of enrollment (see below for more information).

Additional Important Information

Advising
Student advising is overseen by the Co-Director of Undergraduate Studies (DUS-S) and ESE’s Academic Coordinator. Co-Director DUNS-A aims to match individual students with a faculty mentor in an area of their interest. Please contact DUNS-A to initiate that match. This faculty member can help connect you to research opportunities, jobs and internships. If you take the effort to get to know your faculty mentor, they could also serve as a reference. Undergraduate students are encouraged to meet regularly with the DUS-S and review their Tar Heel Tracker each semester. The DUS-S and Academic Coordinator in the ESE Student Services Office will verify that coursework requirements for the concentration have been met. The DUS-S and the ESE Academic Coordinator work with current and prospective majors by
appointment. Departmental academic advising is particularly important for those majors who are considering going on to the dual bachelor’s–master’s degree.

Each student has a degree-specific electronic worksheet that is stored in their drop-box on the BSPH Sakai site, where it is accessible for consultation and updating by the student, Academic Coordinator, the DUS-S, and the advising faculty members.

The DUS-S schedules (through the ENHS Sakai site) individual advising sessions open to all enrolled and incoming undergraduates in the Spring semester (approximately two weeks before registration for the Fall semester) and in the Fall semester (approximately two weeks before registration for the Spring semester).

**Addressing Students Concerns**

Your well-being and positive student experience are important to us. Please visit and bookmark this page for reference. We are committed to addressing issues in a fair, timely and professional manner. We know it will not be possible in some cases, but to help us achieve the best outcome, we ask students to follow the 5 steps below whenever possible:

- **Step 1:** Contact your instructor, the individual with whom you have a concern, or your faculty mentor as appropriate. Most concerns can be resolved through discussion between the person(s) involved. If you are uncomfortable interacting directly with the person(s), or if the concern is not resolved satisfactorily, proceed to step 2.
- **Step 2:** Discuss the matter with your department’s Director of Graduate Studies (DGS) or the ESE Academic Coordinator. If you have consulted with the DGS, or designee, and still believe the matter has not been dealt with satisfactorily or equitably, proceed to step 3.
- **Step 3:** Discuss the matter with your department chair. If you believe the matter has not been dealt with satisfactorily or equitably, you can proceed to step 4.
- **Step 4:** Schedule a meeting with Charletta Sims Evans, the SPH Associate Dean for Student Affairs (simsevan@email.unc.edu), if you need further consultation.
- **Step 5:** If the issue is still not resolved and you are a graduate student: schedule a meeting with Kate McAnulty, the associate dean for student affairs in The Graduate School (kmcanulty@unc.edu). Undergraduate students, contact the Office of Dean of Students.

**Second Majors and Minors**

Can I combine a Second Major/a Minor/a Second Minor with the BSPH?

Yes, though the effort involved varies with the extent of overlap of the respective programs. Chemistry and/or Biology are frequent choices for minors. The Pre-med curriculum pretty much covers a Chemistry minor and a Biology minor. The latter requires one additional course numbered above 400 and one “course with a lab” (other than BIOL101) beyond the BSPH ENHS requirements. The former requires CHEM 241 + Lab and CHEM 262 + lab beyond the BSPH ENHS requirements. Minors such as Spanish are easily accommodated and have been popular. Several of our undergraduates are currently minoring/have minored in Entrepreneurship (logical tie-in to developing green technology). Second Majors have most commonly been Chemistry or Mathematics (usually students who had previously
been Math majors). Other more esoteric subjects (such as Romance Languages) have been pursued, by individuals sufficiently motivated to tackle fields with no overlapping coursework.

Note that all prior major and minor declarations are expunged when a student transfers to the School of Public Health, so these will have to be (re-) declared /authorized. The best time to do this is in September of your Junior year (first semester in the BSPH).

To declare a minor (or two minors) complete the SPH form and have it signed by the DUS-S.

Completion of a second major requires permission of the SPH Associate Dean of Academic Affairs and of the relevant second Department, as described: Second Major Guidelines. See the DUS-S to start this process. Note also that a second major in the College of Arts and Sciences will require completion of the full range of General Education Connections (8 courses) as opposed to the 5 Connections courses required for the BSPH.

Study Abroad

Can I combine the BSPH with Study Abroad?

Yes, the key is advance planning. Courses taken through Study Abroad may be able to meet the General Educational requirements, the Basic Science requirements, or the Advanced Environmental Science Elective requirements. Consult the Director of Undergraduate Studies (DUS-S) as you start planning your Study Abroad. Getting appropriate credit for courses taken through Study Abroad can be tricky, but ultimately this is feasible.

Research

A research rotation or project is not required, however we encourage undergraduate students to gain some experience of research as they consider their options for graduate school or careers after graduation. ENVR 695, or ENVR 691H + ENVR 692H (Honors Research and Thesis) (minimum 3 credit hours) satisfy the requirement for a Culminating Experience.

ESE Independent Learning Contract

Students enrolled in ENVR 296, ENVR 593, or ENVR 695 are required to complete this form and upload an Independent Study Learning Contract. This form and the submission portal can be found here.

This form must be submitted by the end of the second week of class. All students undertaking an independent study or research should complete a learning contract at the beginning of the semester. A new Learning Contract should be approved by the DUS-S and filed with the student services office for every semester of enrollment.

How Do I Get Involved in Research?

One good way is to identify areas of research that you are interested in, then seek out Faculty members in Environmental Sciences and Engineering (potential Research Advisors) who are working in those areas. Feel free to talk to other students in ENHS about the labs in which they are carrying out research. Co-Director DUNS-A will also be happy to connect you with faculty who are a good match for your research interests.
The Office of Undergraduate Research maintains a searchable database of Undergraduate Research Opportunities. The ESE Student Services Office will periodically circulate information about specific research opportunities. Initiate contact with potential Research Advisors by email (or as specified in the position advertisement), then follow up in person (make appointment).

Think long-term: your Research Advisor is also a potential reference for Graduate School or employment opportunities, and a sponsor for the Plus1 Masters program, which allows completion of a Masters degree in one year beyond the undergraduate degree. The usual time-line is to identify a Research Advisor in the Fall of your Junior year (first semester in the BSPH), join that lab and register for ENVR695 so that you can receive academic credit in the Spring of that year, then if things go sufficiently well that you could write an Undergraduate Honors Thesis based on your research, register for ENVR691H in the Fall of your Senior year and ENVR692H in the Spring of your Senior year. It is certainly possible to begin research even earlier.

What if my Research Experience does not have the potential to lead to an Honors Thesis?

That’s perfectly fine, ENVR695 can be taken for credit more than once, so you can continue in the lab you originally chose, or you can switch to another lab to gain experience in a different topic.

Checkpoints and Milestones

Students can monitor their own progress towards graduation with Tar Heel Tracker, the ConnectCarolina degree audit system, and on their worksheet, by updating it in their drop-box on the BSPH Sakai site, and by meeting (by appointment, preferably, with the DUS-S). The DUS-S schedules blocks of time for advising appointments before registration opens each semester (available through the BSPH Sakai site). Key events consist of:

- Initial advising with DUS-S for program planning: Spring of Sophomore year, usually just after Spring Break (after admission, but before registration for Fall courses). Advising appointments will be scheduled through the BSPH Sakai site.
- Declaration of Minors and Second Majors: Target Fall of Junior year (see the DUS-S, and page 9 of this Handbook).
- Pre-graduation advising with DUS-S: Fall of Senior year (for May graduation), usually just after Fall Break (before registration for Spring courses). Advising appointments will be scheduled through the BSPH Sakai site.
- Application to graduate: at time of registration for the final semester.

Plus, the standard University-wide deadlines each semester to add or drop courses, declare pass/fail, apply for funding.

MINOR: Engineering for Environmental Change, Climate, and Health

Program Overview

This minor is designed to train students with an interest in developing engineering skills focused on building public health resilience to climate and environmental change. Climate-related challenges will include droughts, floods, heatwaves and extreme weather events, which in turn impact air pollution, water availability and quality, toxic releases, food and nutrition, infectious and non-communicable diseases, and will increase migration and conflict pressure and exacerbate health inequities. As environmental scientists and engineers located within the top public school of public health, the
Department of Environmental Sciences and Engineering (ESE) is ideally positioned to provide holistic, intersectoral responses to mitigate and prepare for these upcoming and pressing environmental challenges. Join the minor to learn about climate change, health/risk assessment, environmental processes, and engineering tools to provide quantitative answers to complex environmental questions.

**Admissions Requirements**
Students may apply for the minor any semester after completing MATH 233. Admitted students must have an average GPA of 3.0 or higher in the minor’s prerequisite courses: MATH 231, MATH 232, MATH 233, MATH 383, CHEM 101&101L, CHEM 102&102L, PHYS 118, PHYS 119, COMP 110 or COMP 116 or PHYS 231 or BME 201.

**Minor Requirements/Curriculum**
The following table describes the required courses for the minor. Students must take at least nine hours of the required courses in-residence at UNC Chapel Hill. In addition, students must earn a minimum cumulative GPA of 2.0 in minor core requirements.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Requirements</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENVR 205</td>
<td>Engineering Tools for Environmental Problem Solving</td>
<td></td>
</tr>
<tr>
<td>ENVR 475</td>
<td>Global Climate Change: Interdisciplinary Perspectives</td>
<td>1</td>
</tr>
<tr>
<td>Select one health/risk assessment course from the following list:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENVR 430</td>
<td>Health Effects of Environmental Agents</td>
<td></td>
</tr>
<tr>
<td>ENVR 470</td>
<td>Environmental Risk Assessment</td>
<td></td>
</tr>
<tr>
<td>ENVR 601</td>
<td>Epidemiology for Environmental Scientists</td>
<td></td>
</tr>
<tr>
<td>ENVR 610</td>
<td>Global Environmental Health Inequities</td>
<td></td>
</tr>
<tr>
<td>ENVR 630</td>
<td>Systems Biology in Environmental Health</td>
<td></td>
</tr>
<tr>
<td>Select one environmental process course from the following list:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Air quality and atmospheric processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVR 416</td>
<td>Aerosol Physics and Chemistry</td>
<td></td>
</tr>
<tr>
<td>ENVR 675</td>
<td>Air Pollution, Chemistry, and Physics</td>
<td></td>
</tr>
<tr>
<td>Sustainable water resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVR 419</td>
<td>Chemical Equilibria in Natural Waters</td>
<td></td>
</tr>
<tr>
<td>ENVR 421</td>
<td>Environmental Health Microbiology</td>
<td></td>
</tr>
<tr>
<td>ENVR 453</td>
<td>Groundwater Hydrology</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>ENVR 525</td>
<td>Water, Sanitation, Hygiene, and Global Health</td>
<td></td>
</tr>
<tr>
<td>ENVR 685</td>
<td>Water and Sanitation Planning and Policy in Less Developed Countries</td>
<td></td>
</tr>
<tr>
<td>ENVR 755</td>
<td>Analysis of Water Resource Systems</td>
<td></td>
</tr>
<tr>
<td>ENVR 756</td>
<td>Physical/Chemical Treatment Processes</td>
<td></td>
</tr>
<tr>
<td>ENVR 890</td>
<td>Problems in Environmental Sciences and Engineering (section 002)</td>
<td></td>
</tr>
</tbody>
</table>

Select one engineering tools course from the following list: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAN 390</td>
<td>Undergraduate Special Topics in Urban and Regional Studies</td>
</tr>
<tr>
<td>ENVR 451</td>
<td>Introduction to Environmental Modeling</td>
</tr>
<tr>
<td>ENVR 468</td>
<td>Temporal GIS and Space/Time Geostatistics for the Environment and Public Health</td>
</tr>
<tr>
<td>ENVR 580</td>
<td>Policy Design for Environmental Health Solutions</td>
</tr>
<tr>
<td>ENVR 582</td>
<td>Sanitation for Development</td>
</tr>
<tr>
<td>ENVR 666</td>
<td>Numerical Methods</td>
</tr>
<tr>
<td>ENVR 671</td>
<td>Environmental Physics I</td>
</tr>
<tr>
<td>ENVR 672</td>
<td>Environmental Physics II</td>
</tr>
<tr>
<td>ENVR 698</td>
<td>Senior Capstone Course</td>
</tr>
<tr>
<td>ENVR 788</td>
<td>Managing Environmental Financial Risk</td>
</tr>
</tbody>
</table>

**Total Hours** 13

**Applying to Graduate**
The application to graduate in May becomes available online in ConnectCarolina at the time of registration for Spring courses for the senior year, usually in early November. The online application remains open until mid-February. For December graduation, online applications open at the time of registration for Fall courses, and close sometime in October (exact deadlines vary from year to year).

**Graduation**
The School of Public Health holds its own May graduation ceremony, usually in Memorial Hall (with ample room for guests) on Saturday afternoon before the Sunday University-wide graduation. The SPH ceremony is a much smaller and more personal affair, each undergraduate gets to walk across the stage and shake hands individually with the Dean, and there is a reception with light refreshments afterwards in the Atrium of the School of Public Health.
Health Policy and Management

Program Mission/ Overview

Admission Requirements

Program Competencies

Requirements / Curriculum

Sample Plan

Culminating Experience / Capstone
HPM 697 BSPH Capstone
During fall and spring semester of the senior year, students work in teams to complete a major project in a community organization. This capstone project serves as a culminating experience for the program, providing students with an opportunity to synthesize, integrate, and apply knowledge and skills gained through their coursework and further develop and demonstrate attainment of program competencies. These projects are completed under the direction of faculty and with a preceptor, typically within a public health department, community health center, hospital, medical office, or non-profit organization. Teams begin planning and working with their preceptors during their senior fall in HPM 330.

Honors Options
Students who meet eligibility criteria have the option of completing a senior honors thesis. Students pursuing this research option enroll in HPM 691H (Fall) and HPM 692H (Spring) for a total of 6 credit hours, and present their work to faculty and other students in April of the senior year. Students identify mentors and topics of high interest to them. A broad variety of research or program evaluation topics, approaches and methods are permissible depending on student interest and faculty mentor availability. Normally projects are not lab science - which would fit better as a thesis in a natural science department - but rather involve social science methods applied to public health or health care management topics.

Students potentially interested in pursuing an Honors Thesis are encouraged to contact Dr. Karl Umble, instructor for HPM 691H and 692H, for more information.

Internship
An 8 week full-time internship (320 hour minimum) is required during the summer between the junior and senior years. The internship provides students an opportunity to apply the knowledge and skills being acquired through their coursework and further develop and demonstrate attainment of program competencies.

Students are not placed in an internship, but rather will work with Cathy Padgett, the department’s Career Services Coordinator, and their faculty mentor to search for and secure an internship. Students register for HPM 393 (2 credits) during their senior fall. A field training fee of $400 is also required.

Detailed information about the internship requirements is available in the HPM 393 syllabus posted on the BSPH Program in HPM Sakai site.
Resources and Support
There are many resources available to students. Please refer to the table below to determine the first point of contact for various needs.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Types of support</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBD, Academic Coordinator</td>
<td>General education requirements; course registration; drop/add forms; minor declaration forms; overload forms; graduation audits</td>
<td>TBD</td>
</tr>
<tr>
<td>Cathy Padgett, Career Services Coordinator</td>
<td>Internship and job search; career services; professional development support</td>
<td><a href="mailto:cathy_padgett@unc.edu">cathy_padgett@unc.edu</a></td>
</tr>
<tr>
<td>Faculty Mentors</td>
<td>Internship and career exploration; connections with alumni and professionals; supervise internships</td>
<td>Contact information provided by assigned faculty mentor</td>
</tr>
<tr>
<td>Melanie Studer, Program Director</td>
<td>Program-related issues or concerns</td>
<td><a href="mailto:melanie_studer@unc.edu">melanie_studer@unc.edu</a></td>
</tr>
<tr>
<td>BSPH Program in HPM Sakai Site</td>
<td>Internship and job resources; professional development resources</td>
<td><a href="https://sakai.unc.edu">https://sakai.unc.edu</a></td>
</tr>
<tr>
<td>BSPH Program in HPM Weekly Newsletter</td>
<td>Announcements; events; internship and job postings</td>
<td>Distributed weekly via email</td>
</tr>
</tbody>
</table>

Nutrition

Program Mission / Overview

Admission Requirements

Concentration Competencies

Requirements / Curriculum

Culminating Experience / Capstone

Honors Options

General University Academic Information and Policies

Academic Calendar
The Academic Calendar contains important dates, deadlines, holidays, and exams per academic year at the University of North Carolina. Please visit: https://registrar.unc.edu/academic-calendar/
Course Credit Guidelines

Grading Basis
The University of North Carolina at Chapel Hill’s official Explanation of Grading System is located on the Office of the University Registrar’s website. Grade points are assigned as outlined in the Undergraduate Grade definitions.

Online Courses
The following policies apply to distance-learning courses:

1. The maximum number of credit hours that can be counted toward an undergraduate degree in the College of Arts and Sciences is 24. There can be no exceptions to this upper limit.
2. First-semester, first-year students may not enroll in for-credit online courses unless unusual circumstances prevail, nor may first-year students take an online course in the summer prior to matriculation.
3. Full-time undergraduate students may enroll in a maximum of one for-credit online course per regular semester (after the first semester, if they are a first-year student) and a maximum of two for-credit online courses per summer session (courses offered over the full summer would count in both Summer Session I and Summer Session II).
4. Degree-seeking students who are not enrolled may take a maximum of two for-credit online courses in a regular semester or summer.
5. No more than two for-credit online courses may count toward a major (core requirement) or minor in the College of Arts and Sciences.
6. Self-paced courses cannot count toward a degree in the College of Arts and Sciences.
7. It is the responsibility of the senior associate dean for undergraduate education, in consultation with the associate dean and director of the academic advising program, to determine whether students in unusual circumstances warrant an exception to these policies.

Pass/ Fail/ Auditing Courses
The Pass/Fail option provides students an opportunity to enroll in an additional course (beyond the usual load of five academic courses) or to reduce their concerns about competing with prospective majors in a course in which they have considerable interest. Students who declare a course on the Pass/Fail option will receive the grade of PS (pass) when a letter grade of A through D is recorded on the official grade roster and F when the course is failed. For the purpose of computing a grade point average, a PS grade does not count as hours attempted; therefore, a PS grade does not affect a student’s grade point average. However, an F under the Pass/Fail option counts as hours attempted and is treated in the same manner as F grades earned in any other course.

Course content and requirements are the same for Pass/Fail registrants as for regular registrants. The minimum performance for a PS grade is equivalent to the minimum performance for the letter grade of D.

Auditing of courses is permitted only in lecture-based courses and never in courses that include laboratories or performances. Auditing is not permitted in courses that focus on the development of written or oral communication skills or that rely heavily on class participation.

Exemptions and Substitutions
If you took a course that did not fulfill a specific general education requirement, but you feel it meets the criteria for that requirement, you may be eligible to submit a course petition. More information
about the supporting documentation required for your petition is available [here].

**Tar Heel Tracker**

[Tar Heel Tracker](THT) is Carolina’s degree audit system, available in [ConnectCarolina](ConnectCarolina). A THT degree audit shows your progress toward degree completion.

**Registration**

**Full-time Registration**

Students must be enrolled in at least 12 academic hours to be considered full-time. Those seeking exceptions to these rules must follow appropriate procedures as outlined below.

**Credit/ Course Load**

The academic course load policy determines the minimum and maximum number of hours students may take during a term as specified by the [Office of the University Registrar](Office of the University Registrar).

**Adding/ Dropping**

Course registration begins for students in their ConnectCarolina Student Center when their enrollment appointment opens, and updates can be made through the first five days of classes.

- During this time, students may add courses using the registration system.
- After the first five days of classes, the addition of a course to a student’s registration schedule requires permission of the course instructor or the department concerned.

Additionally, students must obtain a Registration/Drop/Add form from their academic adviser, the concerned department, or their school. Students are **required** to have their school dean’s signature when registering for the first time or making any course additions after the last day to add a course and the end of late registration.

See the [University Registrar’s Calendar](University Registrar’s Calendar) for specific dates. In these cases, deans will only approve those registrations or course additions which have first been approved by the instructor, and only for truly exceptional circumstances.

Undergraduate students may drop courses using the registration system during their online access period; however, they are responsible for ensuring that any registration schedule changes do not result in less than a twelve-academic hour semester registration, excluding all one-hour Physical Education Activity (PHYA) 200-level courses from the twelve-academic hour total.

**Interinstitutional**

One interinstitutional course per regular term, providing the student is registered for the balance / remaining 9 hours (totaling 12 credit hours including the interinstitutional course for undergraduates) of their fulltime load at UNC-CH. All requests will need to be reviewed and approved first by the student’s Academic Coordinator and the Senior Executive Director of Academic Advising & Student Affairs. If approved, the request will be sent to the UNC Office of the University Registrar for processing.

More information on interinstitutional enrollment can be found at the Office of the University Registrar’s [website](website).
Underloads / Overloads

Medical Underloads

Before the end of the eighth week of classes:
Students experiencing issues of a medical nature which they believe necessitate enrollment in fewer than 12 academic hours in a fall or spring term must consult with either Campus Health Services or Counseling and Psychological Services about a medical underload. These offices, in turn, recommend medical underloads or suggest alternate courses of action. Students who are approved for a medical underload as recommended by Campus Health Services or Counseling and Psychological Services must see an Academic Coordinator in their BSPH department and submit an online Course Underload Request. The student must initiate a drop request before the end of the last day of classes during the term.

After the eighth week of classes:
Students seeking to drop a class or classes with the possible result that they may be enrolled in fewer than 12 academic hours for medical or non-medical reasons after the eighth week of classes must meet with someone in the Office of Student Affairs, 263 Rosenau Hall, about submitting an appeal.
Academic Appeals for an Underload

If a student experiences non-medically related extenuating circumstances that s/he believes necessitates a schedule of fewer than 12 academic hours in a fall or spring term, the student may appeal to the Office of Student Affairs, permission to drop below 12 hours. Students should communicate with the Office of Student Affairs to discuss the appeal form and submit appropriate documentation. Approval to drop below nine hours is rarely granted.

Senior Underload
Seniors in their final semester who do not require 12 or more academic hours to complete graduation requirements may request an underload as part of the graduation application process. Details are available on the Underloads for Seniors section of our web page. Students must see an Academic Coordinator in their BSPH department and submit an electronic Course Underload Request.

Before the start of a term, students may request to register to overload for more than 18 hours in fall or spring and more than eight in a summer session. There are three ways to qualify for an overload of 19 hours: you earned a GPA of at least 3.0 in the previous semester and your cumulative GPA is at least 2.5; you require an overload to graduate in the term requested; or you obtained special permission from the associate dean for academic and student affairs.

Requests for 20 or 21 hours are rarely granted and typically reserved for seniors who need the hours for graduation or students in truly extenuating circumstances. Students must see their Academic Coordinator in their BSPH department and submit an electronic Course Overload Request.

Withdrawals
An official withdrawal occurs when you, as an enrolled student, decide you must leave the University in a given term once the term begins and you have attended at least one class. If you must leave, you are required to notify the University through the withdrawal process and then cease attendance in all classes and/or academic activities. To make an informed decision, carefully read the withdrawal policy before you decide to withdraw. A withdrawal has several important potential impacts that may apply to you. Please review the financial, academic and campus service Impacts of a Withdrawal.
Cancellations
A cancellation results in removal of all enrollments for the term. Cancellations are not noted on the permanent record. No tuition or fees are charged, but other charges related to attending the University (e.g., mandatory student health insurance, housing, meal plan) are the responsibility of the student. Students may contact these offices directly for any questions about charges. Prior to the first day of classes, if you decide you cannot or will not attend the University that term, you may request to cancel your registration. More information about cancellations is available here. The University will only cancel registration for students who have not attended any classes in a term.

If you have never attended a single class this term, and classes have begun, you must request a cancellation of your registration through your department student services office and provide verification of non-attendance from each professor. If you cancel a fall or spring term registration and wish to return to UNC-Chapel Hill in a future term, you must apply for readmission. If you cancel your registration for a summer term, readmission is not required.

Post-semester Add/ Drop
Students must obtain a Registration/Drop/Add form from their Academic Coordinator, the concerned department, and their school. The Senior Associate Dean of Academic and Student Affairs signature is required when registering or making any course additions after the last day to add a course and the end of late registration (this can be obtained by submitting the form to the Gillings Registrar).

See the University Registrar’s Calendar for the Last Day for Graduate Students to drop courses. Course drops requested after the last day for undergraduate students to drop courses requires approval of the Senior Associate Dean of Academic and Student Affairs.

Grading

Grade Policy
The University of North Carolina at Chapel Hill’s official Explanation of Grading System is located on the Office of the University Registrar’s website. Grade points are assigned as outlined in the Undergraduate Grade definitions.

Grade Changes and Appeals
A grade appeal is a request to change a course grade based on arithmetic or clerical error, arbitrariness, discrimination, harassment or personal malice. Generally, students who wish to appeal a course grade should first attempt to resolve the issue with their instructors. Students also may consult the chair of the academic department that offers the class. Failing a satisfactory resolution, the student may appeal the grade in accordance with the procedures outlined in the Undergraduate Bulletin. Such appeals must be made no later than the last day of classes of the succeeding fall or spring semester to the Office of Student Affairs.

For additional information on The University’s Policy on Prohibited Discrimination, Harassment and Related Misconduct, see the university policy.
Exams

UNC Exam Schedule
UNC’s final exam schedule is listed each term via the Chancellors Calendar.

Exam Excuse Policy
A student who has three final examinations scheduled by the Office of the University Registrar within a 24-hour period or two scheduled at the same time may request for permission to have one of the scheduled examinations rescheduled. In the event that one of the scheduled examinations is a common-hour exam, that examination is the one to be rescheduled. In all cases in which an examination is to be rescheduled, the instructor may reschedule that examination during the final examination period, but not later than the end of the following semester. Any petition for a change in the examination schedule because of the “three exams in a 24-hour” rule must be submitted to the Gillings Student Affairs, before the first day of the final examinations.

Students are required to take final examinations as scheduled. The only exceptions are for illness as documented by Campus Health Services or for other medically documented or family or personal emergency situations. Students who wish to request an exam excuse should complete an exam excuse form, before the first day of the final examinations, and documentation will be required.

Exam Excuse Form
Examination excuses should be completed and have a letter attached to give the Gillings Registrar a short description of why the excuse is needed. Students should complete the electronic form for processing by the Gillings Registrar. The deadline to submit this form is the last day of class of the semester.

Adding/ Changing a Second Major/ Minor

Adding a Second Major
Undergraduates must obtain written permission from the Gillings School’s associate dean for academic affairs or that dean’s designee to declare a second major in the College of Arts and Sciences or in the Gillings School of Global Public Health. Students wishing to pursue a major within the Gillings School and with another professional school must apply and be admitted into both programs and, if admitted, comply with the policies and requirements of each school. Students first must speak with their BSPH program faculty coordinator when the student has their approval, and the student must follow the Guidelines for Declaring a Second Major in another school or College at UNC-Chapel Hill or the Guidelines for Declaring a Second Major at the Gillings School. It is the student’s responsibility to make sure s/he is making good progress toward completing the second major.

Canceling a Second Major
To cancel a second major, the student should first inform the department of the cancelled major, and then their Academic Coordinator. Once the Gillings Registrar receives the notification of the cancellation of the second major from the Academic Coordinator, the student’s Program/ Plan will be updated.
Adding a Minor
Gillings School students must obtain permission from their BSPH Academic Coordinator to declare an academic minor. A minor can be requested through the Electronic Minor Request form. If approved by the Academic Coordinator, the student’s Program/Plan will be adjusted by the Gillings Registrar.

Canceling a Minor
Gillings School students must obtain permission from their BSPH Academic Coordinator to cancel an academic minor. A cancellation of a minor can be requested through the Electronic Minor Request form. Once approved by the Academic Coordinator, the student’s Program/Plan will be adjusted by the Gillings Registrar.

Academic Ineligibility
Students who began an enrolled term with a status of Alert and who do not raise their cumulative UNC-Chapel Hill grade-point average to 2.000 or higher at the end of the term.

Students with an academic status of Ineligible cannot enroll in any courses in any term. Students with an academic status of Ineligible may appeal to the Friday Center.

Further information on Academic Ineligibility can be found here.

Non-payment of Tuition and Fees
The UNC Cashier’s Office puts holds on past due accounts, places restrictions on registration, withholds diplomas, and will cancel enrollment. Further information on payment of fees and tuition can be found here.

Honors Code
The Honor System forms a bond of trust among students, faculty, and administrators. The University of North Carolina at Chapel Hill operates under a system of self-governance, as students are responsible for governing themselves. As such, our University is transformed into a powerful community of inquiry and learning. The Honor Code embodies the ideals of academic honesty, integrity, and responsible citizenship, and governs the performance of all academic work a student conducts at the University. Acceptance of an offer of admission to Carolina presumes a commitment to the principles embodied in our century-old tradition of honor and integrity.

Further information on the Honor Code and Honors Court can be found here.

Failure to Submit Campus Health Requirements
North Carolina law requires individuals attending college or universities to receive certain vaccines. But in order to be fully protected from vaccine-preventable diseases, individuals should receive all immunizations recommended by the Centers for Disease Control and Prevention (CDC). Vaccines to protect against the flu, meningitis, HPV and others are available. Learn more about recommended vaccines.

More information from Campus Health can be found here.
Study Abroad
Students interested in pursuing a study abroad option should start planning early. The first step is for the student to meet with the Director of Undergraduate Studies and their Academic Coordinator. If the transfer credit is seen as appropriate, study abroad options can be explored here.

Petition for an Additional Semester
The University’s academic eligibility rules impose limits on the number of semesters (fall or spring) in which students are allowed to enroll. (There is no limit on summer sessions.) New academic eligibility rules were instituted in 2007. To see the types of appeals that are often granted and those that are not, consult the Additional Semester Information handout.

• Students who entered UNC as first-years/freshmen are limited to eight semesters. Special permission is required to enroll in a ninth semester for students who have experienced exceptionally extenuating circumstances. You may request permission to enroll for an additional semester beyond the applicable maximum. Students who are permitted to enroll in an additional semester may graduate with only a single major and no minor, even if all the work for the minor or second major has been completed.

• Transfer students (who transfer in 30 or more hours to UNC) will be granted permission to enter a ninth or 10th semester after meeting with the faculty coordinator of their BSPH program and submitting the necessary forms for approval.

To do so, students must fill out and submit a SPH Petition to Enroll for an Additional Semester form and submit it to the Office of Student Affairs. The request will be reviewed by the Associate Dean of Academic Affairs.

Graduation Policies
All students must apply for graduation through their ConnectCarolina account. It is the student’s responsibility to work consistently with their Academic Coordinator and monitor their Tarheel Tracker to ensure that they are on an effective path for degree completion.

Directions on how to apply to graduate can be found here.

Tarheel Tracker
Students can monitor their general education, major, and minor progress towards graduation with Tarheel Tracker, the ConnectCarolina degree audit system. Information on Tarheel Tracker can be found here.

Applying to Graduate
All students must apply for graduation through their ConnectCarolina account. Information on how to apply to graduate can be found here.
Graduation
It is the responsibility of students to complete and meet the minimum number of courses required for graduation. The School of Public Health holds its own May graduation ceremony, usually in Memorial Hall (with ample room for guests) on Saturday afternoon before the Sunday University-wide graduation. The SPH ceremony is a much smaller and more personal affair, each undergraduate gets to walk across the stage and shake hands individually with the Dean, and there is a reception with light refreshments afterwards in the Atrium of the School of Public Health.

Honors/ Highest Honors
Each department has its own honors courses that honors students can enroll in. Each department also has its own Honors Thesis projects. Depending on a student’s successful completion of requirements, both will lead to a student receiving a transcript remark of Honors or Highest Honors. Students should work with the Academic Coordinator for Honors options. More information on Honors status can be found here.