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Important Notes

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details of the Capstone Project will be determined jointly by the student and the Capstone Advisory Committee and will be outlined in a Capstone project proposal. Capstone projects must be relevant to the student's chosen concentration(s). The proposal needs to be approved by all members of the Capstone Advisory Committee before being submitted to the MPH Office.

10 Things to Know About Your Culminating Experience

1. There is no program component more important to your public health education and your professional career than an outstanding Capstone Experience.
 - x It is never too soon to be thinking about what the right Culminating Experience is for you.
 - x The idea of getting a Culminating Experience started may be exciting and scary. Both feelings

7. Be ambitious...
 - x Remember that you are not facing your Culminating Experience alone.
 - x Ask for advice.
 - x Don't be afraid to follow the advice.
 - x Don't be afraid to respectfully reject advice if you can justify doing so.

8. ...but be realistic
 - x It almost always works better to spread your Culminating Experience efforts and credits over two or more semesters .
 - x Realize that Capstone Projects are almost always more work than students expect.
 - x Start big and scale back if necessary.

9. The goal of all Culminating Experiences should be the creation of new and meaningful knowledge.

Possible Approaches to the Culminating Experience

These are only ideas for the Culminating Experience. Students are strongly encouraged to discuss other potential approaches with people such as their advisor, the leader of their chosen concentration, their Capstone Advisory Committee, the Director of Community Based Education, and their Practicum Preceptor or other representatives of the community organization. (Note: in all cases, students should combine multiple approaches for their Culminating Experience. The best approaches to Culminating Experiences, like public health, require a multifaceted approach!)

Program Design

Design a health-related program that could be implemented at the partner site, including instructions, procedures, manuals, and materials. Alternatively, participate in the design of a new program initiated by the community organization.

Program Implementation

Participate in a substantive way towards the implementation of a program already planned at the community organization.

Data Analysis

Complete a substantial new analysis of existing data (e.g., dataset, survey, or claims database) on a health-related topic of interest to the community organization and report on the results. (Note: data analysis, in isolation, is not sufficient for a Practicum.)

Community Intervention

Design and implement a community intervention supported by the community organization.

Program Evaluation

Population Health Research

Research the determinants or distribution of a health problem identified by the community organization.

Community Assessment

Undertake in-depth analysis of the health characteristics of a defined population or community of interest to the community organization.

Public Health Services & Systems Research

Research the nature of access to health care, quality and cost of services, or evaluation of the provision and design of health services offered by the community organization.

Survey Research

Survey an identified population on a topic of mutual interest with the community organization.

Quality Improvement

Using a systematic and comprehensive approach, conduct a quality improvement project to impact things like infection rates, vaccine uptake, or some other clinical metric.

Policy Analysis

Conduct an in-depth policy analysis on a topic of interest, systematically analyzing existing policies, best practices, or other appropriate data sources and make recommendations based on your findings.

Resources to Get You Started... And Keep You

Conference Support

The MPH program and the School of Graduate Studies considers attendance at international, national,

14. Advocate for political, social or economic policies and programs that will improve health in diverse

Population Health Research

1. Construct a conceptual model and choose an appropriate existing data set, such as electronic health records, Medicare/Medicaid, Medical Expenditure Panel Survey, Health Care Utilization Project, and Health and Retirement Study, to address a population health research question
2. Design and perform a study consisting of a retrospective analysis of an existing data set to address a population health research question of interest
3. Design efficient computer programs for data management and manipulation, statistical analysis, and presentation using R (or another statistical programming language, such as SAS)
4. Apply advanced statistical methods for analyzing count data, categorical data and time to event data: specifically, Poisson regression models, multinomial and ordinal logistic regression models and Cox proportional hazard models
5. Perform predictive modeling employing different strategies for model selection (best subsets and shrinkage approaches), imputation of missing values, and splitting data into training and test data sets

Practicum Competency Requirements

Students must meet at least 5 competencies through the practicum portion of the Culminating Experience. At least 3

Culminating Experience Checklist

Step 1: Build a project idea

A student-initiated and student-driven process

Suggested Timeline: A semester or more before proposed start date

Network: Discover community needs/interest with guest speakers, MPH staff, faculty members, and other students. The inclusion of guest speakers in the classroom is designed to help connect you to members of the Public Health Practice community. These are the people on the front lines with the experience, knowledge, and resources you need to get the most out of your project and future career.

Develop ideas: Think about your experience, goals, area of concentration, population focus, preferred methodological approach, and target population(s). Keep in mind that anything you want to be able to do with skill after graduation should be integrated into your Culminating Experience. Explore your ideas with faculty, your concentration leader, MPH staff, etc. Be sure to keep the MPH Director of Community-Based Education in the loop.

Find a site: Where will you complete your Practicum? Would you like to do your Capstone Project at the same site or a different site? What population or community might they benefit? What organization and on-site preceptor will you work with?

For some students, the organization or site will be the first thing they are sure of. Other students will have an idea in mind and seek a site at which the idea can be actualized. Still others will know the population they wish to work with first and then identify a site and topic.

Step 2: Prepare for your Practicum Experience

A foray into the field

Suggested Timeline: By the start of the semester you intend to begin the Practicum

Finalize organization and Practicum preceptor: Which organization will you work with for your practicum hours? Who will be your primary contact at the organization?

Step 3: Prepare for your Capstone Project

Laying the groundwork for a successful project

Suggested Timeline: During the semester before proposed start date

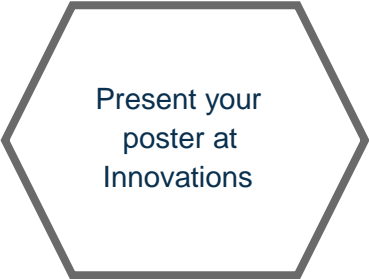
(If you are completing a project which requires IRB approval, we recommend starting even earlier. For domestic projects, we recommend allotting two months for IRB approval. For international projects, we recommend giving yourself at least one semester to complete the IRB process. Consult your Capstone Advisory Committee for guidance with the IRB process. Additional details on the IRB process are also available in this handbook.)

Identify and invite a minimum of three people who can guide, support and advise you. One member should act as the Chair of the Committee Advisory Committee. The Chair should hold a faculty appointment and will have the academic authority to assign the final grade in collaboration with the other Capstone Advisory Committee Members.

In addition to the Chair, we recommend including a site Preceptor as a member of your Committee. The Preceptor is a member of the organization with which you will be completing your Capstone Experience and is responsible for day-to-day supervision and serves as a troubleshooter for issues related to the site and the population participating in the project. You'll also want Capstone Committee Members who can address specific learning pieces, methodology, and content, in addition to serving as troubleshooters for program related issues.

Register for Capstone Credits: You must register for a total of six (6) semester hours of credits to satisfy the Capstone requirement.

Flowchart: Separate Practicum & Capstone



Grading for the Culminating Experience

The MPH Culminating Experience is graded on a Pass/Fail basis. To fulfill the Culminating Experience, students must earn a "Pass" in both MPHP 650 'Public Health Practicum' and MPHP 652 'Public Health Capstone'. To receive a grade of Pass, the student must complete all required components of MPHP 650 and/or MPHP 652 by the stated deadlines. The required components are detailed in MPH Program documents, including this one.

Practicum Credits

Students should plan on enrolling in all 3 Practicum credits during the semester in which they intend to complete the project and present at the Public Health Innovations Conference. In order to enroll in Practicum credits, a Practicum Learning Agreement (or a project proposal that encompasses both Practicum and Capstone, if a student is completing an integrated project) must be completed by the student and their preceptor and submitted to the MPH Director of Community Based Education before the end of the Add/Drop period of the tlbcum ai co the MPone]TJ Ofum(um)4.9 (c)8.-6.6 (he)10.5 ()11.3 (M)4.92u
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Public Health Practicum Overview

The Public Health Practicum is meant to provide students with community-based practical field experience that cultivates mentored relationships with public health professionals through meaningful, hands-on work that builds upon foundational and concentration-specific competencies. The Practicum is also meant to serve as a bridge between the classroom and public health profession, linking

Requirements

The successful completion of the Public Health Practicum (MPHP 650) requires:

- x Exhibiting professionalism in all work situations (e.g., behavior, dress, oral and written communication, and ethics) as evaluated by the student's practicum preceptor
- x A structured, individually arranged Practicum learning agreement with a community partner that describes the nature of the Practicum experience, including public health competencies addressed (Note: a student may submit one single written proposal, if appropriate, if practicum and capstone requirements are being satisfied through one large project.)
- x Attendance at Community Health Research & Practice (CHRP) meetings
- x Completion and documentation of 120 hours dedicated to the Practicum
- x Preparation and presentation of a professional poster describing the practicum experience, to be presented at the Public Health Innovations Conference hosted by the MPH program near the end of each fall and spring semester
- x At least two portfolio products (deliverables) that are useful to the host organization and that demonstrate attainment of the identified competencies. Portfolio deliverables can be in electronic

Roles and Responsibilities for the Public Health Practicum

A successful Practicum experience requires the commitment of several individuals. The Practicum is a mutually beneficial partnership between the student, the MPH program, and a sponsoring agency/organization, represented by a preceptor. The agency preceptor is the professional on-site responsible for daily supervision of the student. Preferably, this individual will be a public health

- x Schedule regular meetings (recommended weekly or at least 1 meeting for each 40 hours of practicum completion) with the student to discuss performance, development, and progress
- x Discuss maintenance of data/records, if applicable
- x Review and approve the student's Practicum Learning Agreement which contains the above information, in concert with MPH Director of Community Based Education
- x Include student in meetings or seminars related to the practicum area
- x Clarify to whom student should report if preceptor is not available
- x Communicate regularly with the MPH Director of Community Based Education
- x Review the final practicum poster and Practicum Portfolio products (along with MPH Director of Community Based Education)
- x Complete an evaluation of the student at the end of the practicum experience

At a minimum, Public Health Practicum Preceptors should possess the following traits and/or abilities:

- x Possess a MPH degree or sufficient public health knowledge and experience to appropriately guide and advise students

are required to submit both a learning agreement and a proposal for the Practicum and Capstone, respectively.

Students must submit a completed Capstone proposal (with accompanying forms) to the MPH Office before they are allowed to register for Capstone (MPHP 652) credits. Most students will complete their Capstone Project experience during their last academic year in the program (two semesters, three credits

The MPH Director of Community Based Education

The Role of the MPH Director of Community Based Education includes the following responsibilities related to the Capstone Project:

- x Support the student, preceptor, and Committee in all aspects of the Capstone
- x

Human Research Protection and IRB Information

There are federal regulations governing research involving human subjects. These regulations require Institutional Review Board (IRB) approval of a protocol. In determining whether your Capstone Project will require IRB clearance, we recommend a simple approach: When in doubt, submit a protocol to the IRB. Your Capstone Advisory Committee and the MPH Program can offer guidance on the IRB process. Students at Case Western Reserve University must have a “Responsible Investigator” (faculty with a contractual relationship to the University) be the primary sponsor for the IRB application. The Capstone Advisory Committee Chair should function as the Responsible Investigator. In addition, all IRB applications must obtain the signature of the Chair of your home department (usually Population & Quantitative Health Sciences). When preparing the IRB application, work closely with your Responsible Investigator and be diligent in following the directions given by the IRB, as this will save a lot of time and headaches. Remember, you are not alone in this process. Your Capstone Advisory Committee and the Responsible Investigator can guide you through the process. All study applications are submitted through the SpartaIRB system. More information can be found here: <http://www.case.edu/irb/>

Risks and Benefits

- x Are there any direct benefits to the individual's participating in your research?
- x How will your research benefit the population you are working with?
- x How will your research benefit the general population?
- x What are the risks to this population?
- x What will you do to mitigate and address these risks?

Previous Research

- x What research has already been done on your topic?
- x What question(s) does your research seek to answer that previous research has not answered?

Methodology

- x Describe the methodology you intend to use.
- x Why have you chosen this methodology?

Dissemination Plan

- x How will you report the results of your findings to your participants?
- x How do you plan to disseminate your results to the general public?

In addition to the general considerations above, please familiarize yourself with the relevant university policies (on the Office of Research Compliance's website), particularly if you are completing a Capstone Projects which includes a research-component. It is important that you also familiarize yourself with the policies of your Capstone site (and host country for international projects).

Capstone Essay Guidelines

Each student is required to develop an essay of professional quality based on his or her Capstone experience. The student writes the essay based on the Capstone project as outlined in the student's Capstone proposal. The Capstone Committee, analogous to a Thesis Committee, is responsible for evaluating the essay. The structure of the Capstone essay should generally follow the format listed below. (An alternate option is to submit a manuscript prepared for submission for publication.)

Following completion of the Capstone experience and the essay, each student is required to formally present his or her his or her research findings. (Refer to Capstone Presentation Guidelines on page 39.) The essay is due to all members of the Capstone Committee and the MPH Program Office prior to the presentation. (Read all emails from the MPH Office while working on your Capstone experience as these emails will contain specific deadlines.) Should the student's Capstone Advisory Committee request any changes to the essay, the modifications need to be incorporated into a final document to be submitted (to all previously named parties) at the time of the final presentation. The student will receive support and encouragement to publish peer-reviewed, scholarly work based on the Capstone essay.

Samples of past Capstone essays are on file with the MPH Office and available to reference upon request.

Suggested Capstone Essay Format

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and submit them to the MPH Office so

Abstracts

All students who have completed sufficient work toward their Capstone are strongly encouraged to prepare an abstract for potential submission to APHA or another professional conference. Abstracts will be reviewed at CHRP, where students will receive feedback from faculty and other students prior to actual submission. Students will be directed on the preferred method of submission in advance of the due date. It is not unusual for several MPH students to have their abstracts accepted to APHA and other professional conferences in a typical year. Notify the MPH Office if your abstract is accepted for presentation.

presentation. Once a student has arranged this time, they should contact the MPH Office for assistance in reserving a room in the School of Medicine for the presentation. The MPH Program will advertise the presentation to MPH faculty, staff, students, alumni, and the broader community and can also video-record the presentation, if requested. Please note that students presenting and graduating in a summer

Culminating Experience Funding Request Form

Student name: _____ 7-Digit ID: _____

Project title: _____

Amount requested: _____

Please briefly describe the expenses you plan to incur:

Please note: expenses are paid on a reimbursement basis. (Exception: CWRU will not reimburse you for gift card purchases. Please see the Research Incentives Policy below for details on procurement of gift cards for research purposes.) You must save itemized receipts for all expenses and submit them to the MPH office for reimbursement. CWRU will not reimburse you without a receipt.

Financial Support for Capstone Projects

The MPH program recognizes that the Capstone Experience may entail expenses for the student (e.g., survey instruments, materials, etc.). The MPH program provides financial support, on a competitive basis, for student capstone projects up to \$250

international activities, but supplemental insurance may still be advisable. In all cases, verify your eligibility and restrictions (e.g., for specific activities that you could foresee during your travels) and carry copies of the coverage.

MPH Program Study Abroad Policy

Per the guidelines of the CWRU Center for International Affairs, Integrated Graduate Studies (IGS) students are classified as undergraduate students for the purposes of study abroad experiences. All undergraduate and graduate students must register with the Center for International Affairs Office of Education Abroad (see instructions below). Undergraduate students may have travel abroad denied or restricted based on current U.S. Department of State Travel Advisories. If an undergraduate student travels to a country or region which the Office of Education Abroad has identified as restricted, the student may not receive the credits associated with the study abroad experience. (Restricted regions typically include those for which Level 4 Travel Advisories have been issued by the U.S. Department of State.)