SCHOOL OF
PUBLIC HEALTH

BSTA 507 FIELD EXPERIENCE & CULMINATING EXPERIENCE GUIDELINES MPH IN BIOSTATISTICS

2016-17

BSTA 507 FIELD EXPERIENCE & CULMINATING EXPERIENCE GUIDELINES MPH IN BIOSTATISTICS

INTRODUCTION

Students in all Master of Public Health programs must complete a graduate internship or field experience, which provides an opportunity to demonstrate mastery of skills acquired during the degree program. For students in the Biostatistics program, this is a 6-credit, minimum 200-hour experience that concludes with a final summary report. The culminating experience involves two components: 1) the Biostatistics comprehensive exam and 2) the final integrative paper, which builds on the field experience and requires students to address all of the program's competencies.

Information, including a video of current students and alumni sharing wisdom about their field experiences, can be found on the SPH website:
http://ohsu-psu-sph.org/index.php/current-students/field-experience/

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RECOMMENDED FIELD EXPERIENCE & INTEGRATIVE PAPER TIMELINE OVER 1 TERM

After completing Biostatistics core courses

- Contact Rochelle Fu, Biostatistics program director*

2 terms prior (typically fall)

- Attend FE orientation
- Look for FE site
- **Talk with faculty adviser, potential preceptors**
- Get application from Lisa Hatfield, field experience coordinator (also on website)
- If international FE or needing IRB process, submit application packet to Lisa Hatfield

1 term prior (typically winter)

- Confirm site
- Keep faculty adviser updated
- **Work with faculty adviser and preceptor to craft application**
- Submit application to Lisa Hatfield by announced deadline; this is typically 4-5 weeks before the beginning of the next term

FE term (typically spring)

- Lisa Hatfield will register students for the FE through the registrar
- Submit progress report to Lisa Hatfield by given deadline
- Let Lisa Hatfield know of any concerns
- **Keep faculty adviser updated**
- Submit final report to Lisa Hatfield by given deadline
- Submit culminating experience integrative paper to Lisa Hatfield by given deadline
- Complete FE survey

*The comprehensive exam will be scheduled twice a year, once in the middle of spring quarter and once toward the end of summer quarter. Students will be advised when to take the comprehensive exam.

RECOMMENDED FIELD EXPERIENCE & INTEGRATIVE PAPER TIMELINE OVER 2 TERMS

After completing Biostatistics core courses

- Contact Rochelle Fu, Biostatistics program director*

2 terms prior (typically summer)

- Attend FE orientation
- Look for FE site
- **Talk with faculty adviser, potential preceptors**
- Get application from Lisa Hatfield
- If international FE or needing IRB process, submit application packet to Lisa Hatfield

1 term prior (typically fall)

- Confirm site
- **Work with faculty adviser and preceptor to craft application**
- Submit application to Lisa Hatfield by announced deadline; this is typically 4-5 weeks before the beginning of the next term

Term 1 of FE (typically winter)

- Lisa Hatfield will register students for the FE through the registrar
- Submit progress report to Lisa Hatfield by given deadline
- Submit end-of-term update to Lisa Hatfield by given deadline
- Let Lisa Hatfield know of any concerns
- **Keep faculty adviser updated**

Term 2 of FE (typically spring)

- Lisa Hatfield will register students for the FE with the registrar
- Submit progress report to Lisa Hatfield by given deadline
- Let Lisa Hatfield know of any concerns
- **Keep faculty adviser updated**
- Submit final report to Lisa Hatfield by given deadline
- Submit culminating experience integrative paper to Lisa Hatfield by given deadline
- Complete FE survey

*The comprehensive exam will be scheduled twice a year, once in the middle of spring quarter and once toward the end of summer quarter. Students will be advised when to take the comprehensive exam.

OVERVIEW & REQUIREMENTS

Students are required to work with their **faculty adviser (FA)** and **field experience coordinator (FEC**) throughout the **field experience (FE)**.

1. WHAT IS THE PURPOSE OF THE FIELD EXPERIENCE?

The purpose of the FE is to provide students with a supervised opportunity to apply the statistical methods learned in coursework to important public health problems and to demonstrate mastery of program competencies. In addition, it provides students the opportunity to reflect on the Biostatistics program and learning competencies in the context of a professional setting; the opportunity to learn new skills; and the opportunity for socialization into a public health field.

2. WHAT IS THE CULMINATING EXPERIENCE?

The culminating experience involves two components: 1) the Biostatistics comprehensive exam and 2) the final integrative paper, which builds on the field experience. It is the summative experience evaluated after the completion of the core. Students are asked to demonstrate mastery of the skills and knowledge acquired during the course of study by synthesizing, integrating, and applying skills and competencies acquired through the classroom and their public health experiences.

See Appendix G for complete requirements.

3. WHO MUST TAKE BSTA 507?

All students in the Biostatistics MPH program must take BSTA 507, which is the course number for the FE. Students in the other MPH programs also must complete the FE; however, their course numbers differ.

4. WHAT DOES THE FELD EXPERIENCE INVOLVE?

Students work on a public health issue confronting an agency or organization ***onsite*** using the knowledge and skills acquired in core and required program coursework. It is an opportunity for students to relate and apply their academic experiences to public health issues.

Two Terms or One?

All core courses and required program courses need to be completed before the field experience.

If the FE is completed over two terms, students may take one required course concurrently during the first term of the FE. Students will receive an incomplete for the first term and a letter grade for both terms when the entire 6 credits of the FE are complete.

Because the FE is part of the culminating experience for each MPH program, it is one of the final measurement points demonstrating mastery of program competencies. To this end, students must demonstrate mastery of program competencies through their field experience proposal, work products, and summary report. The student must spend a minimum of 200 hours of work in the FE for a total of 6 credits. Time spent writing the final report will be in addition to these 200 hours. Biostatistics students may register for all 6 credits in one term or register across two consecutive terms for a total of 6 credits.

During the FE, students are encouraged to keep a journal of experiences in and reflections about the FE. These journals are not submitted to the FEC but rather are intended to support the student in crafting progress reports as well as the final summary report. ***Students must email a progress report to the FEC***

***by the deadline given, which is typically around Week 5 each term*.** See Appendix C for details. Students will be given a specific deadline for submission each term.

At the end of the FE, the student must prepare and submit a FE summary report (Appendix E) and examples of the work products, if applicable, created during the field experience.

Should a problem arise during your placement, ***contact the FEC as soon as possible***. Most problems can be resolved if addressed early by working closely with both the preceptor and FEC. In rare instances, it may be necessary to find another more appropriate placement.

5. WHEN IN THE MPH PROGRAM SHOULD THE FIELD EXPERIENCE OCCUR?

Students must ***complete all core and program required courses before*** beginning the field experience if the field experience is being completed in one term. If the field experience is being completed over two terms, students may enroll concurrently in ***one*** required course during the first term of a two-term FE.

6. IS ATTENDANCE AT THE FIELD EXPERIENCE ORIENTATION REQUIRED?

Yes. Students are required to attend a field experience orientation ***prior*** to their planned field experience term. It is recommended that they attend the orientation two terms prior to the planned field experience. Orientations are scheduled once a term. The FEC will organize and facilitate the orientations, which will include information about FE selection, paperwork, and approval processes.

7. HOW DO I IDENTIFY A FIELD EXPERIENCE SITE?

Sites for FEs are identified in a number of ways, including:

- Students' own ideas and contacts, including previously placed MPH students
- Students' research into existing agency and organizational postings
- Announcements of opportunities posted on the MPH listservs
- Sites identified in consultation with the students' faculty advisers

See Appendix I for a list of recent field experience sites.

Placement at current employer: In some circumstances, students may use their current employer as their FE site though this is typically discouraged. Students using their current employer as their FE site will be required to work on a project *outside* the normal scope of their employment position.

Clinical and lobbying activities: No FE shall include lobbying or clinical practice. This includes students who hold clinical licensure or who currently lobby in their professional lives. Any clinical or lobbying activities to which a student agrees are to be performed outside the context of fieldwork, will not count toward the 200-hour requirement, and are not sanctioned by OHSU.

Use of personal vehicles: Students may use personal vehicles to get to/from placement activities. However, students may not drive placement staff or clients in their personal vehicle.

Students are advised to research FE opportunities 1-2 full terms prior to the term during which they plan to do their field work. This is to ensure that there is sufficient time to make final decisions and to obtain all necessary approvals.

Students need to work with their faculty advisers throughout the entire FE process, including meeting with their FA to help determine an appropriate FE site. FAs may recommend meeting with other faculty depending upon student interests. Students also are encouraged to conduct a series of informational interviews at possible placements to help select the site for their fieldwork. In these informational interviews, students should be prepared to explain concisely the FE requirements and to ask specific and targeted questions that will help determine whether there is a good fit between BSTA 507 requirements and the needs of the site.

Feedback on application materials: Students are welcome to meet with the FEC prior to submitting paperwork for the FE. Students may want to bring drafts of the application & learning contract, which will allow time before the application submission deadline for revisions if there are gaps or questions.

8. WHO MAY SERVE AS PRECEPTOR?

Field Experience preceptors must have public health credentials, by virtue of formal training or position and experience. Experience and expertise in biostatistics are desirable but not required. Potential preceptors will be evaluated on a case-by-case basis. It is recommended while conducting informational interviews with prospective preceptors that you discuss their public health qualifications to serve as a preceptor. ***The FE preceptor may not be a current SPH faculty member nor can preceptors be current students regardless of position.***

9. WHEN DO I NEED TO TURN IN MY APPLICATION & LEARNING CONTRACT?

Students are responsible for submitting the application & learning contract (Appendix B), including appropriate signatures, at least ***one month prior to beginning the FE (a deadline will be announced for each term)***. Please allow for sufficient time to complete all documents and approval processes. Students will not be authorized to register for BSTA 507 until all paperwork has been signed, submitted, and approved.

10. HOW DO I REGISTER FOR THE FIELD EXPERIENCE?

Registration for BSTA 507 requires approval by the FEC. Students will submit all required documentation associated with the application & learning contract to the FEC (Appendix B). Following the submission of completed paperwork and receipt of all approvals, the FEC will register the student for the appropriate BSTA 507 credits. Students do not need to submit a special registration form.

11. HOW DO I COMPLETE THE FIELD EXPERIENCE?

Successful completion of the FE requires demonstrated mastery of the stated learning competencies, completion of all placement deliverables, and submission of a summary report and other required materials (Appendix E). Students are responsible for submitting all materials on time. ***Materials are due on the Monday of Week 11 or 12 of the term in which the placement is completed. A specific deadline will be announced each term.*** The FEC then coordinates review and assignment of a letter grade with the student's faculty adviser during finals week. All materials should be submitted via email to the FEC.

10. HOW ARE CREDITS AND GRADES ASSIGNED FOR THE FE?

Assessment of a student's performance in the field experience is based on quality of materials submitted (Application & Learning Contract, mid-term updates, evidence of products developed while in field work, FE summary report, culminating integrative paper), meeting the learning competencies, and assessments by both the site preceptor and the faculty adviser. If the FE is completed over two terms, the student will receive an incomplete grade for the first term and will receive the same letter grade for both terms when the entire 6 credits of the FE are complete.

11. WHAT DO I NEED TO DO IF MY FE HAS A RESEARCH COMPONENT THAT INVOLVES HUMAN SUBJECTS?

OHSU requires research conducted with humans and/or human data to be reviewed through the Institutional Review Board (IRB). It is important to note that only the IRB can determine whether or not research is exempt from full review, and that OHSU's terms for reviewing research by graduate MPH students may differ from those at the FE site.

Projects planned with preceptors or agencies already having human subjects approval either at OHSU or through another institution may simply provide confirmation that the student has been added to the personnel list of the protocol approval. All MPH students must complete two online modules through OHSU's integrity office offered by CITI: 1) Responsible Conduct of Research and 2) Human Subjects Research. If no human subjects approval is active and one is required, students may need to submit full proposals via OHSU's eIRB system for review.

Please note that in all cases involving human subjects research, work on the project and registration for the course may not begin until OHSU IRB approval has been obtained.

12. WHAT DO I NEED TO DO IF I AM PLANNING AN INTERNATIONAL FIELD EXPERIENCE?

International placement preparations and authorizations will be addressed on a case-by-case basis. Please meet early with the FEC if you are planning on an international field experience as institutional approvals and paperwork will be required. In addition to the Application & Learning Contract, the student must also submit the following:

- International Away Elective Approval Form
- Submit the Risk Management Off Campus Authorization Form
- Complete the Pre-Travel Consultation Appointment at JBT Health & Wellness and have met the Student Health Travel requirements regarding immunizations
- Complete the Office of International Services Travel Screening submission

Protection of human subjects:

IRB requirements need to be addressed any time you gather information from people about their lives. This is particularly true when working with vulnerable populations. **IRB review and approvals take time, so we suggest that you start early or structure your FE to not need review.**

Please submit all materials at least one full term (two terms are preferred) in advance of your planned field experience. Processes begun after that point may not receive necessary approvals in time for planned departure out of the country Please note that all international field experiences must involve a host, host agency, or organization; university-sanctioned field experiences will not be approved in the absence of a formal host.

REQUIRED DOCUMENTS BEFORE YOU BEGIN

1. APPLICATION & LEARNING CONTRACT

The components of the application & learning contract are listed on the document itself (Appendix B). It consists of:

- ☐ Student information
- ☐ Preceptor information
- ☐ Field experience overview
- ☐ Student's career goals
- ☐ Program competencies and learning objectives
- ☐ IRB documentation (if applicable)
- ☐ International Elective Approval Form (if applicable)
- ☐ Off-campus authorization screenshot (if applicable)
- ☐ Advising checklist
- ☐ Current resume or CV
- ☐ Agency agreement (if required)

Because this is a substantial package, it is important to allow sufficient time for development and any required revisions. As each field experience is crafted uniquely for each student, each student's contracts will differ from those of their peers; therefore, it is not recommended that students try to model their package after another student's contract. As indicated in the timeline, students will work with their preceptor, the FE coordinator, and faculty adviser in the development of the application & learning contract. Please be respectful of others' time to fulfill professionally their responsibility.

The application & learning contract must be signed by the student, preceptor, and faculty adviser prior to submission. The original signed document must be given to the FEC, and copies must be given to the preceptor and faculty adviser. All of this can be done electronically unless a party prefers otherwise.

Field Experience Agreement
Most sites do not require this agreement. OHSU maintains standing internship/practicum agreements with public agencies; no work is required on the student's part to maintain standing agreements. The OHSU-PSU School of Public Health

Background checks: Some sites, including most public agencies, require background checks. Most sites that require them have internal processes to address this; if your site does not and you need to have a background check done, please contact the FEC.

Immunization records: Some sites, including many public agencies, may require immunizations. Please contact the OHSU Student Health Center with a list of required immunizations and make an appointment with a nurse to receive the appropriate

The fine print: For your protection and that of the University's, all field work will require oversight and approvals, the precise nature of which will be determined by the content of each proposed experience. This is to say that procedures and timeframes may vary by student and project.

currently does not require a field experience agreement with agencies and organizations, but the field experience site may. Please check with your preceptor if this is applicable to your site, and direct inquiries about this to the FEC.

Tell me again when I need to submit my documentation

Documentation for FEs **must be submitted by the deadline given, which is typically 4-5 weeks before the start date for** the field experience. ***Applications involving IRB review and international travel must be submitted much earlie***r, at least one full term before the planned start date to allow for the additional procedures and paperwork required.

COMPETENCIES & LEARNING OBJECTIVES

1. HOW DO I ADDRESS PROGRAM COMPETENCIES?

The field experience is a competency-based experience demonstrating mastery of knowledge and skills developed during the MPH program. Students' individual learning competencies, as expressed in the application & learning contract, must be mapped to the biostatistics program learning competencies below and also in Appendix A.

- Students must address at least the asterisked competencies
- The student must provide a minimum of three specific tasks/activities for each FE learning objective. A task/activity may satisfy more than one learning objective and thus appear repeatedly in the matrix, but measurement of each must be clear.
- Summary reports must state and respond to the degree to which each of the chosen program competencies and chosen FE learning objectives were met, describe how each task/activity was performed, and how the student addressed any challenges (Appendix E).

Biostatistics Program Competencies:

1. Apply appropriate principles of research design and population-based concepts to assess health problems.*
2. Apply appropriate descriptive and inferential statistical methods to analyze risk determinants of disease and health conditions.*
3. Apply descriptive and inferential statistical methods that are appropriate to the different study designs used in public health research.
4. Interpret and summarize results and communicate them to lay and professional audiences, in the context of proper public health principles and concepts.*
5. Identify strengths and weaknesses of alternative designs and analytic methods, and critically review and assess statistical analyses presented in public health literature.
6. Describe basic ethical principles pertaining to the collection, maintenance, use, and dissemination of public health data.*
7. Identify cultural dimensions of conducting research, including culturally sensitive recruitment of study participants, and develop strategies for interpretation of data in the larger cultural context.*

2. WHAT IS A LEARNING OBJECTIVE?

Students are encouraged to work with the FEC to refine appropriate FE learning objectives and associated tasks/activities. Together, learning objectives and activities must:

- Describe the performance of a major cognitive skill (knowledge, comprehension, application, analysis, synthesis, and evaluation)
- ***Emphasize data analysis, synthesis, and evaluation***
- Begin with an "action verb" that matches how the performance will be assessed
- Be explicitly measurable through ***at least three*** learning tasks/activities per learning objective
- Identify the intended outcome or product, not the process
- ***Make reference to and build upon the Biostatistics program competencies***

Writing Effective Learning Objectives

- Brief specific statements of what a student will *do*; typically one sentence
- Use *measureable* action verbs; in other words, someone will be able to determine easily if objectives have been met

Changes to the field experience require a revised matrix

Any proposed changes to agreed-upon activities must be approved by the FEC *prior to* implementing such changes. Alterations to the learning competencies and matrix will be required to accompany changes in planned activities.

Appropriate and ***measurable action verbs*** for each of the skill areas per Benjamin Bloom's taxonomy of learning* might include the following:

- **Knowledge:** arrange, define, duplicate, label, list, name, order, recognize, relate, repeat, reproduce, count, define, meet, review, study
- **Comprehension:** classify, describe, discuss, explain, express, identify, indicate, locate, report, restate, review, select, translate
- **Application:** apply, choose, demonstrate, employ, illustrate, interpret, operate, practice, schedule, solve, use, write
- **Analysis:** analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, test
- **Synthesis:** arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, write
- **Evaluation:** appraise, assess, attach, choose, compare, defend, estimate, judge, predict, rate, select, support, value, evaluate

Avoid unmeasurable verbs such as:

- Understand, embrace, embody, address, respect, appreciate, honor, etc.
    - If you are going down this path, stop yourself and ask: What *measurable* and *active* verb would show my understanding, appreciation, and so on.

*Much has been written about Bloom's taxonomy as well as its subsequent revisions. If you would like to learn more, begin with a simple search.

3. WHAT DOES A LEARNING OBJECTIVES MATRIX LOOK LIKE?

Create a table with **three columns**:

Column 1 - Program Competencies: Choose which Biostatistics program competencies you will address using the guidelines above.

Column 2 - Learning Objectives: Indicate the specific and measurable learning objectives you have developed for your Field Experience. Be certain you have at least one learning objective for each of the broader Program competencies you will address.

Column 3 - Learning Tasks/Activities: Identify the specific activities through which you will satisfy both program and learning objectives. Activities must relate specifically to the associated learning competencies; ***plan for a minimum of three sequential activities for each learning objective***. Be explicit, as you will use these objectives and activities as the basis for reflection and measurement of your accomplishments during the field experience.

Matrix Example:

Program Competency	Learning Objective	Tasks/Activities
Apply descriptive and inferential statistical methods to analyze risk determinants of disease and health conditions.	**Compare** designs of two studies conducted by my FE site; **critique** appropriateness of study designs and **create** alternative designs if appropriate. *We know you are the "who" and that you may not know "by when" at this point	1. Select and review studies to compare 2. Talk with authors about design decisions 3. Review similar studies, if any, for design alternatives 4. Write comparison of designs with recommendations to improve them 5. Submit review to preceptor
Program Competency	**Learning Objective**	**Tasks/Activities**
Identify cultural dimensions of conducting research, including culturally sensitive recruitment of study participants, and develop strategies for interpretation of data in a larger cultural context.	**Create** and **implement** survey tool applicable to project population	1. Research project population history, demographics, previous publish health work; contact population community leaders 2. Create instrument; send for review to appropriate people 3. Execute survey tool 4. After analysis, send for review to appropriate people for cultural bias

2. WHY DO I NEED TO SUBMIT MY RESUME/CV AND STATE MY CAREER OBJECTIVES?

Ideally, the field experience should provide you with the opportunity to use knowledge and skills acquired in your MPH program in an actual public health practice. In addition to applying skills in biostatistics, you will have the opportunity to build relationships with the professional network that you aspire to join, and you can observe their day-to-day activities. In selecting your field experience, you and your faculty adviser will review your experience and choose an organization that advances you towards your ultimate career objectives.

REQUIRED DOCUMENTS TO EARN CREDIT FOR THE FIELD EXPERIENCE & INTEGRATIVE PAPER

1. MID-TERM PROGRESS REPORTS

During both the first and second terms of the FE, students are required to submit a mid-term progress report to the FEC typically by the end of Week 5 of each term. Specific deadlines will be given each term. These progress reports should be 3-4 pages and single-spaced. Details of each section are given in Appendix C. A suggested rubric (Appendix D) may be helpful as you put this document together.

If you are completing the FE over two terms, you will need to submit an **updated progress report** at the end of your first term. A specific deadline will be given. Please highlight the updates you have for each of the progress report's sections.

2. FINAL SUMMARY REPORT

A 10-12 page, single-spaced final summary report is due the Monday of Week 11 or 12 of the student's last FE term. Specific deadlines will be given each term. This is to be submitted to the FEC. Details of each section are given in Appendix E. A suggested rubric (Appendix F) may be helpful as you put this document together.

3. CULMINATING EXPERIENCE INTEGRATIVE PAPER

A 7-8 page single-spaced paper that addresses how all program competencies have been met throughout the student's MPH experience is to be submitted to the FEC. Details are given in Appendix I.

4. FIELD EXPERIENCE EVALUATION BY STUDENT

Your feedback is invaluable. After submitting your summary report, work products if applicable, and the integrative paper, you will be emailed a link to a survey that asks questions about your field experience, including preparation, meeting of competencies, and your preceptor and site. Results may be shared with your adviser.

Preceptors also will be given a link to a survey at the end of the field experience. Questions have to do with their student work, skills, and professionalism as well as how well their student met biostatistics competencies during the field experience.

APENDIX A: BIOSTATISTICS PROGRAM LEARNING COMPETENCIES

1. Apply appropriate principles of research design and population-based concepts to assess health problems.*
2. Apply appropriate descriptive and inferential statistical methods to analyze risk determinants of disease and health conditions.*
3. Apply descriptive and inferential statistical methods that are appropriate to the different study designs used in public health research.
4. Interpret and summarize results and communicate them to lay and professional audiences, in the context of proper public health principles and concepts.*
5. Identify strengths and weaknesses of alternative designs and analytic methods, and critically review and assess statistical analyses presented in public health literature.
6. Describe basic ethical principles pertaining to the collection, maintenance, use, and dissemination of public health data.*
7. Identify cultural dimensions of conducting research, including culturally sensitive recruitment of study participants, and develop strategies for interpretation of data in the larger cultural context.*

*Learning contracts must address these competencies specifically, *at minimum*.

APPENDIX B: APPLICATION & LEARNING CONTRACT

Return this form and attachments electronically to hatfiell@ohsu.edu

Student Information (expand as needed)

Student's Name		Date	
Student's ID#		Student Phone	
Emergency Contact/Relationship		Emergency Contact's Phone	
Planned terms of enrollment for FE and credits per term		Faculty adviser name	

Preceptor Information (expand as needed)

Field Experience Location (Organization Name and Address)			
Organization's Mission/Purpose			
Organization's URL, if applicable			
Preceptor's Name (include academic degrees)			
Preceptor's Title			
Preceptor's Phone Number		Fax #:	
Preceptor's Email Address			

Field Experience Overview: General overview of duties and responsibilities of field experience

Public Health Focus: How will this field experience focus on public health?

Student's Career Goals:

PROGRAM COMPETENCIES AND LEARNING OBJECTIVES

Choose at minimum the asterisked learning competencies (1, 2, 4, 6, and 7)	**Write at least one learning objective for each competency that you have chosen**	**Write 3-5 tasks or activities you will need to do to meet each learning objective that you have chosen**
Biostatistics Program Competency	**Learning Objective**	**Tasks or Activities**
1. Apply appropriate principles of research design and population-based concepts to assess health problems.*		
2. Apply appropriate descriptive and inferential statistical methods to analyze risk determinants of disease and health prevention.*		
3. Apply descriptive and inferential statistical methods that are appropriate to the different study designs used in public health research.		
4. Interpret and summarize results and communicate them to lay and professional audiences in the context of proper public health principles and concepts.*		
5. Identify strengths and weaknesses of alternative designs and analytic methods, and critically review and assess statistical analyses presented in public health literature.		

6. Describe basic ethical principles pertaining to the collection, maintenance, use, and dissemination of public health data.*		
7. Identify cultural dimensions of conducting research, including culturally sensitive recruitment of study participants, and develop strategies for interpretation of data in the larger cultural context.*		

OTHER DOCUMENTATION

If the scope of your work requires IRB review, please attach documentation showing this. This can be through your field experience site or through your own application and could consist of the project's IRB approval or certificates showing completion of IRB training modules.

If you are traveling out of the country for your field experience, please attach 1) a copy of the International Elective Approval Form with at least your signature and your adviser's signature and 2) a screenshot of the OHSU off-campus authorization form. You will need to submit the entire International Elective Approval Form with all signatures to the Program Office in CSB per the form's directions.

Agreement to the above Field Experience

_____ _____

Student **Date**

_____ _____

Preceptor **Date**

Approval of the above Field Experience

_____ _____

Faculty Adviser **Date**

ADVISING CHECKLIST

Faculty Adviser: _____

Course Number	Course Title	Credits	Grade	Term/Year	Comments
Oregon MPH Program Core Courses (17 credits)					
BSTA 511	Biostatistics I (Estimation and Hypothesis Testing)	4			
PHPM 512	Epidemiology I (Introduction)	4			
PHPM 517 (PHE 512)	Principles of Health Behavior	3			
PHPM 518 (PHE 580)	Concepts of Environmental Health	3			
PHPM 519 (PAH 574)	Health Systems Organization	3			
Program Required Courses (26 credits)					
BSTA 512	Linear Models	4			
BSTA 513	Categorical Data Analysis	4			
BSTA 515	Data Management and Analysis in SAS	3			
BSTA 516	Design and Analysis of Surveys	3			
BSTA 519	Applied Longitudinal Data Analysis	3			
PHPM 513	Epidemiology II	4			
PHPM 520	Ethics of Research and Application in Public Health	3			

PHPM 566	Current Issues in Public Health	2			

ATTACHMENTS

1. Resume or CV
2. IRB documentation if necessary
3. International travel documentation if necessary

Return this form and attachments electronically to hatfiell@ohsu.edu
by the deadline given for the term.

For questions or concerns, please contact
Lisa Hatfield, Ed.D., Field Experience Program Coordinator
OHSU-PSU School of Public Health
Oregon Health & Science University
3181 SW Sam Jackson Park Road, CB669
Portland, OR 97239
Tel 503- 494-7548
Email: hatfiell@ohsu.edu

For more information about Field Experience requirements and processes, see http://ohsu-psu-sph.org/index.php/current-students/field-experience/

For FEC: Date Received: _____

APPENDIX C: MID-TERM PROGRESS REPORT REQUIREMENTS

3-4 PAGES, SINGLE SPACED TO BE EMAILED TO LISA HATFIELD, HATFIELL@OHSU.EDU

1. Introduction

- Brief overview of site and project
- Explain your role and responsibilities during your FE

2. Learning Objectives

- How you are addressing thus far the learning objectives you have enumerated on your Application & Learning Contract – please use this tabular format.

Program Competency	Learning Objectives	Tasks/activities completed to help meet objective
State competency 1 from application and learning contract matrix	Learning Objective 1	• Task 1 • Task 2 • And so on
State competency 2	Learning Objective 2	
State competency 3	Learning Objective 3 Add more rows as necessary	

Add a narrative summarizing your tabular content. Also include tasks/activities planned for the rest of the term. For **second-term students**, also explain if you have accomplished (or not) what you had hoped since writing your first-term progress report.

3. Relation to Coursework

- How you see your project in relation to coursework
- Highlight most applicable courses to your FE project(s)

Tasks/Activities/Other things you have done for your project(s)	Which course or courses are most relevant	Brief explanation of relevancy
Task/activity 1	• Course 1 • Course 2, etc.	• Reason 1 • Reason 2
Task/activity 2	Add more rows as necessary	

Add a narrative if you feel it would be helpful to explain your table content.

For **second-term students**, add a narrative as to how this is different (or updated) from the table you created during your first mid-term progress report

4. Issues or Concerns

- Note any issues or concerns and explain why
- If no issues or concerns, explain why you think that is

5. Nuts & Bolts

- How much time you have spent so far on the FE
- For students who are completing their second term and thus their second mid-term progress report, please share how your perspective and thoughts of the FE have changed and/or remained constant since your first mid-term progress report. Also, is the FE turning out to be what you had hoped?
- Plans for rest of term
- Generally speaking, how is your FE going so far?

6. Suggested (not required)

Keep a bulleted list of day and what you did/whom you met or contacted. You can add this to the end of the progress report you submit. This is not required, but it is a useful tool for your own reflection on the field experience, when you are job hunting and interviewers ask about your skill set, and as a way to keep program of whom you've met and their positions, which may be helpful in your job search and during your professional career. Here's an example of what one student did:

January 20, 2016: Client Satisfaction Survey Work

- Edit data dictionary as needed
- Edit dataset file as needed
- Enter surveys collected
- Add legitimate skip patterns
- Shadow [person's name] for QI project

APPENDIX D: MID-TERM PROGRESS REPORT SUGGESTED EVALUATION RUBRIC

=Not met/developing **2=met/proficient** **3=met/exemplary**

	Score	Comments
Learning Objectives • Objectives are from original Application & Learning Contract • Tasks and activities clearly support objectives; sufficient work has been done toward meeting objectives • Narrative clearly and thoroughly addresses requirements		
Relation to Coursework • Clear connection is made between tasks/activities and courses • Narrative clearly and thoroughly addresses requirements		
Other Important Factors • Earnestly responds to all sections • Writing is in a professional manner and voice • Narratives are organized, easy to follow		

APPENDIX E: FINAL SUMMARY REPORT REQUIREMENTS

10-12 PAGES, SINGLE SPACED TO BE EMAILED TO LISA HATFIELD, HATFIELL@OHSU.EDU

1. Introduction

- About 1-2 page narrative
- Give a general overview of agency/organization
- Explain your role and responsibilities during your FE

2. Learning Objectives

- Matrix + 1-2 page narrative
- Insert matrix of competencies, learning objectives, and tasks
- Describe how you have met your learning objectives

3. Relation to Coursework

- About 1-2 page narrative or table
- Discuss how your project work related to specific courses in the Biostatistics program

4. Work Products

- As many pages as needed; narrative, table, or some other organized forms
- List and describe the products you created for the agency/organization
- You can add the actual products (or copies) as addenda
- Products may include technical reports, policy papers, surveillance reports, grant applications, journal manuscripts, presentation slides (excluding your oral presentation slides), outreach materials, agency memos, and legislative updates. Products can be at various stages of completeness depending on the FE.
- Private or sensitive information must be removed from FE products.

5. Reflection

- About 2-3 pages narrative
- What did you learn? (the "what")
- Why was this learning significant? (the "so what")
- What are you going to do with this learning? (the "now what")
- What would you have done differently

APPENDIX F: FINAL SUMMARY REPORT SUGGESTED EVALUATION RUBRIC

1=Not met/developing **2=met/proficient** **3=met/exemplary**

	Score	Comments
Learning Objectives • Learning objectives clearly align to the chosen Biostatistics competencies • Tasks appropriately support process of meeting learning objectives		
Relation to Coursework • Gives examples of how the FE relates to specific courses in Biostatistics program • Specific examples cover a wide range of courses		
Work Products • Products are substantive and professional • Products are clearly listed and described in appropriate detail		
Reflection • Thoughtfully reflects on personal learning rather than provide a superficial summary of products created or processes learned (the "what") • Explains why this learning is significant to the MPH experience, personal growth, and/or future professional endeavors (the "so what") • Shares how this learning will be utilized in the future (the "now what") • Thoughtfully explores what may be done differently if given another opportunity for the same FE		
Professionalism • Writing is presented using standard conventions and in a professional manner and voice • Citations, where needed, are given correctly • Obvious that writing report has been reviewed and revised where needed		

APPENDIX G: CULMINATING EXPERIENCE

INTEGRATIVE PAPER

The culminating experience integrative paper requires students to demonstrate mastery of the skills and knowledge acquired during the entire course of study. It builds on the Field Experience, and requires students to synthesize, integrate and apply skills and competencies acquired through the classroom and their public health experiences. For Biostatistics students, this is demonstrated through a final integrative paper and the comprehensive exam.

The 7-8 page single-spaced **final integrative paper** must:

a) Describe and evaluate the degree to which students demonstrated mastery of **all** Biostatistics program learning competencies during their field experience, their coursework, and other experiences during the MPH program
b) Provide specific examples of how these competencies were met
c) Reflect on the lessons learned and key take-aways from their MPH experience
d) Reflect on future career directions based on the field experience, coursework, and other experiences

Culminating experience papers are due to Lisa Hatfield, hatfiell@ohsu.edu, typically the last Friday of the student's graduating term. Specific deadlines will be given for each term.

COMPREHENSIVE EXAM

The comprehensive exam is an assessment of the student's ability to integrate statistical knowledge and skills covered from the different biostatistics courses. Students need to demonstrate mastery of the subject matter, skills of critical thinking and independent problem solving as well as interpretation of results in the context of research question. The comprehensive examination compromises questions reflective of five required courses in Biostatistics:

- BSTA 511 Estimation and Hypothesis Testing for Applied Biostatistics
- BSTA 512 Linear Models
- BSTA 513 Categorical Data Analysis
- BSTA 516 Design and Analysis of Surveys
- BSTA 519 Applied Longitudinal Data Analysis

Specifically, the examination will evaluate the following three track learning competencies:

- Apply appropriate descriptive and inferential statistical methods to analyze social and other determinants of health.
- Apply descriptive and inferential statistical methods that are appropriate to the different study designs used in public health research.
- Identify strengths and weaknesses of alternative designs and analytic methods, and critically review and assess statistical analyses presented in public health literature.

The exam has two parts: the written part is closed book with three applied questions, and the lab part has two data analysis questions and one question to assess the appropriateness of the statistical methods used in a published journal article. The written part takes two hours and the lab part takes three hours, administered on separate days. Each year, students have two opportunities to take the examination, once toward the end of the summer, and another time in the middle of the spring quarter.

The comprehensive exam uses a Pass/No Pass grading system, and is based on pre-specified criteria determined by the comprehensive exam committee. Students who do not pass the comprehensive exam on their first attempt will be required to retake exam. Students will be provided information about areas of weakness prior to taking the examination again. A student who fails the second attempt is required to complete a remediation project specified by her/his faculty advisor and the comprehensive exam committee. Passing the exam or completion of the remediation project is a requirement for graduation.

If students have questions regarding the comprehensive exam, they may contact Miguel Marino (marinom@ohsu.edu), the Chair of the Comprehensive Exam Committee, or Rochelle Fu (fur@ohsu.edu), the Program Director.

APPENDIX H: INTEGRATIVE PAPER SUGGESTED EVALUATION RUBRIC

1=Not met/developing **2=met/proficient** **3=met/exemplary**

	Score	Comments
Program Competencies • Addresses all program competencies • Thoughtfully self-evaluates the degree to which each competency has been met • Provides specific examples as to how each competency has been met • Uses a variety of specific examples that could be from but not limited to coursework, faculty and staff interactions, peer interactions, field experience, internships and/or volunteer work, and involvement with student groups.		
Reflection • Thoughtfully reflects on personal learning throughout the entire MPH experiences • Thoughtfully reflects on personal areas of growth and development		
Career Directions • Explores potential careers and gives specific reasons as to why these careers will be pursued		
Professionalism • Writing is presented using standard conventions and in a professional manner and voice • Citations, where needed, are given correctly • Obvious that writing report has been reviewed and revised where needed		

APPENDIX I: RECENT MPH FIELD EXPERIENCE SITES

Agencies and Organizations
AARP
American Heart Association
American Heart Association
Association of Oregon Community Mental Health Programs
Cambia Health Solutions
Cascade AIDS Project
Cascadia Behavioral Health Corporation
Catholic Charities Relief Service
Center for Evidence-based Policy
Center for Family Services Head Start
Center for Global Health Tumbes
Center for Inquiry Portland
Central City Concern
Centre for Addiction and Mental Health
Children's Hospital of Philadelphia
Children's Village Day School
City Repair Project
Columbia Pacific CCO/CareOregon
Community Cancer Center
Community Health Center of New River Valley
Ecotrust Farm to School Project
Elkhart County Health Department
Family Walk-In Medical Center
Foundation for the Advancement of Cleft Education and Services
Fred Hutch Cancer Research Center
Friends of Creston Children's Dental Clinic
Global Health Access Program
Global Washington
Harm Reduction Action Center
Head Start of Lane County
Health Share of Oregon
Hilyard Community Center
Hood River County Commission on Children and Families
ICAN (Ideas for Cooking and Nutrition) Food & Nutrition Program
Immigrant & Refugee Community Organization

Indiana University Hospital
Intracranial Hypertension Registry
Jackson County Health and Human Service
Jefferson County Health Department
Kaiser Permanente
Kaiser Permanente Center for Health Research
Kaiser Permanente Community Benefit
Legacy Health
Lift Urban Portland
Linnton Community Center
March of Dimes, Washington Chapter
Marion County Health Department Reproductive Health Services
Molecular Testing Labs
Multnomah County Commercial Sexual Exploitation of Children
Multnomah County Domestic Violence Coordination Office
Multnomah County Health Department
Multnomah County Health Department Community Capacitation Center
Multnomah County Health Department Future Generations Collaborative
National Park Service: Fort Vancouver Historical Site
Neighborhood Partnerships
New Mexico Dept. of Health, Office of Primary Care & Rural Health
New Mexico Dept. of Health, Student Nutrition Activity Clinic
Northwest Parkinson's Fund
Northwest Portland Area Indian Health Board
NW Portland Area Indian Health Board
OHA Acute and Communicable Disease Prevention and Oregon's Emerging Infections Program
OHA Acute and Communicable Disease Prevention Program
OHA Breast and Cervical Cancer Screening Services
OHA HIV, STD, & TB Section
OHA Maternal & Child Health
OHA Oregon Genetics Program
OHA Public Health Division
OHSU Asian Health & Service Center
OHSU Casey Eye Institute Elk's Preschool Vision Screening Program
OHSU Department of Neurological Surgery
OHSU Department of Psychiatry Developmental Brain Imaging Laboratory
OHSU Dept. of Behavioral Neuroscience Fair Neuroimaging Lab
OHSU Digestive Health

OHSU Division of Arthritis & Rheumatic Diseases
OHSU Division of General Internal Medicine and Geriatrics
OHSU Doernbecher Children's Hospital
OHSU Executive Vice Provost's Office
OHSU Family Medicine/OCHIN Research Group
OHSU Institute for Development & Disability
OHSU Internal Medicine Clinic
OHSU Layton Aging and Disease Center
OHSU Moore Institute
OHSU Office of Human Resources
OHSU Oregon National Primate Center
OHSU Richmond Clinic
OHSU Women's Health Research & Policy
Oregon Academy of Family Physicians
Oregon Association of Hospitals and Health Systems
Oregon Community Health Information Network (OCHIN)
Oregon Department of Agriculture
Oregon Department of Education
Oregon Food Bank
Oregon Foundation for Reproductive Health
Oregon Health Authority
Oregon Health Care Quality Corporation
Oregon Health Latino Coalition
Oregon Health Policy and Research
Oregon Office on Disability & Health
Oregon Patient Safety Commission
Oregon Public Health Institute
Oregon Rural Practice-Based Research Network (ORPRN)
Oregon Tradeswoman, Inc.
OSU Family Community Health Program
OSU/OHSU School of Pharmacy
Our House of Portland Neighborhood Housing and Care
Outside In
Planned Parenthood of Maryland
Planned Parenthood of South Atlantic
Population Council
Population Services International
Portland VA Medical Center Operative Care Division

Portland Women's Crisis Line
Providence ElderPlace
Providence Health Systems Heart and Vascular Institute
PSU Finance and Administration
PSU Institute for Sustainable Solutions
PSU Student Food Pantry
PSU Student Health & Wellness
Sanofi Pasteur
Seattle and King County Public Health
Sexual Assault Resource Center
Sexual Awareness Resource Center
SPOON Foundation
Transition Projects, Inc.
Veteran's Affairs Northwest Health Network VISN 20
Veterans Health Administration
Washington Co. Health & Human Services: Research, Analytics, Informatics and Data
Washington County Public Health Department
Western States Center