

# **Biostatistics**

MS, MPH, PhD Degree Programs

Division of Biostatistics

## 2014-2015 Student Guidebook

UNIVERSITY  
OF MINNESOTA

**School of  
Public Health**

## **Welcome to the University of Minnesota School of Public Health!**

All students are responsible for knowing the rules and policies that govern their academic program. To this end, we are providing you with this guidebook which covers your specific academic program requirements. Please refer to it often.

Many Graduate School processes are in transition. Please stay in touch with your Program Coordinator as some paper processes will convert to electronic processes.

In addition, you are responsible for knowing University of Minnesota and School of Public Health policies and procedures that pertain to all students. Links to these policies and procedures can be found by clicking on the "Current Students" link at <http://www.sph.umn.edu/current/resources/>.

*The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.*

This publication can be made available in alternative formats for people with disabilities. Direct requests to the Office of Admissions and Student Resources, School of Public Health, MMC 819 Mayo, 420 Delaware Street SE, Minneapolis, MN 55455; 612.626-3500 or 800.774.8636.

---

# Table of Contents

---

|  |           |
|--|-----------|
| <b>University of Minnesota Calendar 2014-2015</b> .....  | <b>5</b>  |
| <b>Section 1 The School of Public Health</b> .....   | <b>6</b>  |
| 1.1 About the School .....   | 6         |
| 1.2 School of Public Health Office of Admissions and Student Resources .....                     | 6         |
| 1.3 Mentor Program .....   | 9         |
| 1.4 SPH Student SPHere .....   | 9         |
| 1.5 Complaints and Grievances .....  | 10        |
| 1.6 Field Experience Agreement .....   | 10        |
| 1.7 Minors and Interdisciplinary Concentration Areas .....                                       | 10        |
| 1.8 Community Engagement .....   | 10        |
| 1.9 Online Courses .....   | 11        |
| 1.10 Course Evaluations and Yearly Student Survey .....  | 11        |
| 1.11 Your Advising Team .....  | 11        |
| 1.12 Commencement Eligibility .....  | 12        |
| <b>Section 2 The University of Minnesota</b> .....   | <b>13</b> |
| 2.1 Mission .....  | 13        |
| 2.2 Twin Cities Campus .....   | 13        |
| 2.3 U of M Services .....  | 14        |
| <b>Section 3 Registration</b> .....  | <b>23</b> |
| 3.1 Full-Time Status .....   | 23        |
| 3.2 Registration Process .....   | 23        |
| 3.3 Grade Option Changes, Course Additions, Withdrawals, Evaluations, and Equivalency Exams .... | 24        |
| <b>Section 4 Tuition, Fees, Billing, and Finances</b> .....                                      | <b>28</b> |
| 4.1 Tuition and Fees .....   | 28        |
| 4.2 Billing .....  | 28        |
| 4.3 Financial Aid and Scholarships .....   | 28        |
| 4.4 Graduate Assistantships .....  | 29        |
| <b>Section 5 University Guidelines and Policies</b> .....  | <b>30</b> |
| 5.1 Student Responsibility and Conduct .....   | 30        |
| 5.2 University of Minnesota Board of Regents' Policies .....                                     | 30        |
| 5.3 Scholastic Dishonesty and Plagiarism .....   | 36        |
| 5.4 University Senate Uniform Grading and Transcript Policy .....                                | 37        |
| 5.5 Health Insurance .....   | 41        |
| 5.6 Leave of Absence .....   | 43        |
| 5.7 Privacy .....  | 43        |
| 5.8 Immunizations .....  | 44        |
| 5.9 Criminal Background Checks .....   | 44        |
| 5.10 Use of Human Subjects in Research .....   | 44        |

|                   |   |           |
|-------------------|---|-----------|
| 5.11              | International Student Requirements .....                                    | 46        |
| <b>Section 6</b>  | <b>Groups, Associations, and Societies .....</b>                            | <b>48</b> |
| 6.1               | Student Groups.....   | 48        |
| 6.2               | Public Health Related Associations and Agencies.....                        | 49        |
| 6.3               | Alumni Societies .....  | 49        |
| <b>Section 7</b>  | <b>Division of Biostatistics.....</b>                                       | <b>51</b> |
| 7.1               | Introduction .....  | 51        |
| 7.2               | Overview of Degree Programs .....   | 51        |
| 7.3               | Advising .....  | 52        |
| 7.4               | Internships .....   | 53        |
| 7.5               | Seminars.....   | 53        |
| 7.6               | International Student Requirements .....                                    | 53        |
| 7.7               | Teaching Assistant and Research Assistant Positions .....                   | 54        |
| 7.8               | Student Mailboxes .....   | 56        |
| 7.9               | Division Travel Policy for Biostatistics Students.....                      | 57        |
| <b>Section 8</b>  | <b>Biostatistics MS Degree Program.....</b>                                 | <b>57</b> |
| 8.1               | Biostatistics MS Competency Statement .....                                 | 57        |
| 8.2               | Requirements .....  | 58        |
| 8.3               | Written Examination .....   | 60        |
| 8.4               | Graduate Degree Plan.....   | 60        |
| 8.5               | Transferring from the MS to the PhD Program.....                            | 61        |
| 8.6               | Satisfactory Progress in the MS Program .....                               | 61        |
| 8.7               | The Plan B Project and Graduating.....                                      | 62        |
| <b>Section 9</b>  | <b>Biostatistics MS Plan A Degree Program .....</b>                         | <b>65</b> |
| <b>Section 10</b> | <b>Biostatistics MPH Degree Program .....</b>                               | <b>66</b> |
| 10.1              | Biostatistics MPH Competency Statement.....                                 | 66        |
| 10.2              | Requirements .....  | 67        |
| 10.3              | Other Degree Requirements .....   | 68        |
| <b>Section 11</b> | <b>Biostatistics PhD Degree Program .....</b>                               | <b>72</b> |
| 11.1              | Biostatistics PhD Competency Statement.....                                 | 72        |
| 11.2              | Requirements .....  | 73        |
| 11.3              | Minor Field .....   | 75        |
| 11.4              | Preliminary Written Examination .....                                       | 75        |
| 11.5              | Graduate Degree Plan.....   | 76        |
| 11.6              | Satisfactory Progress in the PhD Program.....                               | 76        |
| 11.7              | Preliminary Oral Examination and the Dissertation.....                      | 77        |
| 11.8              | Forms, the Final Oral Examination, and Graduating.....                      | 78        |
| <b>Section 12</b> | <b>Biostatistics Faculty with Graduate Education Responsibilities .....</b> | <b>80</b> |

---

## University of Minnesota Calendar 2014-2015

---

The official University Calendar can be found at [onestop.umn.edu](http://onestop.umn.edu).

### Fall Semester 2014

|           |              |  |
|-----------|--------------|--|
| August    | 20-22        | Equivalency Exams                            |
|           | 28           | SPH New Student Orientation                  |
|           | 29           | New PhD Student Reception                    |
| September | 1            | Labor Day holiday – University closed        |
|           | 2            | Classes begin                                |
| November  | 11           | Registration for Spring Semester 2015 begins |
|           | 27-28        | Thanksgiving holiday – University closed     |
| December  | 10           | Last day of instruction                      |
|           | 12-13, 15-18 | Final examinations                           |
|           | 18           | End of Fall semester                         |
|           | 25-26        | University Closed                            |
|           | 21           | Grades due                                   |

### Spring Semester 2015

|         |       |  |
|---------|-------|--|
| January | 14-16 | Equivalency Exams                              |
|         | 19    | Martin Luther King holiday – University closed |
|         | 20    | Classes begin                                  |
| March   | 16-20 | Spring break – no classes                      |
| May     | 8     | Last day of instruction                        |
|         | 11-16 | Final examinations                             |
|         | 16    | End of Spring Semester                         |
|         | 19    | Grades due                                     |
|         | 26    | May Intersession begins                        |

# 1. THE SCHOOL OF PUBLIC HEALTH

---

## 1.1 About the School

---

The mission of the School of Public Health is to preserve and enhance the health of the public through education, research, and service programs designed to discover and transmit new knowledge aimed at the prevention of disease and disability, the improvement of health, and the planning, analysis, management, evaluation, and improvement of systems for the delivery of health services.

Our school was founded in 1944, although public health courses have been offered at the University of Minnesota since its inception. We consistently rank among the top schools of public health in the country.

Through our education, research, and community outreach, we focus on improving the health of populations. We emphasize prevention of illness and injury, and we look at health through a multi-faceted prism that includes physiology, the environment, communities, economics, and public policy.

This interdisciplinary approach allows us to collaborate with many other schools throughout the University, including the College of Veterinary Medicine, the School of Dentistry, the College of Pharmacy, the Medical School, the H. Humphrey School of Public Affairs, the Carlson School of Management, School of Social Work, and Law School. By combining our expertise, we can explore innovative, far-reaching ways of maintaining and improving the health of the people in Minnesota and throughout the country and world.

### Notable accomplishments:

- Invented K Rations.
- Improved the recovery of World War II survivors through the Minnesota Starvation Study (1944).
- Established the connection between diet and heart disease in the Seven Countries Study (1967).
- Established the first U.S. Ph.D. program in epidemiology (1958).
- Conducts one of the largest HIV/AIDS studies in the world, involving 120 countries.
- Trains the majority of the public health workforce in the Upper Midwest.
- Was the first school of public health in the country to require a course in ethics.

### Academic Health Center (AHC)

The School of Public Health is one of the six schools and colleges that make up the Academic Health Center at the University of Minnesota. The others include the disciplines of medicine, dentistry, nursing, pharmacy, and veterinary medicine. Strong interdisciplinary centers and programs in bioethics, cancer, genomics, infectious disease, drug design, food safety, and spirituality and healing augment the broad range of professional health education and research efforts.

---

## 1.2 School of Public Health Office of Admissions and Student Resources

---

### Office Hours (Fall and Spring Terms)

Monday – Friday, 7:45 AM - 4:30 PM

### Office Hours (Summer)

Monday – Friday, 7:45 AM – 4:30 PM

Closed every day from 12:00 PM – 1:00 PM

### Location

Mayo Memorial Building, Room A395

### Telephone

612.626.3500 or 800.774.8636

### Fax

612.624.4498

### Email

sph-oasr@umn.edu

### Mailing Address

Office of Admissions and Student Resources  
School of Public Health  
Mayo Mail Code 819  
420 Delaware Street SE  
Minneapolis, MN 55455-0381

---

## Office of Admissions and Student Resources (OASR)

The Office of Admissions and Student Resources is a school-wide office that assists students with all phases of their academic journey. The OASR staff works closely with the program coordinators to create a set of school-wide and program-specific services that we hope meets your needs for high-tech and high-touch delivery. You will be interacting with us directly or indirectly throughout your education here.

We coordinate many functions including:

- Applications
- Orientation
- CoursEval
- Class Scheduling
- Student Tracking
- SPH Scholarships
- Registration
- Graduation Clearance
- Commencement

## Career Services

Career Services offers a variety of resources to assist you in your efforts to locate and apply for professional positions – from field experiences (internships) to fellowships to full-time career positions. Our mission is to provide professional, comprehensive, lifelong career services and resources to SPH students, post-docs, and alumni. Our goal is to facilitate the career development process to ensure confidence in conducting a competitive job search and helping to maximize each individual's career potential. As a student and later as an alumnus/alumna, you are able to take advantage of the following resources to help you achieve your career goals.

### Career Services Website

The Career Services Website at [www.sph.umn.edu/careers](http://www.sph.umn.edu/careers) has many links to help you start your new career, including:

- **Jobs / Internships:** Our online job posting system listing internships, graduate assistantships and fellowships, and full-time career opportunities ([www.ahc.umn.edu/sphjobs/](http://www.ahc.umn.edu/sphjobs/)).
- **Field Experiences:** This module, which is password-protected, is where students can start a new field experience learning agreement, complete a field experience scholarship application, search the database of past field experience sites, and access additional resources ([sph.umn.edu/students/current/fe/](http://sph.umn.edu/students/current/fe/)).
- **Alumni Networking Database:** A searchable *Alumni Networking Directory*, to help you connect with SPH alumnae all over the world ([sphalumni.umn.edu](http://sphalumni.umn.edu)).
- **Career Tips:** General career-related links and tip sheets on a variety of job-search related topics ([www.sph.umn.edu/careers/tipsheets/](http://www.sph.umn.edu/careers/tipsheets/)).
- **Blog:** Our Career Services Blog hosts several career-related posts for students and alumni ([sph.umn.edu/category/careers/](http://sph.umn.edu/category/careers/)).

### Individual Appointments

You may schedule individual appointments with Vic Massaglia and Darren Kaltved to discuss any career-related issues, from creating a top-notch resume to ideas for field experiences, interviewing, and negotiating job offers. To schedule an appointment, please email [sphjobs@umn.edu](mailto:sphjobs@umn.edu).

### Other Resources

Throughout the year, you will have the opportunity to take advantage of career-related events. In the fall, you may choose to attend the Etiquette Dinner, participate in the Mentor Program, and attend the Field Experience Fair. Other activities will be announced via the SPHere News, and may include employer visits, alumnae panel discussions, and campus-wide career fairs.

You are on your way to an exciting and fulfilling career! We look forward to helping you get started!

## Recruitment Services

Recruitment Services seeks to make the School of Public Health a welcoming place to all prospective students and is the center for recruitment activities at the School of Public Health. Recruitment staff - which includes Maggie Aftahi, Director of Admissions and Student Leadership Development and Sherlonda Clarke, Coordinator for Diversity Initiatives and Programs - meets with prospective students to learn about their interests and goals, and discusses the School of Public Health's learning opportunities. Recruitment Services also coordinates preview days, information sessions, diversity events and other special events, as well as attends career fairs and recruitment venues to meet with prospective students.

## OASR Staff

| Career Services      |   |              |  |
|----------------------|---|--------------|--|
| Darren Kaltved       | Assistant Director, Career Services                               | 612-626-4448 | <a href="mailto:dkaltved@umn.edu">dkaltved@umn.edu</a> |
| Vic Massaglia        | Director of Career Services                                       | 612-626-5443 | <a href="mailto:victorm@umn.edu">victorm@umn.edu</a>   |
| Recruitment Services |   |              |  |
| Maggie Aftahi        | Director of Admissions and Student Leadership Dev.                | 612-624-0601 | <a href="mailto:med@umn.edu">med@umn.edu</a>           |
| Sherlonda Clarke     | Coordinator for Diversity Initiatives and Programs                | 612-624-9970 | <a href="mailto:sdclarke@umn.edu">sdclarke@umn.edu</a> |
| Guy Piotrowski       | Coordinator for Applications and Admissions                       | 612-624-1991 | <a href="mailto:piotr005@umn.edu">piotr005@umn.edu</a> |
| Student Services     |   |              |  |
| Richard Archer       | Student Data Coordinator  | 612-624-6915 | <a href="mailto:arche071@umn.edu">arche071@umn.edu</a> |
| Carol Francis        | Registrar and Associate Director of Academic and Student Services | 612-624-6952 | <a href="mailto:franc004@umn.edu">franc004@umn.edu</a> |
| Katie Keyser         | Executive Operations/Student Support Specialist                   | 612-624-7660 | <a href="mailto:loas0001@umn.edu">loas0001@umn.edu</a> |
| Mary Ellen Nerney    | Assistant Dean of Educational Operations                          | 612-626-5005 | <a href="mailto:nerne002@umn.edu">nerne002@umn.edu</a> |

---

## 1.3 Mentor Program

---

Preparing for a career in public health extends well beyond the classroom. A vital part of that preparation can be learning from the experiences of others.

The School of Public Health boasts the largest mentor program of any public health school. Each fall we match about 200 students with alumni and other professionals who share their interests.

Students learn from the professional experiences of their mentors, and mentors play a role in training future public health leaders. These matches often prove to be enriching relationships for students and professionals alike.

For more information, go to [sphalumni.umn.edu/mentorprogram](http://sphalumni.umn.edu/mentorprogram).

---

## 1.4 SPH Student SPHere

---

Make use of the SPH Student SPHere (Commons) to relax or study with your student colleagues. All students actively registered in an SPH degree program have access to the SPH Student SPHere (Mayo A150) via their U-Card. The Student Commons has the following amenities:

- Locker room – Free lockers are assigned in the Office of Admissions and Student Resources (Mayo A395). Students need to renew their locker each year and provide their own lock.
- Kitchen area with tables, chairs, microwaves, refrigerators, sink, and a telephone for free local calls.
- Lounge area with couches, chairs, and wireless internet.
- Study room with tables, chairs, computers (with internet connectivity, Microsoft Office, SAS and STATA software) and a printer.

Please work together to ensure that the SPHere is a comfortable and safe place.

- Keep all areas of the SPHere clean in consideration of others.
- Please protect the security of access. Do not allow anyone to enter behind you that you do not know to be a SPH student. Never prop the door open for any reason. The student commons is for SPH students only.
- If you are aware of a breach of security or if you see something in the commons that needs repair, please report it to the OASR (A395 Mayo) as soon as possible.
- Avoid being alone in the commons during the evening or early morning.
- If you believe you are in danger or see improper activity in progress, call 9-1-1.

Printing in the SPHere

The School of Public Health (SPH) provides \$100 worth of printing (1,000 pages) for the Fall and Spring semesters on your U Card. This value can ONLY be used in the SPHere computer lab (Mayo A-151) and is not valid in any other campus computer lab, including libraries.

When you swipe your card at a print release station, UniPrint will show a balance on the screen. This balance is a combination of the print value given to you by SPH and your Gopher GOLD balance. In order to determine how much print value you have left, you need to subtract your Gopher GOLD balance from the balance shown on screen. Once the \$100 SPH Print Value is exhausted, printing costs will be deducted from your Gopher GOLD account. To view your current balance and transaction history or to add value to your Gopher GOLD account online, please visit [www.gophergold.umn.edu](http://www.gophergold.umn.edu). If you experience any printing issues or need to request a refund, please contact the lab attendant or call the SPH Office of Admissions and Student Resources at (612) 626-3500.

---

## 1.5 Complaints and Grievances

---

The SPH seeks to be aware of and responsive to student issues and complaints. There are numerous ways for you to channel your academic and student life concerns:

- Provide comments on the yearly student survey (in March).
- Meet with your advisor and/or program coordinator.
- Raise the issue with your program director or director of graduate studies, either individually or in a meeting set up for this kind of feedback.

The SPH takes all student concerns seriously and we welcome your input in any of these ways. If the matter is not handled satisfactorily by any of these methods, or if the issue is particularly widespread or serious, please make an appointment with Dr. Kristin Anderson, Associate Dean for Learning Systems and Student Affairs, at [ander116@umn.edu](mailto:ander116@umn.edu).

The University provides resources as well. Report incidents of bias, discrimination, or harassment to the University Office of Equal Opportunity and Affirmative Action at [www.eoaffact.umn.edu](http://www.eoaffact.umn.edu). For student issues that are not resolved through SPH channels or for which you seek external support, the Student Conflict Resolution Center will assist in resolving campus-based problems or concerns [www.sos.umn.edu](http://www.sos.umn.edu).

---

## 1.6 Field Experience Learning Agreement

---

All students pursuing a required field experience or summer residency must complete an online learning agreement prior to beginning the experience. The online form provides a streamlined process that is comprehensive for you, your preceptors, your faculty advisor and your program coordinator. Please refer to the current student website for this and other resources related to the field experience, [www.sph.umn.edu/current/fe/index.asp](http://www.sph.umn.edu/current/fe/index.asp). Students exploring international field experience opportunities need to begin the process six to eight weeks before departure, and need to be aware of requirements specific to international travel.

---

## 1.7 Minors and Interdisciplinary Concentration Areas

---

### Minors

SPH students pursuing an MHA, MPH, MS, PhD are eligible to declare a minor in other areas. For a listing of graduate level minors click on [www.catalogs.umn.edu/gradmajorsalpha.html](http://www.catalogs.umn.edu/gradmajorsalpha.html).

### Interdisciplinary Concentration Areas

SPH Master of Public Health students have the option to add an interdisciplinary concentration area to their program of study. The concentrations are Global Health (GHIC), Public Health Policy (PHPIC), and Health Disparities (HDIC). For more information and link to the required forms go to [www.sph.umn.edu/programs/ic/](http://www.sph.umn.edu/programs/ic/).

---

## 1.8 Community Engagement Agreement

---

Many students in the School of Public Health volunteer in the community. Liability insurance is available through the University provided that the student registers for PUBH 0020 (a zero credit class), and has the approval of their academic faculty advisor. Registration for PubH 0020 will be officially documented on the student's transcript; however, the zero credit course has no tuition, no fees, no credits, and no grades. It is important to understand that a zero credit registration for a community engagement activity is not a substitute for a required course or field experience.

Prior to registration, students are required to provide information about the experience by completing the Community Engagement Agreement available at [www.ahc.umn.edu/sphcommunity](http://www.ahc.umn.edu/sphcommunity). The agreement is complete once it has been approved by the student's advisor and the Student Data Coordinator.

To complete the Student Engagement Agreement a student must provide the following information:

Name of the organization

Address

Organization phone number

Supervisor within the organization

Description of the activity

Description of how this activity relates to their development as a public health professional

Semester and date of experience

Electronic signature of academic advisor

When the agreement is approved, the student will be contacted by email and provided with a registration permission number.

---

## 1.9 Online Courses

---

Moodle is the course management software system used by the University of Minnesota that enables instructors to create and manage Web-based learning materials and activities. Students use Moodle to access these materials and participate in learning activities via the web.

Once you register for online classes, you will be sent a welcome email. Generally, you will not have access to course sites until the first day of class. A general Moodle tutorial is available [uttc.umn.edu/training/tutorials/moodle/orientation/moodle-introduction/index.htm](http://uttc.umn.edu/training/tutorials/moodle/orientation/moodle-introduction/index.htm). This tutorial is not mandatory but may prove helpful to those with little or no experience with online courses.

---

## 1.10 Course Evaluations and Yearly Student Survey

---

### Course Evaluations

Students provide very important input into the continued development of the School of Public Health's teaching program. Students will be asked to complete evaluations for all SPH courses. Evaluations are done online at the end of each term.

### SPH Yearly Student Survey

Students also are strongly encouraged to evaluate and comment on the school and its programs through our annual end of year SPH Student Survey. The survey covers many aspects of student experiences including field placements, career services, financing, and overall School service.

### Career Survey

Recent graduates are encouraged to complete the Career Survey. The survey captures important employment information, compensation norms and contact information.

---

## 1.11 The Roles of Your Advising team

---

The School of Public Health provides advising that promotes collaboration among students, staff and faculty to enhance students' academic and professional development in the field of public health. The School's goal is to provide educational and experiential excellence that prepares students for successful careers improving the health of populations.

### DEFINING ADVISING

The School of Public Health is committed to creating and sustaining high quality advising in the following four areas:

1. **Administrative Advising:** advising on course planning and scheduling, policies, procedures and benchmarks of the degree program/major, SPH, and the University. Your program coordinator is your first point of contact for these questions.
2. **Academic Advising:** general guidance on topics related to program/major including, but not limited to, program focus (may include identifying appropriate course work options), project selection and career planning. Students find their faculty advisors, coordinators and career services staff helpful in answering these questions.
3. **Field Experience/Internship/Practicum Advising:** specific and targeted advising for field experience/internship/practicum development, placement and completion. Your faculty advisor can assist you as you select the type of field experience that would best match your goals. Career Services staff can help you to learn how to network with other students and alums to explore possible field experiences sites.
4. **Masters Project/Thesis/Plan A&B/Dissertation Advising:** specific and targeted direction on a master's project or a PhD dissertation including, but not limited to development, completion and in some cases publication. Your faculty advisor will assist you in developing a direction for your project or dissertation.

## **ADVISING EXPECTATIONS FOR STUDENTS**

SPH students are expected to:

Regularly read and respond to University email (ideally once per day); email is the official mode of communication at the University of Minnesota.

- Review program objectives and educational documents at least once per semester, (i.e. Student Guidebook, etc.), or when directed by program coordinator or program director/DGS; students are responsible for knowing the requirements of the degree program.
- Actively contribute to a welcoming and supportive SPH climate.
- Initiate meetings with advisor(s) at least once per semester; regularly communicate with faculty advisor(s) and/or program coordinator about program progress.
- Respond to inquiries from faculty or staff in a timely manner (ideally within 5 – 7 business days).
- Behave in a professional and courteous manner; fulfill educational and advising commitments, such as appointments, project deadlines, etc.

---

### **1.12 Commencement Eligibility**

---

Students enrolled in MPH, MHA or MS programs are eligible to participate in the May Commencement ceremony if they are on-track to complete course credit requirements and the culminating experience by the end of the spring or summer semester, or have completed the necessary course credit requirements and culminating experience the previous summer or fall semester.

Exceptions may be granted on an individual basis per review by the program coordinator and program director. To seek an exception, contact your program coordinator.

## 2. THE UNIVERSITY OF MINNESOTA

---

### 2.1 Mission

---

The University of Minnesota, founded in the belief that all people are enriched by understanding, is dedicated to the advancement of learning and the search for truth; to the sharing of this knowledge through education for a diverse community; and to the application of this knowledge to benefit the people of the state, the nation, and the world. The University's mission, carried out on multiple campuses and throughout the state, is threefold:

- 1. Research and Discovery**  
Generate and preserve knowledge, understanding, and creativity by conducting high-quality research, scholarship, and artistic activity that benefit students, scholars, and communities across the state, the nation, and the world.
- 2. Teaching and Learning**  
Share that knowledge, understanding, and creativity by providing a broad range of educational programs in a strong and diverse community of learners and teachers, and prepare graduate, professional, and undergraduate students, as well as non-degree-seeking students interested in continuing education and lifelong learning, for active roles in a multiracial and multicultural world.
- 3. Outreach and Public Service**  
Extend, apply, and exchange knowledge between the University and society by applying scholarly expertise to community problems, by helping organizations and individuals respond to their changing environments, and by making the knowledge and resources created and preserved at the University accessible to the citizens of the state, the nation, and the world.

In all of its activities, the University strives to sustain an open exchange of ideas in an environment that embodies the values of academic freedom, responsibility, integrity, and cooperation; that provides an atmosphere of mutual respect, free from racism, sexism, and other forms of prejudice and intolerance; that assists individuals, institutions, and communities in responding to a continuously changing world; that is conscious of and responsive to the needs of the many communities it is committed to serving; that creates and supports partnerships within the University, with other educational systems and institutions, and with communities to achieve common goals; and that inspires, sets high expectations for, and empowers individuals within its community.

### 2.2 Twin Cities Campus

---

The University of Minnesota is a world-class university, known globally as a leader in teaching, research, and public service. It is both a land-grant university, with a strong tradition of education and public service, and a major research institution, with scholars of national and international reputation. UMNTC consistently ranks among the top 20 public universities in the United States. The classic Big 10 campus, located in the heart of the Minneapolis-St. Paul metropolitan area, provides an exceptional setting for lifelong learning.

The University community is a broad mix of ethnic backgrounds, interests, and cultures. Students come from all 50 states and from more than 100 foreign countries. Many small communities of students, faculty, and staff help to create a welcoming atmosphere on campus.

UMNTC is also a thriving center for culture and the arts, featuring outstanding galleries, museums, concerts, theatre productions, and public lectures. For sports fans, the Golden Gophers offer all the spirit and excitement of Division I college athletics.

The campus in Minneapolis is located just a few minutes east of downtown. Nestled along the bluffs of the Mississippi River, buildings in Minneapolis range from the ultramodern Weisman Art Museum to the classic and stately Northrop Memorial Auditorium. A few miles to the east in St. Paul, rolling hills and quiet lawns create a more rural setting. The Minneapolis and St. Paul parts of the campus are connected by a convenient campus shuttle system.

UMNTC also provides a life beyond the campus like few other Big 10 universities can. The dynamic communities of Minneapolis and St. Paul offer something for everyone - a nationally recognized art and theatre community, a thriving entertainment industry, a host of Fortune 500 companies, four glorious seasons of outdoor recreation, exciting professional sports, shopping, and restaurants for every taste--all located close to campus.

---

## 2.3 U of M Services

---

### 2.3.1 First Steps

#### One Stop

[onestop.umn.edu](http://onestop.umn.edu)

The first resource for students having a question about the University is [onestop.umn.edu](http://onestop.umn.edu). Please bookmark this site. One Stop offers links to a variety of online services and information about the University including course information, grades, registration, finances, transcripts, and general services.

#### Email Accounts

[www.umn.edu/initiate](http://www.umn.edu/initiate)

Each student attending the University of Minnesota must set-up a student internet/email account by going to [www.umn.edu/initiate](http://www.umn.edu/initiate) or by calling the Technology Help Line at 612.301.4357 (1-HELP).

**All SPH students are required to use their University of Minnesota email account.** Course lists, immunizations, billing statements, financial aid updates, and other important information will be sent via the U of M student email address. It is strongly recommended that students use their U of M email account and do not transfer it to a personal email account.

The School of Public Health relies heavily on email notices to students, staff, and faculty. To keep current on upcoming events, job announcements, new course announcements, scholarships, internships, the SPH newsletter, or good opportunities, etc., students should check their email regularly.

Students can retrieve email messages in many locations including the SPH student commons, SPH Career Resource Center, and SPH division computer facilities. Other computer facilities are located in numerous locations on campus; see [www.oit.umn.edu/computer-labs/](http://www.oit.umn.edu/computer-labs/) for a list.

**Note:** Students who choose to forward their University email account to another email account are still responsible for all the information, including all attachments, sent to their University email account.

The U has expanded technological capacity to allow free lifetime access to University email. This allows students to use the U of M email address for personal or professional purposes even after graduation. (Imagine never having to subscribe to an email service or memorize another address! In addition, imagine being able to stay in touch with your student colleagues wherever you and they may journey.)

The account must be accessed at least once every three months through the [Web Interface](#) to keep the email account active. If the account remains suspended for 90 days, it is then deleted. All data associated with the account will be deleted and cannot be recovered. If the user contacts the Service Desk [[help@umn.edu](mailto:help@umn.edu)] after the account is deleted, the account can be recreated without any content.

#### U Card

[www.umn.edu/ucard](http://www.umn.edu/ucard)

The U Card identifies you as a student on the Twin Cities campus. Your first U Card is free and can be obtained at the U Card Office. Bring your driver's license, state ID, or passport and be prepared to have your picture taken.

##### U Card Main Office

G22 Coffman Memorial Union  
300 Washington Avenue SE  
Phone 612.626.9900  
Weekdays: 8:30 to 4:00pm

The U Card is your key to all sorts of campus services and facilities. Your U Card can also be used as your ATM card through TCF Bank.

Since the U Card never expires, you should hold on to it even after you leave the University. If you ever return as a student, staff or faculty member, your card will still be valid.

Use your U Card for:

- Access to the SPHere and lockers
- Campus ID purposes
- All your checking needs
- Making Gopher GOLD purchases
- Charging textbook purchases at the U of M Bookstores to your student account

Checking out library materials

Entering the recreation center, golf course, computer labs, buildings, and residence hall dining rooms

Art and athletic ticket discounts (available at place of purchase)

Accessing art materials, student employment, business school services, and more

Report lost or stolen U Cards immediately. There is a \$25.00 replacement fee for lost, stolen, or damaged U Cards. The fee can be paid by cash or check at all U Card Office locations. Debit, check or credit cards are not accepted.

### **LinkedIn**

LinkedIn ([www.linkedin.com](http://www.linkedin.com)), the world's largest professional network on the Internet, helps you make better use of your professional network through the exchange of knowledge, ideas, and opportunities with a broader network of professionals. Your professional network of trusted contacts gives you an advantage in your career, and is one of your most valuable assets in any job search. According to the National Association of Colleges and Employers over 85% of recruiters use LinkedIn or Google to search candidates, and 46% use LinkedIn to research new hires. LinkedIn includes executives and employees from all Fortune 500 companies, all Fortune 100 companies (including 82 of the 100 who use it for hiring purposes), and over 200 million total companies.

The School of Public Health encourages ALL students to use LinkedIn as an invaluable career and networking resource. Not only will this benefit and enhance your experience now, but will serve as a life-long resource in advancing your career. To help you get started, check out our LinkedIn Guide (<http://www.sph.umn.edu/careers/tipsheets/linkedin/>). To learn more about connecting with the School of Public Health through LinkedIn and social media, please visit: <http://www.sph.umn.edu/socialmedia>.

### **Parking and Transportation**

[www.umn.edu/pts/](http://www.umn.edu/pts/)

The University's Parking and Transportation website has a wealth of information concerning getting to and around campus. Parking is extremely limited on campus and we encourage students to bus, bike, or walk if possible.

#### **Campus Shuttle Buses**

Campus shuttle buses run at no charge between the East and West Bank and St. Paul campuses with varying routes and times. Current schedule information is posted on the above listed website as well as various locations throughout the Twin Cities campus.

#### **Metro Transit and the U Pass**

Take advantage of the deeply discounted Metro Transit bus pass. U-Pass is the ultimate transit pass that provides unlimited rides 24 hours a day. It is valid on all regular bus and light-rail train routes, as well as express, local, limited-stop, or Downtown Zone routes. It may not, however, be used on some special event services. Information can be found at [www1.umn.edu/pts/index.html](http://www1.umn.edu/pts/index.html).

#### **Parking**

Contract parking for students is sold through a lottery system each semester. Locations may vary but include spaces on the East Bank, West Bank, and St. Paul campuses. Hourly parking is available in several University public facilities. Parking rates vary depending on proximity to campus and the facility type. Visit the Parking and Transportation website, [www1.umn.edu/pts/](http://www1.umn.edu/pts/), or call 612.626.PARK (7275) for more information.

The Motorist Assistance Program offers free services (unlocking vehicles, jump-starts, changing flat tires, and referral to a service station) to all customers parked in U parking facilities. Hours are Monday through Thursday from 7 a.m. to midnight, Friday from 7 a.m. to 10 p.m. (Service is not available on weekends or official University holidays). Call 612.626.PARK for motorist assistance or any other questions.

Disability parking is available in many parking facilities and metered areas. Use of these designated spaces requires a state-issued permit or license plate. For additional information, call the State of Minnesota at 651.296.6911 or Disability Resource Center at 612.624.4037.

### **Bookstore**

[www.bookstore.umn.edu](http://www.bookstore.umn.edu)

The University of Minnesota Bookstore, located in Coffman Union, sells texts for all Public Health courses. Course materials can also be ordered online.

## Housing

The University's Office of Housing & Residential Life is the best resource for finding housing on or near campus.

[www.housing.umn.edu](http://www.housing.umn.edu)

## Maps

Find the way to any University building.

[campusmaps.umn.edu/tc/](http://campusmaps.umn.edu/tc/)

## Digital Signage

The School of Public Health had three different digital sign's that provide information specific to the School of Public Health students. These can be found on the 3<sup>rd</sup> floor of the Mayo building – right near the Dean's office Mayo A302, the student SPHere Mayo A150, and the 3<sup>rd</sup> floor (Lobby level) of the WBOB building.

## 2.3.2 Health and Well Being

### Boynton Health Services

[www.bhs.umn.edu](http://www.bhs.umn.edu)

Boynton Health Services offers comprehensive medical services for students, faculty, and staff.

#### Clinics

- Dental Clinic
- Eye Clinic
- Int'l Travel Clinic
- Mental Health Clinic
- Sports Medicine Clinic
- Women's Clinic

#### Services

- Contraceptive Services
- Immunization Services
- Massage Therapy Services
- Nutrition Services
  - Pediatric Services Immunizations
  - Nursing Mothers Room

#### Testing Services

- HIV Testing and Counseling
- Pregnancy Testing
- STI Testing

#### General Care

- Pharmacy
- Physical Exams

▪ Primary Care/Urgent Care **Boynton also offers a variety of programs and classes including:**

- Alcohol & Other Drugs Presentations
- Birth Control Classes
- CPR/First Aid Classes
- Eating-Disorders Program
- HIV Testing and Counseling
- Smoking Cessation
- Stress Management

### **Mental Health Resources**

Financial challenges, isolation, cultural changes, academic stress, and other pressures on graduate students can create health issues. Please seek assistance before you feel overwhelmed. Resources include:

Boynton Health Service Mental Health Clinic, [www.bhs.umn.edu/services/mentalhealth.htm](http://www.bhs.umn.edu/services/mentalhealth.htm).

International Student and Scholar Services counseling. [www.isss.umn.edu/office/advising/personal.html](http://www.isss.umn.edu/office/advising/personal.html)

Your advisor or program coordinator can also help lead you to appropriate resources.

### **Smoke-free University**

The University of Minnesota, Crookston, Duluth, Rochester, and Twin Cities are smoke- and tobacco-free campuses. All students, staff, faculty, and visitors are prohibited from smoking and using, selling, free distributing, and advertising tobacco products and electronic cigarettes in all facilities and on all University property.

The success of this policy will depend upon the thoughtfulness, consideration, and cooperation of everyone on campus, including tobacco-users and non-users. All members of the University community are responsible for enforcing this policy. Students, faculty, staff, and visitors who violate this policy should be reminded of the policy and asked to comply. Repeated violation of this policy may be cause for disciplinary action in accordance with applicable student or employee codes of conduct. Visitors who refuse to comply with this policy may be asked to vacate campus property.

### **The Aurora Center**

[www.umn.edu/aurora](http://www.umn.edu/aurora)

The Aurora Center for Advocacy and Education provides crisis intervention and advocacy services to victim/survivors of sexual and relationship violence, harassment and stalking. The staff and volunteers are also available to provide prevention training and education on a variety of issues.

### **Nursing Mothers' Room**

[www.bhs.umn.edu/east-bank-clinic/nursing-mothers-room.htm](http://www.bhs.umn.edu/east-bank-clinic/nursing-mothers-room.htm)

Spaces are available on campus offering private and comfortable rooms that are designed specifically for nursing mothers to be able pump and store breast milk. This service, offered through Boynton Health Services, requires a brief orientation for users to familiarize themselves with the rooms. For addition information or questions please email Barry Standorf at [bstandorf@bhs.umn.edu](mailto:bstandorf@bhs.umn.edu)

### **Recreation & Wellness Center**

[recwell.umn.edu/](http://recwell.umn.edu/)

The University Recreation and Wellness Center opened its doors in 1993, and is commonly referred to by students as the Rec Center. An expansion to the original building opened in 2013. Located on the University of Minnesota's East Bank Campus, the facility serves between 3,000 and 5,000 patrons on an average weekday during the academic year. The Department of Recreational Sports also offers opportunities for the following:

- Aquatics
- Fitness
- Golf
- Intramurals
- Outdoor Recreation
- Sport Clubs
- Wellness
- Youth Programs

### **Dining**

[www.dining.umn.edu/](http://www.dining.umn.edu/)

University Dining Services offers a wide variety of dining experiences throughout the Twin Cities campus. The East Bank Campus offers several University Dining Service locations.

## **2.3.3 Diversity**

### **Diversity and Inclusiveness**

The University of Minnesota (University) is committed to the principles to achieve excellence through equity and diversity. It is believed that a diverse student body enhances the academic and social environment for all students and prepares students to thrive in an increasingly diverse workforce and society. Equal education access is critical to preparing students for the responsibilities of citizenship and civic leadership in a heterogeneous society. The University will provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status,

disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. The University will also establish and nurture an environment for faculty, staff, students, and visitors that actively acknowledges and values equity and diversity and is free from racism, sexism, ageism, homophobia, and other forms of prejudice, intolerance, or harassment.

The global, population-based nature of public health demands that the School of Public Health (SPH) seek and train students of all racial, ethnic, economic and educational backgrounds. We believe such diversity enriches the learning experience and helps build excellence in public health leadership. The SPH is dedicated to providing our students with a supportive and welcoming academic experience in and out of the classroom. Our Diversity Matters series and Taste Diversity ([sph.umn.edu/taste-diversity-2014-menu-april-7/](http://sph.umn.edu/taste-diversity-2014-menu-april-7/)) programs are designed to highlight diverse issues that impact public health professionals.

We also strive to create a community that is actively engaging in the areas of diversity and inclusiveness of its students, faculty, staff and programs to create an excellent educational environment. The SPH defines inclusiveness as all-embracing of the fullness of humanity. Our goal is to celebrate the differences and to help foster unity within the SPH community. This sense of inclusiveness recognizes that diversity is not limited to a select number of categorical elements of a person but encompasses all attributes.

The U of MN SPH Coordinator for Diversity Initiatives and Programs, Sherlonda Clarke, works with students, staff, faculty, and community members to enhance diversity within the SPH. Her office is located in A395-3 Mayo Memorial Building or you can contact her at [sdclarke@umn.edu](mailto:sdclarke@umn.edu) or at 612-624-9970.

For more information please visit:

- University policy library - [regents.umn.edu/sites/default/files/policies/Equity\\_Diversity\\_EO\\_AA.pdf](http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EO_AA.pdf)
- Office for Equity and Diversity - [diversity.umn.edu/eoaa/home](http://diversity.umn.edu/eoaa/home)
- SPH website on Diversity in Minnesota - [www.sph.umn.edu/prospective/diversity/](http://www.sph.umn.edu/prospective/diversity/)

In addition, the University has several offices across campus whose purpose is to support underrepresented students and promote diversity. The following is a list of some of those offices.

### **Disability Resource Center**

[diversity.umn.edu/disability/](http://diversity.umn.edu/disability/)

Location: 108 McNamara Alumni Center, 200 Oak Street SE (East Bank)  
Phone: (612) 626-1333 (Voice/TTY)

The Disability Resource Center promotes access and equity for students with disabilities (e.g., physical, learning, psychiatric, sensory or systemic) They exist to ensure that students, faculty and staff have access to all the University has to offer and equal opportunities to participate in the many interesting activities on campus. Their goal is to ensure that you have access to all the learning opportunities you choose, whether in class or at work, or participating in the wide range of social and cultural experiences the University offers. Students are responsible for contacting the Disability Resource Center for more information or to arrange accommodations.

### **Diversity in Graduate Education**

[diversity.umn.edu/gradededucation/](http://diversity.umn.edu/gradededucation/)

Location: 333 Johnston Hall, 101 Pleasant Street SE (East Bank)  
Phone: (612) 625-6858

The Office for Diversity in Graduate Education (ODGE) coordinates and leads the University's initiatives in the recruitment, funding, retention and graduation of a diverse graduate and professional student body. Additionally, ODGE works closely with The Graduate School and other units connected to diversity and multiculturalism.

### **GLBTA Programs Office**

[diversity.umn.edu/glbta/](http://diversity.umn.edu/glbta/)

Location: 46 Appleby Hall, 128 Pleasant Street SE (East Bank)  
Phone: (612) 625-0537

Through its various services, the Gay, Lesbian, Bisexual, Transgender, Ally (GLBTA) Programs Office is dedicated to improving campus climate for all University constituents by developing and supporting more inclusive understandings of gender and sexuality. GLBTA Programs Office seeks to build and bridge

communities that welcome and affirm people to be their whole selves, honoring their multiple identities and life experiences.

### **International Student and Scholar Services**

[www.issv.umn.edu/](http://www.issv.umn.edu/)

Location: 109 Hubert H. Humphrey School, 301 19<sup>th</sup> Avenue S (West Bank)

Phone: (612) 626-7100

International Student and Scholar Services (ISSS) is the office dedicated to serving the University international community. Its primary mission is to assist international students and scholars in successfully accomplishing the goals that brought them to the University, by using all available resources. Services include:

- Counseling and advising
- Immigration and visa regulation advising
- Newsletters
- Career services
- Academic opportunities for university students
- Tax return information

### **Multicultural Center for Academic Excellence**

[diversity.umn.edu/multicultural/](http://diversity.umn.edu/multicultural/)

Location: 140 Appleby Hall, 128 Pleasant Street SE (East Bank)

Phone: (612) 624-6386

The Multicultural Center for Academic Excellence (MCAE) is a campus-wide resource that promotes an inclusive atmosphere to foster and enrich multicultural understanding among all members of the University community. MCAE's commitment to creating such a climate is driven by a student-first culture in which students are the highest priority.

### **Office of Equity and Diversity**

[diversity.umn.edu/](http://diversity.umn.edu/)

Location: 432 Morrill Hall, 100 Church Street SE (East Bank)

Phone: (612) 624-0594

The mission of the Office of Equity and Diversity (OED) is to leverage the transformative power of equity and diversity to advance excellence in teaching, research and community engagement at the University of Minnesota. OED envisions a University where equity and diversity are:

1. Integrated into the work and lives of every student, faculty and staff member.
2. Recognized as core institutional values, and will inform thinking, policies and practices throughout the University.
3. Inherently intertwined with academic excellence and the development of leaders for a globally inclusive society.

### **Office of Equal Opportunity and Affirmative Action**

[diversity.umn.edu/eoaa/](http://diversity.umn.edu/eoaa/)

Location: 274 McNamara Alumni Center, 200 Oak Street SE (East Bank)

Phone: (612) 624-9547

The Office of Equal Opportunity and Affirmative Action (EOAA) was founded in 1972 to ensure that all University community members uphold federal and state civil rights laws and regulations, as well as University equal opportunity policies. The EOAA Office envisions a University community that is equitable-one that values the diversity of its workforce and student body and is free from discrimination and harassment.

### **Student Conflict Resolution Center**

[www.sos.umn.edu/](http://www.sos.umn.edu/)

Location: 254 Appleby Hall, 128 Pleasant St. SE (East Bank)

Phone: (612) 624-7272

The Student Conflict Resolution Center (SCRC) offers informal and formal conflict resolution services to resolve students' University-based problems and concerns. An ombudsman provides confidential, neutral and informal options. An advocate is available to assist students in formal grievance or disciplinary proceedings.

### **Women's Center**

[diversity.umn.edu/women/](http://diversity.umn.edu/women/)

Location: 64 Appleby Hall, 128 Pleasant Street SE (East Bank)

Phone: (612) 625-9837

The Women's Center advances equity for women students, staff, faculty and alumnae across identities. The Women's Center increases connections for women's success, cultivates socially responsible leaders and advocates for organizational culture change toward excellence for all.

## **2.3.4 Academic**

### **University Libraries**

[hsl.lib.umn.edu/biomed](http://hsl.lib.umn.edu/biomed)

The Bio-Medical Library, located in Diehl Hall, contains materials in the areas of allied health, medicine, mortuary science, nursing, pharmacy, public health, and the basic life sciences. In addition the library provides numerous resources and services such as library instructional classes, research workshops, reference consultations, library mediated searches, and citation clarification. The Mathematics library (<https://www.lib.umn.edu/math>), located in Vincent Hall, contains materials in the area of mathematics and statistics.

Information on other University libraries and collections can be found at [www.lib.umn.edu](http://www.lib.umn.edu).

The Outreach Librarian for the School of Public Health is Anne Beschnett, her office hours are between Monday and Friday, 8-4:30. Please email her or call to set up an appointment: [besch015@umn.edu](mailto:besch015@umn.edu) or 612-625-9603.

### **Center for Teaching and Learning Services**

[www1.umn.edu/ohr/teachlearn/](http://www1.umn.edu/ohr/teachlearn/)

The Center for Teaching and Learning Services works to enhance the culture of teaching and learning through campus-wide workshops, courses, and facilitated discussions about teaching and learning.

### **Center for Writing**

[writing.umn.edu/](http://writing.umn.edu/)

The Center for Writing provides free writing instruction for all University of Minnesota students at all stages of the writing process. In collaborative consultations, we help students develop productive writing habits and revision strategies. This may be through appointments or online.

The Online Writing Center offers online tutoring to students taking Writing-Intensive courses at the University of Minnesota. Online tutoring is conducted via the Web, and consists of comments and feedback offered by our experienced writing tutors.

Tutors are trained in fields such as composition, speech communication, scientific and technical communication, and rhetoric, and many of them are instructors at the university. Tutors review the writing you submit by offering comments and suggestions for improvement; however, they will comment mainly on the areas students specify.

### **Computing Services**

[it.umn.edu/services/](http://it.umn.edu/services/)

The University's Academic and Distributed Computing Services (ADCS) website provides a wealth of information and services available to students including:

Computer Lab Locations  
Computer Rental  
Internet Services and Email Accounts  
Computers and Software for Purchase

Training  
Support and Help Services  
Resources and Useful Links  
Security

## myU Portal

[myu.umn.edu](http://myu.umn.edu)

The myU web portal permits you to:

- Sign-in once to access all major applications.
- Receive personalized information.
- Create a custom news page from over 200 news channels.
- Set-up secure areas to discuss, share, and collaborate.

myU can be personalized based on your role as a student in the School of Public Health and Academic Health Center (AHC). The myU portal view currently serves students, faculty, and staff in AHC collegiate units. It provides information to students in AHC affiliated colleges that is personalized to the level of specific academic program and, in some cases, to their year in the program. The School of Public Health and AHC are using myU as a method of communicating with students.

## University Counseling and Consulting Services

[www.uccs.umn.edu/](http://www.uccs.umn.edu/)

Provides the following services to the University community:

- |   |                                     |
|---|-------------------------------------|
| Career Development Center                     | Groups and Workshops                |
| Consultation, Outreach, and Diversity Program | Learning and Academic Skills Center |
| Counseling Program                            | Academic Support Group              |

## 2.3.5 Campus Safety

### Police

[www.umn.edu/umpolice/](http://www.umn.edu/umpolice/)

The University of Minnesota has a full service police department in the event of an emergency dial 911.

### Security Monitor Program

[www1.umn.edu/police/escort.html](http://www1.umn.edu/police/escort.html)

The Security Monitor Program offers a walking/biking escort service to and from campus locations and nearby adjacent neighborhoods. This service is available at no charge to students, staff, faculty, and visitors to the University of Minnesota – Twin Cities campus. To request an escort by a trained student security monitor, please call 612.624.WALK (9255) shortly before the desired departure time and walk safe.

### TXT-U Emergency Notification

[www1.umn.edu/prepared/txtu/](http://www1.umn.edu/prepared/txtu/)

TXT-U is the University of Minnesota's emergency notification text messaging system. Students, faculty, and staff can stay informed about critical campus safety information by registering to receive TXT-U messages.

TXT-U will be used infrequently and specifically for real emergency situations.

### Campus Wide Emergency Alert System

The Campus Wide Emergency Alert System includes 21 outdoor loudspeakers mounted on poles and rooftops on the West Bank and East Bank and in St. Paul. The system will allow for an alert tone and vocal instructions in the event of a campus emergency.

## 2.3.6 Social

### Student Unions and Activities Office

[www.sua.umn.edu](http://www.sua.umn.edu)

The Student Unions and Activities Office is the University of Minnesota's center for campus-wide programs and activities, leadership opportunities, skill development, and student organization training, advising and registration.

More than 400 student groups on campus are registered with the Student Unions and Activities Office, including academic societies, cultural centers, sports clubs, political action groups and fraternities and sororities. These organizations provide students with endless involvement opportunities and the chance to interact with others who share a similar interest.

### Campus Events

[events.umn.edu/](http://events.umn.edu/)

Website for events hosted by the University of Minnesota.

### School of Public Health Events

[www.sph.umn.edu/news/](http://www.sph.umn.edu/news/)

Website for events specific to the School of Public Health.

[hub.ahc.umn.edu/news-capsules](http://hub.ahc.umn.edu/news-capsules)

### Academic Health Center Events

News and events specific to the Academic Health Center.

### 2.3.6 Additional Resources

**Post Office**

[sua.umn.edu/services/postal-stations/](http://sua.umn.edu/services/postal-stations/)

A full-service U.S. Post Office is located on the ground floor of Coffman Union.

**Copies/Fax Machines**

[www.printing.umn.edu](http://www.printing.umn.edu)

A University Copy Center is located in Mayo D104 as well as other locations throughout the University.

**Student Conflict Resolution Center**

[www.sos.umn.edu](http://www.sos.umn.edu)

The Student Conflict Resolution Center assists students in resolving campus-based problems and concerns through coaching, intervention and mediation by Ombudsman and Advocacy staff.

**Student Legal Service**

[www.umn.edu/usls/](http://www.umn.edu/usls/)

University Student Legal Service (USLS) functions to provide legal representation and legal advice to eligible students on the Twin Cities campus.

## 3. REGISTRATION

---

### 3.1 Full-Time Status

---

All SPH students need to register for at least six (6) credits in fall and spring semester to be considered full-time. In summer MHA and MPH students must be registered for 6 credits to be considered fulltime and 3 credits to be considered halftime.

**Note:** The Office of Financial Aid or external agencies may require students to be registered for more than three or six credits to be considered full-time; check with these agencies to verify their requirements.

---

### 3.2 Registration Process

---

#### Step One

View the Class Schedule for each term on the web at [onestop.umn.edu](http://onestop.umn.edu). Select courses for the term with your advisor before registering (make an appointment at the earliest convenient time). Check for holds e.g. immunizations, transcript, etc.

**Note:** 5000 through 8000-level courses are considered graduate-level. 1000 and 3000-level courses are for undergraduates and will not receive approval for graduate credit. Under some circumstances – with approval of the student’s major field – 4000 – level courses may also be applied toward a MPH degree as long as they are taught by a member of the graduate faculty.

#### Step Two

After selecting your courses, run through the checklist below before registering. Frustrating delays can be avoided by following these hints:

- If instructor consent is necessary for any of your selected course(s), get a permission number from the course instructor or his/her designee before registering. This number permits registration for the course through the second week of the semester; after the second week, it expires. Note that the number is specific to the student it is given to and the course requiring instructor consent. Once a number is used to register, it becomes invalid and cannot be used for another course or by another student.
- You will not be able to register if you have any holds on your University record. Notice of any hold, including the name of the department or office where it may be cleared, is available at [onestop.umn.edu](http://onestop.umn.edu).
- You can find your registration queue date and time on the web at [onestop.umn.edu](http://onestop.umn.edu).
- You will need your x.500 login and password to register. If you have forgotten your password, call 612.301.4357 to have your password reset. You can also call this number if you have problems logging in to register.

#### Step Three

Register via the web at [onestop.umn.edu](http://onestop.umn.edu) or go to the University’s One Stop Student Services Center in 200 Fraser Hall on the East Bank Campus to register in person. Students having difficulty with self-registration should contact the registration help-line at 612.624.1111 (M-F 8:00-4:00) or email [helpingu@umn.edu](mailto:helpingu@umn.edu). You may also contact your Program Coordinator or the School of Public Health Office of Admissions and Student Resources at 612.626.3500. Please note the following when registering:

- Most courses give the option of either an A/F or S/N (pass/fail) grading option. Be sure to select the grade option desired for the course. Note that there may be a limit to the number of credits a student can take S/N (pass/fail); see the major section of this guidebook for more information. Stricter policies may be enforced by individual majors/programs. There is a strict and early deadline for when grading options can be changed.
- Some courses have variable credits. Before selecting the number of credits, students should make sure they are in agreement with the instructor as to the number of credits appropriate for the work proposed.

---

## 3.3 Grade Option Changes, Course Additions, Withdrawal and Evaluations

---

### Change of Grade Option

For full-semester courses, students may change their grade option, if applicable, through the second week of the semester. After that, grading options cannot be changed. Grade option change deadlines for other terms (i.e. summer and half-semester) can be found at [onestop.umn.edu](http://onestop.umn.edu). For more information about grading policies, see section 5.4 University Senate Uniform Grading and Transcript Policy.

### Adding a Course

No approval is required to add a course during the first week of classes. Instructor approval is required during week two. After the second week of classes, instructor and college scholastic committee approval is required. Deadlines for adding a course for other terms (i.e. summer and half-semester) can be found at [onestop.umn.edu](http://onestop.umn.edu).

### Registration Exception Form

Students must consult with their program coordinator prior to submitting any paper or electronic forms. After this consultation, students must complete a formal request to change their registration (e.g., add, drop, change your grade basis) after a deadline or to register for more than 18 credits. Please ask your program coordinator for the appropriate form. Approval is not automatic.

### Course Cancellation and Withdrawal

Students should refer to the Refund and Drop/Add Deadlines for the particular term at [onestop.umn.edu](http://onestop.umn.edu) for information and deadlines for withdrawing from a course. As a courtesy, students should notify their instructor and, if applicable, advisor of their intent to withdraw.

Students wishing to withdraw from a course after the noted final deadline for a particular term must contact the School of Public Health Office of Admissions and Student Resources at [sph-oasr@umn.edu](mailto:sph-oasr@umn.edu) for further information.

### Repeat and Bracket Course Policy

An officially admitted SPH student (MHA, MPH, MS, PhD, and Certificate Programs) may repeat a public health course only **once**.

MHA, MPH, and Certificate students have the option to bracket a particular course (with the same course number) **one time**. Bracketing is a practice where one grade is omitted from GPA calculations, while continuing to appear on the transcript.

Only courses with the same catalog number may be bracketed.

A University of Minnesota course may not be bracketed with a course taken at another institution.

**How bracketing works:** When an SPH student repeats an SPH course, both grades for the course will appear on the official transcript and will be counted towards the GPA calculation. The student is responsible for submitting a written request that a repeated course be "bracketed" (only once per course). If a student registers for a course a third or greater number of times (either in violation of this policy or by approved exception), all non-bracketed grades will be factored into GPA calculations. It is important to note that student school loans may not cover the tuition cost of repeating a course.

**Exceptions:** Exceptions to this policy must be submitted to the student's academic advising team and discussed with the course instructor. *Example:* Requesting to repeat a course (more than two times) is at the discretion of the academic advising team and may be approved due to extraordinary circumstances such as documented illness or hospitalization, death in family, etc..

Higher standards of achievement and stricter repeat policies may be enforced by individual majors/programs. This may include restrictions on repeating core courses that are also core to a major, and/or requiring that students earn better than a B- in particular courses in order to meet major/program requirements. Documentation of such policies can be found in the program portion of student guidebooks.

*Students can consult with their advising team for alternative core course options.*

## Other Transcript symbols

### Incomplete [I]

There shall be a temporary symbol I, **incomplete**, awarded to indicate that the work of the course has not been completed. The I shall be assigned at the discretion of the instructor when, due to extraordinary circumstances, the student was prevented from completing the work of the course on time. The assignment of an I requires a written contract between the instructor and student specifying the time and manner in which the student will complete the course requirements. In no event may any such written agreement allow a period of longer than one year to complete the course requirements. The Incomplete contract can be found at <http://secure.ahc.umn.edu/publichealth/sphgrades/>

For graduate/professional students, an I is to remain on the transcript until changed by the instructor or department.

When an I is changed to another symbol, the I is removed from the record.

A student does not need to be registered at the University in order to complete the work necessary to convert an I to a grade with credit in the time and manner previously agreed upon between the student and the instructor. The instructor is expected to turn in the new grade within four weeks of the date the work was submitted by the student.

### **Interpretation of Policy on Incompletes for Students Called to Active Military Duty**

When appropriate, instructors may prefer to arrange for the student to take an incomplete. Senate policy requires that an incomplete be made up within one calendar year of the end of the term in which the incomplete is given. When students are called to active military duty, and reach agreement with their instructor(s) to take an incomplete, they will have up to one calendar year following their discharge from active duty to complete their incomplete(s). Complete policies and procedures are available in the SPH Office of Admissions and Student Resources.

### Transfer [T]

There shall be a symbol T, **transfer**, posted as a prefix to the original grade, to indicate credits transferred from another institution or from one college or campus to another within the University when reevaluation is required.

### Withdrawal [W]

If a student officially withdraws from a course during the first two weeks of classes, there shall be no record of that course registration entered on the student's transcript. There shall be a symbol W, **withdrawal**, entered upon a student's record when the student officially withdraws from a course in accordance with procedures established by the student's college or campus\*. The W will be entered on the transcript irrespective of the student's academic standing in that course if the student withdraws from the course during the third through eighth week of class (second or third weeks of summer sessions). Withdrawal in the ninth or later week of classes (fourth or later in summer sessions) shall require approval of the college and may not be granted solely because a student is failing the course; there must be extenuating non-academic circumstances justifying late withdrawal.

\*See *section 3.3* for the School of Public Health withdrawal process.

### Continuation [X]

There shall be a symbol X, indicating a student may continue in a continuation course in which a grade cannot be determined until the full sequence of courses is completed. The instructor shall submit a grade for each X when the student has completed the sequence.

### In Progress [K]

There shall be a symbol K, assigned by an instructor to indicate the course is still in progress and that a grade cannot be assigned at the present time.

## Other Provisions

### Course Credit Transfer Policy

A student may seek transfer of no more than 40% of their total graduate or professional program credits taken at the University of Minnesota or at another college or university prior to the SPH program matriculation. Course credits may be used to satisfy public health core or other program requirements as jointly approved by the Program Director and the Senior Associate Dean for Academic Affairs. No course credits older than 5 years from the date of the student's matriculation will be accepted for transfer. A grade of "B-" or better is required for each course requested for transfer credit.

SPH students who have completed graduate-level coursework at the University of Minnesota or another college or university may petition to transfer those courses toward their SPH degree. To be considered for transfer, graduate level coursework must have been taken at an accredited graduate institution.

Higher standards of achievement and stricter policies may be enforced by individual majors/programs.

Students must:

1. Meet with their academic advisor to discuss the petitioning process. If the petition is acceptable to the advisor, the student will complete and sign the Academic Policy Petition form, and attach an official transcript on which the final grade has been posted.
2. Submit the Academic Policy Petition form to the Program Coordinator for processing. The Academic Policy Petition form can be found at <http://www.sph.umn.edu/current/resources/>. The Program Coordinator will forward the petition to the Program Director for approval and signature and then to the Office of Admissions and Student Resources for the Associate Dean for Learning Systems and Student Affairs for final evaluation and/or approval.

The Academic Policy Petition forms may be used for other academic reasons. Students are encouraged to discuss petition issues with their academic advisor or Program Coordinator to determine the appropriate process and procedure.

### Equivalency Exams

Equivalency examinations are given at least twice each year (January and August). Students have the option of taking the equivalency exams in any of the following core areas; however, **students can only take the exam one time in each core area**. Students who pass the exam(s) are waived from taking the required course and must make up the credits per their area of study and degree requirements. A notation on the student's transcript will be documented if the student passes an equivalency exam. Students who do not pass the exam(s) are required to take the appropriate core course area to satisfy the competency requirements. Equivalency exams satisfy competency requirements for the following core courses only:

### PubH 6020 Fundamentals of Social and Behavioral Science

Contact: Toben Nelson [tfnelson@umn.edu](mailto:tfnelson@umn.edu)

|                             |       |
|-----------------------------|-------|
| Number of questions on exam | 4     |
| Type of questions           | Essay |
| Open or closed book         | ----  |

### PubH 6751 Principles of Management in Health Services Organizations

Contact: Jim Begun [begun001@umn.edu](mailto:begun001@umn.edu)

|                             |   |
|-----------------------------|---|
| Number of questions on exam | 32  |
| Type of questions           | 25 multiple choice, 3 essay, 1 case analysis with 4 questions |
| Open or closed book         | Closed  |

### PubH 6102 Issues in Environmental and Occupational Health

Contact: Bill Toscano [tosca001@umn.edu](mailto:tosca001@umn.edu)

|                             |                 |
|-----------------------------|-----------------|
| Number of questions on exam | 200             |
| Type of questions           | Multiple choice |
| Open or closed book         | Closed          |

## PubH 6320 Fundamentals of Epidemiology

Contact: Rachel Widome [widom001@umn.edu](mailto:widom001@umn.edu)

|                             |  |
|-----------------------------|--|
| Number of questions on exam | 31                                       |
| Type of questions           | Multiple choice, show-your-work problems |
| Open or closed book         | Open                                     |

## PubH 6414 Biostatistical Literacy

Contact: Sally Olander [brown198@umn.edu](mailto:brown198@umn.edu)

|                             |  |
|-----------------------------|--|
| Number of questions on exam | 60-75  |
| Type of questions           | Multiple choice, short answer, and show-your-work problems |
| Open or closed book         | Open   |

## PubH 6741 Ethics in Public Health: Professional Practice and Policy

Contact: Sarah Gollust [sgollust@umn.edu](mailto:sgollust@umn.edu)

|                             |                           |
|-----------------------------|---------------------------|
| Number of questions on exam | 10                        |
| Type of questions           | Short answer              |
| Open or closed book         | Open (no internet access) |

### Course Prerequisites

Any college or campus may set special scholastic or other standards for registration in a particular course, for scholastic probation, admission, honors, continued residence, degrees, and other purposes they deem appropriate.

### Grade Submission

All grades for all courses each term shall be submitted to the Office of the Registrar no later than 72 hours after the last final examination for that term. Students can view their grades online at [onestop.umn.edu](http://onestop.umn.edu) 24 hours after they are posted by the course instructor.

### Course Evaluations

Student feedback on course content and faculty teaching skills are an important means for improving our work. Please take the time to complete a course evaluation for each of the courses for which you are registered. The SPH collects student course evaluations electronically using a software system called CoursEval: <http://sph.umn.edu/students/current/course-eval-grades/>. The system will send email notifications to students when they can access and complete their course evaluations. Students who complete their course evaluations promptly will be able to access their final grade as soon as the faculty member renders the grade in SPHGrades: [www.sph.umn.edu/grades](http://www.sph.umn.edu/grades). All students will have access to their final grades through OneStop two weeks after the last day of the semester regardless of whether they completed their course evaluation or not.

Note: Responses will remain anonymous and will not be released to the course instructor until after final grades have been submitted. This is School of Public Health procedure - not a University-wide policy - and therefore applies to Public Health courses only.

## 4. TUITION, FEES, BILLING, AND FINANCES

---

### 4.1 Tuition and Fees

---

Please go to <http://onestop.umn.edu/> for complete tuition and fee information.

### 4.2 Billing

---

Students will receive a billing statement approximately 4 weeks after a semester begins (May/Summer Session billing statements are sent mid-June. Students may view their fee statement online at [onestop.umn.edu](http://onestop.umn.edu/)).

Students will receive electronic bills and have the option of paying their bill online with an electronic check from their checking or savings account. Students can also allow access to authorized users, such as parents, to view and pay tuition bills on their behalf. For more information on electronic billing and payment, visit [onestop.umn.edu](http://onestop.umn.edu/). Questions on billing and fee statements can be referred to [helpingu@umn.edu](mailto:helpingu@umn.edu).

**Third Party Billing** [onestop.umn.edu/finances/pay/third\\_party\\_billing/index.html](http://onestop.umn.edu/finances/pay/third_party_billing/index.html)

When an organization, not owned by you or a family member, makes a commitment to pay your educational expenses, they are considered a third party sponsor by the University of Minnesota. When payment is due on your student account, the sponsor is billed by the University. This payment process is termed "third party billing."

Sponsor's payments are subject to the same federal reporting requirements as other financial aid. Some sponsorships don't require a billing invoice and are administered by the University through One Stop Student Services. Whether you are a student or a sponsor, you will find answers in the frequently asked questions (FAQ ) about how the third party billing processes these payments at the links on the left. In addition, you can view current tuition and fee information.

If you have more questions or need further information, please contact the third party billing office at [tpbill@umn.edu](mailto:tpbill@umn.edu) or 612-625-8559.

### 4.3 Financial Aid and Scholarships

---

A variety of resources to assist students in financing their education as well as estimations of living expenses can be found at [sph.umn.edu/students/prospective/finances/](http://sph.umn.edu/students/prospective/finances/). Information specific to SPH Divisions and/or Programs may be found in the Division and/or degree program sections of this guidebook.

Information on financial aid can be found at [onestop.umn.edu](http://onestop.umn.edu) or by -mailing [helpingu@umn.edu](mailto:helpingu@umn.edu).

Students having questions about the status of their financial aid should refer to the appropriate contact below:

| Aid Type   | Contact                  | Email address  |
|--|--------------------------|--|
| Division/Major Specific Awards and Traineeships, the Dean's Scholarship        | Your Program Coordinator |  |
| Medica Scholarships, and scholarships that support specific US minority groups | SPH Student Services     | <a href="mailto:sph-oasr@umn.edu">sph-oasr@umn.edu</a> |
| Federal Loans, Financial Aid Package   | Liz Holm                 | <a href="mailto:holmx029@umn.edu">holmx029@umn.edu</a> |

#### Loan Deferment

A temporary postponement of loan payments available only under certain conditions; some loans do not accrue interest in deferment, such as subsidized loans [policy.umn.edu/forms/fa/fa830.pdf](http://policy.umn.edu/forms/fa/fa830.pdf).

Students requesting a loan deferment can get their form signed by One Stop Student Services [onestop.umn.edu/contact\\_us/index.html](http://onestop.umn.edu/contact_us/index.html).

## Financial Aid Exit Counseling

Exit counseling sessions are required of all borrowers of federal and University-administered student loan programs. Exit counseling provides you information regarding the rights and responsibilities of a borrower and a lender/servicer. You learn about repayment, deferment, and cancellation of your loan. These sessions prepare you to be responsible and effective in repayment of your educational loans.

### You are required to complete exit counseling when you:

- are about to graduate.
- leave the University (even if it is just temporary).
- drop your registration below half-time enrollment.
- transfer to another school.
- leave for a National Student Exchange (NSE) experience.

Once you have been selected for the exit process, you will receive an email with instructions to complete your exit counseling online. Make sure you respond by completing your exit counseling in a timely manner! A hold will remain on your student record until your exit counseling is complete, delaying your diploma, preventing registration, and preventing access to your transcripts.

For more information about student loan exit counseling, contact Student Account Assistance :

[onestop.umn.edu/contact\\_us/student\\_account\\_assistance.html](https://onestop.umn.edu/contact_us/student_account_assistance.html)

---

## 4.4 Graduate Assistantships

---

Many SPH students use graduate assistantships to help finance their education. These are campus working/learning positions that take the form of research, teaching, or administrative appointments. Degree-seeking students in the SPH registered for six or more credits, including international students, are eligible to apply for any assistantship on campus. Because many assistantships are funded by grants, the vigorous research activity of SPH faculty makes available numerous opportunities in the school.

Graduate assistantships include an hourly wage, tuition benefits, subsidized insurance coverage, and may include resident tuition rates for student and dependents.

For graduate assistant policies and benefits, go to [www1.umn.edu/ohr/gae](http://www1.umn.edu/ohr/gae).

The tuition benefits are particularly attractive to students. Graduate assistants who work at least 25% time from the beginning to the end of the official semester appointment dates are eligible to receive tuition benefits (tuition remission and resident rates) during that semester.

## 5. UNIVERSITY GUIDELINES AND POLICIES

---

### 5.1 Student Responsibility and Conduct

---

Students are ultimately responsible for the level of success that they achieve in their program of study and for the time it takes to complete that program. Students should:

- Attend fall orientation and understand the information distributed.
- Understand and follow University, School of Public Health, Division, and Program rules and procedures for completion of degree requirements.
- Read email messages frequently for announcements from the Program Coordinators, Program Directors and Director of Graduate Studies, Office of Admissions and Student Resources, and Career Center. These announcements may involve changes in the University, School or Division rules and procedures for completion of degree requirements; students are responsible for reading and understanding these announcements.
- Check their student mailbox often for printed informational materials.
- Contact a Program Coordinator, Program Directors or Director of Graduate Studies if they are not getting reasonable assistance from their academic and/or master's project/thesis advisor.
- Initiate and maintain contact each semester with their academic advisor to review progress toward the completion of their degree.
- Complete the degree in a timely fashion.

The School of Public Health emphasizes three principles of student conduct in all of its degree programs:

1. **Respect others**

Students are expected to behave in a respectful and professional manner with other students, faculty, and staff in the classroom and on campus.

2. **Honor privacy**

Every student's course grades are private and are not to be shown to anyone else. This also applies to the grades of students in courses for which you are a Teaching Assistant.

3. **Present your work honestly**

Plagiarism is defined as the presentation of another's writing or ideas as your own. For a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity:

<http://writing.umn.edu/tww/preventing/definitions.html>. Students should be careful to properly attribute and cite others' work in their writing. For guidelines for correctly citing sources, go to [tutorial.lib.umn.edu](http://tutorial.lib.umn.edu).

**The Associate Dean for Learning Systems and Student Affairs is responsible for managing all School of Public Health issues and investigations of academic misconduct.**

---

### 5.2 University of Minnesota Board of Regents' Policies

---

The policies of the Board of Regents are umbrella policies that provide the framework under which the administration is responsible for implementation of and compliance with the intent of the board policy. Students are responsible for abiding by the Board of Regents policies. The Board of Regents policies can be found at [www.umn.edu/regents/policies.html](http://www.umn.edu/regents/policies.html).

We encourage students to read the policies and ask that they particularly become aware of the following policies reprinted here in a slightly different format:



#### University of Minnesota Board of Regents Policy Student Conduct Code

**Adopted:** July 10, 1970

**Amended:** December 13, 1974; March 11, 1994; June 13, 2003; December 8, 2006; October 11, 2012

**Supersedes:** (see end of policy)

## **SECTION I. GUIDING PRINCIPLES.**

- (a) The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University.
- (b) The University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.
- (c) The University is dedicated to responsible stewardship of its resources and to protecting its property and resources from theft, damage, destruction, or misuse.
- (d) The University supports and is guided by state and federal law while also setting its own standards of conduct for its academic community.
- (e) The University is dedicated to the rational and orderly resolution of conflict.

## **SECTION II. SCOPE.**

This policy applies to all students and student organizations at the University of Minnesota (University), whether or not the University is in session.

## **SECTION III. DEFINITIONS.**

**Subd. 1. Academic Environment.** Academic environment shall mean any setting where a student is engaged in work toward academic credit, satisfaction of program-based requirements, or related activities including but not limited to on line courses, learning abroad, and field trips.

**Subd. 2. Campus.** Campus shall mean all University premises, including all land, buildings, facilities, and other property owned, possessed, leased, used, or controlled by the University, and adjacent streets and sidewalks.

**Subd. 3. Plagiarism.** Plagiarism shall mean representing the words, creative work, or ideas of another person as one's own without providing proper documentation of source. Examples include, but are not limited to:

- Copying information word for word from a source without using quotation marks and giving proper acknowledgement by way of footnote, endnote, or in-text citation;
- Representing the words, ideas, or data of another person as one's own without providing proper attribution to the author through quotation, reference, in-text citation, or footnote;
- Producing, without proper attribution, any form of work originated by another person such as a musical phrase, a proof, a speech, an image, experimental data, laboratory report, graphic design, or computer code;
- Paraphrasing, without sufficient acknowledgment, ideas taken from another person that the reader might reasonably mistake as the author's; and
- Borrowing various words, ideas, phrases, or data from original sources and blending them with one's own without acknowledging the sources.

It is the responsibility of all students to understand the standards and methods of proper attribution and to clarify with each instructor the standards, expectations, and reference techniques appropriate to the subject area and class requirements, including group work and internet use. Students are encouraged to seek out information about these methods from instructors and other resources and to apply this information in all submissions of academic work.<sup>1</sup>

**Subd. 4. Student.** Student shall mean any person taking courses at the University or enrolled in a University program; any person participating as a student in University activities prior to the start of classes; any student who is not enrolled or registered for a particular term but has a continuing relationship with the University; any student who withdraws, transfers, or graduates after an alleged violation of the Student Conduct Code; and any already graduated student when the conduct at issue implicates the student's University degree.

**Subd. 5. Student Organization.** Student organization shall mean any organization of students that is or has been registered as a University student organization under applicable University policies or procedures.

**Subd. 6. University-Sponsored Activities.** University-sponsored activities shall mean any program or event sponsored by the University, including but not limited to those sponsored by student organizations, or athletics.

## **SECTION IV. JURISDICTION.**

**Subd. 1.** The Student Conduct Code shall apply to student conduct that occurs on campus or at University-sponsored activities.

**Subd. 2.** The Student Conduct Code shall apply to student conduct that directly relates to the University's education, services, programs, or rules, including but not limited to scholastic dishonesty, hazing, violation of University rules, and falsification, whether the conduct occurs on campus or off campus.

**Subd. 3.** At the discretion of the president or delegate, the Student Conduct Code also shall apply to off-campus student conduct when the conduct, as alleged, adversely affects a substantial University interest and either:

(a) constitutes a criminal offense as defined by local, state, or federal law or ordinance, regardless of the existence or outcome of any criminal proceeding; or

(b) indicates that the student may present a danger or threat to the health or safety of the student or others.

## **SECTION V. THE RESPONSIBILITIES OF DUAL MEMBERSHIP.**

Students are both members of the University community and of the state. Students are responsible to the community of which they are a part, and they are responsible to the academic community of the University. By enforcing its Code, the University neither substitutes for nor interferes with other civil or criminal legal processes. When a student is charged in both jurisdictions, the University will decide on the basis of its interests, the interests of affected students, and the interests of the community whether to proceed with its disciplinary process or to defer action. Determinations made or sanctions imposed under the Code will not be subject to change because criminal charges arising out of the same facts were dismissed, reduced, or resolved in favor of the criminal law defendant.

## **SECTION VI. DISCIPLINARY OFFENSES.**

Any student or student organization found to have committed, attempted to commit, assisted or abetted another person or group to commit the following misconduct is subject to appropriate disciplinary action under this policy:

**Subd. 1. Scholastic Dishonesty.** Scholastic dishonesty means plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, misrepresenting, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis.

**Subd. 2. Disruption of the Academic Environment.** Disruption of the academic environment means engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach and/or a student's ability to learn.

**Subd. 3. Falsification.** Falsification means willfully providing University offices or officials with false, misleading, or incomplete information; forging or altering without proper authorization official University records or documents or conspiring with or inducing others to forge or alter without proper authorization University records or documents; misusing, altering, forging, falsifying, or transferring to another person University-issued identification; or intentionally making a false report of a bomb, fire, natural disaster, or other emergency to a University official or an emergency service agency.

**Subd. 4. Refusal to Identify and Comply.** Refusal to identify and comply means willfully refusing to or falsely identifying one's self or willfully failing to comply with a proper order or summons when requested by an authorized University official, by law enforcement personnel, or by emergency medical staff responding to an emergency.

**Subd. 5. Attempt to Injure or Defraud.** Attempt to injure or defraud means making, forging, printing, reproducing, copying, or altering any record, document, writing, or identification used or maintained by the University when done with intent to injure, defraud, or misinform.

**Subd. 6. Harm to Person.** Harm to person means engaging in conduct that endangers or threatens to endanger the physical and/or mental health, safety, or welfare of another person, including, but not limited to, threatening, stalking, harassing, intimidating, or assaulting behavior.

**Subd. 7. Bullying.** Bullying means aggressive behavior directed at another person, either in person or through electronic means, that causes stress or harm and that is repeated over time, including but not limited to assaulting, defaming, terrorizing, making obscene gestures, or invading privacy.

**Subd. 8. Sexual Assault.** Sexual assault means actual, attempted or threatened sexual contact with another person without that person's consent. Sexual assault is a criminal act that can be prosecuted under Minnesota state law, as well as under the Student Conduct Code and employee discipline procedures.

**Subd. 9. Disorderly Conduct.** Disorderly conduct means engaging in conduct that incites or threatens to incite an assault or breach of the peace; breaching the peace; obstructing or disrupting teaching, research, administrative, or public service functions; or obstructing or disrupting disciplinary procedures or authorized University activities.

**Subd. 10. Illegal or Unauthorized Possession or Use of Weapons.** Illegal or unauthorized possession or use of weapons means possessing or using weapons or articles or substances usable as weapons, including, but not limited to, firearms, incendiary devices, explosives, and dangerous biological or chemical agents, except in those instances when authorized by law and, where applicable, by proper University authority.

**Subd. 11. Illegal or Unauthorized Possession or Use of Drugs or Alcohol.** Illegal or unauthorized possession or use of drugs or alcohol means possessing or using drugs or alcohol illegally or, where applicable, without proper University authorization.

**Subd. 12. Providing Alcohol to Minors.** Providing alcohol to minors means directly or indirectly providing alcohol to anyone under the legal drinking age.

**Subd. 13. Unauthorized Use of University Facilities or Services.** Unauthorized use of University facilities or services means wrongfully using University properties or facilities; misusing, altering, or damaging fire-fighting equipment, safety devices, or other emergency equipment or interfering with the performance of those specifically charged to carry out emergency services; or acting to obtain fraudulently—through deceit, unauthorized procedures, bad checks, or misrepresentation—goods, quarters, services, or funds from University departments or student organizations or individuals acting on their behalf.

**Subd. 14. Theft, Property Damage, or Vandalism.** Theft, property damage, or vandalism means theft or embezzlement of, damage to, destruction of, unauthorized possession of, or wrongful sale or gift of property.

**Subd. 15. Unauthorized Access.** Unauthorized access means accessing without authorization University property, facilities, services, or information systems, or obtaining or providing to another person the means of such unauthorized access, including, but not limited to, using or providing without authorization keys, access cards, or access codes.

**Subd. 16. Disruptive Behavior.** Disruptive behavior means willfully disrupting University events; participating in a campus demonstration that disrupts the normal operations of the University and infringes on the rights of other individuals; leading or inciting others to disrupt scheduled or normal activities of the University; engaging in intentional obstruction that interferes with freedom of movement, either pedestrian or vehicular, on campus; using sound amplification equipment on campus without authorization; or making or causing noise, regardless of the means, that disturbs authorized University activities or functions.

**Subd. 17. Hazing.** Hazing means any act taken on University property or in connection with any University-related group or activity that endangers the physical and/or mental health or safety of an individual (including, without limitation, an act intended to cause personal degradation or humiliation), or that destroys or removes public or private property, for the purpose of initiation in, admission to, affiliation with, or as a condition for continued membership in a group or organization.

**Subd. 18. Rioting.** Rioting means engaging in, or inciting others to engage in, harmful or destructive behavior in the context of an assembly of persons disturbing the peace on campus, in areas proximate to campus, or in any location when the riot occurs in connection with, or in response to, a University-sponsored event. Rioting includes, but is not limited to, such conduct as using or threatening violence to others, damaging or destroying property, impeding or impairing fire or other emergency services, or refusing the direction of an authorized person.

**Subd. 19. Violation of University Rules.** Violation of University rules means engaging in conduct that violates University, collegiate, or departmental regulations that have been posted or publicized, including provisions contained in University contracts with students.

**Subd. 20. Violation of Local, State, or Federal Laws or Ordinances.** Violation of local, state, or federal laws or ordinances means engaging in conduct that violates a local, state, or federal law, or ordinance, including, but not limited to, laws governing alcoholic beverages, drugs, gambling, sex offenses, indecent conduct, or arson.

**Subd. 21. Persistent Violations.** Persistent violations means engaging in repeated conduct or action in violation of this Code.

## **SECTION VII. SANCTIONS.**

Student and student organizations found responsible for disciplinary offenses under the Student Conduct Code are subject to sanctions. Factors to consider in determining appropriate sanctions include: the nature of the offense, the severity of the offense, the culpability of the student or student organization, the impact on other students or members of the University community, and the opportunity for student development. Separation from the University through suspension or expulsion is a serious sanction that may be appropriate for: repeated violations of the Code, for serious scholastic dishonesty, and for misconduct that constitutes a threat to community safety or well-being (including, but not limited to harm to person and sexual assault), or significantly disrupts the rights of others or the operations of the University. The following sanctions may be imposed upon students or student organizations found to have violated the Code:

**Subd. 1. Academic Sanction.** An academic sanction means a sanction affecting the course or academic work of the student for violation of Section VI, Disciplinary Offenses, Subdivision 1, Scholastic Dishonesty.

**Subd. 2. Warning.** A warning means the issuance of an oral or written warning or reprimand.

**Subd. 3. Probation.** Probation means special status with conditions imposed for a defined period of time and includes the probability of more severe disciplinary sanctions if the student is found to violate any institutional regulation during the probationary period.

**Subd. 4. Required Compliance.** Required compliance means satisfying University requirements, work assignments, community service, or other discretionary assignments.

**Subd. 5. Confiscation.** Confiscation means confiscation of goods used or possessed in violation of University regulations or confiscation of falsified identification or identification wrongly used.

**Subd. 6. Restitution.** Restitution means making compensation for loss, injury, or damage.

**Subd. 7. Restriction of Privileges.** Restriction of privileges means the denial or restriction of specified privileges, including, but not limited to, access to an official transcript for a defined period of time.

**Subd. 8. University Housing Suspension.** University housing suspension means separation of the student from University Housing for a defined period of time.

**Subd. 9. University Housing Expulsion.** University housing expulsion means permanent separation of the student from University Housing.

**Subd. 10. Suspension.** Suspension means separation of the student from the University for a defined period of time, after which the student is eligible to return to the University. Suspension may include conditions for readmission.

**Subd. 11. Expulsion.** Expulsion means the permanent separation of the student from the University.

**Subd. 12. Withholding of Diploma or Degree.** Withholding of diploma or degree means the withholding of diploma or degree otherwise earned for a defined period of time or until the completion of assigned sanctions.

**Subd. 13. Revocation of Admission or Degree.** Revocation of admission or degree means revoking a student's admission to the University or revoking a degree already awarded by the University.

## **SECTION VIII. INTERIM SUSPENSION.**

The president or delegate may impose an immediate suspension on a student or student organization pending a hearing before the appropriate disciplinary committee (1) to ensure the safety and well-being of members of the University community or to preserve University property, (2) to ensure the student's own physical or emotional safety and well-being, or (3) if the student or student organization poses an ongoing threat of disrupting or interfering with the operations of the University. During the interim suspension, the student or student organization may be denied access to all University activities or privileges for which the student or student organization might otherwise be eligible, including access to University housing or property. The student or student organization has a right to a prompt hearing before the president or delegate on the questions of identification and whether the interim suspension should remain in effect until the full hearing is completed.

## **SECTION IX. HEARING AND APPEALS OF STUDENT DISCIPLINE.**

Any student or student organization charged with violation of the Code shall have the opportunity to receive a fair hearing and access to a campus-wide appeal. To safeguard the rights of students and student organizations, the president or delegate shall ensure that each campus has an appeals procedure to govern alleged violations of this policy. The appeals procedure shall provide both substantive and procedural fairness for the student or student

organization alleged to have violated the Code and shall provide for resolution of cases within a reasonable period of time.

The appeals procedure must describe:

- (a) grounds for an appeal;
- (b) procedures for filing an appeal; and
- (c) the nature of an appellate review.

## **SECTION X. DELEGATION OF AUTHORITY.**

The president or delegate shall implement this policy, including publishing and distributing the Code and the procedures governing the student disciplinary process at the University.

**1 Portions used with permission from New York Institute of Technology and University of Texas, San Antonio.**

**Supersedes: Existing disciplinary appeals policies in contradiction and specifically repeals the appeals policies dated February 9, 1979.**

---



## **University of Minnesota Board of Regents Policy**

### **Sexual Harassment**

**Adopted:** May 11, 2012

**Supersedes:** (see end of policy)

## **SECTION I. SCOPE.**

This policy governs the commitment to the prevention and awareness of and response to sexual harassment at the University of Minnesota (University).

## **SECTION II. DEFINITIONS.**

**(a) Sexual Harassment.** *Sexual harassment* shall mean unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature when:

- (1) Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic advancement in any University activity or program;
- (2) Submission to or rejection of such conduct by an individual is used as the basis of employment or academic decisions affecting this individual in any University activity or program: or
- (3) Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive work or academic environment in any University activity or program.

**(b) Retaliation.** Retaliation shall mean any form of intimidation, reprisal or harassment against an individual because the individual has made a report of sexual harassment or has participated in an investigation of sexual harassment by or of a University community member including:

- (1) Firing, refusing to hire, or refusing to promote the individual;
- (2) Departing from any customary employment or academic practice regarding the individual;
- 3) Transferring or assigning the individual to a lesser position in terms of wages, hours, job classification, job security, employment or academic status; (4) Informing another student, staff or faculty member who does not have a need to know that the individual has made a complaint or participated in an investigation of a complaint of sexual harassment;
- (5) Impeding the individual's academic advancement in any University activity or program.

**(c) Member of the University Community.** *Member of the University community* shall mean any University faculty member, student, staff member, visitor or other individual engaged in any University activity or program.

## **SECTION III. GUIDING PRINCIPLES.**

The following principles shall guide the commitment of the University for the prevention and awareness of and response to sexual harassment:

(a) Consistent with its academic mission and standards, the University is committed to achieving excellence by working to create an educational, employment and residential living environment that are free from sexual harassment.

(b) The University is committed to preventing and eliminating sexual harassment of faculty, staff and students through education and by encouraging all members of the University community to report any concerns or complaints about sexual harassment.

(c) As a community of faculty, staff and students engaged in research, scholarship, artistic activity, teaching and learning or activities that support them the University seeks to foster an environment that is equitable, humane and responsible and where all members are treated with dignity and respect.

#### **SECTION IV. IMPLEMENTATION.**

The University shall:

(a) Prohibit sexual harassment or retaliation.

(b) Ensure that department heads, deans, provosts, chancellors, vice presidents, and other supervisors and managers take timely and appropriate action when they know or should know of the existence of sexual harassment. Other persons who suspect sexual harassment should report it to an appropriate person in their unit or to the University equal opportunity officer.

(c) Adopt procedures on each campus for investigating and resolving complaints of sexual harassment in coordination with the director of equal opportunity and affirmative action.

(d) Address violations of this policy through disciplinary or other corrective action up to and including termination of employment or academic dismissal.

#### **SECTION V. MONITORING.**

The president or delegate shall address complaints of sexual harassment consistent with this policy and law and remedy any discriminatory or harassing practice that deviate from this policy.

SUPERSEDES: SEXUAL HARASSMENT DATED SEPTEMBER 11, 1998

---

### **5.3 Scholastic Dishonesty and Plagiarism**

---

Students are responsible for maintaining scholastic honesty in their work at all times. Students engaged in scholastic dishonesty will be penalized, and offenses will be reported to the Office of Student Conduct and Academic Integrity (OSCAI, [www1.umn.edu/oscai/](http://www1.umn.edu/oscai/)).

The University's Student Conduct Code defines scholastic dishonesty as "Plagiarism shall mean representing the words, creative work, or ideas of another person as one's own without providing proper documentation of source. Examples include, but are not limited to:

- Copying information word for word from a source without using quotation marks and giving proper acknowledgement by way of footnote, endnote, or in-text citation;
- Representing the words, ideas, or data of another person as one's own without providing proper attribution to the author through quotation, reference, in-text citation, or footnote;
- Producing, without proper attribution, any form of work originated by another person such as a musical phrase, a proof, a speech, an image, experimental data, laboratory report, graphic design, or computer code;
- Paraphrasing, without sufficient acknowledgment, ideas taken from another person that the reader might reasonably mistake as the author's; and
- Borrowing various words, ideas, phrases, or data from original sources and blending them with one's own without acknowledging the sources.

It is the responsibility of all students to understand the standards and methods of proper attribution and to clarify with each instructor the standards, expectations, and reference techniques appropriate to the subject area and class requirements, including group work and internet use. Students are encouraged to seek out information about these methods from instructors and other resources and to apply this information in all submissions of academic work."

Serious, intentional plagiarism will result in a grade of "F" or "N" for the entire course. For more information on this policy and for a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity: <http://www.oscai.umn.edu/>

Students are urged to be careful that they properly attribute and cite others' work in their own writing. For guidelines for correctly citing sources, go to [www.lib.umn.edu/instruction/tutorials](http://www.lib.umn.edu/instruction/tutorials) and click on "Organizing and Citing Research."

In addition, original work is expected in all coursework. It is unacceptable for students to hand in assignments for any course for which they received credit in another course unless by prior agreement with the instructor. Building on a line of work begun in another course or leading to a thesis, dissertation, or final project is acceptable.

All issues relating to academic misconduct are referred to the Associate Dean for Learning Systems and Student Affairs.

## 5.4 University Senate Uniform Grading & Transcript Policy

### A. Establishment and Use of University Grading Systems

1. There are two distinct grading systems on each campus of the University, A-B-C-D-F (with pluses and minuses as permitted by this policy) and S-N. The S-N system is a self-contained alternative to the A-F system and the two may not be combined for a particular student in a particular course. Students may receive grades or symbols only from the grading system under which they have registered for a course. This policy does not require any instructor to use pluses and minuses.
2. There are, in addition, registration symbols identified and described in this policy that carry neither grade nor credit.
3. No campus, college, or program is required to offer a course on the S-N grading system.
4. Any unit may choose to limit grades in a particular course to the A-F or the S-N system.
5. When both grading systems are available to a student, he or she must declare a choice of system as part of the initial registration for the course. The choice may not be changed after the end of the second week of classes (the first week in summer sessions).
6. Except as provided in this policy in Sections A (7) and F (12), no college may use any grading systems other than the ones established by this policy.
7. The Law School and the Medical School are exempt from the provisions of this policy, but will report their grading systems, and any changes therein, to the Faculty Senate. Any other units that believe that the national norms of their profession require a different grading system may make application to the Senate Committee on Educational Policy for an exemption from this policy. The Faculty Senate must approve all such exemptions.
8. The No Grade (NG) grading basis is used for certain graduate-level registrations as determined by the Graduate School.

### B. Permanent Grades for Academic Work for Credit

1. The list below identifies the possible permanent grades that can be given for any course for which credit is to be awarded. These grades will be entered on a student's official transcript and, for an A, B, C, or D with permitted pluses and minuses, carry the indicated grade points. (Except for the Law School, the University does not award A+ grades, nor are D- grades permitted). The S grade will not carry grade points but the credits will count toward the student's degree program if allowed by the college, campus, or program.

|    |  |
|----|--|
| A  | 4.000 - Represents achievement that is outstanding relative to the level necessary to meet course requirements |
| A- | 3.667  |
| B+ | 3.333  |
| B  | 3.000 - Represents achievement that is significantly above the level necessary to meet course requirements     |
| B- | 2.667  |

|    |  |
|----|--|
| C+ | 2.333  |
| C  | 2.000 - Represents achievement that meets the course requirements in every respect                                 |
| C- | 1.667  |
| D+ | 1.333  |
| D  | 1.000 - Represents achievement that is worthy of credit even though it fails to meet fully the course requirements |
| S  | Represents achievement that is satisfactory, which is equivalent to a C- or better.                                |

2. These definitions apply to grades awarded to students who are not enrolled in graduate, post-baccalaureate, and professional programs, but the grade points are the same no matter the level or course of enrollment.
3. Instructors are permitted to hold graduate and undergraduate students who are in the same class to different standards of academic performance and accomplishment. The syllabus must make clear what the different standards will be for the different groups of students who may be enrolled in the class.
4. These are the general University standards. In connection with all symbols of achievement instructors will define for a class, at one of its earliest meetings and as explicitly as possible, the performance that will be necessary to earn each.

### C. Permanent Grades for Academic Work for which No Credit is Given

1. There are two permanent grades given for a course for which no credit is to be awarded. These grades will be entered on a student's official transcript.

|   |  |
|---|--|
| F | "0" Represents failure and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (see Section D). The F carries 0 grade points and the credits for the course do not count toward any academic degree program. The credit hours for the course will count in the grade point average.  |
| N | Represents no credit and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (see Section C). The N carries no grade points and the credits for the course do not count toward any academic degree program. The credit hours for the course do not count in the grade point average. |

2.
  - a. **Scholastic dishonesty.** Scholastic dishonesty in any portion of the academic work for a course will be grounds for awarding a grade of F or N for the entire course, at the discretion of the instructor. This provision allows instructors to award an F or an N to a student when scholastic dishonesty is discovered; it does not require an instructor to do so. Students who enroll for a course on the A-F grading system will receive an F if such grade is warranted; students who enroll for a course on the S-N system will receive an N if such grade is warranted. (See Board of Regents Policy: *Student Conduct Code* for a definition of scholastic dishonesty.)
  - b. If the instructor determines that a grade of F or N for the course should be awarded to a student because of scholastic dishonesty, the student cannot withdraw to avoid the F or N. If the student withdrew from the course before the scholastic dishonesty was discovered or before the instructor concluded that there was scholastic dishonesty, and the instructor (or the appropriate hearing body if the student requests a hearing) determines that the student should receive the F or the N, the student will be re-registered for the course and the F and N grade will be entered on the transcripts.

## D. Incompletes

1. There will be a symbol I (incomplete) awarded to indicate that the work of the course has not been completed. The I will be assigned at the discretion of the instructor when, due to extraordinary circumstances (as determined by the instructor), the student who has successfully completed a substantial portion of the course's work with a passing grade was prevented from completing the work of the course on time.
2. The assignment of an I requires a written agreement between the instructor and student specifying the time and manner in which the student will complete the course requirements. In no event may any such written agreement allow a period of longer than one year to complete the course requirements (except as provided in section D (8)).
3. Work to make up an I must be submitted within one year of the last day of final examinations of the term in which the I was given for all students except graduate and professional students. If not submitted by that time, the I will automatically change to an F (if the student was registered on the A-F system) or an N (if the student was registered on the S-N system) for the course. If an I changes automatically to an F or an N, the instructor has the discretion to reinstate the I for one additional year only.
4. For graduate and professional students, an I remains on the transcript until changed by the instructor or department.
5. When an I is changed to another symbol, the I is removed from the record. Once an I has become an F or an N, under the provisions of the preceding paragraph, it may subsequently be converted to any other grade, upon petition by the instructor (or the department if the instructor is unavailable) to the college.
6. A student does not need to be registered at the University in order to complete the work necessary to convert an I to a grade with credit in the time and manner previously agreed upon between the student and the instructor. The instructor is expected to turn in the new grade within four weeks of the date the work was submitted by the student. (Depending on the timing of when the work is turned in and the ability of the instructor to award a grade, an F or an N may appear temporarily on the transcript.) Students who have received an I in a course are not allowed to sit in on the class again (that is, without registering for it) to complete the grade.
7. If a student graduates with an I on the transcript, the I will remain permanently an I. A student may petition his or her college, within a year of graduation, to complete the work in the course and receive a grade. The degree GPA is frozen upon graduation but the cumulative GPA will reflect the change in GPA if a student chooses to complete the work and change the I to a grade within a year of graduation.
8. When students are called to active military duty, and reach agreement with their instructor(s) to take an incomplete, they will have up to one calendar year following their discharge from active duty to complete their incomplete(s).
9. Receipt of an I in a course does not create an entitlement for a student to take the course a second time.

## E. Other Transcript Symbols

1. **Auditing a course.**
  - a. There will be a symbol V, visitor, indicating registration as an auditor or visitor, which will carry no credit and no grade.
  - b. Students auditing a course are required to pay full tuition but do not take exams and are not required to do homework. An auditor is entered on the class roster (grade report), is counted as filling a seat in a controlled entry course, and is counted in an instructor's student contact hours.
  - c. Students may not sit in on a course without registering for it.
  - d. A student will be allowed to take a previously audited class for a grade.
2. **Withdrawing from a course.**
  - a. There will be a symbol W, withdrawal, entered upon a student's record when the student officially withdraws from a course in accordance with procedures established by the student's college or campus. The W will be entered on the transcript irrespective of the student's academic standing in that course if the student withdraws from the course during the third through eighth week of class (Twin Cities) or the third through ninth week of class (Morris) or during the second or third weeks of summer sessions.
  - b. If a student officially withdraws from a course during the first two weeks of classes, there will be no record of that course registration entered on the student's transcript.
  - c. One-time late withdrawal: Each student may, once during his or her undergraduate enrollment, withdraw from a course without college approval, and receive the transcript symbol W, after the

deadline for withdrawal and at any time up to and including the last day of instruction for that course. A student may not withdraw after completing the final examination or equivalent for a course.

- d. Except as provided in the preceding section, withdrawal after the deadlines will require approval of the college and may not be granted solely because a student is failing the course; there must be extenuating non-academic circumstances justifying late withdrawal.
3. **Continuation course.** There will be a symbol X, indicating a student may continue in a continuation course in which a grade cannot be determined until the full sequence of courses is completed. The instructor will submit a grade for each X when the student has completed the sequence.
4. **Course in progress.** There will be a symbol K, assigned by an instructor to indicate the course is still in progress and that a grade cannot be assigned at the present time.

## F. Other Provisions

1. **Zero-credit courses.** Courses that carry zero credits do not count in either term or cumulative grade point averages. Such courses carry normal tuition and fee charges.
2. All grades for academic work are based on the quality of the work submitted, not on hours of effort. Instructors have the responsibility and authority to determine how final grades are assigned, including, in classes where they use numeric scores, the method that will be used to translate numeric scores into letter grades. (Examples: the instructor may decide that 90% equals an A, 80% a B, and so on, or the instructor may decide that the top 10% of the scores will receive an A, the next 20% a B, and so on.)
3. **Counting credits toward a University degree.**
  - a. A course that carries University credit toward a degree in one department or college must carry University credit in all other departments and colleges (except insofar as those credits exceed the limit on skills credits established in the policy Credit Requirements for an Undergraduate (baccalaureate) Degree).
  - b. A department or college has discretion to decide whether a course completed in another unit will count towards the specific college or department/program/major requirements.
4. When a student graduates, no further changes to his or her transcript will be made (to that portion of the transcript related to the program from which the student graduated) except as expressly allowed under the provisions of this policy.
5. **Releasing transcripts.** The University's official transcript, the chronological record of the student's enrollment and academic performance, will be released by the University only at the request of the student or in accord with state or federal statutes.
6. **Repeating courses.**
  - a. An undergraduate student may repeat a course only once (except as noted in section 6(c)). The college offering the course may grant an exception to this provision. [Morris only] Students who receive a grade of S or C or higher may repeat a course only if space permits.
  - b. When a student repeats a course before receiving his/her degree, (a) both grades for the course will appear on the official transcript, (b) the course credits may not be counted more than once toward degree and program requirements, and (c) only the last enrollment for the course will count in the student's grade point average.
  - c. Provisions 6 (a) and (b) of this policy will not apply to courses (1) using the same number but where students study different content each term of enrollment and (2) to courses designated as "repetition allowed."
  - d. If an undergraduate student repeats a course after his/her degree has been awarded, the original course grade will not be excluded from the degree GPA nor will the new grade be included in the degree GPA.
  - e. Bracketing is the practice of not including a course in the calculation of a student's GPA and not counting the course as satisfying any degree requirements, including electives, because a student has repeated a course. When a student repeats a course, all prior attempts are bracketed and only the most recent attempt counts (except as provided in 6 (c)). No department or college may bracket the courses of another department or college for any reason other than course repetition. An F may not be bracketed with an N. A University course may not be bracketed with a course taken at another institution. The Graduate School does not bracket courses.
  - f. When a student enrolled in the Graduate School repeats a course, provisions 6(a) and (b) apply, but all grades for the course will be counted in the student's grade point average.
7. **Grade point average.** Every student will have calculated, both at the end of each grading period (quarter or semester) and cumulatively, a grade point average, which will be the ratio of grade points earned divided by

the number of credits attempted with grades of A-F (including pluses and minuses). Both the term and cumulative grade point average will appear on each student's record.

8. **Final grade due date.** Final grades will be submitted to the Registrar no later than three business days after the last day of the final examination period.
9. This policy may be modified from time to time but existing transcripts will not be modified when there are changes in policy. Changes to the grading and transcript policy will be reflected on the legend on the back of the official transcript.10.
10. **Compiling and reporting grading data.**
  - a. Data on the mean grade point average by designator and course level, on the percentage of A's awarded by course level, and on overall collegiate grade point averages will be prepared for grades awarded each Fall Semester. Data should be reported for all undergraduate students. Cells in the tables with fewer than 10 grades should be suppressed, in order to protect the privacy of students, but the numbers should be included in the totals.
  - b. The Office of Institutional Research will produce the required tables and provide them to the chair of the Senate Committee on Educational Policy and to the Office of the Senior Vice President for Academic Affairs and Provost.
  - c. The data tables and graphs required in 10 (a) and (b) will be reported annually to the Faculty Senate. These data should also be provided to all deans and department heads and made available to faculty and students.
11. All undergraduate colleges and campuses will publish each term a dean's list, consisting of students who achieved a 3.666 GPA or higher and who completed a minimum of 12 credits on the A-F grading system. There will be a transcript notation for each term that a student achieves the dean's list. Students who have chosen to suppress all their public information (which includes academic awards and honors) will not be included on the published dean's list.
12. **Alternative grading systems.**
  - a. Only the Senate Committee on Educational Policy will have the authority to grant to individual colleges or campuses permission to use alternative grading methods outside the provisions of this official University system, for a specified period (but no longer than five years), and only for the purpose of experimenting with a new grading system for possible system-wide adoption. Such permission may be granted if the proposal does not interfere significantly with the registration options of students from other colleges, campuses, and programs. Such alternative systems will be reported for information to the University Senate as soon as permitted and, after the specified period, will be re-evaluated, either to be discontinued, or with University Senate approval on recommendation from the Senate Committee on Educational policy, made part of the system-wide policy. Except for the provisions of this section 6, no college or program may use any grading system except for the one contained in this policy.
  - b. Because alternative grading systems, once used, must be maintained by the University forever afterward (to preserve the integrity of the transcripts), the Senate Committee on Educational Policy will rarely grant permission for alternative grading systems. It will consider doing so only when (1) those who propose it can make a persuasive case that the alternative is a more accurate and effective way to measure and record student academic performance, and (2) there is strong reason to believe that the proposal will be useful to all colleges and campuses of the University (except the Law School and Medical School).

---

## 5.5 Health Insurance

---

The University requires all students to have health care coverage to ensure they have access to medical care and can maintain good health, which is essential for academic success.

The Office of Student Health Benefits (OSHB), a unit of the Office for Student Affairs, administers health, dental and other benefits and enrollment for all eligible University students, residents, fellows, and interns. Please understand that this requirement is University-wide and not specific to the School of Public Health.

All students who are 1) admitted to a degree program\*, and 2) registered for six or more credits per semester (or three or more credits during summer term) that count towards the automatic assessment of the Student Services Fee, are required by the University of Minnesota to have health plan coverage. Students who meet both of these criteria are automatically enrolled in the University-sponsored Student Health Benefit Plan. Students may choose to waive the

University-sponsored Student Health Benefit Plan by providing proof of enrollment in an alternative Eligible Health Plan.

*\*Non-degree seeking, certificate-seeking, and distance learning students are not eligible to enroll in the University-sponsored Student Health Benefit Plan. Please contact the Office of Student Health Benefits to determine exact eligibility status.*

The University also requires all international students and their dependents to purchase the University-sponsored Student Health Benefit Plan unless they are eligible for a waiver. International scholars visiting the University for more than 31 days are also required to enroll in the University-sponsored Student Health Benefit Plan. Scholars who will be at the University for 31 days or less may choose not to enroll in the University-sponsored Student Health Benefit Plan, but are required to carry their own health plan coverage for the duration of their visit to the University (must meet J-1 U.S. Federal regulation requirements).

## Benefits

The Student Health Benefit Plan (SHBP) is a cost-effective, comprehensive health plan designed to meet the unique needs of students.

Key features of the SHBP include:

- No deductible;
- 100% coverage for routine preventive care like annual checkups and eye exams;
- Minimal out-of-pocket costs;
- Unlimited lifetime benefits; and
- Emergency travel assistance through FrontierMEDEX.

Many students find the University-sponsored plan to be a better value than alternative plans under parents, spouses, and employers, or individual health plan options.

The Office of Student Health Benefits negotiated with Blue Cross and Blue Shield of Minnesota to create the most robust student health plan possible. And because the Office of Student Health Benefits receives these features at cost—meaning with no inflated prices—the SHBP is an extremely cost-effective health plan for students. Plan details can be found online at [www.shb.umn.edu/index.htm](http://www.shb.umn.edu/index.htm)

## Long Term Care Disability Insurance Fee

[www.shb.umn.edu/twincities/ahc-students/disability-insurance-plan.htm](http://www.shb.umn.edu/twincities/ahc-students/disability-insurance-plan.htm)

Academic Health Center students (which includes the School of Public Health), enrolled in a qualifying AHC program, will be automatically covered under a group Long Term Disability plan while a student. **This coverage is not optional.** They will see a charge of \$41.50—an average cost of \$6.92 per month—for this coverage on their student account once at the beginning of each fall and spring semester. Payment of this fee for two consecutive semesters provides year around coverage until graduation from their program.

## Waiver

Eligible students are automatically enrolled in the University-sponsored Student Health Benefit Plan (SHBP) unless they waive the coverage. A charge for coverage on the SHBP will appear on your student account. The coverage and charge may be waived for Fall 2014 if you complete the waiver process per established guidelines by **September 15, 2014**. Approved waivers are valid for two years.

You are eligible to waive enrollment on this plan if you have health plan coverage for the entirety of each semester. If you do not appropriately waive the SHBP by **September 15, 2014**, you will be enrolled and billed for the entire semester. Additional information and deadlines for other terms can be found on the website for the Office of Student Health Benefits

**To waive enrollment in the SHBP** please submit details of your active health plan coverage when you register for classes, by providing the following:

1. the name of your insurance company,
2. your member ID number, and
3. your group number.

This information can be entered during registration or provided online through the deadline at [www.onestop.umn.edu/](http://www.onestop.umn.edu/). Look under Quick Links, then under Registration Tools, then select Health Plan Coverage.

## Questions and More Information

Office of Student Health Benefits  
University of Minnesota  
410 Church Street S.E., N323  
Minneapolis, MN 55455  
Phone: 612-624-0627 or 1-800-232-9017  
Fax: 612-626-5183 or 1-800-624-9881  
E-mail: [umshbo@umn.edu](mailto:umshbo@umn.edu)

[www.shb.umn.edu/](http://www.shb.umn.edu/)

---

## 5.6 Leave of Absence

---

### Leave of Absence

Graduate students who experience circumstances that prevent them from maintaining active status through continuous registration (excluding summer term), and who, through consultation with their Director of Graduate Studies (DGS), Program Director, advisor(s), and relevant offices determine that a leave of absence (LOA) is appropriate, must request a LOA from their college office using this form. Graduate students must receive approval for an official Leave of Absence.

Forms must be submitted to the School of Public Health Office of Admissions and Student Resources, A395 Mayo Memorial Building, MMC 819, 420 Delaware Street SE, Minneapolis, MN 55455.

---

## 5.7 Privacy

---

The School of Public Health is committed to protecting the privacy of students, staff, and research participants. Students have privacy rights that assure confidentiality of their student records. Research Participants have many rights that guarantee their safety and their privacy.

Often School of Public Health students work as Teaching Assistants and Research Assistants [that may require exposure] to private information. Please be [aware] of privacy laws, complete required privacy trainings, and act with the highest honor towards all private information.

For further information, go to [privacy.ahc.umn.edu](http://privacy.ahc.umn.edu).

### **FERPA (Family Educational Rights and Privacy Act): Student records**

FERPA grants four specific rights to a post-secondary student:

1. To see the information that the institution is keeping on the student.
2. To seek amendment to those records and in certain cases append a statement to the record.
3. To consent to disclosure of his/her records.
4. To file a complaint with the FERPA Office in Washington.

In addition:

- U of MN Faculty and Staff have a legal responsibility, under FERPA, to protect the confidentiality of your student educational records.
- Student educational records are considered confidential and may not be released without written consent of the student.
- Student information stored in electronic format must be secure and available only to those entitled to access that information.

## HIPAA (Health Insurance Portability and Accountability Act)

HIPAA is a federal law related to the privacy of an individual's health care information.

All students in the Academic Health Center (AHC), including School of Public Health students, must complete the University's online HIPAA Privacy training.

Login to [www.ahc.umn.edu/privacy/training/home.html](http://www.ahc.umn.edu/privacy/training/home.html), click on [myU.umn.edu](http://myU.umn.edu) and select **my Worklife** link to complete the training.

---

## 5.8 Immunizations

---

According to OSHA regulations, CDC guidelines, and University of Minnesota policy, Academic Health Center (AHC) students are required to have a health clearance as a condition of enrollment.

More details and the downloadable *Student Immunization Record* form are available from Boynton Health Service at <http://www.bhs.umn.edu/index.htm> and click on immunizations.

---

## 5.9 Criminal Background Checks

---

Students should be aware that certain facilities are required by Minnesota law to submit paperwork for a criminal background check for all personnel with direct, unsupervised client contact. Students placed in such facilities may be asked by the institution to submit paperwork, or the institution may require that they have this check facilitated by the School of Public Health or Division. The School is prepared to assist students with this process. Facilities that are covered by this law are hospitals, boarding care homes, outpatient surgical centers, nursing homes, home care agencies, residential care homes, and board/lodging establishments providing health supervision services. Client contact must be direct and unsupervised (outside the hearing or vision of a supervisor at the facility). In the unlikely event that this situation arises, students should call the School of Public Health Office of Admissions and Student Resources at 612.626.3500 or go to A395 Mayo for assistance.

---

## 5.10 Use of Human Subjects in Research

---

Any research you conduct while a student at the University of Minnesota may be subject to review and approval by the University's Institutional Review Board (IRB) for the protection of human research subjects. This applies to projects conducted inside or outside the University. For research conducted outside of the University, students may still need IRB approval from the University even if approval has been obtained from an external agency.

The IRB is a committee of faculty, students, and community members that follows federal regulations and ethical principles in order to protect human research subjects. Learn more about the IRB here: <http://www.research.umn.edu/irb>.

The committee is most concerned with the researcher's interface with subjects rather than the background rationale for the project. Specifically, this refers to the recruitment process, the interviewer's experience and expertise, how subjects are informed about the study and expectations for their participation, and how subjects are debriefed after their participation so that subjects can make an informed decision about participation.

If your proposed research project is subject to IRB review, you must submit an application to the IRB before you begin. **You cannot begin any regulated research until you have IRB approval.** This includes sending out recruitment flyers or emails, accessing private data, or doing any aspect of your research. You may not be permitted to use any data that was collected without prior IRB approval. The IRB does not have the authority to approve a study *after* it has begun.

The IRB approval process may take as little as one week, but **can take up to 2 months or longer**. "Last minute" approvals are not possible, so it is important to plan ahead. Applications for international research, research with children, research about illegal or stigmatizing behavior, research with vulnerable populations, or research that incorporates deception often require more review time.

What research must be reviewed by the IRB?

**If you and/or your faculty advisor are even a little uncertain about whether your project needs IRB approval, email or call the IRB.** IRB staff members are trained to help you and your advisor determine if you must submit an IRB application. Contact your faculty advisor or the Executive Director of the IRB at 612-626-4851 if you do not receive a helpful response. Again, you may not be able to use any data collected if you conduct research that should have been reviewed by the IRB.

### **IRB Contact Information**

(612) 626-5654

irb@umn.edu

<http://www.research.umn.edu/irb/>

Any *research involving human subjects* must be reviewed by the IRB. This means that if you are conducting research (which is a systematic investigation designed to contribute to generalizable knowledge) with human subjects (which are living individuals about whom you collect information) your research is subject to IRB approval. In short, if your research project involves living people, you should at least contact the IRB or submit an application.

Projects that are not subject to IRB review include studies that rely on existing publicly available data, such as US Census data. If you are only doing an analysis of publicly available data (i.e., data you can download from a public website) you do not need IRB approval to use it. Technically, such work is research but does not involve living individuals from whom you collect information. On the other hand, an oral history study may not require IRB because it is not a systematic investigation designed to contribute to generalizable knowledge. However, there are many grey areas, so students proposing such work are strongly encouraged to contact the IRB to determine whether their project requires approval.

Additional guidelines for students involved in international fieldwork

If you plan to use data collected as part of your international field experience for your master's project, you are strongly encouraged to contact the IRB before your field experience begins to ensure that your project is approved in a timely manner. **You will not be allowed to take data out of the host country without IRB approval.**

How do I apply for IRB approval?

If, after contacting the IRB or speaking with your faculty advisor, your project needs to be reviewed, the next step is to browse and study the IRB website.

Before submitting your application, **you must complete online training** in the protection of human research subjects. To do this, follow the TRAINING tab on the IRB website to the CITI training. For most public health students, the CITI social science module is suggested. There is no charge for the training but it takes up to four hours to complete. You will need your UMN X.500 username and password.

Your research may be exempt from IRB review. However, only the IRB can determine this, so you must submit an **Exempt Research Application** to the IRB to have your exemption approved. There are four categories of research that are exempt from IRB review. Exempt public health research typically involves exemption #2 (e.g., low risk anonymous surveys or observation of public behavior when no personal identifiers are recorded) or #4 (e.g., use of existing anonymous data from a professor's study). For more information on these categories and copies of the appropriate Exempt Research Applications, click the IRB REVIEW PROCESS tab on the IRB website and then click on EXEMPT CATEGORIES.

If your research is subject to IRB review and is not exempt, you must fill out a regular IRB application form, which can be found on the IRB website under the FORMS tab. Most public health studies should fill out the **Social Science form**. The Medical form is typically for experimental drug studies or similar types of research. Call or write the IRB if you are unsure of which form to fill out. Also, there are several appendices on the IRB website that you may be required to include with your application. One appendix is surely needed: **Appendix J**, which is for student research. Your advisor will help you fill this out.

The IRB forms may be submitted by email to the IRB (see Contact Information, above). **Be sure to "cc" your advisor** if she/he did not actually sign the documents: the IRB accepts the "cc" as a digital signature.

What does the IRB look for?

When reviewing your application, the IRB will look for the following things:

1. You have completed (CITI) training
2. Your advisor has completed Appendix J and is "cc'd" on the submission email or has signed the documents
3. Risks to subjects are minimized
4. Risks to subjects are reasonable in relation to anticipated benefits
5. Selection of subjects is equitable and fair
6. Informed consent is sought from each prospective participant
7. Adequate preparation is taken to protect the privacy and confidentiality of subjects
8. Adequate provisions are made for the ongoing monitoring of the subjects' welfare

Some tips

- **Call or email the IRB if you have *any* questions. They are paid to help you and have seen thousands of studies, many just like yours!**
- Students should work closely with their faculty advisors when completing IRB forms.
- If you are collecting primary data, you will need a copy of the questions you intend to ask subjects, a protocol for collecting data, a consent form with all the elements (see website), and a plan to encrypt identifiable data. If you will be using participant recruitment materials (letters, advertisements, etc.), you must also include them along with your application.
- The IRB looks very closely at research involving children, prisoners, incapacitated persons, the elderly, deception, and higher risk interventions.
- If you're hoping to work with children, plan on getting informed consent from parents.
- All research entails some risk to subjects, even if merely boredom. It is best to overestimate the risks your study poses to subjects and to underestimate its benefits.
- Write short, pithy answers to each question on the IRB form.
- The length of time it takes for the IRB to review and approve your application is highly correlated with the completeness and quality of your application. Incomplete or vague answers often result in "deferrals" which can greatly lengthen the time to approval.
- This page on the IRB website offers specific guidance for student researchers:  
<http://www.research.umn.edu/IRB/guidance/student-researchers.html>.

---

## 5.11 International Student Requirements

---

**Note:** International student requirements may change over time. For up-to-date information go to [www.iss.umn.edu](http://www.iss.umn.edu).

### Document Check and Orientation

All new international students must visit the University of Minnesota International Student & Scholar Services office (ISSS) shortly after arrival in Minnesota. See [www.iss.umn.edu](http://www.iss.umn.edu) for directions, office hours, and services. ISSS will review immigration documents, register new students for the International Student Orientation Program, and provide information on how to release registration holds. These processes are mandated by the Department of Homeland Security (DHS); formerly known as Immigration and Naturalization Service (INS).

International students are allowed to enter the U.S. only within 30 days of their program start date. Regulations and SEVIS requirements provide strict guidelines regarding this date, to coincide with the term of admission.

### Student and Exchange Visitor Information System (SEVIS)

SEVIS is an electronic reporting system that provides the Department of Homeland Security with information on international students and scholars in the United States who hold F, J, and M visas. This internet-based record-keeping system maintains electronic data on all international students. The system also tracks entries into and departures from the U.S. Every school, college, and university that admits students or scholars on F, J, or M visas is mandated to implement SEVIS.

In addition to the information routinely reported on I-20 and DS-2019 forms, other information is reported, including but not limited to: academic status, employment, and residential address.

For more information on SEVIS requirements, including those listed below, go to [www.iss.umn.edu](http://www.iss.umn.edu).

### **Academic Status**

International students must maintain full-time status. MPH students must register for at least 6 credits each semester. Under special conditions, students may apply for an exemption from the full-time status rule at the ISSS office. Students must apply for the exemption before registering for less than a full course of study.

### **Address Change**

International students **MUST** notify **BOTH** the DHS Bureau of Citizenship & Immigration Services (BCIS) and the University of Minnesota **within 10 days** of a change of address. For more information go to [www.iss.umn.edu/INSGen/address.html](http://www.iss.umn.edu/INSGen/address.html) See Section. 6. Groups, Associations, and Societies.

## 6. Groups, Associations and Societies

### 6.1 Student Groups

#### School of Public Health Student Senate

<https://sites.google.com/a/umn.edu/sphss/>

The Student Senate is comprised of graduate students of the University of Minnesota, School of Public Health. The Senate serves two main functions:

- The Student Senate is an official organization of the University of Minnesota, School of Public Health, representing the SPH graduate students in several university committees.
- The Student Senate also acts as the public health student association of the University of Minnesota, organizing activities and events among the graduate students in the school. They participate in volunteer activities around the Twin Cities, organize social events, and address student needs and concerns to the School and the divisions.

The SPH Student Senate welcomes input from all students from the school and invite you to join the Senate and help us serve the needs of the SPH students. Contact us at [sphss@umn.edu](mailto:sphss@umn.edu).

The student senate officers for the 2014-2015 academic year are:

| Office                    | Name                                |
|---------------------------|-------------------------------------|
| President                 | Christopher Kim                     |
| VP of Communications      | Elizabeth (Bette) Dougherty         |
| VP of Operations          | Brian Ambuel                        |
| VP of Student Advancement | Elizabeth (Liz) Fristad             |
| VP of Finance             | Elizabeth (Ellie) MadisonCraig-Kuhn |

#### Graduate and Professional Student Assembly (GAPSA)

[www.gapsa.umn.edu](http://www.gapsa.umn.edu)

The Graduate and Professional Student Assembly serves many functions on this campus, chief among them ensuring that the University, in all of its offices, programs, schools and departments, works in the interests of excellence in the graduate and professional experience. GAPSA and its coordinate councils advocate on your behalf to make the University of Minnesota the premier institution for graduate and professional education in the nation, and try to make sure students have a smooth, supported, even fun time getting their degree.

#### Council of Graduate Students (COGS)

[www.cogs.umn.edu](http://www.cogs.umn.edu)

The Council of Graduate Students (COGS) is the official student governing board of the Graduate School, representing all Graduate Students at the U of M. The U administration looks to COGS for consultation and direction on all matters pertaining to the Graduate School experience, including Graduate Assistant issues.

#### Center for Health Interdisciplinary Programs (CHIP)

[www.chip.umn.edu](http://www.chip.umn.edu)

The Center for Health Interdisciplinary Programs or CHIP is a department of the Office of Education in the Academic Health Center Senior Vice President's Office. The CHIP Student Center serves AHC students in the schools of dentistry, dental hygiene, health care administration, medical technology, medicine, mortuary science, nursing, occupational therapy, pharmacy, physical therapy, public health, and veterinary medicine.

CHIP exists to foster interdisciplinary relationships and teamwork between Academic Health Center students. CHIP provides educational, leadership, and service opportunities for students.

#### Minnesota International Student Association (MISA)

[www.tc.umn.edu/~misa/](http://www.tc.umn.edu/~misa/)

The Minnesota International Student Association (MISA) is a non-profit organization that aims at working in the interest of international students at the University of Minnesota. MISA represents the international community of the University of Minnesota Campus. There are about 3000 international students on this campus, whose length of stay varies from 3 months to several years. MISA plays a vibrant role in students' social lives, by being the forum for international students on the U of M campus and by organizing events throughout the year.

## Other Groups

[www.sua.umn.edu/groups/](http://www.sua.umn.edu/groups/)

More than 400 student groups on campus are registered with the University's Student Unions and Activities Office, including academic societies, cultural centers, sports clubs, political action groups and fraternities and sororities. These organizations provide students with endless involvement opportunities and the chance to interact with others who share a similar interest.

---

## 6.2 Public Health Related Associations and Agencies

---

### Minnesota Public Health Association

[www.mpha.net/](http://www.mpha.net/)

Founded in 1907, the Minnesota Public Health Association (MPHA) is a statewide professional organization actively serving Minnesotans, our members, and the public health profession through its efforts and activities. MPHA is an affiliate of the American Public Health Association.

### American Public Health Association

[www.apha.org](http://www.apha.org)

The American Public Health Association (APHA) is the oldest and largest organization of public health professionals in the world, representing more than 50,000 members from over 50 occupations of public health.

### Association of Schools and Programs of Public Health

[www.aspph.org/](http://www.aspph.org/)

The Association of Schools and Programs of Public Health (ASPPH) is the only national organization representing the deans, faculty, and students of the accredited member schools of public health and other programs seeking accreditation as schools of public health.

### Centers for Disease Control and Prevention

[www.cdc.gov](http://www.cdc.gov)

The Centers for Disease Control and Prevention (CDC) is recognized as the lead federal agency for protecting the health and safety of people - at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships. CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.

### National Institutes of Health

[www.nih.gov](http://www.nih.gov)

Begun as a one-room Laboratory of Hygiene in 1887, the National Institutes of Health today is one of the world's foremost medical research centers, and the Federal focal point for medical research in the U.S.

### American College of Healthcare Executives

[www.ache.org](http://www.ache.org)

The American College of Healthcare Executives is an international professional society of more than 30,000 healthcare executives who lead hospitals, healthcare systems and other healthcare organizations.

---

## 6.3 Alumni Societies

---

### School of Public Health Alumni Society

[www.minnesotaalumni.org](http://www.minnesotaalumni.org)  
[www.sph.umn.edu/alumni/](http://www.sph.umn.edu/alumni/)

Founded in 1944, University of Minnesota School of Public Health alumni exist around the world. Our 9500+ alumni are important members of the school and public health community as they continue to shape public health policy, conduct ground-breaking research, lead innovative public health solutions and contribute to the future of public health.

Since its inception in 1982, the School of Public Health Alumni Society has worked to serve alumni and students, promote excellence in programs and advance public health efforts in our community and the world. As an extension of the University of Minnesota Alumni Association, the SPH Alumni Society currently has more than 1,400 members. Membership is open to all graduates, former students who have completed a minimum of 12-18 credits, faculty and administrators of the school.

The SPH Alumni Society is committed to building relationships with students through Mentoring@SPH, a new program aimed at providing professional development opportunities for students by connecting with alumni. For more information, visit [sphalumni.umn.edu/mentoring](http://sphalumni.umn.edu/mentoring).

### MHA Alumni Association

[www.mhaalum.org/](http://www.mhaalum.org/)

The Alumni Association of the University of Minnesota MHA Program was established in 1948 to facilitate ongoing support of the Healthcare Administration program and to continue fellowship among alumni. There are over 1,600 members. The Association supports MHA students through scholarships and by providing learning opportunities.

## 7. DIVISION OF BIOSTATISTICS

---

### 7.1 Introduction

---

J. Arthur Harris and Edna Lockwood of the Botany Department taught the first biostatistics course at the University of Minnesota in 1924. Biostatistics courses continued in the Botany Department until 1936, when the biostatistics group became the Biometry Division, headed by Alan Treloar, in the new Department of Preventive Medicine and Public Health. By 1965, when Biometry opened a computer center for students and faculty, Biometry was the largest division in the School of Public Health. The Division head at the time was Jacob Bearman, who has endowed an annual student award. Byron Brown headed the Division from 1965-1968, followed by Richard McHugh until 1972. Marcus Kjelsberg was Division Head until 1986, when Biometry became Biostatistics, with Thomas A. Louis as its new Division head. In 1999, Richard Tweedie became head of Biostatistics. Following Dr. Tweedie's sudden death in June 2001, John Connett became the Division head of Biostatistics. In May 2010, Bradley Carlin began his role as Biostatistics Division Head.

During the 2014-2015 academic year, there will be 32 faculty with Biostatistics Graduate Education responsibilities. and around 65 graduate students: 38 in the PhD program and about 25 in the Masters degree programs. Our website at [www.sph.umn.edu/biostatistics/](http://www.sph.umn.edu/biostatistics/) has notes on the faculty and their research and collaborative projects.

### 7.2 Overview of Degree Programs

---

Biostatistics has four different degree programs:

- Master of Science (MS) Plan B (*section 8*)
- Master of Science (MS) Plan A (*section 9*)
- Master of Public Health (MPH) (*section 10*)
- Doctor of Philosophy (PhD) (*section 11*)

The MS-Plan B program takes two academic years for full-time students, but we also accept part-time students and will help plan a schedule for completing the MS. The first year consists of two courses in applied biostatistics methods with extensive computing in SAS, two semesters of statistical theory, and a health science elective course. At the end of the first year, there is a written exam covering the two theory and two methods courses. During the summer many students gain experience at an internship in industry or research. In the second year, students take courses in clinical trials, analysis of survival data, plus three biostatistics electives. The MS is completed with a project during the final semester.

The MS-Plan A is primarily pursued by students who already have a research degree in a closely related field, for example, a PhD in mathematics. The MPH has additional requirements beyond those for the MS-Plan B, including an internship and coursework in all of the core areas of public health.

The PhD program (*section 11*) is designed so that students, with an MS in Biostatistics/Statistics, may complete all required PhD coursework in two years and start their dissertation during their second or third year. (Student with a Bachelor's degree who are admitted to the PhD program may complete all required PhD coursework in three years.) PhD students who have already taken all pre-recommended coursework will take semester courses in linear models, probability models, advanced statistics inference and Bayesian decision theory and then prepare during summer for the preliminary written exam that is given near the end of August. The following year is for biostatistics electives and the supporting program or minor. Students are encouraged to begin work on their dissertation after taking the preliminary PhD written exam.

---

## 7.3 Advising

---

The Division of Biostatistics and the School of Public Health provides advising that promotes collaboration among students, staff and faculty to enhance students' academic and professional development in the field of public health. The School's goal is educational and experiential excellence that prepares students for successful careers improving the health of populations.

The Division of Biostatistics and the School of Public Health is committed to creating and sustaining high quality advising in the following four areas:

- **Administrative Advising:** advising on course planning and scheduling, policies, procedures and benchmarks of the degree program/major, SPH, and the University. (In Biostatistics this is the Program Coordinator.)
- **Academic Advising:** general guidance on topics related to program/major including, but not limited to program focus (may include identifying appropriate course work options), project selection and career planning. (Academic advisors are assigned to new students at random and students may switch advisors at any time by contacting the Program Director/Director of Graduate Studies.)
- **Field Experience/Internship/Practicum Advising:** specific and targeted advising for field experience/internship/practicum development, placement and completion. Your faculty advisor can assist you as you select the type of field experience that would best match your goals. Careers Services staff can help you to learn how to network with other students and alums to explore possible field experiences sites.
- **Masters Project/Thesis/Plan A&B/Dissertation Advising:** specific and targeted direction on a master's project or a PhD dissertation including, but not limited to development, completion and in some cases publication. (MS students choose their project advisor for their Plan B project during the second year. This does not need to be the same person as their academic advisor. When PhD students choose their dissertation advisor, this faculty member also becomes their academic advisor.)

Students will be assigned to an advising team consisting of the program coordinator, faculty advisor, project advisor and program chair. All members of the team share responsibility for creating a successful advising relationship.

### Advising Expectations for Students

Biostatistics students are expected to...

- Regularly read and respond to University email (ideally once per day); email is the official mode of communication at the University of Minnesota
- Review program objectives and educational documents at least once per semester, (i.e. Student Guidebook, etc.), or when directed by program coordinator or program chair; students are responsible for knowing the requirements of the degree program
- Actively contribute to a welcoming and supportive SPH climate
- Initiate meetings with advisor(s) at least once per semester; regularly communicate with faculty advisor(s) and/or program coordinator about program progress
- Respond to inquiries from faculty or staff in a timely manner (ideally within 5 – 7 business days)
- Behave in a professional and courteous manner; fulfill educational and advising commitments, such as appointments, project deadlines, etc.

### Advising Expectations for Faculty

Faculty advisors are expected to...

- Refer advisee to Program Coordinator for course planning/scheduling, policy and procedural information
- Review program objectives and educational documents at least on an annual basis, (i.e. Student Guidebook, etc.), or when directed by Program Coordinator or Program Chair
- Actively contribute to a welcoming and supportive SPH climate
- Initiate meetings with advisee at least once per semester; regularly communicate with students on progress
- Respond to student inquiries in a timely manner (ideally within 5 – 7 business days)
- Provide reasonable office hours and/or appointments and be generally available to student inquiries; communicate with students about extended absences or travel
- Serve as a model and example of respectful behavior
- Provide referrals to school and university resources when appropriate (e.g. Student Mental Health Services)

---

## 7.4 Internships

---

A summer internship at the Centers for Disease Control, or a medical or pharmaceutical company, can be a valuable experience and a great help on a resume. MS students who find an internship usually hold the job during the summer after the first year.

Start looking early: The time to start looking for an internship for the summer after the first year is during the December-January break between semesters. The January issue of *Amstat News* lists internship opportunities, as does the following website: [www.amstat.org/jobweb/index.cfm](http://www.amstat.org/jobweb/index.cfm)

Federal regulations apply to international students who wish to hold internships; see *section 7.6*.

---

## 7.5 Seminars

---

An advantage of being in a major research program like ours is the opportunity to learn what other top biostatisticians, from both academic and industry, are doing; our divisional seminar provides such a venue. It is not necessarily about technical details, but also a big picture of the field, to which you will devote your next many years of life. It also provides a chance to learn something you may not learn from class. As a biostatistician, you need a big toolbox, from which you will draw to apply in your future work; even with as many courses as provided in our full curriculum, the chance is still quite high that a lot of useful tools are not covered in our courses.

The Division of Biostatistics offers research seminar talks, usually on Wednesday afternoons at 3:30, preceded by a tea at 3:00. All students are strongly encouraged, and PhD students are required to attend, and are warmly welcomed to join the social tea. The schedule of seminars is at <http://www.sph.umn.edu/biostatistics/seminars/>.

The School of Statistics also offers research seminars. Further information can be found at [www.stat.umn.edu](http://www.stat.umn.edu).

---

## 7.6 International Student Requirements

---

### Document Check

Students must visit the International Student and Scholar Services (ISSS) office to have their documents checked upon arrival in the U.S. The ISSS has a web page of orientation information for international students at <http://www.iss.umn.edu/new/default.html>.

### Health Insurance

The University of Minnesota requires all international students and their spouses and children to enroll in the Student Health Benefit Plan (SHBP) unless they are covered by a United States-based-employer-sponsored health plan or the Graduate Assistant Insurance Plan (GA Plan) provided by the University of Minnesota. If you have questions or need further information, please contact the Student Health Benefits Office (612.624.0627) located in room N323 at Boynton Health Service [studins@bhs.umn.edu](mailto:studins@bhs.umn.edu).

### Spoken English Testing and English Proficiency

Students for whom English is a second language must demonstrate proficiency in spoken English. All Biostatistics students must have a proficiency ELP rating of 1, 2 or 3. Proficiency is assessed in one of the following ways:

- English Language Proficiency (ELP) rating earned through coursework with the Center for Teaching and Learning (CTL)
- Speaking section of TOEFL iBT (internet-based Test of English as a Foreign Language).
- SETTA (Spoken English Test for Teaching Assistants) test (TC campus) or alternative test chosen by coordinate campuses

More information can be found at [www1.umn.edu/ohr/teachlearn/graduate/itap/settaeligibility/index.html](http://www1.umn.edu/ohr/teachlearn/graduate/itap/settaeligibility/index.html)

It is best to confirm your ELP rating during Fall Semester of the first year. Students who do not have a rating of 1, 2 or 3 must take the SETTA test or a course in Classroom Communication Skills. Students who do not have a 1, 2, or 3 proficiency rating will be considered less favorably for available Graduate Assistantships that occur during the year.

## Maintain Full-Time Student Status

Students must register for at least 6 credits each semester. Under special conditions, they may apply for an exemption from the 6-credit rule at the ISSS office. Students must apply for the exemption before registering for fewer than 6 credits.

## Notification of Changes

Students should immediately notify the Program Director/Director of Graduate Studies if their visa type changes or there is a change in their graduate assistantship. We will work with you to help solve any problems that arise.

## Internships

Students who find an internship opportunity during their graduate program may apply with the ISSS to hold an internship under **Curricular Practical Training (CPT)**. The federal requirements are:

- Students must find a Biostatistics faculty member who will act as "sponsor." This faculty sponsor signs the ISSS application, and agrees to assess the student's work during the internship. The student and faculty sponsor should agree in advance on the terms of this assessment; a brief written report is usual.
- Students must register for PubH 8494 Biostatistics: Directed Research (1 credit), with the faculty sponsor.

There is another program called **Optional Practical Training (OPT)** that may be used after students have finished all requirements for their degree. As with CPT, a faculty sponsor and assessment are also needed for Optional Practical Training and the student needs to register for Grad 0999 (free, no-credit). However, a student who spends 12 months or more in full-time Curricular Practical Training is not eligible for Optional Practical Training. Please contact the ISSS for more details.

---

## 7.7 Teaching Assistant and Research Assistant Positions

---

The Division of Biostatistics gives financial support in several ways, but mostly through graduate assistantships: Teaching Assistant (TA) or Research Assistant (RA) positions or a combination of both. Graduates use skills from both types of work, so there is an effort to assign each supported student to both at some time during their program. The Program Director/Director of Graduate Studies in consultation with the faculty makes TA and RA assignments.

### Teaching Assistantship (TA)

Teaching assistants are usually assigned to one or two courses each semester, and are expected to work 10 hours each week (25% appointment) for each assigned course working one-on-one with students to answer questions, grading papers and exams, or helping in the computer lab.

### Research Assistantship (RA)

Research assistants are assigned to research projects to work with data management and statistical analysis under the supervision of faculty and staff. Research assistants are expected to work 10 hours each week for a 25% appointment or 20 hours each week for a 50% appointment.

The levels of financial support depend on the highest academic degree held by the student: Level I for students with a BA or BS; Level II for students with an MA, MS, higher degree or students in the Biostatistics PhD program.

Should a student earn a Master's degree during an appointment period as an RA or TA, the student's salary will increase at the start of the next pay period after the degree is conferred.

The following table summarizes the salary, benefits, and expectations for half-time (25%) and full-time (50%) support for the nine-month school year during the 2014-2015 academic year. Further details of benefits are at [www1.umn.edu/ohr/gae/benefits/index.html](http://www1.umn.edu/ohr/gae/benefits/index.html)

|   | Half-Time Support<br>25% Appointment | Full-Time Support<br>50% Appointment |
|---|--------------------------------------|--------------------------------------|
| <b>Hours of Work Per Week</b>                 | 10 hours                             | 20 hours                             |
| <b>MS/PhD Tuition [14 credits/semester] *</b> | 50% tuition benefit, resident rate*  | 100% tuition benefit*                |
| <b>Medical Benefit</b>                        | 47.5% coverage                       | 95% coverage                         |
| <b>Minimum 9-Month Salary [Level I]</b>       | \$6,833                              | \$13,666                             |
| <b>Minimum 9-Month Salary [Level II]</b>      | \$8,744                              | \$17,488                             |

The maximum tuition benefit is defined by the Graduate School tuition plateau. For 2014-15 the tuition plateau cap will be \$7,729.00 per semester for a 50% appointment.

MPH students may calculate the tuition benefit with the following method:

- Multiply your actual appointment percentage times two to determine tuition benefit percentage
- Multiply the maximum tuition benefit by your calculated tuition benefit percentage
- Subtract this amount from your total tuition (number of registered credits times \$888.00 resident or \$1,155.00 nonresident tuition).

#### **Example 1: 25% appointment**

|                   |  |
|-------------------|--|
| 25%               | (Appointment Percentage)               |
| <u>X 2</u>        |  |
| 50%               | (Tuition Benefit Percentage)           |
| <br>              |  |
| \$7,729.00        | (Maximum 2013-2014 Tuition Benefit)    |
| <u>X 50%</u>      | (Tuition Benefit Percentage)           |
| \$3,864.50        | (Tuition Benefit)                      |
| <br>              |  |
| \$10,656.00       | (12 cr. at \$888.00 SPH resident rate) |
| <u>- 3,864.00</u> | (Tuition benefit)                      |
| \$ 6,792.00       | (Tuition billed to MPH student)        |

#### **Example 2: 50% appointment**

|                   |  |
|-------------------|--|
| 50%               | (Appointment Percentage)               |
| <u>X 2</u>        |  |
| 100%              | (Tuition Benefit Percentage)           |
| <br>              |  |
| \$7,729.00        | (Maximum 2013-2014 Tuition Benefit)    |
| <u>X 100%</u>     | (Tuition Benefit Percentage)           |
| \$7,729.00        | (Tuition Benefit)                      |
| <br>              |  |
| \$10,656.00       | (12 cr. at \$858.00 SPH resident rate) |
| <u>- 7,729.00</u> | (Tuition benefit)                      |
| \$ 2,927.00       | (Tuition billed to MPH student)        |

### **Dates of Employment for Graduate Assistantships**

RA and TA positions actually start a week before classes begin in the Fall, and continue a week after classes end in the Spring. There is no official vacation in December. Under the University rules, all graduate assistants are expected to be present to work during the entire term they are employed, so this means that **vacation time must be negotiated in advance with the supervisor**. Here are the time periods when graduate assistants are employed:

|                             | Start Date      | End Date        |
|-----------------------------|-----------------|-----------------|
| <b>Fall Semester 2014</b>   | August 25, 2014 | January 7, 2015 |
| <b>Spring Semester 2015</b> | January 8, 2015 | May 24, 2015    |

Students who terminate a graduate assistantship before the contracted ending date will be required to “pay back” a prorated amount of tuition and health insurance.

### **Summer Support**

TA positions do not continue during the summer. Summer support for RAs depends on research funding levels, so these are negotiated between the student and their supervisor. Summer RA/TA positions generally do not cover summer tuition costs.

### **Length of Financial Support**

PhD students, who have completed their MS degree and make satisfactory progress (see section 11.5), will receive financial support for up to four years. All other students in the PhD program will be supported for a maximum of 5

years. If funding is available, we will support MS and MPH students for up to two years, as long as they make satisfactory progress (see section 8.5). Because future research funding is always uncertain and because of our increasing student body, we may not be able to promise this funding for future MS/MPH students. Students assigned a graduate assistantship will receive a letter of appointment before Fall Semester describing their assignment, but the Division cannot make a commitment to continue that assistantship longer than the academic year (Fall and Spring Semesters).

We try to help continuing students who did not receive support when they started the program, as long as they are making satisfactory progress.

### **Finding Other Assistantships**

Students admitted to the MS or PhD programs without financial support are eligible to apply for any graduate assistantship within the University. All graduate assistants receive the benefits listed above, although salaries may differ. All graduate assistant openings are listed at [www1.umn.edu/ohr/employment/index.html](http://www1.umn.edu/ohr/employment/index.html) and [www.sph.umn.edu/careers/search/](http://www.sph.umn.edu/careers/search/).

---

## **7.8 Student Mailboxes**

---

All division students have a mailbox and should check it frequently for information. Mailboxes are located in Mayo A446. This room is locked at all times. The combination to the door can be obtained from the Biostatistics Mayo staff (Megan Schlick or Sally Olander).

---

## **7.9 Division Travel Policy for Biostatistics Students**

---

The 2014-2015 Division policy for Biostatistics student travel is as follows:

- 1.) All students giving a contributed, invited, or poster presentation of their research at a conference (ENAR, JSM, etc.) will be eligible for up to \$600 in support.
- 2) For those who obtain external matching funds (say, an ENAR Student Travel Award, any of the JSM student travel awards sponsored by the various ASA sections, etc), the amount of expenses eligible for reimbursement will increase to \$1200. That is, we will continue to reward students who find other funding sources and get nice slots on the program with an increase in support. We will also permit such students to split this funding across more than one meeting -- say, using \$400 to supplement your ENAR travel and the remaining \$800 to supplement your JSM or other travel.

Please email all requests for approval to use these funds to Brad Carlin ([carli002@umn.edu](mailto:carli002@umn.edu)) with a copy to Janet Bendickson ([j-bend@umn.edu](mailto:j-bend@umn.edu)). Save your receipts so the Division of Biostatistics can process your reimbursement after you return.

## 8. BIostatISTICS MS PLAN B DEGREE PROGRAM

### 8.1 Biostatistics MS Competency Statement

Biostatisticians are key collaborators in scientific research, providing expert advice on and direct involvement in study design, implementation, analysis, and communication. The Biostatistics program balances education in applied and theoretical biostatistics, mathematical statistics, and computing, all within the context of public health, medicine, and clinical translational research. Employers' requirements are periodically assessed by surveys of and informal discussions with alumni and their employers, and the curriculum is often modified as a result of that feedback. No biostatistics or statistics professional organizations have developed competency sets for graduate programs. Thus, the Biostatistics programs' competencies reflect the views of the faculty and alumni on the critical knowledge and skills needed by biostatisticians, as well as review of peer programs' curricula.

| MS — Biostatistics   | LEARNING EXPERIENCES                                    |                                |  |                                     |  |                                     |   |   |  |   |   |                             |  |                                    |  |  |                                  |                                   |   |
|--|---|--------------------------------|--|-------------------------------------|--|-------------------------------------|---|---|--|---|---|-----------------------------|--|------------------------------------|--|--|----------------------------------|-----------------------------------|---|
|  | PUBH 6020 Fundamentals of Social and Behavioral Science | PUBH 6101 Environmental Health | PUBH 6751 Principles of Management in Health Organizations | PUBH 7405 Biostatistics: Regression | PUBH 7406 Advanced Regression and Design | PUBH 6341 Epidemiological Methods I | PUBH 7420 Clinical Trials: Design, Implementation, and Analysis | PUBH 7430 Statistical Methods for Correlated Data | PUBH 7435 Latent Variable Measurement Models | PUBH 7440 Introduction to Bayesian Analysis | PUBH 7445 Statistics for Human Genetics and Molecular Biology | PUBH 7450 Survival Analysis | PUBH 7460 Advanced Statistical Computing | PUBH 7465 Biostatistics Consulting | PUBH 7470 Statistics for Translational and Clinical Research | PUBH 7475 Statistical Learning and Data Mining | STAT 5101 Theory of Statistics I | STAT 5102 Theory of Statistics II |   |
| Use a general understanding of public health research, practice, and ethics to inform biostatistical practice.                   | X   | X                              | X  |                                     |  | X                                   | X   |   | X  |   |   | X                           |  |                                    |  |  |                                  |                                   |   |
| Collaborate in the design of research studies of human health and disease.   |   |                                |  | X                                   | X  |                                     | X   |   |  |   |   | X                           |  |                                    |  |  |                                  |                                   |   |
| Implement tabular and graphical displays of quantitative information in ways that are clear to non-statistical scientists.       |   |                                |  |                                     | X  |                                     |   |   |  |   |   |                             |  | X                                  |  |  |                                  | X                                 | X |
| Draw inferences from quantitative data and communicates those inferences and their interpretation to non-statistical scientists. |   |                                |  |                                     | X  |                                     |   | X   |  | X   |   |                             |  | X                                  |  | X  | X                                | X                                 | X |
| Write programs in two or more statistical packages.  |   |                                |  | X                                   | X  |                                     |   |   |  | X   |   | X                           | X  |                                    |  |  |                                  |                                   |   |
| Address a public health or research question with statistical analysis and/or simulation study.                                  |   |                                |  |                                     | X  | X                                   | X   | X   |  |   | X   |                             |  |                                    | X  |  |                                  |                                   |   |

## 8.2 Requirements

### Coursework

For the MS-Plan B program, you must complete 6 core courses and 4 elective courses with a GPA of 3.0, pass a comprehensive written exam, complete the Plan B project, and pass the final oral exam. All courses in the MS-Plan B program must be taken with the A/F grading option.

- Six core biostatistics courses: Regression (PubH 7405), Advanced Regression and Design (PubH 7406), Theory of Statistics I and II (Stat 5101, 5102; or Stat 8101, 8102), Survival Analysis (PubH 7450), and Clinical Trials, (PubH 7420).
- Three biostatistics electives (at least 8 credits total), usually taken during the second year.
- One health science elective (3 credits), usually taken during the first year.
- PubH 7494 Master's Project: Biostatistics (3 credits), taken while completing the Plan B project.
- Students who are not native speakers of English must show proficiency in spoken English; see section 7.6.

### Standard MS-Plan B Course Schedule

#### Fall Semester – Year One

| Course                         | Title  | Credits |
|--------------------------------|--|---------|
| PubH 7405                      | Regression   | 4       |
| * Stat 5101<br>or<br>Stat 8101 | Theory of Statistics I (5101)<br>Theory of Statistics I (8101) | 4       |
| <i>Varies</i>                  | <i>Health Science Elective</i>                                 | 3-4     |

#### Spring Semester – Year One

|   |  |     |
|---|--|-----|
| PubH 7406   | Advanced Regression and Design                                   | 4   |
| * Stat 5102<br>or<br>Stat 8102  | Theory of Statistics II (5102)<br>Theory of Statistics II (8102) | 4   |
| <i>Varies</i>   | <i>Biostatistics Elective</i>                                    | 1-4 |
| <b>Comprehensive Written Exam to be taken after finals of Spring Semester</b> |  |     |

#### Fall Semester – Year Two

| Course        | Title                         | Cr  |
|---------------|-------------------------------|-----|
| PubH 7450     | Survival Analysis             | 3   |
| <i>Varies</i> | <i>Biostatistics Elective</i> | 1-4 |
| <i>Varies</i> | <i>Biostatistics Elective</i> | 1-4 |

#### Spring Semester – Year Two

|               |                                 |     |
|---------------|---------------------------------|-----|
| PubH 7420     | Clinical Trials                 | 3   |
| PubH 7494     | Master's Project: Biostatistics | 3   |
| <i>Varies</i> | <i>Biostatistics Elective</i>   | 1-4 |

\* CHOOSING BETWEEN STAT 5101-5102 AND STAT 8101-8102: Student may take either the theory sequence Stat 5101-5102 or the theory sequence Stat 8101-8102. You should consider taking Stat 8101-8102 if you have a strong background in mathematics and especially if you are considering going on for a PhD in Biostatistics.

## Biostatistics Electives

You need **three** biostatistics elective courses (at least 8 credits) chosen from the list below. The courses are grouped into topics, but you may choose any three courses. To use a course not listed below for your biostatistics elective, please get approval from your advisor and the Program Director/Director of Graduate Studies before registering for the course.

### Biostatistical Methods

| Course         | Title  | Credits |
|----------------|--|---------|
| PubH 7430      | Statistical Methods for Correlated Data                            | 3       |
| PubH 7435/8435 | Latent Variable Models   | 3       |
| PubH 7440      | Introduction to Bayesian Data Analysis                             | 3       |
| PubH 7445/8445 | Statistics in Genetics and Molecular Biology                       | 3       |
| PubH 7460      | Advanced Statistical Computing                                     | 3       |
| PubH 7470      | Statistics for Translational and Clinical Research                 | 3       |
| PubH 7465      | Biostatistics Consulting   | 3       |
| PubH 7475/8475 | Statistical Learning and Data Mining                               | 3       |
| PubH 8422      | Modern Non-parametrics ( <i>requires PhD level prerequisites</i> ) | 3       |
| Stat 5401      | Applied Multivariate Methods                                       | 3       |
| Stat 5601      | Nonparametric Methods  | 3       |

### Preparation for the Biostatistics PhD Program [see section 8.4]

|            |                                     |   |
|------------|-------------------------------------|---|
| Math 5615H | Honors: Introduction to Analysis I  | 4 |
| Math 5616H | Honors: Introduction to Analysis II | 4 |

### Spatial Statistics and Related Software

|           |   |   |
|-----------|---|---|
| PubH 8472 | Spatial Biostatistics ( <i>requires PhD level prerequisites</i> ) | 3 |
| GIS 5571  | Introduction to Arc/Info  | 3 |
| Geog 5561 | Principles of Geographic Information Science                      | 4 |

### Technical Writing in English for Non-native Speakers

|           |  |   |
|-----------|--|---|
| Writ 5051 | Research Writing Practice for Non-native Speakers                                | 3 |
| Writ 5052 | Research Presentations and Conference Writing for Non-Native Speakers of English | 3 |

## Health Science Electives

You need at least 3 credits from the list below. To use a course not listed below for your health science elective, please get approval from your advisor and the Program Director/Director of Graduate Studies before registering for the course.

### Epidemiology

| Course    | Title   | Credits |
|-----------|---|---------|
| PubH 6341 | Epidemiologic Methods I ( <b>HIGHLY RECOMMENDED</b> ) | 3       |
| PubH 6320 | Fundamentals of Epidemiology                          | 3       |

### Statistical Genetics and Genomics

|           |                                       |   |
|-----------|---------------------------------------|---|
| CSci 5481 | Computational Techniques for Genomics | 3 |
| PBio 5301 | Plant Genomics                        | 3 |
| PSY 5137  | Introduction to Behavioral Genetics   | 3 |
| PubH 6381 | Genetics in Public Health             | 2 |

### Administration

|           |   |   |
|-----------|---|---|
| PubH 6751 | Principles of Management in Health Services Organizations | 2 |
|-----------|---|---|

### Behavioral Science

|           |   |   |
|-----------|---|---|
| PubH 6020 | Fundamentals of Social and Behavioral Science | 3 |
|-----------|---|---|

## Environmental Health

|           |   |   |
|-----------|---|---|
| PubH 6101 | Environmental Health                            | 2 |
| PubH 6102 | Issues in Environmental and Occupational Health | 2 |

## Minor Field

A *minor field* is optional, with extra requirements. Students must complete 6 or more credits in a single field outside biostatistics and need approval from the Program Director/Director of Graduate Studies in the minor field.

## Transferring Credits

Coursework from other institutions or programs may be transferred to the Biostatistics MS program with approval from the student's advisor and the Program Director/Director of Graduate Studies. No more than 40% of the credits on a student's degree plan may be transferred. Rules for transferring courses are given in the online Graduate Education Catalog at <http://www.policy.umn.edu/Policies/Education/Education/GRADCREDITDEGREE.html>. The Petition Form can be found at: <http://policy.umn.edu/forms/otr/otr190.pdf>.

## Registration Requirement and Student Status

MS students must register for at least six credits each semester to be certified by the Office of the Registrar as a full time Graduate School student. Full-time status is required to hold a graduate assistantship.

Students should maintain active student status from the beginning of their program until they graduate. To maintain active student status, you must register every fall and spring semester. Students who have completed all required courses may register for Grad 0999, which is free, zero-credit, non-graded and fulfills the registration requirement. See [www.grad.umn.edu/current\\_students/registration/active\\_status.html](http://www.grad.umn.edu/current_students/registration/active_status.html).

Students who do not register for one semester lose their student status with the Graduate School. To regain student status, they must reapply; see <http://www.isph.umn.edu/wp-content/uploads/2014/01/Change-of-Status-Request.pdf> for details.

---

## 8.3 Written Examination

---

The written examination is given in May one week after spring semester final exams. The written exam covers material from the two methods courses, (PubH 7405-7406) and the two statistical theory courses (Stat 5101-5102, for which Stat 8101-8102 is also more than adequate). Students are expected to take the exam the first time it is given after the student completes these courses. Students who are expected to take the exam but do not, will be officially recorded as failing the written exam. Exemptions can only be granted by the academic advisor and the Program Director/Director of Graduate Studies, in consultation with the Division Head. To help students prepare, previous years' written exams and answer keys are available for review and photocopying in the Division office.

The written exam is a three-hour, closed book exam. Students are issued hand calculators for the exam and may not use their own calculator. Students are assigned individual code letters when the test is given, and only this code appears on the student's test. Each test is scored independently by two faculty. Faculty meet within two weeks after the exam to decide the passing score, which takes into account the difficulty of the exam relative to previous years' exams. Only after the passing score is set are the faculty unblinded to which student had which code letter. Academic advisors inform students whether or not they passed the exam. Faculty do not reveal scores or score rankings to the students. The exam's answers are made available to students after the passing score is set. Students may request additional information on their exam performance from their academic advisor.

Students have two chances to pass the exam. If they do not pass the first time, they may take the exam again one year later. A student who fails on the second try will not be allowed to continue in the MS program.

---

## 8.4 Graduate Degree Plan

---

In January of a student's final term (or at least eight weeks before their final oral exam) students must file a Graduate Degree Plan with the Program Coordinator. You may complete and print this form online at <http://policy.umn.edu/forms/otr/otr198.pdf>. This form collects all the required coursework for the MS degree, both courses completed and those not yet taken. This should be a *minimal set* of courses that meet the requirements. By the time you are ready to graduate, the minimal set of courses listed must appear on your transcript; you do not need to list all courses you have taken. To revise the list of courses, you need to file a *Graduate School Petition Form* (<http://policy.umn.edu/forms/otr/otr190.pdf>).

---

## 8.5 Transferring from the MS to the PhD Program

---

Students who are enrolled in the MS program and who wish to continue to the PhD program must apply through the SOPHAS application process. Students should refer to the School of Public Health admissions website for the most up to date application process (<http://www.sph.umn.edu/prospective/admissions/>):

1. Discuss plans with their academic advisor and the Program Director/Director of Graduate Studies during their first year or after the Masters written examination.
2. Take the prerequisite, *Math 5615H Real Analysis I* (or *MATH 4603* for those students who have had no exposure to *Real Analysis*) during fall semester of year two.
3. There are 2 application processes a student can choose depending on how early one submits an application. Both application processes are through SOPHAS.
  - First, a student can submit their application as early as July 15 (one entire year before beginning the PhD program). If an applicant chooses this process, their original MS application information is still available in SOPHAS. The applicant will need to have 2 letters of recommendation from Biostat faculty submitted with their application by July 15. Letter-writers will have the opportunity update their recommendations during fall semester, when the file will be reviewed. A third letter of recommendation, from the Math 5615/Math 4603 instructor (see below), should be submitted directly to the Division of Biostatistics during fall semester. Please note: the admissions committee will not review the application until early fall once the applicant has confirmed all updated materials have been received by the Division of Biostatistics.
  - A second application option, a student can begin a new application in SOPHAS and submit a complete application to SOPHAS by December 1.
4. For either application process, applicants are encouraged to submit a recommendation letter from the Math 5615/Math 4603 instructor and at least one from a Biostatistics faculty member. Applicant also needs to write a one-page statement explaining why they want to earn a doctorate degree in Biostatistics.
5. For students working towards an MS degree: if your PhD application states that you plan to finish your MS degree, it is important that you do so before the first semester after admission to the PhD program. This includes specifically finishing the Plan B project before the start of the fall semester of the PhD study. If you have not completed the MS program by that time, you may forfeit chances of having a graduate assistantship until completion of all MS requirements.

If students have additional questions, they are encouraged to talk with the Biostatistics Program Coordinator.

---

## 8.6 Satisfactory Progress in the MS Program

---

Students are expected to advance steadily towards graduation, which is called making "satisfactory progress." To make satisfactory progress in the MS program, students should:

- Register for courses every fall and spring semester until course requirements are completed. Students with graduate assistantships must register for at least 6 credits to maintain their full-time status, or lose their assistantship.
- Maintain a GPA of at least 3.0 in the MS core courses and the MS required elective courses, and make up all grades of I (incomplete) within one year.
- File a Degree Program plan early in spring semester of year two; see section 8.3.
- Take the written exam the first time it is given after the student completes PubH 7405-7406 and Stat 5101-5102 (or Stat 8101-8102). Students who are expected to take the exam but do not will be officially recorded as failing the written exam. Exemptions can only be granted by the academic advisor and the Program Director/Director of Graduate Studies, in consultation with the Division Head.
- Complete the Plan B project and pass the final oral examination within one semester of completing all required coursework.

In June, current students receive a letter from their academic advisor assessing their progress, and explaining any unfulfilled requirements for satisfactory progress.

If you need an exemption from these requirements, you must make a written request to both your academic advisor and the Program Director/Director of Graduate Studies. Your request must include a written plan for finishing the MS program.

Students who fail to make satisfactory progress will be asked to meet with their academic advisor and the Program Director/DGS, to discuss the requirements for continuing in the program. These requirements and the time limit for fulfilling them will be given to the student in writing. If the requirements are not met within the deadline, the graduate faculty will vote to decide whether to dismiss the student from the program.

---

## 8.7 The Plan B Project and Graduating

---

The Plan B project should involve a combined total of approximately 120 hours (the equivalent of three full-time weeks) of work. Common topics for Plan B projects include application and assessment of new methodology, a novel analysis of an interesting dataset, or a simulation study to compare statistical methods. As examples, written projects from previous students are in the Biostatistics Reading Room.

In Biostatistics, there are three requirements for the Plan B project:

1. A written report, with a review of the relevant biostatistical literature, technical explanation of the biostatistical method, and a clear exposition of the scientific background relevant to any data used. Computer code written for the project should be listed in an appendix, and carefully documented. The student should do all work on the project.
2. A 25-minute oral presentation of the project at a seminar, followed immediately by a final oral examination by the committee listed on the Graduate Degree Plan. The seminar is open to the public; the oral exam is not.
3. Students must register for PubH 7494 – *Master's Project: Biostatistics*, for a total of 3 credits with the S/N grading option. This course is not included on the official Graduate Degree Plan. If you must use your own money for these credits, please see the Program Director/Director of Graduate Studies before registering.

From start to finish (graduation), the Plan B project requires at least six weeks, and many students take four or five months to complete their project. Below is a list of steps in carrying out a Plan B project. If necessary, some steps can be finished quickly, but some cannot be rushed. A fixed deadline is that *you must give a complete final copy of your project, approved by your Plan B project advisor, to your oral examination committee two weeks before your seminar and final oral exam*. Your Plan B project advisor decides when your written project is ready to give to your committee and this may take longer than you expect. You may find yourself in a difficult situation if you accept a job with a fixed starting date before your advisor says you are ready to schedule your seminar and final oral exam. Here is a suggested timeline:

### During Fall Semester of Year Two:

MS students are required to submit numerous on-line forms to the Graduate School to report details about their degree coursework, examining committee members, and to obtain approvals at each step. It is important to initiate the required forms far enough in advance to allow time for automated routing for approvals and allow for delays. The Graduate Student Services and Progress office will not allow students to defend the master's project until all required forms have been submitted and approved.

1. Find a **Plan B project advisor** and a topic.

Your Plan B project advisor is a member of the Biostatistics faculty with Graduate Education Responsibilities who is responsible for supervising your work, and approving the scope and content of your project. You may choose your academic advisor as your project advisor, or you may choose another Biostatistics faculty member.

Another possibility is to work on your project with a faculty member in a health science field outside Biostatistics, supervised by your Plan B project advisor in Biostatistics. This outside advisor would normally be a member of your final oral examination committee. In order to serve on this committee, the outside advisor must be listed as a Faculty member with Graduate Education Responsibilities with the Graduate School ([https://apps.asr.umn.edu/faculty\\_roles/](https://apps.asr.umn.edu/faculty_roles/)); please see the Program Coordinator to check on this. If they are not listed as a Faculty with Graduate Education Responsibilities, they will not be able to serve on your final oral examination committee.

2. **Final oral examination committee.** This is your Plan B committee, and must have a minimum of 3 members; 2 members of the Biostatistics faculty including your academic advisor and 1 faculty member from outside Biostatistics. All committee members must be listed as a Faculty with Graduate Education Responsibilities with

the Graduate School ([https://apps.asr.umn.edu/faculty\\_roles/](https://apps.asr.umn.edu/faculty_roles/)). Typically the committee is made up of the Plan B advisor/committee chair, the academic advisor (or some other Biostatistics faculty when the Plan B advisor is also the academic advisor), and a non-biostatistics faculty member whom the student had as a professor for a class or who has some relationship with the project.

For students declaring a minor, a faculty member from the minor department must be included and will fulfill the external member requirement.

### **During Spring Semester of Year Two, or about two months before graduation:**

3. In early January (or 2 months before your planned graduation) file a Graduate Degree Plan with the Program Coordinator. You may complete and print this form online at <http://policy.umn.edu/forms/otr/otr198.pdf>.
4. Once your Graduate Degree Plan is approved by the Graduate School, inform the Graduate Student Services and Progress office of your committee membership. This is submitted online at <http://www.grad.umn.edu/students/assignmasterscommittee/index.html>.
5. Complete a first draft of your project for your project advisor. For the format of the written project, please see recent students' projects in the Biostatistics Reading Room (Mayo A460). You may need to revise this draft several times. Your Plan B project advisor decides when your written project is close enough to finished, and then gives you permission to schedule your seminar and final oral examination.
6. Most students complete their projects and their final oral examination during spring semester of their second year or during the summer following this. If your project takes longer and your final oral examination will be scheduled during fall semester of your third year, then you must register for fall semester to maintain active student status. If you lose active student status, you will not be able to graduate until you reapply and pay the application fee. If you are not taking any courses, you may register for Grad 0999, which is free, zero-credit, non-graded and fulfills the registration requirement.
7. Order your Graduation Packet from the Graduate Student Services and Progress office (<https://apps.grad.umn.edu/secure/gradpacket/>). You must have an approved Graduate Degree Plan and approved final exam committee on file before the Graduate Student Services and Progress office gives you the Graduation Packet. Make sure that all the courses listed on your Graduate Degree Plan and your final oral examination committee are completely correct. If you have taken different courses than you originally listed on your Graduate Degree Plan, then you must file a Graduate School Petition Form to update your Degree Program.

The Graduation Packet contains all the forms and instructions you need to finish including: Graduation Instructions, *Application for Degree* and the *Final Examination Report*.

### **The Final Oral Examination and Graduation**

The Graduate School awards degrees administratively every month. The earliest you can graduate is at the end of the month of your seminar and final oral examination. Here are the final steps to finish:

8. **Before the first day of the month in which you want to graduate:** Bring the *Application for Degree*, from the Graduation packet, to Student Relations, 333 Science Teaching and Student Services (East Bank) or 130 Coffey Hall (St. Paul).
9. When you file the *Application for Degree*, the Graduate Student Services and Progress staff will check your *Graduate Degree Plan*. If they find that you have not taken a course listed on your *Graduate Degree Plan*, then you will not be able to graduate until you have filed a *Graduate School Petition Form* (<http://policy.umn.edu/forms/otr/otr190.pdf>) to correct the *Graduate Degree Plan*. All Graduate School requirements for the MS must be completed by the last working day of the month you intend to graduate.
10. Choose a date and time for your presentation with your committee. Inform Megan Schlick (in A460 Mayo) of this date once you know it. She will arrange a room for your presentation, as well as coordinate paperwork for the exit interview with the Division Head. This exit interview is a way for you to give comments on the Biostatistics program.
11. **Two weeks before your seminar and final oral examination:** Give a complete final copy of your project, approved by your Plan B project advisor, and to each member of your oral examination committee.
12. **At your seminar and final oral examination:** Bring the *Final Examination Report* and a current copy of your transcript. The Division will serve coffee and tea, and you may bring cookies or treats.

13. **After you have passed the final oral exam:** Your committee will sign the *Final Examination Report*. Take the signed report to the Graduate Student Services and Progress office in 160 Williamson Hall.
14. Make all revisions in your written project that were required by your committee. When your Plan B project advisor accepts your revisions, bring a copy of your completed Plan B written project to the Biostatistics office in Mayo A460. The Plan B paper should be unbound - no staples, punched holes, or report covers.
15. If you wish to attend a commencement ceremony, the School of Public Health holds commencement every May (<http://sph.umn.edu/students/current/commencement/>).
16. Complete the School of Public Health Alumni Survey at: <https://secure.ahc.umn.edu/PublicHealth/careersurvey>.
17. Finally, the Biostatistics office will give you an *Alumni Information* form. Please fill out the contact information so we can keep in touch with you. Copy any files you want from your computer account, and return any Reading Room materials. Please return your University keys to the Biostatistics Division office.

## 9. BIostatISTICS MS PLAN A DEGREE PROGRAM

The Plan A Master's program requires that a student complete at least 20 credits with a GPA of 3.0, pass the MS written exam (see *section 8.2*), complete the thesis project and pass the final oral exam.

The required courses for the MS Degree Plan B do not prepare a student to write a thesis, that is, to do original research in biostatistics methodology. This is why nearly all students choose to do a written project (Plan B) rather than a thesis. Only students with an advanced background in mathematics or theoretical statistics should consider Plan A.

Please consult

[http://www.policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/masterscompletion\\_appa.pdf](http://www.policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/masterscompletion_appa.pdf) for detailed rules imposed by the Graduate School on the Plan A MS program. Here is a brief outline: Guided by the advisor and with the agreement of the Program Director/Director of Graduate Studies, the student selects at least 20 semester credits with at least 14 semester credits in biostatistics courses and at least 6 semester credits in a minor area or coordinated/related fields. All credits included in the official Graduate Degree Plan must be in graduate-level courses. A 3.00 minimum GPA must be maintained for all courses in the program. Students are expected to make satisfactory progress toward graduation; see *section 8.5*. Students who are not native-speakers of English must demonstrate proficiency in spoken English; see *section 7.6*.

The student must pass the MS written exam (see *section 8.2*) before starting the thesis under the guidance of the advisor. Students must also register for a minimum of 10 master's thesis credits (PubH 8777), but these cannot be used to meet course credit requirements. There is a final oral exam that consists of a defense of the thesis. A final copy of the thesis should be given to the Biostatistics office and the Graduate Student Services and Progress office.

# 10. BIOSTATISTICS MPH DEGREE PROGRAM

The Biostatistics MPH program require that students meet the Association of Schools of Public Health (ASPH) Core Competencies in five core public health areas, including administration, behavioral science, Biostatistics, environmental health, and epidemiology, plus an additional requirement in ethics. These competencies are met through the SPH core courses.

The Master of Public Health (MPH) program has different course requirements than the MS plan B. In place of the four elective courses (1 in health science and 3 in Biostatistics) which are required in the MS Plan B, the MPH requires five public health courses (1 taken from each public health core area listed below). The MPH program also requires students to complete a field experience (a kind of internship) **in addition** to a written master’s project like the MS Plan B written project. Unlike the MS Plan B, the MPH does not have a comprehensive written exam requirement.

## 10.1 Biostatistics MPH Competency Statement

Biostatisticians are key collaborators in scientific research, providing expert advice on and direct involvement in study design, implementation, analysis, and communication. The Biostatistics program balances education in applied and theoretical biostatistics, mathematical statistics, and computing, all within the context of public health, medicine, and clinical translational research. Employers' requirements are periodically assessed by surveys of and informal discussions with alumni and their employers, and the curriculum is often modified as a result of that feedback. No biostatistics or statistics professional organizations have developed competency sets for graduate programs. Thus, the Biostatistics programs' competencies reflect the views of the faculty and alumni on the critical knowledge and skills needed by biostatisticians, as well as review of peer programs' curricula.

| MPH — Biostatistics  | LEARNING EXPERIENCES                                    |                                |  |                              |  |                         |   |   |  |   |   |                             |                               |                              |  |  |                                  |                                   |
|--|---|--------------------------------|--|------------------------------|--|-------------------------|---|---|--|---|---|-----------------------------|-------------------------------|------------------------------|--|--|----------------------------------|-----------------------------------|
|  | PUBH 6020 Fundamentals of Social and Behavioral Science | PUBH 6101 Environmental Health | PUBH 6751 Principles of Management in Health Organizations | PUBH 7405 Biostat Regression | PUBH 7406 Advanced Regression and Design | PUBH 6341 Epi Methods I | PUBH 7420 Clinical Trials: Design, Implementation, and Analysis | PUBH 7430 Statistical Methods for Correlated Data | PUBH 7435 Latent Variable Measurement Models | PUBH 7440 Introduction to Bayesian Analysis | PUBH 7445 Statistics for Human Genetics and Molecular Biology | PUBH 7450 Survival Analysis | PUBH 7460 Adv. Stat Computing | PUBH 7465 Biostat Consulting | PUBH 7470 Stat for Translational and Clinical Research | PUBH 7475 Statistical Learning and Data Mining | STAT 5101 Theory of Statistics I | STAT 5102 Theory of Statistics II |
| Use a general understanding of public health research, practice, and ethics to inform biostatistical practice.                   | X   | X                              | X  |                              |  | X                       | X   |   | X  |   |   | X                           |                               |                              |  |  |                                  |                                   |
| Collaborate in the design of research studies of human health and disease.   |   |                                |  | X                            | X  | X                       |   |   |  |   |   | X                           |                               |                              |  |  |                                  |                                   |
| Implement tabular and graphical displays of quantitative information in ways that are clear to non-statistical scientists.       |   |                                |  |                              | X  |                         |   |   |  |   |   |                             | X                             |                              |  |  | X                                | X                                 |
| Draw inferences from quantitative data and communicates those inferences and their interpretation to non-statistical scientists. |   |                                |  |                              | X  |                         |   | X   |  | X   |   |                             | X                             |                              |  | X  | X                                | X                                 |

| MPH — Biostatistics   | LEARNING EXPERIENCES                                    |                                |  |                              |  |                         |   |   |  |   |   |                             |                               |                              |  |  |                                  |                                   |
|---|---|--------------------------------|--|------------------------------|--|-------------------------|---|---|--|---|---|-----------------------------|-------------------------------|------------------------------|--|--|----------------------------------|-----------------------------------|
|   | PUBH 6020 Fundamentals of Social and Behavioral Science | PUBH 6101 Environmental Health | PUBH 6751 Principles of Management in Health Organizations | PUBH 7405 Biostat Regression | PUBH 7406 Advanced Regression and Design | PUBH 6341 Epi Methods I | PUBH 7420 Clinical Trials: Design, Implementation, and Analysis | PUBH 7430 Statistical Methods for Correlated Data | PUBH 7435 Latent Variable Measurement Models | PUBH 7440 Introduction to Bayesian Analysis | PUBH 7445 Statistics for Human Genetics and Molecular Biology | PUBH 7450 Survival Analysis | PUBH 7460 Adv. Stat Computing | PUBH 7465 Biostat Consulting | PUBH 7470 Stat for Translational and Clinical Research | PUBH 7475 Statistical Learning and Data Mining | STAT 5101 Theory of Statistics I | STAT 5102 Theory of Statistics II |
| Write programs in two or more statistical packages.   |   |                                |  | X                            | X  |                         |   |   |  | X   |   | X                           | X                             |                              |  |  |                                  |                                   |
| Address a public health or research question with statistical analysis and/or simulation study. |   |                                |  |                              | X  | X                       | X   | X   |  |   | X   |                             |                               |                              | X  |  |                                  |                                   |

## 10.2 Requirements

For the MPH program, you must complete 6 core biostat courses, 5 SPH core courses with a GPA of 3.0, complete a Fieldwork Experience, complete the written project, and pass the final oral exam.

MPH students must complete a minimum of 42 credits, including the required courses shown below. Additional credits needed to total 42 may be taken from any of the following: graduate-level courses related to Biostatistics, Statistics, or Public Health (including courses in the Public Health Interdisciplinary Concentrations), PubH 7494 (Master's Project), and PubH 7496 (Field Experience).

- Six core biostatistics courses (22 credits): Regression (PubH 7405), Advanced Regression and Design (PubH 7406), Theory of Statistics I and II (Stat 5101, 5102), Survival Analysis (PubH 7450), and Clinical Trials, (PubH 7420).
- Five public health core courses (11-13 credits): Administration (PubH 6751), Behavioral Science (PubH 6020), Environmental Health (PubH 6101 or 6102), Epidemiology (PubH 6320 or 6341), Ethics (PubH 6741 or 6742).
- Complete a formal, supervised fieldwork experience consisting of at least 90 hours.
- Students who are not native speakers of English must show proficiency in spoken English; see section 7.6.

### Suggested MPH Course Schedule

#### Fall Semester – Year One

| Course        | Title                  | Credits    |
|---------------|------------------------|------------|
| PubH 7405     | Regression             | 4          |
| * Stat 5101   | Theory of Statistics I | 4          |
| <i>Varies</i> | <i>SPH Core Course</i> | <i>1-4</i> |

#### Spring Semester – Year One

|               |                                |            |
|---------------|--------------------------------|------------|
| PubH 7406     | Advanced Regression and Design | 4          |
| <i>Varies</i> | <i>SPH Core Course</i>         | <i>1-4</i> |
| * Stat 5102   | Theory of Statistics II        | 4          |

#### Fall Semester – Year Two

| Course        | Title                  | Cr         |
|---------------|------------------------|------------|
| PubH 7450     | Survival Analysis      | 3          |
| <i>Varies</i> | <i>SPH Core Course</i> | <i>1-4</i> |
| <i>Varies</i> | <i>SPH Core Course</i> | <i>1-4</i> |

### Spring Semester – Year Two

|               |  |            |
|---------------|--|------------|
| PubH 7420     | Clinical Trials  | 3          |
| <i>Varies</i> | <i>SPH Core Course</i>   | <i>1-4</i> |
| <i>Varies</i> | <i>Remaining coursework to fulfill the 42 credit requirement</i> | <i>1-4</i> |

### Public Health Core Courses [11-13 credit hours]

|  |   |   |
|--|---|---|
| <b>Administration</b> [one course]       |   |   |
| PubH 6751                                | Principles of Management in Health Services Organizations | 2 |
| <b>Behavioral Science</b>                |   |   |
| PubH 6020                                | Fundamentals of Social and Behavioral Science             | 3 |
| <b>Environmental Health</b> [one course] |   |   |
| PubH 6101 <b>or</b>                      | Environmental Health                                      | 2 |
| PubH 6102                                | Issues in Environmental and Occupational Health           | 2 |
| <b>Epidemiology</b> [one course]         |   |   |
| PubH 6320 <b>or</b>                      | Fundamentals of Epidemiology                              | 3 |
| PubH 6341                                | Epidemiological Methods I                                 | 3 |
| <b>Ethics</b> [one course]               |   |   |
| PubH 6741 <b>or</b>                      | Ethics in Public Health: Professional Practice and Policy | 1 |
| PubH 6742                                | Ethics in Public Health: Research and Policy              | 1 |

---

## 10.3 Other MPH Degree Requirements

---

### Public Health Core Area Requirements

Students working towards an MPH degree must satisfy competency requirements in the six core areas of public health – administration, behavioral science, biostatistics, environmental health, epidemiology, and ethics. This is accomplished by satisfactorily passing (with a grade of B- or better) the chosen public health courses described in section 10.1.

The Public Health core area requirements can also be satisfied by:

- Pass an equivalency exam in the core area. Examinations are given twice each year prior to Fall and Spring Semesters. Equivalency exams satisfy competency requirements for the following core courses only:
  - PubH 6751 Principles of Management in Health Services Organizations
  - PubH 6020 Fundamental of Social and Behavioral Science
  - PubH 6101 Environmental Health
  - PubH 6320 Fundamentals of Epidemiology
  - PubH 6741 Ethics in Public Health: Professional Practice and Policy

**OR**

- Pass an advanced course in the core area as approved by the respective Program Director and the Educational Policy Committee,

**OR**

- Complete a graduate level course, with a grade of B or better, at an accredited university or college that meets the competencies defined by CEPH. The Educational Policy Committee, upon petition of the student, will determine acceptance of a course for transfer.

### Registration Requirement

Students are required to register for at least 2 semesters and 15 credits in the School of Public Health.

### Course Numbers and Graduate Credit

5xxx and 8xxx-level courses are considered graduate-level. 1xxx and 3xxx-level courses are for undergraduates and will not receive approval for graduate credit. Under some circumstances – with approval of the student's Program

Director – 4xxx, 6xxx, and 7xxx-level courses may also be applied toward a MPH degree as long as they are taught by a member of the graduate faculty.

## **SPH Grading Policies**

### **Grade Point Average**

Students must achieve a grade point average of no less than 3.0 (B) across their entire program to receive an MPH degree.

### **S-N Grade Option**

MPH students may take no more than 20% of their coursework on an S-N grading basis, exclusive of those topics, seminars, and field experience courses offered only on an S-N basis.

### **Public Health Core Courses**

Courses designated as part of the public health core must be taken for a letter grade (A-F). Students will be required to achieve no less than a B- grade in each course taken on an A-F basis. Students may retake public health core courses at their own expense until they achieve a grade of B- or better. However, a retaken course may be counted only once toward degree requirements in the student's study plan.

Each public health major may require higher levels of achievement for its own students in public health core courses that are also core to the major. This may include restrictions on retaking public health core courses that are also core to the major, or requiring more than a B- performance level. Students should consult their Program Coordinator for documentation of these requirements.

**Note:** Students should refer to *section 5.4* for information on the University's uniform grading policy.

## **Field Experience**

All students matriculating in a MPH program must complete a formal, supervised fieldwork experience consisting of at least 90 hours in order to graduate. Neither prior professional degrees nor prior work experience in a field not closely related to the MPH degree program are sufficient grounds for waiving the fieldwork requirement.

Each major has established requirements for completion of fieldwork. These requirements include criteria for type of experience, site selection, and preceptor; how students should initiate and arrange the fieldwork; role of faculty supervisor; method of evaluation; and credit and course enrollment. Fieldwork requirements can take whatever form is deemed appropriate to the major, including internships, master's projects completed in a practice setting, or coursework with significant field or community work done under the guidance of a community preceptor. Guidelines for Biostatistics are found at [http://www.sph.umn.edu/pdf/programs/biostats/MPH\\_Practicum.pdf](http://www.sph.umn.edu/pdf/programs/biostats/MPH_Practicum.pdf).

All students must complete a Fieldwork experience module prior to beginning the experience. The online agreement provides streamlined, comprehensive for the student, their preceptors, and faculty advisor. Please refer to the current student Web site for this and other resources related to the field experience [www.sph.umn.edu/current/fe/](http://www.sph.umn.edu/current/fe/). Similarly, an evaluation of the field experience by both the preceptor and the student must be completed prior to receiving a satisfactory grade.

## **MPH Study Plan**

Students are required to submit a completed MPH Study Plan (<http://www.sph.umn.edu/pdf/current/ MPHstudyplan.pdf>) to their Program Coordinator at least one semester prior to their anticipated completion of coursework. Earlier submission (e.g. in the second to last semester) is suggested to allow the Program Coordinators to review the study plan and notify students if they are missing any requirements prior to their last term of study.

## **Master's Project**

Students must complete a master's project, demonstrating familiarity with the tools of research or scholarship in the major, the capacity to work independently, and the ability to present the results of the investigation effectively. The master's project should involve a combined total of approximately 120 hours (the equivalent of three full-time weeks) of work. See section 8.6 for a description of the project as it is the same as the MS Plan B project.

## **Satisfactory Progress**

Students are expected to advance steadily towards graduation, which is called making "satisfactory progress." To make satisfactory progress in the MPH program, students should:

- Register for courses every fall and spring semester until course requirements are completed. Students with graduate assistantships must register for at least 6 credits, or lose their assistantship.

- Maintain a GPA of at least 3.0 in the Biostatistics core courses, the MPH core courses, and additional courses to reach the 42 credit minimum, and up all grades of I (incomplete) within one year.
- Complete the Master's project and pass the final oral examination within one semester of completing all required coursework.

In June, current students receive a letter from their academic advisor assessing their progress, and explaining any unfulfilled requirements for satisfactory progress.

If you need an exemption from these requirements, you must make a written request to both your academic advisor and the MPH Program Director. Your request must include a written plan for finishing the MPH program.

Students who fail to make satisfactory progress will be asked to meet with their academic advisor and the MPH Program Director, to discuss the requirements for continuing in the program. These requirements and the time limit for fulfilling them will be given to the student in writing. If the requirements are not met within the deadline, the graduate faculty will vote to decide whether to dismiss the student from the program.

## Time Frame

The maximum time allowed by the School of Public Health for completion of an MPH degree is seven years. The seven year period begins with the first term of enrollment after admission to a degree program within the School.

## Course Transfer Credits

Students must complete credit requirement as specified by the individual major with a minimum of 42 credits. Effective with students entering the program in Fall 2007, a student may seek transfer of no more than 40% of their total graduate or professional program credits taken at the University of Minnesota or at another college or university prior to the SPH program matriculation. Course credits may be used to satisfy public health core or other program requirements as jointly approved by the Program Director and the Senior Associate Dean for Academic Affairs. No course credits older than 5 years from the date of the student's matriculation will be accepted for transfer. A grade of "B-" or better is required for each course requested for transfer credit.

SPH students who have completed graduate-level coursework at the University of Minnesota or another college or university may petition to transfer those courses toward their SPH degree. To be considered for transfer, graduate level coursework must have been taken at an accredited graduate institution.

Students must:

1. Meet with their academic advisor to discuss the petitioning process. If the petition is acceptable to the advisor, the student will complete and sign the *Petition* form, and attach an official transcript on which the final grade has been posted.
2. Submit the *Petition* form to the Program Coordinator for processing. The *Petition* form can be found at <http://www.sph.umn.edu/current/resources/>.

The Program Coordinator will forward the petition to the MPH Program Director for approval and signature and then to the Student Services Center for the Senior Associate Dean for Academic Affairs for final evaluation and/or approval.

Students admitted to the Public Health Certificate in Core Concepts program are considered officially enrolled in the School of Public Health (SPH). While successful completion of the Certificate program does not entitle recipients to future admission to SPH degree programs, recipients are free to apply to degree programs upon completion of the Certificate. Should they be admitted to an MPH major, the 15 credits qualifying for the Certificate will be accepted as fulfilling the public health core requirements, and do not count as transfer credits.

## Course Substitutions and Waivers

All student requests that deviate from the degree curriculum requirements outlined in this Guidebook must be made on a *Petition* form. The *Petition* form can be obtained from the SPH Student Services Center or Program Coordinator.

NOTE: the process for approving a course substitution or waiver could take up to one month, so plan accordingly.

### Course Substitution Procedures:

The following process should be followed when requesting that a course substitute for a required course in your degree program.

1. Gather the course syllabi of the required course in your degree program and the proposed substitute course and a transcript on which the proposed course grade has been posted (if the proposed course has already been completed).
2. Complete the *Petition* form with the following information in each section:
  - REQUEST SECTION: describe the course requested for substitution including the course title, number of credits, term and year taken, and the name of the institution where the course was taken. Also list the course/requirement in your degree program for which you are asking for the substitution.
  - REASON/EXPLANATION SECTION: Indicate what skills and/or content overlaps between the required course(s) and the proposed substitute course(s).
3. Compile the above materials and have the request reviewed by your advisor. He/she will complete the Department section of the *Petition* form and indicate whether or not they approve of the request.
4. After the advisor has made his/her recommendations, the student should submit these materials to the Program Coordinator who will forward it to the appropriate Credentials Committee for review. The student will be notified via e-mail of the committee's decision.
5. If the substitute course is to replace a School of Public Health Core course (administration-PubH 6751/6752, behavioral/social science-PubH 6020, biostatistics-PubH 6414/6450, environmental health-PubH 6101/6102, epidemiology-PubH 6320/6341, ethics-PubH 6741/6742), there is an additional step to get School level approval. To complete this next step, provide two additional copies of the above materials. All of those materials should be submitted to your Program Coordinator. Upon receipt of those materials, the Program Coordinator will review the request with the Program Director and then if approved by the Program Director, all copies of the request will be forwarded to the SPH Educational Policy committee. The student will be notified by the SPH Student Services Center via e-mail of the committee's decision. If the Program Director does not approve of the request, the Program Coordinator will inform the student that the request will not be forwarded to the SPH Educational Policy Committee for review.

### **Application for Degree**

MPH students are required to complete an *Application for Degree* form. There are strict deadline dates before a student can be cleared for graduation. The form can be found at: [policy.umn.edu/Forms/otr/otr177.pdf](http://policy.umn.edu/Forms/otr/otr177.pdf). We strongly encourage students to complete the form and submit to the Division's Program Coordinator at least 2 months before their intended completion date.

# 11. BIostatISTICS PHD DEGREE PROGRAM

## 11.1 Biostatistics PHD Competency Statement

Biostatisticians are key collaborators in scientific research, providing expert advice on and direct involvement in study design, implementation, analysis, inference and communication. The Biostatistics program balances education in applied and theoretical biostatistics, mathematical statistics, and computing, all within the context of public health, medicine, and clinical translational research. Employers' requirements are periodically assessed by surveys of and informal discussions with alumni and their employers, and the curriculum is often modified as a result of that feedback. No biostatistics or statistics professional organizations have developed competency sets for graduate programs. Thus, the Biostatistics programs' competencies reflect the views of the faculty and alumni on the critical knowledge and skills needed by biostatisticians, as well as review of peer programs' curricula.

| PhD — Biostatistics   | LEARNING EXPERIENCES               |                           |   |                              |                                  |                                    |                                  |                                   |                                      |                                      |                                 |                               |                              |                                   |                                     |                                      |                         |                              |
|---|------------------------------------|---------------------------|---|------------------------------|----------------------------------|------------------------------------|----------------------------------|-----------------------------------|--------------------------------------|--------------------------------------|---------------------------------|-------------------------------|------------------------------|-----------------------------------|-------------------------------------|--------------------------------------|-------------------------|------------------------------|
|   | Math 5615 Introduction to Analysis | PUBH 7420 Clinical Trials | PUBH 8400 Seminar on Statistical Genomics | PUBH 8432 Probability Models | PUBH 8435 Latent Variable Models | PUBH 8442 Bayesian Decision Theory | PUBH 8445 Statistical Genetics I | PUBH 8446 Statistical Genetics II | PUBH 8452 Longitudinal Data Analysis | PUBH 8462 Advanced Survival Analysis | PUBH 8472 Spatial Biostatistics | PUBH 8482 Sequential Analysis | PUBH 8494 Directed research. | PUBH 8888 Thesis Credit: Doctoral | Stat 8111 Mathematical Statistics I | Stat 8112 Mathematical Statistics II | PUBH 8401 Linear Models | PUBH 8412 Advanced Inference |
| Work independently as a practicing biostatistician, on an equal basis as a collaborator with public health and medical researchers in designing, carrying out, and analyzing clinical trials, case control studies, and other experimental and observational studies. |                                    | X                         | X   | X                            | X                                | X                                  | X                                | X                                 | X                                    | X                                    | X                               | X                             | X                            | X                                 |                                     |                                      | X                       |                              |
| Conduct and publish original research, solely or collaboratively, on the theory and methodology of biostatistics.   | X                                  | X                         | X   | X                            | X                                | X                                  | X                                | X                                 | X                                    | X                                    | X                               | X                             | X                            | X                                 | X                                   | X                                    | X                       | X                            |
| Develop a biological and public health perspective in research.   |                                    | X                         | X   |                              |                                  |                                    | X                                | X                                 | X                                    | X                                    |                                 | X                             | X                            |                                   |                                     |                                      |                         |                              |

---

## 11.2 Requirements

---

### Coursework

The PhD program requires 7 core courses and 3 electives, a preliminary written examination, a preliminary oral examination, writing the dissertation, and defending the dissertation in a final oral examination.

- Seven core biostatistics courses:
  - PubH 8401 (Linear Models)
  - PubH 8403 (Biostat Research Mentoring)
  - PubH 8412 (Advanced Statistical Inference)
  - PubH 8432 (Probability Models)
  - PubH 8442 (Bayesian Decision Theory)
  - STAT 8101-8102 (Theory of Statistics I and II)
- 9 credits of Biostatistics elective courses chosen from the following:
  - PubH 7420 (Clinical Trials)
  - PubH 7465 (Biostat Consulting)
  - PubH 8422 (Modern Nonparametrics)
  - PubH 8435 (Latent Variable Models)
  - PubH 8445 (Statistics for Human Genetics)
  - PubH 8446 (Advanced Statistical Genetics and Genomics)
  - PubH 8452 (Advanced Longitudinal Data Analysis)
  - PubH 8462 (Advanced Survival Analysis)
  - PubH 8472 (Spatial Biostatistics)
  - PubH 8475 (Statistical Learning and Data Mining)
  - PubH 8482 (Sequential and Adaptive Methods for Clinical Trials)
  - PubH 8492 (Hierarchical and Richly Parametrized Linear Models)
  - Other 8000 level biostatistics topics courses that is not included in the Core Curriculum
  - 8000 level course offered by the School of Statistics that is not included in the Core Curriculum
- 3 credits of public health electives selected from PubH 6000, 7000, 8000, level courses offered by other divisions in the SPH.
- Survival Analysis (PubH 7450).
- At least 24 thesis credits (PubH 8888) while writing the doctoral thesis. Students must pass their preliminary oral examination before they can begin registering for thesis credits, so this examination should be scheduled as early as possible. Students who delay their preliminary oral examination may be forced to delay their graduation by a semester to have time to fulfill the thesis credit requirement.
- Students who are not native-speakers of English must demonstrate proficiency in spoken English, as described in section 7.6. It is best to complete this during the first semester.

All PhD program courses must be taken with the A/F grading option, except for courses only offered pass/fail (S/N).

## Sample Biostatistics PhD Course Schedules

Below are two sample Biostat PhD course schedules. The schedule a student takes will vary depending on their background when admitted to the Biostatistics PhD program. Students are encouraged to consult with their academic advisor and Program Director/Director of Graduate Studies to determine the most appropriate schedule.

**Schedule 1:** Students admitted to the University of Minnesota with an MS in Statistics or Biostatistics and who have taken courses in Survival Analysis and graduate level mathematical statistics (at the level of STAT 8101-8102) will follow the Biostatistics PhD course schedule outlined below.

### Fall Semester – Year One

| Course    | Title                      | Credits |
|-----------|----------------------------|---------|
| PubH 8401 | Linear Models              | 4       |
| PubH 8403 | Biostat Research Mentoring | 1       |
| PubH 8432 | Probability Models         | 3       |

### Spring Semester – Year One

|   |                                |   |
|---|--------------------------------|---|
| PubH 8412   | Advanced Statistical Inference | 4 |
| PubH 8442   | Bayesian Decision Theory       | 3 |
| <b>Preliminary Written Exam to be taken in August. **</b> |                                |   |

\*\* The written exam covers materials from the 4 Biostat courses (PubH 8401, 8412, 8432, 8442)

Additional courses satisfying the 3 biostatistics elective requirements, PubH 7450 and the Health Science elective are typically taken during the second or third year.

**Schedule 2** Students entering the PhD program without a Masters degree in Statistics or Biostatistics typically take two years of courses before the PhD written exam. The standard course schedule for a student with this background is outlined below.

### Fall Semester – Year One

| Course                          | Title  | Credits |
|---------------------------------|--|---------|
| Math 5615H*<br>or<br>Math 4603* | Mathematical Analysis I  | 4       |
|                                 | Advanced Calculus I (strongly recommended for students without a previous course in Real Analysis) | 3       |
| PubH 7405                       | Biostatistics: Regression  | 4       |
| Stat 8101                       | Theory of Statistics I   | 4       |

### Spring Semester – Year One for students entering the program with an undergraduate degree

|           |                                 |   |
|-----------|---------------------------------|---|
| PubH 7406 | Advanced Regression and Design  | 4 |
| Stat 8102 | Theory of Statistics II         | 4 |
| Varies    | PubH (Health Sciences) elective | 3 |

**Year 1 Masters Written Exam to be taken in May after Spring Semester finals\*\***

### Fall Semester – Year Two

| Course    | Title                      | Credits |
|-----------|----------------------------|---------|
| PubH 8401 | Linear Models              | 4       |
| PubH 8403 | Biostat Research Mentoring | 1       |
| PubH 8432 | Probability Models         | 3       |

### Spring Semester – Year Two

|               |                                |            |
|---------------|--------------------------------|------------|
| PubH 8412     | Advanced Statistical Inference | 4          |
| PubH 8442     | Bayesian Decision Theory       | 3          |
| <i>Varies</i> | <i>Elective Course</i>         | <i>1-4</i> |

**PhD Preliminary Written Exam to be taken in August. \*\*\***

### Fall Semester – Year Three

| Course        | Title                   | Credits    |
|---------------|-------------------------|------------|
| PubH 7450     | Survival Analysis       |            |
| <i>Varies</i> | <i>Elective Courses</i> | <i>1-4</i> |

### Spring Semester – Year Three

|               |                         |            |
|---------------|-------------------------|------------|
| <i>Varies</i> | <i>Elective Courses</i> | <i>1-4</i> |
| <i>Varies</i> | <i>Elective Courses</i> | <i>1-4</i> |

During Year 3 students will complete the 3 biostatistics elective requirements.

\* Students that have not had a previous course in real analysis are required to take one semester of real analysis and are encouraged to take Math 4603 (Math 5615H would also be sufficient). Students that have had a previous course in real analysis are encouraged to take Math 5615H but it is not required.

\*\* The year 1 written exam covers materials from the 4 Biostat masters level courses (PubH 7405, 7406, Stat 8101, 8102).

\*\*\* The written exam covers materials from the 4 Biostat courses (PubH 8401, 8412, 8432, 8442).

### Registration Requirement and Student Status

Full-time status is required to hold a graduate assistantship. PhD students must register for at least six credits each semester to be certified by the Office of the Registrar as a full time Graduate School student. PhD students may register for pre-thesis credits (PubH 8666) when they have completed all required courses but not yet passed their preliminary oral examination, and need to be registered as full-time students in the Graduate School.

Students should maintain active student status from the beginning of their program until they graduate. To maintain active student status, you must register every fall and spring semester. Students who have completed all required courses may register for Grad 0999, which is free, zero-credit, non-graded and fulfills the registration requirement.

Students who do not register for one semester lose their student status with the Graduate School. To regain student status, they must reapply (<http://www.isph.umn.edu/wp-content/uploads/2014/01/Change-of-Status-Request.pdf>).

---

## 11.3 Minor Field

---

Minor field courses must be in a single field. The minor field must be declared before the student passes the preliminary oral examination and the Program Director/Director of Graduate Studies for the minor field must be consulted concerning the requirements early in the program of study and also must approve and sign the Graduate Degree Plan before it is submitted to the Graduate Student Services and Progress office. One committee member for the preliminary oral examination must be Graduate Faculty in the minor field.

---

## 11.4 Preliminary Written PhD Examination

---

The preliminary written PhD examination is offered once each year in August. The exam covers these four core courses:

- PubH 8401 Linear Models
- PubH 8412 Advanced Statistical Inference
- PubH 8432 Probability Models
- PubH 8442 Bayesian Decision Theory

Students are expected to take the exam the first time it is given after the student completes these courses. Students who are expected to take the exam but do not, will be officially recorded as failing the written exam. Exemptions can only be granted by the academic advisor and the Program Director/Director of Graduate Studies, in consultation with the Division Head. To help students prepare, previous years' written exams and answer keys are available for photocopying from the Biostatistics office.

The exam is closed-book, four hours long, and consists of questions that may touch on several courses. Students are issued hand calculators for the exam and may not use their own calculator. Student's names are masked by assigning individual code letters when the test is given, and names remain masked when test papers are graded. The masking is removed when the faculty meets to discuss the test scores, and in addition to the exam results there is a broad assessment of the student's record and research potential. All these factors are weighed with the examination scores in deciding who passes the comprehensive written examination. Examination answers are available to students after the grading.

When you have passed the exam, the Biostatistics division will record the Preliminary Written Examination results with the Graduate School.

Students have two chances to pass the exam: if they do not pass the first time, they may take the exam again one year later. A student who fails both times will not be allowed to continue in the PhD program.

---

## 11.5 Graduate Degree Plan

---

You should file the official *Graduate Degree Plan* with the Program Coordinator at the end of your second year of the PhD program, or at least 2 months prior to your preliminary oral exam. The Graduate Degree Plan is available online at <http://policy.umn.edu/forms/otr/otr198.pdf>. Complete this form in consultation with your academic advisor. On this form, you will list required coursework:

- A minimal set of required courses, completed and proposed, in the major field and in the minor field or supporting program, including any transfer work. You do not need to list all courses you have taken. By the time you are ready to graduate all the courses listed must exactly match their entries on your transcript. To revise the list of courses, you need to file a Graduate School Petition Form (<http://policy.umn.edu/forms/otr/otr190.pdf>).

---

## 11.6 Satisfactory Progress in the PhD Program

---

The faculty expects that students will advance steadily towards graduation, which is called making "satisfactory progress." To make satisfactory progress in the PhD program, you should:

- Register for courses every fall and spring semester until course requirements are completed. Students with graduate assistantships must register for at least 6 credits to maintain their full-time status, or lose their assistantship. Students who have not passed their preliminary oral examination may register for Doctoral Pre-Thesis Credits (PubH 8666) for up to 2 semesters, if necessary to fulfill this requirement.
- Take required courses and the preliminary written examination according to the Schedule (1 or 2) under which you were admitted. For Schedule 1 students, this means completing the required preparatory coursework in the first year and taking the PhD written examination at the end of the first year. For students admitted under Schedule 2, this means completing preparatory coursework during the first two years, taking the Masters written examination at the end of the first year, and taking the PhD written examination at the end of the second year. Section 11.1 describes the required courses and exams for each Schedule.
- Maintain a GPA of at least 3.3 in the core PhD courses and the required PhD elective courses, and make up all grades of I (incomplete) within one year.
- File a Graduate Degree Plan within one year of completing the PhD written examination.
- Take the preliminary oral examination within two years of completing the PhD written examination.
- After passing the preliminary oral examination, begin registering for thesis credits (PubH 8888) to fulfill the minimum of 24 credits.
- File a yearly Progress Report to be approved by the faculty. In the report, you will indicate when you have taken or expect to take required courses and exams, and (once the written examination has been completed) your plans for starting/continuing/completing thesis or dissertation work, including expected graduation date. If you have requested and/or received any exemptions from any of the above requirements, these should also be recorded. Reports are due by May 31 each academic year. The faculty will review and discuss progress reports at the June faculty meeting. If your progress report is not approved, you will be asked to revise it in

consultation with your academic advisor and the Program Director/Director of Graduate Studies. Students will receive a letter from their academic advisor assessing their progress, and explaining any unfulfilled requirements for satisfactory progress. Failure to file an approved progress report within 90 days of the progress report due date constitutes not making satisfactory progress.

If you need an exemption from these requirements, you must make a written request to both your academic advisor and the Program Director/DGS. Your request must include a justification for requesting the exemption.

If the Division determines that you are not making satisfactory progress, the faculty reserves the right to:

- Require you to meet with your academic advisor and the Program Director/DGS, to discuss the requirements for continuing in the program.
- Revisit your funding status for the coming school year.
- Vote to decide whether to dismiss you from the program.

---

## 11.7 Preliminary Oral Examination and the Dissertation

---

PhD students are expected to begin considering dissertation areas and advisors after passing the PhD preliminary written examination, and to have begun work on their dissertation in earnest by their third year. As the plan of the dissertation becomes definite, it forms the basis for the preliminary oral examination.

At least one month prior to your preliminary oral exam (and after you have submitted a Graduate Degree Plan), notify the Graduate Student Services and Progress office of your committee members (<http://www.grad.umn.edu/students/assignprelimcommittee/index.html>). This online form collects your committee member's names and the role on the committee. The committee for your preliminary oral examination consists of at least four faculty with graduate education responsibilities: three from Biostatistics (including your adviser), and one from outside Biostatistics. All committee members must be listed as a Faculty with Graduate Education Responsibilities with the Graduate School ([https://apps.asr.umn.edu/faculty\\_roles/](https://apps.asr.umn.edu/faculty_roles/)).

For students declaring a minor, a faculty member from the minor department must be included on your committee and will fulfill the external member requirement.

With your thesis advisor's agreement, you can schedule your preliminary oral examination at least one week in advance with the Graduate Student Services and Progress (<http://www.grad.umn.edu/students/prelimschedule/index.html>). The Graduate Student Services and Progress office will prepare the *Preliminary Oral Examination Report* form.

Submit your thesis proposal material to your committee at least a week before the examination.

The format for the preliminary oral examination is usually an oral presentation of your thesis proposal to your examination committee. The presentation often summarizes completed work, work in preparation, and planned work: "what you've already done, what you know you can do, and what you think you can do."

It is expected that a PhD thesis in Biostatistics will contain material of sufficient breadth, depth, and sophistication to yield at least two papers that are strong submissions to scholarly journals of quality comparable to the *Journal of the American Statistical Association*, *Biometrika*, *Journal of the Royal Statistical Society (Series B)*, *Biometrics*, *Statistics in Medicine*, *Bioinformatics*, *Genetic Epidemiology*, *Human Heredity*, *American Journal of Epidemiology*, *Journal of Clinical Epidemiology*, or *Statistical Science*. Thesis research often yields an additional submission to a journal in an area of substantive application.

### Doctoral Dissertation Fellowship

There is a great advantage to scheduling the preliminary oral examination before January of your second or third year: you are eligible for a Graduate School Dissertation Fellowship, which could support you entirely for the next year's work on your thesis. Please see the Director of Graduate Studies for more information about this award or <http://www.grad.umn.edu/fellowships/ddf/index.html>.

---

## 11.8 Forms, the Final Oral Examination, and Graduating

---

The final oral examination is a 50-minute public seminar where you present your dissertation results, followed by a defense of the dissertation before the final oral exam committee.

There are several things that must be done after passing your preliminary oral examination, before you can take the final oral examination and graduate. PhD students are required to submit numerous forms to the Graduate Student Services and Progress office to report details about their degree coursework, examining committee members, and to obtain approvals at each step. It is important to initiate the required forms far enough in advance to allow time for automated routing for approvals and allow for delays. The Graduate Student Services and Progress office will not allow students to defend the doctoral thesis until all required forms have been submitted and approved.

1. When you pass your preliminary oral examination, your committee will sign the *Preliminary Oral Examination Report* form. You must submit this form to the Graduate Student Services and Progress office no later than the working day after the exam to reflect your doctoral candidacy.
2. Begin registering for thesis credits (PubH 8888): 24 credits are required. Note that full financial support pays for only 14 credits per semester, so you will need at least two semesters to get these credits unless you pay for the credits over 14 yourself.
3. Another time constraint is that the final oral examination must be at least 15 weeks after the preliminary oral examination.
4. Register every spring and fall semester to maintain active student status while working on your thesis. If you have completed all required credits including thesis credits, you may register for Grad 0999, which is free, zero-credit, non-graded and fulfills the registration requirement.
5. At least one month prior to your final oral defense, notify the Graduate Student Services and Progress office of your doctoral final exam committee members (<http://www.grad.umn.edu/students/assigndocfinalcommittee/index.html>). A minimum of four members is required: three from Biostatistics (including your adviser), and one from outside Biostatistics. All committee members must be listed as a Faculty with Graduate Education Responsibilities with the Graduate School ([https://apps.asr.umn.edu/faculty\\_roles/](https://apps.asr.umn.edu/faculty_roles/)).
6. After you have notified the Graduate Student Services and Progress office of your final oral defense committee, you may request your graduation packet (<https://apps.grad.umn.edu/secure/gradpacket/>) from 160 Williamson Hall. The packet will include the *Graduate Application for Degree* form and the *Thesis Reviewer's Report* form.
7. Finish your thesis to your advisor's satisfaction.
8. Three or four weeks before you want to have your final oral examination, submit your thesis to your committee.
9. The Graduate School awards degrees administratively every month. The earliest you can graduate is at the end of the month of your final oral examination. Before the first working day of the month you want to graduate, bring the *Application for Degree* form, from the graduation packet, to Student Relations, 333 Science Teaching and Student Services (East Bank) or 130 Coffey Hall (St. Paul).
10. Once you have arranged a date for your final oral examination with your committee members, inform the Biostatistics main office. Staff will arrange a room for your presentation, as well as schedule an exit interview for you with the Division Head. This exit interview is a way for you to give comments on the Biostatistics program.
11. Notify the Graduate Student Services and Progress office of the scheduled exam at least one week in advance via their online form (<http://www.grad.umn.edu/students/finalschedule/index.html>).
12. Submit the signed *Thesis Reviewer's Report* form to the Graduate Student Services and Progress office prior your final oral defense. Once the *Thesis Reviewer's Report* is approved by the Graduate Student Services and Progress office, you will receive the *Final Oral Examination Report* form.
13. Pass your final oral examination. Your committee will sign the *Final Oral Examination Report* form, and you must submit this form to the Graduate Student Services and Progress office no later than the last business day of the anticipated month of graduation.
14. Before the last business day of the month you plan to graduate, submit to the Graduate Student Services and Progress office a copy of the thesis abstract, a copy of the thesis (all signed by your advisor or advisors), the Microfilm Agreement Form, and the Survey of Earned Doctorates.

15. Submit a bound copy of your thesis to the Biostatistics Reading Room.
16. If you wish to attend a commencement ceremony, The School of Public Health holds commencement every May (<http://sph.umn.edu/students/current/commencement/>).
17. Complete the School of Public Health Alumni Survey at: <https://secure.ahc.umn.edu/PublicHealth/careersurvey>.
18. The Biostatistics office will give you an *Alumni Information* form. Please fill out the contact information so we can keep in touch with you. Copy any files you want from your computer account, and return any Reading Room materials. Please return your University keys to the Biostatistics Division office.

For detailed explanations of the forms and requirements, please consult the steps toward graduation at ([http://www.grad.umn.edu/prod/groups/grad/@pub/@grad/documents/content/grad\\_content\\_461847.pdf](http://www.grad.umn.edu/prod/groups/grad/@pub/@grad/documents/content/grad_content_461847.pdf)).

## 12. BIostatISTICS FACULTY WITH GRADUATE EDUCATION RESPONSIBILITIES

### **Karla Ballman**

Adjunct Assistant Professor  
Mayo Clinic Cancer Center

S.M., 1989, Operations Research, Massachusetts Institute of Technology  
Ph.D., 1991, Operations Research, Massachusetts Institute of Technology

Karla Ballman's interests include clinical trial design, analysis and high-dimensional data analysis and statistical techniques for surgical studies. She is specifically focused on trial designs for surgical trials and trials for limited patient populations. Her recent focus in the area of high dimensional data analysis is on NextGen sequencing technologies and microbiome studies. Most of her collaborative efforts in these areas are within cancer research and surgical studies.

### **Dipankar Bandyopadhyay**

Associate Professor of Biostatistics

M.S., 2000, Statistics, University of Calcutta, Calcutta, India  
M.S., 2003, Statistics, University of Georgia, Athens, GA  
Ph.D., 2006, Statistics, University of Georgia, Athens, GA

Dipankar Bandyopadhyay's methodological research interests include modeling of spatially-referenced datasets with emphasis on disease-mapping, clustered/correlated data, survival analysis, non-random missingness, robust regression, nonparametric methods, time-series, etc. His major clinical interest is in dental research, particularly periodontology. His other clinical interests are in substance abuse, diabetes and hypertension, ophthalmology and criminal justice.

### **Sudipto Banerjee**

Adjunct Professor of Biostatistics

M.S., 1996, Statistics, Indian Statistical Institute, Calcutta, India  
Ph.D., 2000, Statistics, University of Connecticut

Sudipto Banerjee's research interests include Bayesian analysis for geographically referenced data, Bayesian modeling for melding numerical models with observed data, statistical computing and software development.

### **Saonli Basu**

Associate Professor of Biostatistics  
Director of Graduate Studies

M.S., 1998, Statistics, Indian Statistical Institute, Calcutta, India  
Ph.D., 2005, Statistics, University of Washington

Saonli Basu's research interest includes computational statistics, nonparametric inferences and their application in different areas of statistical genetics. Currently Dr. Basu is working on modeling association between multiple variants (both rare and common) and single or multiple traits in case-control/cohort or in family studies. Her methodological research is supported by NIH/NIDA R01 and NIH/NIDDK R21. She is also involved as a co-investigator in several R01s led by faculty in Epidemiology and Psychology. Her collaborative work involves addressing statistical issues in pedigree-based or cohort-based genome-wide association studies. Dr. Basu has developed and applied her methods to a variety of diseases, including type 2 diabetes, Alzheimers, kidney allograft rejection, substance abuse, venous thrombosis, and graft-versus-host disease post hematopoietic stem cell transplant.

**Bradley P. Carlin**

Professor of Biostatistics  
Mayo Professor in Public Health  
Division Head  
M.S., 1986, Statistics, University of Connecticut  
Ph.D., 1989, Statistics, University of Connecticut

Brad Carlin's teaching experience and interests include introductory probability and statistics, statistical computing, and graduate level methodology and data analysis courses. His research deals primarily with the development of Bayes and empirical Bayes methodology for biostatistical problems, and the development and analysis of Markov chain Monte Carlo computational techniques for implementing these methods. His applied interests include statistical applications in cancer control, spatio-temporal disease mapping, clinical trials, meta-analysis and sports statistics.

**Haitao Chu**

Associate Professor of Biostatistics

M.D., 1995, Preventive Medicine, West China University of Medical Sciences  
M.S., 2002, Biostatistics, Emory University  
Ph.D., 2003, Biostatistics, Emory University

Haitao Chu's research interests include: latent class modeling for multiple diagnostic tests; meta-analysis of diagnostic tests and multiple treatment comparisons; statistical methods for mismeasured, missing, and correlated data; statistical methods for survival and longitudinal data; methods for observational studies and randomized clinical trials; and applied Bayesian methods. His application research interests focus on HIV/AIDS, cancer, cardiovascular disease and injury prevention.

**John E. Connett**

Professor of Biostatistics

A.M., 1964, Mathematics, University of Missouri  
Ph.D., 1969, Mathematics, University of Maryland

John Connett has research interests in clinical trials in lung disease, ophthalmology and cardiovascular disease, case-control studies, estimation of odds ratio, random effects and longitudinal models, coefficient-of-variation models for laboratory data, variance estimation, and statistical computing. He is currently Principal Investigator of the COPD Clinical Research Network, and Director of the Biostatistical Design and Analysis Center of the Clinical and Translational Science Institute.

**Mariza de Andrade**

Adjunct Professor  
Mayo Clinic Cancer Center  
Professor of Biostatistics  
Mayo Clinic College of Medicine

B.S., 1974, Mathematics, College of Science and Letters, Sao Jose do Rio Preto, SP, Brazil  
M.Sc., 1978, Statistics, Institute of Pure and Applied Mathematics, Rio de Janeiro, Brazil  
M.Sc., 1988, Biostatistics, University of Washington, Seattle, WA  
Ph.D., 1990, Biostatistics, University of Washington, Seattle, WA

Mariza de Andrade's research interests include admixture mapping, and methods for diagnostic, longitudinal and multivariate traits for linkage analysis of quantitative phenotypes using variance components approach, and extending these methods for association studies using family and population-based data. Mariza is also involved in a wide range of genome-wide association studies using family and case-control designs for complex disorders from various networks: Genes. Environment Association. Studies (GENEVA), Cohorts for Heart & Aging Research in Genomic Epidemiology (CHARGE), Electronic Medical Records & Genomics (eMERGE), Genetic Epidemiology Network of

Atherosclerosis (GENOA), and Genetic Epidemiology of Lung Cancer Consortium (GELCC). She is an active collaborator with various investigators at Mayo Clinic, the Universities of Michigan and Cincinnati, MD Anderson Cancer Center in Houston, TX, and University of Sao Paulo, Sao Paulo, Brazil.

### **Sue Duval**

Associate Professor of Medicine and Biostatistics

Ph.D., 1999, Biostatistics, University of Colorado Health Sciences Center

Statistical methods in epidemiology, meta-analysis methods and their applications, publication bias, evidence-based healthcare, systematic review methods, peripheral vascular disease and cardiovascular disease epidemiology.

### **Lynn E. Eberly**

Associate Professor of Biostatistics

M.S., 1994, Statistics, Cornell University

Ph.D., 1997, Statistics, Cornell University

Lynn Eberly's current research interests involve methods for correlated data including medical imaging data, such as MRI, fMRI, and NMR spectroscopy, and time-to-event, clustered, and longitudinal data. She has particular interest in the areas of cancer, neurology/neuroscience, infectious diseases, and endocrinology. Lynn is a collaborator on many projects related to imaging in neurology, cancer, endocrinology, and psychiatry/psychology. She teaches introductory biostatistics and clinical trials courses. She was given the Leonard M. Schuman Award for Excellence in Teaching in the School of Public Health in 2002. She is a Fellow of the American Statistical Association.

### **Birgit Grund**

Associate Professor of Statistics

M.S., 1982, Math/Statistics, Humboldt-Universität (Berlin)

Ph.D., 1987, Math/Statistics, Humboldt-Universität (Berlin)

Birgit Grund has research interests in the design, conduct and analysis of clinical trials, and their application in AIDS research; other research interests include nonparametric curve estimation and smoothing methods.

### **Weihua Guan**

Assistant Professor of Biostatistics

MS, 2001, Statistics, Texas A&M University

PhD, 2010, Biostatistics, University of Michigan

Weihua Guan has research interests in statistical genetics, and identification of genes involved in complex diseases and traits, with special interests on developing statistical and analytical methods for the genetic data with new high-throughput technologies.

### **Yen-Yi Ho**

Assistant Professor of Biostatistics

B.S., 1999, Medical Technology, Double Major in Public Health, National Taiwan University

M.S., 2001, Epidemiology, National Taiwan University

Ph.D., 2009, Biostatistics, Johns Hopkins University

Yen-Yi Ho's general research interests include computational biology, statistical genetics and statistical consulting. She is interested in developing statistical methods for analyzing genetic data generated by high-throughput technologies, and gene pathway/network enrichment analysis. She also enjoys participating in collaborative research.

Through collaboration, she is involved in a wide range of interesting research topics such as: frailty in older women, health disparities, smoking cessation, genetic mechanisms for cancer and chemotherapy response, and genetic etiology for differential malaria responses. Dr. Ho is a member of the Biostatistics Shared Resource Core in the Masonic Cancer Center at the University of Minnesota.

**James S. Hodges**

Associate Professor of Biostatistics

M.A., 1986, Public Affairs, University of Minnesota

Ph.D., 1985, Statistics, University of Minnesota

Jim has collaborated with researchers in many areas of health care including dentistry, cardiovascular diseases, neurology, infectious diseases, psychology/psychiatry, cancer, rheumatology, nephrology, and gastroenterology as well as researchers in sociology, demography, marketing, wildlife management, ornithology, horticulture, combat analysis, military logistics, simulation models, and airport safety. His statistical research is in hierarchical and other richly-parameterized models.

**John Hughes**

Assistant Professor of Biostatistics

Ph.D., 2011, Statistics, The Pennsylvania State University

John's research interests include bioimaging, spatial models, applied stochastic processes, statistical computing, Bayesian methods, and models for longitudinal data.

**Katherine Huppler Hullsiek**

Senior Research Associate, Biostatistics

M.S., 1989, Mathematics, St. Cloud State University

M.S., 1996, Biostatistics, University of Minnesota

Ph.D., 1999, Biostatistics, University of Minnesota

Kathy Huppler Hullsiek has research interests in the design, conduct and analysis of clinical trials and cohort data related to AIDS research. She is a statistician for several NIH-funded studies evaluating treatment strategies for HIV+ persons with cryptococcal meningitis in Africa; INSIGHT, an international HIV clinical trials network; and several other grant-funded AIDS clinical trials.

**Joseph Koopmeiners**

Assistant Professor of Biostatistics

M.S., 2004, Biostatistics, University of Minnesota

Ph.D., 2009, Biostatistics, University of Washington

Joe Koopmeiners's research interests include group sequential methods for biomarker validation studies and Bayesian adaptive methods for clinical trials. Dr. Koopmeiners is also a member of the Biostatistics and Bioinformatics Core of the University of Minnesota Masonic Cancer Center and collaborates with researchers throughout the cancer center in a variety of areas including tobacco cessation and the development of imaging technology as a diagnostic tool for cancer. Joe is also interested in statistics in sports.

**Chap T. Le**

Distinguished Professor of Biostatistics  
Director of Biostatistics and Bioinformatics,  
Masonic Cancer Center - University of Minnesota

M.A., 1971, Mathematics, California State University - Fresno

Ph.D., 1978, Statistics, University of New Mexico

Dr. Le teaches PubH 7405 (Biostatistics Regression) in the Fall semesters and PubH 7470 (Biostatistics for Translational and Clinical Research) in the Fall semesters. His collaboration has focused on analyses of survival and categorical data from clinical and translational research projects. His methodological research interests include epidemiological methods, crossover designs, survival analysis, logistic regression, correlated binary data, ordered alternatives, ROC curves, and, recently, the design and analysis of in vitro experiments for studying cancer drugs - especially, chemocombination therapy.

Dr. Le is the author of many research articles and several textbooks: Fundamentals of Biostatistical Inference (1992), Health and Numbers (1995, 2001, and 2010), Applied Survival Analysis (1997), Applied Categorical Data Analysis (1998), Introductory Biostatistics (2003), and Statistics Quick Reference Guide (2007), Categorical Data and Translational Research (October 2010).

**Robert E. Leduc**

Research Associate, Biostatistics

Ph.D., 1994, Mathematics, University of Wisconsin - Madison

Robert Leduc's research interests include clinical trials, especially in HIV research and kidney transplantation. Robert also has an interest in problems related to missing data or losses to follow-up, and drug resistance issues.

**Eric Lock**

Assistant Professor of Biostatistics

Ph.D., 2012, Statistics, University of North Carolina

Eric's research concerns the analysis of high-dimensional and complex data, with a focus on applications in genomics and molecular biology. His particular interests include the integration of multi-source data, exploratory factorization and clustering methods, and Bayesian nonparametric inference.

**Xianghua Luo**

Associate Professor of Biostatistics

B.S., 1997, Economic Geography, Peking University

M.S., 2000, Quaternary Geology, Peking University

Ph.D., 2005, Biostatistics, Johns Hopkins University

Xianghua Luo's research interests include methods and applications for recurrent event data, survival data, and longitudinal data; design and analysis of clinical trials. Collaborations include cancer research, blood and marrow transplantation (BMT), tobacco use and smoking cessation. Dr. Luo is a member of the Biostatistics Core of the Masonic Cancer Center.

**Theodore Lystig**

Adjunct Assistant Professor of Biostatistics  
Distinguished Statistician, Medtronic

M.S., 1998, Biostatistics, University of Washington  
Ph.D., 2001, Biostatistics, University of Washington

Ted Lystig's research interests include design and analysis of clinical trials for medical devices, active surveillance, signal detection, evidence synthesis, multiple testing, statistical genetics, goodness of fit for longitudinal data, and hidden Markov models.

**Sumithra Mandrekar**

Adjunct Professor  
Professor of Biostatistics - College of Medicine, Mayo Clinic

Ph.D., 2002, Interdisciplinary - Statistics, Psychology, Internal  
Medicine and Biomedical Engineering, The Ohio State University

Dr. Mandrekar is Professor of Biostatistics at Mayo Clinic, Rochester MN; and is the associate director of the Biostatistics Shared Resource for the Mayo Clinic Cancer Center. Her primary research interests include designs for predictive biomarker validation both in the initial and definitive setting, novel trial designs for dose-finding trials, and general clinical trial methodology related to identification of alternative Phase II cancer clinical trial endpoints. Her collaborative research area is in the treatment and prevention of lung cancer.

**Andy Mugglin**

Research Associate Professor of Biostatistics

Ph.D., 1999, Biostatistics, University of Minnesota

Andy Mugglin's research interests include Clinical trials, Bayesian and other innovative clinical trials design; Bayesian hierarchical modeling, spatio-temporal modeling, and computing. He also consults extensively in clinical study design for the medical device and pharmaceutical industries and serves on Data Monitoring Committees for various ongoing clinical trials.

**James D. Neaton**

Professor of Biostatistics

M.S., 1970, Biometry, University of Minnesota  
Ph.D., 1984, Biometry, University of Minnesota

Jim Neaton's research interests are in the design and conduct of clinical trials. He currently is the leader of a large international clinical trials network called INSIGHT that is studying treatments for HIV and other infectious diseases. He is also actively involved trials for the treatment of heart failure and for the prevention of heart disease. He serves on data monitoring committees for studies sponsored by the National Institutes of Health and the pharmaceutical and device industry. He is a past member of the Cardiovascular and Renal Advisory Committee of the Food and Drug Administration and continues to be a frequent member of FDA panels. He is Fellow of the American Statistical Association and the Society for Clinical Trials. Dr. Neaton also is an Adjunct Professor of Medicine and holds the title Distinguished International Professor as a result of receiving the University of Minnesota Global Engagement Award. He is a member of the Academic Health Center Academy for Excellence in Health Research. He teaches a course on the design and implementation of clinical trials.

**David Nelson**

Adjunct Assistant Professor  
Associate Professor of Medicine  
Senior Statistician, Center for Chronic Disease Outcomes Research  
Minneapolis VA Medical Center

M.S., 1994, Statistics, University of Minnesota

Ph.D., 1998, Statistics, University of Minnesota

David Nelson is developing methods for inference in observational studies and model diagnostics using sufficiency and propensity theory. He also is interested in stepwise Bayes methods for finite population sampling and nonparametric statistical analysis.

**Wei Pan**

Professor of Biostatistics

M.S., 1995, Statistics, University of Wisconsin, Madison

Ph.D., 1997, Statistics, University of Wisconsin, Madison

Wei Pan has research interests in statistical genomics and genetics, neuroimaging data analysis, machine learning and data mining. He has taught courses on survival analysis, categorical data analysis, linear models and generalized linear models, microarray data analysis, statistical learning and data mining.

**Cavan Reilly**

Associate Professor of Biostatistics

M.A., 1995, Economics, New School for Social Research

M.A., 1996, Statistics, Columbia University

Ph.D., 2000, Statistics, Columbia University

Cavan Reilly has research interests in the clinical application of high dimensional biological assays (e.g. gene expression and metabolomics) with an emphasis on sophisticated study designs (e.g. longitudinal or cross over studies). His methodological work typically employs Bayesian approaches. Most of his applied work is with AIDS/HIV.

**Kyle Rudser**

Assistant Professor of Biostatistics

M.S., 2005, Biostatistics, University of Washington

Ph.D., 2007, Biostatistics, University of Washington

Kyle Rudser's research interests include the design, monitoring, and analysis of clinical trials, survival analysis, longitudinal analysis, and nonparametric approaches. He is a member of the Biostatistical Design and Analysis Center (BDAC), a group that is part of the Clinical and Translational Science Institute (CTSI), which is involved in a wide variety of collaborative projects with investigators throughout the Schools of Dentistry, Medicine, Nursing, Pharmacy, Public Health, and Veterinary Medicine.

**Daniel Sargent**

Adjunct Professor

Director, Cancer Center Statistics, Mayo Clinic Cancer Center

M.S., 1994, Biostatistics, University of Minnesota

Ph.D., 1996, Biostatistics, University of Minnesota

Daniel J. Sargent, Ph.D., is the Ralph S and Beverly E Caulkins Professor of Cancer Research at the Mayo Clinic, Group Statistician for the Alliance for Clinical Trials in Oncology, an NCI supported Cancer Cooperative Group, professor of both biostatistics and oncology at the Mayo Clinic, Chair of the Section of Cancer Statistics, Mayo Clinic, and Director of the Biostatistics Shared Resource at the Mayo Clinic Comprehensive Cancer Center. He has been the lead statistician for the Gastrointestinal Cancer Research at the Mayo Clinic Cancer Center since 1995. He is recognized as a national leader in the statistical aspects of cancer research. Dr. Sargent has a strong record of statistical methodological development, including the area of clinical trial design.

He has published papers on innovative designs for Phase I, II, and III clinical trials. Other published methodological areas of interest include survival analysis, meta-analysis, surrogate endpoints, and statistical computing.

**Jeff Sloan**

Adjunct Professor

Professor, Mayo Clinic Cancer Center

Ph.D., 1991, Statistics, University of Manitoba

Recent research activities include methods of assessing quality of life (QOL) of cancer patients and other patient-reported outcomes, determining a clinically meaningful difference in these measures, exploring the relationship between patient-reported outcomes and genetic makeup, and finding ways to facilitate the incorporation of patient-reported outcomes into clinical research.

**David Vock**

Assistant Professor of Biostatistics

B.A., 2007 Mathematics and Chemistry, St. Olaf College

M.Stat., 2009, Statistics, North Carolina State University

Ph.D., 2012, Statistics, North Carolina State University

David's research interests include causal inference, dynamic treatment regimes, longitudinal data analysis, and survival analysis. Much of his methodological work has been motivated by applications in organ transplantation, cardiovascular risk prediction, and smoking cessation.

**Julian Wolfson**

Assistant Professor of Biostatistics

Ph.D., 2009, Biostatistics, University of Washington

Julian Wolfson's research interests include causal inference and statistical machine learning for complex data. I apply causal inference methods to understand the biological pathways underlying treatment and discover surrogate endpoints. I develop statistical machine learning tools for making predictions from complex datasets, including large-scale electronic health record data.

**Baolin Wu**

Associate Professor of Biostatistics

B.S., 1999, Probability and Statistics, Peking University

Ph.D., 2004, Biostatistics, Yale University

Baolin Wu is interested in developing statistical and computational tools to help solve scientific problems in molecular biology and genetics. Currently his focuses are on computational biology and statistical genetics.